Transitioning STORET data to WQX

As Organizations begin to submit data through WQX, there are many considerations for transitioning and handling data that was previously submitted using the STORET system. The purpose of this paper is to provide a preliminary outline of EPA’s outlook on handling these considerations.

Migrating STORET WH data to WQX

In order for users to change data already in the STORET Warehouse through WQX, all of an Organization’s data must exist in the WQX backend database or Operational Data Store (ODS). This is the transactional database that the Extract, Transform and Load (ETL) tool runs off of in order to populate the STORET Warehouse (WH). Please reference the following diagram for the data flow and components.

There are a couple of options for getting all of an Organization’s data into the WQX backend database. The options are as follows:

1. EPA can assist in migrating all of the user’s data from the warehouse into the WQX backend database. This would entail extracting all user data from the warehouse, reformatting the data into a WQX schema compliant XML file, and then submitting the user's data through CDX as one large insert transaction. EPA can also provide the reformatted XML file back to the Organization for population into the Organization’s local data management system.

2. Users can send EPA a copy of their data (either complete or partial, depending on what they want to have available for transactional changes) through CDX as one (or many partial) insert transaction(s).

One consideration is that until May of 2008, users will only be able to submit chemical and physical water quality data through WQX. This consideration may mean that some users choose to hold off on migrating all of their data to WQX until WQX is able to accept biological and habitat data in May 2008.

Matching STORET domain value lists to WQX will also need to be taken into account. EPA will work with users to ensure that the domain values in the STORET WH such as characteristic names match with data in new WQX submissions. For characteristic names, this may involve
translating the STORET names in the WH to the WQX names prior to new WQX submissions and/or data migration. This will ensure that the characteristic names match for retrieval.

If users do not see the need to change or amend any of their STORET data that is already in the warehouse, then they do not need to migrate the data to WQX. They will, however, need to have a new WQX ORG ID for submitting data to WQX as the system requires a unique ORG ID for handling transactions.

New WQX ORG IDs

All Organizations submitting data through WQX will require a new WQX ORG ID that is unique from any previous STORET ORG IDs. This ensures that users do not duplicate data already within an Organization in the STORET Warehouse when submitting data through WQX. EPA will work with users to assign new ORG IDs.

After users have migrated STORET data to WQX under their new WQX ORG ID, they will have the option of then working with EPA to delete already migrated data from the STORET Warehouse. Data will need to be looked at carefully between the STORET ORG ID and the WQX ORG ID to ensure that data migrated through WQX is accurate before deleting the data under the STORET ORG ID.

Options for new WQX ORG ID’s include:

1. Same ORG ID as what is in STORET with “_WQX” at the end (this option will allow less confusion, and is possible as the ORG ID data element within WQX has a length of 30)

2. Completely new WQX ORG ID

Once users have replaced older data through WQX, this data has been transferred in to the WH, and the previous data under the original STORET ORG ID has been deleted, users can either keep their new WQX ORG ID, or even switch back to the original STORET ORG ID.

It is worth noting that in the mean time before data has been brought under one ORG ID, users will need to pull data as desired from the WH using both ORG IDs.