

Florida Water Resources Monitoring Council (FWRMC)
Public Meeting of Monitoring Catalog Workgroup – January 23, 2013

Attendees:

Agency	Name
Florida Department of Environmental Protection (DEP)	Kate Muldoon
DEP	Gail Sloane
DEP	Stephanie Sunderman
DEP	Jay Silvanima
DEP	Shel McGuire
Florida Department of Health (DOH)	Charlie Donahue
St. Johns River Water Management District (SJRWMD)	Aiša Cerić
Southwest Florida Water Management District (SWFWMD)	Carol Kraft
South Florida Water Management District (SFWMD)	Brian Turcotte
University of South FL (USF)	Jim Griffin
USF	Jan Allyn
USF	Keith Bornhorst
USF	Jason Scolaro
FL Lakes Management Society (FLMS) / McGlynn Laboratories Inc.	Sean McGlynn
private	Greg Bridge

Introduction

Kate Muldoon (KM) welcomed everyone to the Monitoring Catalog Workgroup (MCW) meeting and reviewed the agenda. The meeting will include a discussion on the next steps for the Catalog and a demonstration of select features on the current Water Atlas.

Next Steps for the Catalog

KM summarized several key points regarding collaboration with the Watershed Information Network (WIN):

- WIN team distributed a survey regarding a draft list of data elements in December. Results will likely be released in early February.
- A WIN planning meeting was held on 1/22/2013. Representatives from several data providers, including some members of the MCW, attended the meeting.
- Communication and coordination will continue between the WIN effort and Catalog effort.
- The Catalog will likely be completed before Phase I of WIN.
- Since many metadata elements are included in both efforts, a crosswalk between the WIN data elements and the Catalog metadata elements will need to be completed. Stephanie Sunderman (SS) is working on this task.

Brian Turcotte (BT) agreed that it will be important to develop both projects (WIN and the Catalog) so that they are able to function together. For example, an agency's regular transmittals of water chemistry data to WIN should satisfy the Catalog's requirements for that type of data. However, there may be other types of information that are not included in Phase I of WIN, but are included in the Catalog.

Gail Sloane (GS) suggested that the Catalog may serve as the spatial platform for displaying information from WIN, since the Catalog will contain information on all of the stations in WIN. BT agreed and indicated that there may be cost savings associated with that collaborative strategy.

Jason Scolaro (JS) also agreed that collaboration between WIN and the Catalog will be very important. Many features, such as a visual location verification system are likely desired for both efforts, and the projects may be able to collaborate to minimize development of duplicate systems.

KM indicated that WIN and the Catalog will be collaborative and complementary efforts. Since these efforts are being developed at roughly the same time, many of the same people will be involved with both efforts, which will aid

the collaborative process. KM also indicated that having a Monitoring Program Catalog is critical to all of the other FWRMC projects. The Catalog effort also dovetails with many other regional and statewide efforts.

BT indicated that different contractors are being used to develop each of the efforts, and asked what the strategy will be for deciding which effort is responsible for each of the pieces that will be shared among the efforts. GS indicated that the WIN effort will be primarily responsible for developing the database for storing analytical results, while the Catalog will be responsible for displaying information about the stations and monitoring programs. KM indicated that both efforts will likely evolve together. In the future, new features can be incorporated into both efforts.

GS suggested involving a representative from the WIN team in the Catalog development meetings and discussions, to make sure that we are achieving the greatest efficiency.

KM indicated that there will be an update on both the Catalog effort and WIN at the next statewide FWRMC meeting on February 12-13, 2013.

Review of Current Water Atlas Features

Jim Griffin (JG) presented a demonstration of select features on the current Water Atlas (www.wateratlas.org).

