

Proposed Revised Metadata Standards Workplan and FWRMC Member Assignment

Background

After the last Council meeting, some weaknesses in the overall approach were pointed out, remedies discovered and a revised approach was identified. This revised approach would add to the scope of the Metadata Expert Panel and shifts the contractor's responsibilities more purely to survey design, implementation and analysis. This approach uses expertise more effectively, thus streamlining and potentially conserving costs for the overall effort, and addresses the weaknesses of the original approach. The revised approach to the metadata standards effort will also be presented to DEP Secretary Mike Sole during a briefing of Council efforts that will take place before the September meeting.

Summary of Proposed Approach

- o Water resource monitoring and research investigations are spread across many different scientific and technical disciplines. It has become apparent that a single uniformly-applied metadata standard is not the best approach, as it would inherently result in one of two scenarios: 1) if the single standard is inclusive across the disciplines (i.e., additional necessary metadata elements added going from one discipline to the next) then this would mean having inappropriate metadata elements required for any one subset of the disciplines, or 2) if the single standard over-minimized the required metadata elements this would result in a poor ability in some or all of the different disciplines to assess data for user's needs. The proposal suggests discipline-specific standardization that would result in a "standard of standards" approach that mirrors the natural groupings of investigations that exist in the real world.
- o In constructing this new model, it is expected that a single subset of metadata, the "who-what-where-when" elements, will emerge from the process as a common set that is applicable to all disciplines and all data. Hence we are proposing a two-tiered set of standards, one tier that applies to all datasets, and a second tier that contains the discipline-specific sets of metadata standards.
- o This proposal recommends that the number and types of disciplines should be initially identified by the Monitoring Council. Outside the Council, separate workgroups for each discipline would be assembled and tasked to develop their own sets of discipline-specific candidate metadata elements for consideration.
- o It is proposed that a steering committee be formed that will include the members of the Metadata Expert Panel plus a metadata expert recruited from

each of the disciplines (we have undertaken to recruit members for a beginning set of these). This steering committee would select the workgroup members for each discipline and provide guidance and oversight for the workgroups, including potential service as individual workgroup chairs, as appropriate.

- o Cross-program data usability and sharing to conserve costs and maximize benefits was identified by both the Oceans Council members and members of legislative committees reviewing the Oceans Council's Research Plan in 2006 as high priority critical concerns. This workgroup process is proposed in recognition of this primary goal.
- o It is envisioned that each work group would first identify a set of questions appropriate for the discipline. These questions would be those that allow a given dataset to be judged for suitability for a broad, but not necessarily comprehensive, set of users' interests. The work group would use this set of basic questions to then identify a minimum set of metadata elements to satisfy this functional requirement – i.e., for a data user in a given discipline to assess data suitability for their needs.
- o Once all of the workgroups have proposed their sets of metadata standards, it would lead to the following requirement: data generators whose existing metadata standards include these minimum sets of metadata elements can continue using them without change; those data producers whose standards do not include the minimum sets would need to add the missing elements to be in compliance.
- o A second phase of the effort would use a survey to compare existing use of metadata elements and metadata standards statewide to the candidate sets of standards that are generated from the workgroups. The survey analysis is expected to produce key information on whether there is a need to revise the proposed sets of standards. Another expected product from the survey is the degree to which an average data generator as well as all data generators statewide will experience “adjustment pain” with various scenarios of compliance with metadata standardization.

****** FWRMC Member Assignment For The Council Meeting ******

Per the above proposal, it is requested for FWRMC members to think about what discipline groups would be appropriate to start with. To help get the process started, the following *partial* list is provided. This list would be fleshed out at the meeting.

Data Discipline Groups in Monitoring and Research Investigations

Laboratory Analytical

Acoustic

Satellite-based Remote Sensing

Aerial-based Remote Sensing
Ocean Observing
Locational (Mapping/GIS - two separate groups?)
Meteorological
Etc.

And For Discussion at some Future Time.....

Data Elements Common to all Disciplines

Who

What

Where (Assign to Locational workgroup?)

When

Why

How