WQX User Call
October 28, 2021

There were approximately 48 participants.
The next WQX User call is January 27, 2021.

Agenda:

1. New WQX Team Member Adam Griggs
2. Release of QAQC services
3. Water Quality Portal NEW Interface (https://labs.waterdata.usgs.gov/wqp/)
4. Open Discussion

1) New WQX Team Member Adam Griggs
   a. Fulltime EPA Staff, Project Lead for Support/Training of the WQX dataflow and Water Quality Portal
   b. New Coordinator for the WQX User Call

2) Release of QAQC services
QAQC Service was release to production September 30, 2021. The Water Quality Exchange (WQX) Team recently released a new quality assurance and quality check (QA/QC) service for the WQX, the prime pathway for submitting state and other water quality monitoring data to the Agency. This innovative service provides critical feedback to data submitters on potential data errors in their submitted data, thereby improving the overall quality of water quality monitoring data that are shared publicly. Historically, WQX required users to fully document the metadata for any data shared, but this new service takes this one step further by conducting deeper analysis on the data by looking for values outside a valid range, incorrect units, incorrect locations, duplicate locations, and results, and data consistency checks. The new QA/QC service provides a user-friendly downloadable report for both locations and sample results. Each report provides detailed information about any errors identified in their data sets. This new service is automatically applied to any data submitted through WQX. Work is underway to add this capability to any data downloaded from the Water Quality Portal. Within the first year of release the WQX Team request review and feedback from the WQX user community Subject Matter Experts (SMEs) to improve the QAQC service's data consistency checks. The next year, the WQX Team will collaborate and deploy any improvements with the Water Quality Portal Team.

3) Water Quality Portal NEW Interface (https://labs.waterdata.usgs.gov/wqp/)
The portal is up and running. It was last refreshed on Wednesday, October 25th.
Please test and explore the new User Interface and email any feedback to wqx@epa.gov
The WQP Team is addressing a number of help desk issues. The main priority is to address consistency on refreshes from Portal data providers.

PRESENTATION:
How do I prepare my data for submission to WQX Web
The interface allows you to create Import Configurations that WQX web uses to

Documentation is referenced on page 24 of the Flow Configuration Document

QAQCResults.CSV	
Column	Definition
ActivityIdentifier	Designator that uniquely identifies an activity within an organization.
ActivityStartDate	The calendar date on which the field activity was started.
ActivityType	The text describing the type of activity.
ActivityMediaName	Name or code indicating the environmental medium where the sample was taken.
MonitoringLocationIdentifier	A designator used to describe the unique name, number, or code assigned to identify the monitoring location.
ResultDetectionConditionText	The textual descriptor of a result.
CharacteristicName	The object, property, or substance which is evaluated or enumerated by either a direct field measurement, a direct field observation, or by laboratory analysis of material collected in the field.
ResultSampleFractionText	The text name of the portion of the sample associated with results obtained from a physically-partitioned sample.
ResultMethodSpeciationText	Identifies the chemical speciation in which the measured result is expressed.
ResultMeasureValue	The reportable measure of the result for the chemical, microbiological or other characteristic being analyzed.
ResultMeasureUnitCode	The code that represents the unit for measuring the chemical substance, microbiological substance or other characteristic.
ResultStatusIdentifier	Indicates acceptability of the result with respect to QA/QC criteria.
ResultDepthHeightMeasure	A measurement of the vertical location (measured from a reference point) at which a result is obtained.
StatisticalBaseCode	The code for the method used to calculate derived results.
AnalyticalMethodIdentifier	The identification number or code assigned by the method publisher.
AnalyticalMethodIDContext	Identifies the source or data system that created or defined the identifier.
LastChangeDate	The Unique ID for the user responsible for the last change to data in this row
TransactionIdentifier	The CDX Transaction ID that was responsible for the last change to data in this row

Invalid_CharacteristicName_YN	NOT a valid Characteristic domain value
Invalid_Unit_YN	NOT a valid Measurement Unit domain value
Invalid_Speciation_YN	NOT a valid Method Speciation for the supplied Characteristic domain value
Invalid_Fraction_YN	NOT a valid Sample Fraction for the supplied Characteristic domain value
Uncommon_Analytical_Method_YN	NOT a valid Analytical Method for the supplied Characteristic domain value
Result_Special_Characters_YN	Special characters found PREFIXED in Result Measure Value
QAPP_NOTApproved_YN	Indicates whether a Quality Assurance Project Plan (QAPP) has been approved for the submitted project.
QAPP_Doc_Missing	Indicates whether a document has been Uploaded for the submitted project.
Below_Lower_Threshold_YN	Indicates Measure Value is above the LowerRange
Exceeds_Upper_Threshold_YN	Indicates Measure Value is below the UpperRange
LowerRange	The lowest number of the range
UpperRange	The highest number of the range
TargetUnitRange	The Unit Conversion Target Unit
UnitConversionFactor	The Unit Conversion Factor: (ResultMeasureValue+UnitConversionCoefficient) * UnitConversionFactor
UnitConversionCoefficient	The Unit Conversion Coefficient: (ResultMeasureValue+UnitConversionCoefficient) * UnitConversionFactor
NOTES_RECOMMENDATION	Shows all allowable domain values for a given characteristic

QAQCLOcations.CSV	
Column	Definition
MonitoringLocationIdentifier	A designator used to describe the unique name, number, or code assigned to identify the monitoring location.
MonitoringLocationName	The designator specified by the sampling organization for the site at which sampling or other activities are conducted.
MonitoringLocationType	The descriptive name for a type of monitoring location.
Latitude	The measure of the angular distance on a meridian north or south of the equator.
Longitude	The measure of the angular distance on a meridian east or west of the prime meridian.

LastChangeDate	The Unique ID for the user responsible for the last change to data in this row
TransactionIdentifier	The CDX Transaction ID that was responsible for the last change to data in this row
Country	A code designator
State	A code designator used to identify a principal administrative subdivision of the United States, Canada, or Mexico.
County	A code designator used to identify a U.S. county or county equivalent.
HUCEightDigitCode	The 8 digit federal code used to identify the hydrologic unit of the monitoring location to the cataloging unit level of precision.
GEO_LATSCALED	Reference Latitude precision and scale
GEO_LONGSCALED	Reference Longitude precision and scale
GEO_COUNTRY	Reference reverse generated Country
GEO_STATE	Reference reverse generated State
GEO_COUNTY	Reference reverse generated County
GEO_HUCTWELVEDIGITCODE	The 12 digit federal code used to identify the hydrologic unit of the monitoring location to the subwatershed level of precision.
GEO_REACHCODE	The 14 digit federal code used to identify the reach code of the monitoring location to the subwatershed level of precision.
InvalidUSALatLong	Negative Latitude and Positive Longitude are NOT USA
DuplicateSiteOrg	Identify Organizational Sites with same Lat/Long points within 3 digit decimal precision
NationalSiteDups	Identify National Sites with same Lat/Long points within 3 digit decimal precision
Less3DigitDecimal	Precision and scale for latitude or longitude is less than 3 digits decimal
CountryDISAGREEwLatlong	User Supplied Country disagrees with reverse geo coded lat/long
StateDISAGREEwLatlong	User Supplied State disagrees with reverse geo coded lat/long
CountyDISAGREEwLatlong	User Supplied County disagrees with reverse geo coded lat/long
NOTES_RECOMMENDATION	List of duplicate Sites (WQP)