WQX User Meeting
October 22, 2020

There were approximately 31 participants.

Agenda:
1) WQX Bug Fixes and Enhancements
2) QA/QC Services
3) Open Discussion

1) WQX Bug Fixes and Enhancements

a. Bug Reported October 2020 – WQX Web OPTIONS

i. Since WQX 3.0 release – result records fail import

Generate Detection Condition and Limits from Result Value	Convert Result Values that start with "<" or ">" into an appropriate Detection Condition and Detection Limit Value. For example: a Result Value of "<0.25" would be converted into a Detection Condition of "Present Below Quantification Limit", a Detection Limit Value of "0.25", and a Detection Limit Type of "Lower Quantitation Limit"

ii. Impact Import Configurations with the above option checked

b. Enhancement November 2020 – Sample Collection Method (National context)
   i. New Domain List - Sample Collection Method Context

c. Bug Reported October 2020 -- WQX Web Template
   i. Monitoring Locations – worksheet has error looking up correct FIPS County Code for county names occurring in multiple states
      1. LOOKUP Bug assigned FIPS code for the first county name found rather than by state and county combination
      2. ALL templates have been updated
      3. Data owners are recommended to EXPLICITLY assigned State and County for all Monitoring Location
         a. NOTE: Re-submitting monitoring Locations will not impact data
         b. WQXWeb 3.0 Physical/Chemical Results Template (ZIP) (983 K)
   ii. Possible erroneous FIPS County Code assigned for submission using the WQX Web Template: "Physical/Chemical"
   iii. Please Review State and County assignments for Monitoring Locations and re-submit Monitoring Locations record ONLY
      1. **Updating a Monitoring Location will not affect the Activities, Metrics, or Results below it**. However, deleting a Monitoring Location will delete the Activities, Metrics and Results below it.

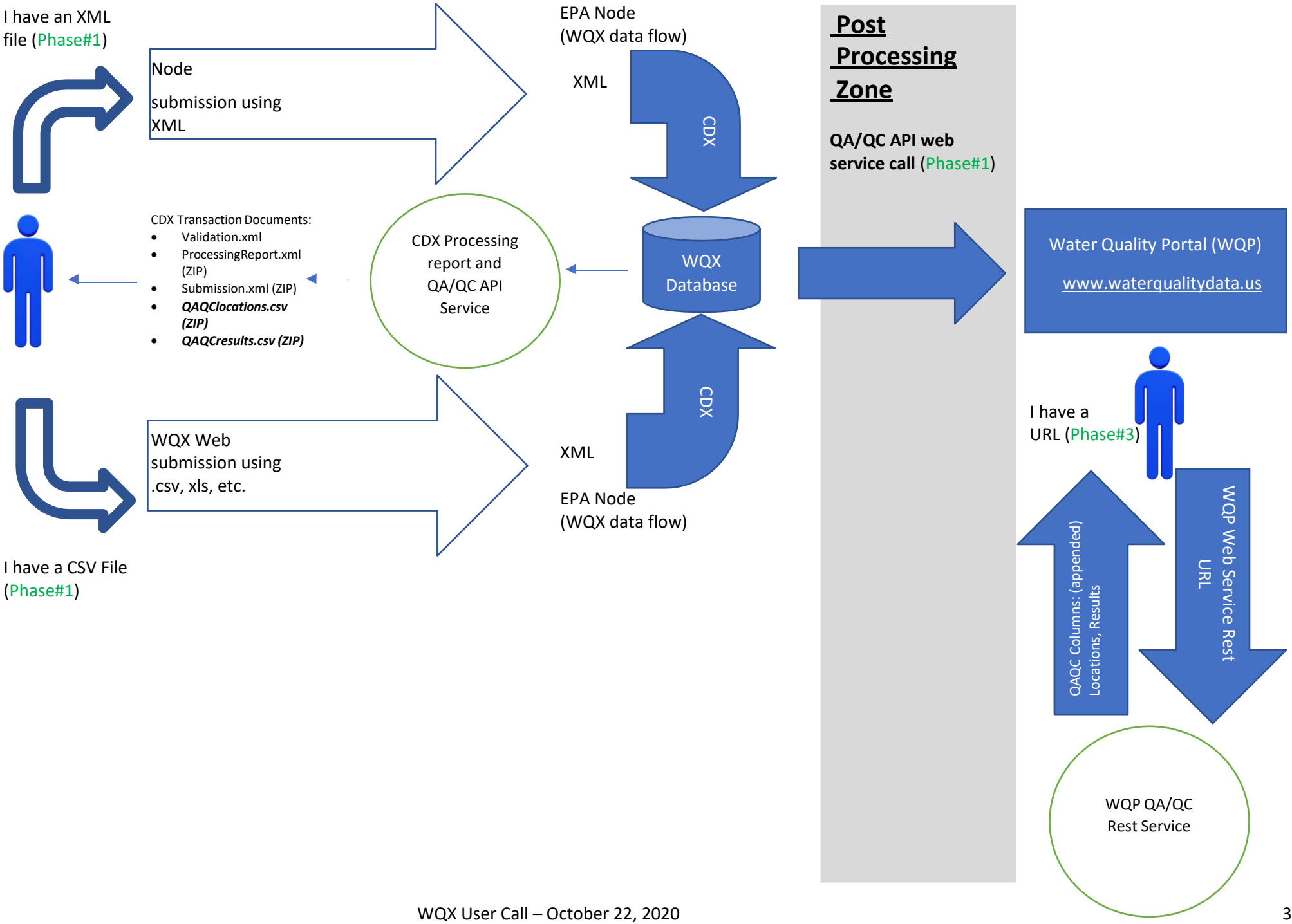
d. Enhancement planned for December 2020 – Update domain picklist in the WQX Web template spreadsheets
   i. Updated Domain List – Characteristic and Taxon

