**Water Information and Data Subcommittee**

**Combined Workgroup 3 and Workgroup 4 call**

Minutes – August 9, 2012

**Attendees**: Steve Malers (Riverside), Sara Larsen (WSWC), Dharhas Pothina (TX), Dave Cole (UT), Nathan Morris (NE), Dan Levish (Reclamation), Dwane Young (WSWC-WestFAST)

**Next Call:**  TBD – Current activities are complete. We won’t meet again for a couple months.

**Administrative:** The minutes were approved.

**Draft Issues Document:**  The group reviewed the draft Issues Document. This document is one of the deliverables of this workgroup. This document defines the issues that need to be addressed as part of the data exchange. It also provides a recommendation on how to proceed. The document will lead to the development of the Flow Configuration Document (FCD). The FCD will provide detailed instructions on how data partners would implement the data exchange.

The group went through the document section by section:

Section 1: No Change

Section 2.1: No Change

Section 2.2: Steve Malers commented that we need to make sure that the REST URLs are visible to the users of the Central Portal. This allows a user to go back and get the data that they had requested at a later time. Steve identified the USGS Portal that generates a URL based on your input parameters as a good example. Dwane thought this was a good idea, and will add this language to the document.

Section 2.3: Steve asked if the decision has been made about allowing data to be reported by month. Dwane said that based on the last discussion of the group, it sounded like this would be the best approach. This would result in a change to the schema. Dwane will add this item to the change list for the schema.

Section 3.1/Platform: The WSWC has elected to go with a staging database approach and will be using PHP for the web services. Dwane explained that this is different from the Data Access Object (DAO) approach that the group had discussed earlier. The WSWC had found that approach to be too complicated for what they were trying to implement. Dharhas commented that this still means that the WSWC will have to deal with the complexity of setting up a staging database in the states and mapping state data to the staging database. He said that in his experience it is sometimes easier to get an IT department to host a translator (i.e. the DAO) than a new database. He also said that if we have well defined schema and set of services that the states can go ahead and build their own services that meet the specification.

Steve Malers asked how the staging database would be used? Dwane answered that the states would have two choices: 1) they deploy the WSWC WaDE staging database, and then map their database to the staging database. This process would update the data in the staging database from the state operational database on some routine basis. The services run directly off of the staging database, and once the data are loaded, they are immediately available via the services; 2) the state builds the services to the WaDE specifications which will be defined in the FCD and by the final schema.

Section 3.1/Database: Dwane explained that the WSWC has done most of the initial development in PostGRESQL. However, based on the information that the WSWC has gotten via site visits and through the State Surveys, it has become apparent that we will need to take a multi-database approach. The WSWC plans to develop a PostGRESQL, a Microsoft SQL Server, and an Oracle version of the staging database. The WSWC central portal will run off of a PostGRESQL database. The WSWC has already developed a PostGRESQL and SQL Server version of the staging database and is testing the functionality. The group did not have any further comment on this approach.

Section 3.1/Security: No Comments

Section 3.1/Implementation: No Comments

Section 3.1/Maintenance: Dwane discussed the goal of the WSWC to have WaDE be an open source product. Dharhas recommended that the WSWC look at github which is an open source means of source code management and sharing. Steve recommended that the WSWC look at the various license options for open source projects. There are two options: 1) a GPL license, which would require anyone who modifies the code or adds capabilities to make those changes available or 2) BSD, which is still open source, but if a developer takes the code, and modifies it, they are free to sell those modifications.

Section 3.2: No Comments

Section 3.3: Dwane raised the possibility of tribes participating in the exchange. He said that he’s had a few tribes approach him about being able to participate. Since the exchange is open to anyone who wants to participate, Dwane felt that tribes should be able to participate. The workgroup didn’t disagree with this approach.

Section 3.4: The services section will be marked as ‘Preliminary’ since they will likely change as the FCD is developed. The group also discussed the importance of including the version number in the REST URL. This will be added to the document.

Section 3.5: Dharhas stated that funding will be a key issue in getting the states to implement WaDE.

Once the changes are made to the document, it will be posted to the website and sent to the Water Information and Data Subcommittee. The next step will be to develop the Flow Configuration Document.

**Workgroup Next Steps:** With the completion of this document, and the completion of the draft schema, the group discussed what would be next for the workgroup. Dwane recommended that the workgroup take a couple months off while the FCD is crafted. Dwane will share this document with the workgroup via email, but we probably wouldn’t need to have a specific workgroup meeting. The group agreed to take a break for a couple months.