

Update on the FWPMC Catalog of Monitoring Programs

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Catalog Workgroup process

- Review of workgroup process to this point
- Recommendation and rationale
- Metadata considerations
- Questions & discussion



Background & Review

- Over the last year
- Evaluated 18 online catalogs / atlases:
 - easy to navigate user interface & search features
 - (text-based and spatial)
 - the ability to search metadata
 - the ability for data providers to upload and edit their own monitoring station information
- Also identified desirable features of these 18
- Collaborate with an existing / ongoing effort

Background & Review

- Identified 3 existing online catalogs / atlases as potential collaborators
 - Gulf of Mexico Alliance (GOMA) Catalog of Monitoring Programs (developed by University of Miami)
 - Water Atlas (developed by University of South Florida)
 - Map Direct (used/developed by DEP).
- Brief statement of needs to potential collaborators
- UM (GOMA Catalog of Monitoring Programs) and USF (Water Atlas) responded with pre-proposals

Background & Review

- Pre-proposal Reviews
- June and August
- Workgroup intent to assess both USF Water Atlas and GOMA Catalog of Monitoring Programs
- Requested extra time (September) to make a recommendation to the FWRMC
- Issue: Delay in release of GOMA Catalog

Background & Review

Comparison of pre-proposals:

Response	UM - CCS	USF
Cost	\$60,339 year 1 devel /main (includes server cost) \$23,399 year 2 maintenance \$24,773 year 3 maintenance	\$47,547 for Design and Development and first year of implementation/maintenance \$25,000 for annual maintenance
Timeline	1 year development	6 mos. Beta; 6 mos. Evaluation & finalization
Portability/Server Locations	Server would be at UM; system could probably be designed to be portable	Server would be at USF
funding for database administration / Q A staff is included	Yes, during initial loading of data into the Catalog	Yes; in addition, a tool will be developed to allow the data provider to run site matches for new sites and to assist in site matching where needed.
Additional Information	Server cost \$4,000 + \$220/yr. hosting fees (included in above costs)	
Comments	Costed out as separate system from GOMA catalog; costs may be less depending upon alignment of FWRMC MC features with those of GOMA MC	Maintenance . . costs are based on assumed saving from the use of previously developed Water Atlas applications and the fact that the Water Atlas has mapped about 45% of the state of Florida water resources and data sites.

Background & Review

Comparison

- Estimated cost and completion time - similar
- Water Atlas staff appear to have more experience with web-enabled databases and GIS.
- USF Water Atlas - dedicated support and infrastructure; major ongoing project
- GOMA Catalog of Monitoring Programs - relatively new project at UM

Recommendation

- 4 of 6 participants in October Catalog Workgroup meeting voted to recommend USF as developer of FWRMC Catalog
 - 1 abstained
 - 1 refrained



Decisions, Decisions . . .

- If USF selected, should the Monitoring Catalog be part of the existing Water Atlas website, or a separate app? (either option is feasible.)
- How much time is needed to associate monitoring sites with water bodies?
- What are the properties of the fields included in the database?
 - domain limited (to enable the use of drop-down lists)
 - free text

Decisions, Decisions . . .

- What metadata elements to include in the Catalog?
- What level of detail is desired?
- What are the priorities?
- What is the timeline to accomplish this?
- How are sites/stations for probabilistic networks addressed?



Metadata Challenges

where the rubber meets the road . . .

- Who monitors/ed?
 - Organization and project name are desirable; program names subject to changes
 - Contact person an issue; full discussion needed to resolve
- What is being monitored?
 - unique station identifier based on location and station name (primary key)
 - GW stations present additional challenges
 - Parameters
 - Medium
 - Frequency of monitoring parameters by station, or link to data

Metadata Challenges

where the rubber meets the road . . .

- When are/were stations monitored?
 - Period of record
 - Start date
- Where are the stations?
 - Lats/longs, standard format
- Why is/was monitoring conducted?
 - Include Data Quality Objectives –field optional
 - DQOs may change with station over time

Metadata Challenges

- Explored Southeast Coastal Water Quality Monitoring Metadata Web Portal:
 - could be used as a starting point
 - Start and end dates vs. parameters measured
 - Not useful because all parameters ever measured are listed
 - Clarification needed on whether “SiteCode” can be used as unique identifier –e.g .,whether name refers to agency’s internal db or this external db

Metadata in SE Coastal Data Portal

Field	Required	Explanation
Program	Yes	Monitoring program under which the site or station is operated
SiteCode	Yes	Code or short name used as the site or station identifier within the monitoring program
SiteName	Yes	Full name of the site or station
Description	no	Description of the site or station
State	no	State the site or station is located in
County	no	County the site of station is located in
Location	no	Additional location description information (if relevant), e.g. local geographic features or context
Latitude	Yes	Geographic latitude in decimal degrees
Longitude	Yes	Geographic longitude in decimal degrees
HUC8	no	8-digit hydrologic unit code (will be auto-generated if missing)
HUC12	no	12-digit hydrologic unit code (will be auto-generated if missing)
DateStart	Yes (if available)	Date the monitoring activity started
DateEnd	no	Date the monitoring activity ended (blank for ongoing)
WebsiteUrl	no	Address (URL) for a web page describing the site or station
DataUrl	no	Address (URL) for a web page or FTP site for obtaining data from the site or station
Parameters	Yes (if available)	List of parameters (variables) measured at the station, including STORET codes or units and methods when possible

Questions and Discussion