2) **QAQC Web Services**
    a. Dataflow Diagram and Requirements
        i. ftp://newftp.epa.gov/storet/wqx/Water_Quality_Exchange_QAQC_Dataflow_diagram.pdf

3) **Open Discussion**
    a. Summary of Water Quality Portal OPEN TICKETS can be found out. These tickets have identified issues that need to be addressed as well as requested enhancements.
        i. ftp://newftp.epa.gov/storet/wqp/status/Water_Quality_Portal_Open_Tickets.pptx

    b. Stay Safe and Enjoy the Holidays.
    c. Next User Call 2021-01-28 @12pm. *There will not be a User Call in November or December*.
    d. To be notified of user calls and water data updates, sign up for our List serve by sending a blank email to subscribe-storetinfo@lists.epa.gov.

WQX QAQC Dataflow Diagram:



WQX QAQC Dataflow Diagram: continued

QAQC Direct Submit a CSV file (Phase#2)

Mandatory Columns

Locations:
Latitude, longitude

Results:
Characteristic

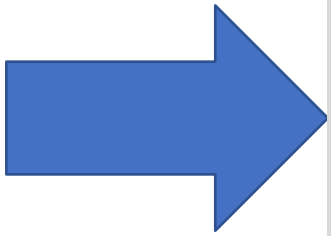
QAQC Download Reports:

1. QAQClocations.csv
2. QAQCresults.csv

QAQC COLUMNS:

Locations: Duplicate, and Precision
Country, State, County, HUC8, HUC12

Results: Notes_Recommendation, VALID_DETECTION_CONDITION, VALID_UNIT_STATUS, RangeLowerMeasureValue, RangeUpperMeasureValue, RangeMeasureUnitCode, VALID_FRACTION_STATUS, VALID_SPECIATION_STATUS, VALID_METHOD_STATUS, ConvertedResultMeasureValue, ConvertedResultMeasureUnitCode,



Post Processing Zone

QA/QC API web service call

User Authentication:

- NAAS_ID, CDX Username (Phase#1 and Phase#2)

NO Authentication:

- Develop Java Rest API form (Phase#4)
- Web page
- WQP(Phase#3) download

WQX QAQC Dataflow Diagram: continued

Summary of Service Requirements:

QAQC REQUIREMENTS SUMMARY	MonitoringLocation	ActivityResults	Projects
Goals	• Geospatial checks on monitoring locations to ensure that the location is accurate • Provide Country, State, County based on lat/long • Provide NHD reachcode and/or HUC8, HUC12 for a location • Validate 3-digit decimal precision for lat/long • Identify duplicate monitoring locations based on 3-digit decimal lat/long	• Flag special characters in Result Value (i.e. not using '<' or '<' or less than, '>' or '>' or less than, 'Non Detect', etc.). • Water Quality Portal (WQP) URL validation for QAQC schema elements • Dataflow QAQC checks for XML submission and direct CSV files. • Characteristic metadata combination checks on results to ensure data is accurate • Flag data outside of range • Units conversion to Targeted Unit • Notify user of incorrect metadata and characteristic combinations • Provide metadata best practices	• QAPP (DocumentGraphic Upload): documentation for organizational method(s) • QAPP Approved Element = Yes/No • Report attachment (out-of-date documents)