- The Water Atlas landing page is a central point of access for all of the individual atlases, and this page may eventually include a link to the Catalog, as well. The landing page also contains general information about the Water Atlas, statistics on the data currently included in the Water Atlas, and a flex map that allows users to view information such as a statewide coverage of LAKEWATCH sites, or a coverage of STORET stations within the current sponsored areas of the Water Atlas. The flex map includes a search feature, where users can search for stations within a specific waterbody.
- The data download tool takes users through a series of steps to find the data that they are searching for. Users have the option to go back to any previously completed steps and change their search options.
 - o Step 1: users select the data type (surface water quality, groundwater water quality, surface water hydrology, groundwater hydrology, meteorological, or near-real time).
 - o Step 2: users select the type of filters to use to limit search results. Filter types include location (watershed, HUC, waterbody name, etc), site information (waterbody type, station name, or data provider), and sample information (date range, parameters, etc).
 - o Step 3: users select their desired search criteria from the list of filters selected in Step 2. For example, if filtering by data provider was selected in Step 2, then the user could choose a specific data provider, such as "Sarasota County". Similarly, if filtering by parameter grouping was selected in Step 2, then the user could select a specific grouping such as "nutrients".
 - o Step 4: users select the specific stations to retrieve data from. The option also exists to return data from all stations that match the selected search criteria. The list of stations includes links to the data provider metadata associated with each station, and links to waterbody maps, which display all stations within the selected waterbody.
 - o Step 5: users select the format for the data download. Format options include Excel and text files. Users can also graph the selected data, bookmark the query, or email the query to another user.

JS gave a brief summary of the data upload process. The current data upload system allows users to upload a text file of information, and then define the data fields that are represented in each column. Once the data is uploaded, it undergoes a series of automated checks, and it then enters the system as provisional information for the data provider to review. Following review, the data is released to the Water Atlas. This system will likely be similar to the system that will be used for the Catalog. The Water Atlas also currently provides upload services to STORET for several data providers because the data is in a usable format once it has been incorporated into the Water Atlas.

BT asked if the Water Atlas has a way of distinguishing between active and inactive sites. JG and Keith Bornhorst (KB) indicated that the flex map includes all types of data, but the data download tool includes the ability to filter the results by sample date. The Data Mapper tool, which is designed to show near-real time data, allows users to view whether a site is active or inactive.

GS asked how migrating to WIN will affect the search process. JS indicated that the Water Atlas will need to periodically download the data from WIN, just as it currently does for STORET. For the Catalog, links will need to be created between the station information in the Catalog and websites where data from each station is available in WIN.

KM asked how much data can be graphed. JG indicated that the graphing is an exploratory tool for viewing the data. The system is capable of graphing any period of record for a single analyte. Jay Silvanima (Jay S) asked how the limits are selected for the y-axis on the graphs. Jay S also asked if there is ever a frame of reference (e.g. a threshold level related to water quality standards) overlaid on the graphs. JG indicated that some sponsored atlases have requested that trend lines and the benchmark thresholds from the 1996 305(b) report be added to the graphs for select analytes. Some sponsored atlases have also requested a Bay Condition Report tool, where the thresholds from the numeric nutrient criteria are compared to five-year arithmetic or geometric means of data collected for chlorophyll, nitrogen, and phosphorus. If data indicates that analyte levels are above the thresholds, the area is listed as "caution" status in the Bay Condition Report. The term "fail" is never used because it could be misleading.

BT asked if the Water Atlas connects to near-real time data providers' web services or if the data is cached. JS indicated that the Water Atlas routinely (e.g. every hour) downloads the data and stores it in the Water Atlas system. JG added that the Water Atlas currently displays data from a limited time frame for near-real time data, but it also provides links to the data providers' websites where additional data may be available.

KM asked if the Water Atlas staff were planning to use an interface for search and data download tools, similar to those from the current Water Atlas that were demonstrated today. JG indicated that they are willing to create any search tool that is desired, but indicated that they have received positive feedback from users about the tools currently used by the Water Atlas.

Concluding Remarks

KM indicated that there will be an update on both the Catalog effort and WIN at the next statewide FWRMC meeting on February 12-13, 2013.