

Florida Water Resources Monitoring Council

September 11 & 12, 2007

St. Johns River Water Management District
Palatka, Florida

REPORT OF PROCEEDINGS

COUNCIL MEMBERS PRESENT:

Ellen McCarron, Florida Department of Environmental Resources (FDEP), CHAIR

Kevin Carter, Florida League of Environmental Resource Agencies (FLERA)

Paul Carlson, Florida Fish and Wildlife Conservation Commission (FWC)

Graham Lewis, Northwest Florida Water Management District (NFWFMD)

Linda Lindstrom, South Florida Water Management District (SFWMD)

Mark Rials, Southwest Florida Water Management District (SWFWMD)

Steve Richter, Saint Johns River Water Management District (SJRWMD)

Gail Sloane, Florida Department of Environmental Protection (DEP)

Meagan Wetherington, Suwannee River Water Management District (SRWMD) (Day 2)

There were 8 observers the first day and 14 observers the second day.

Day One: Tuesday, September 11, 2007

AGENDA REVIEW/MEETING GUIDELINES

Council Chair, Ellen McCarron, opened the meeting and welcomed everyone back. She then turned the meeting over to the Facilitator, Janice Fleischer.

Ms. Fleischer began by reviewing the Agenda (**Exhibit A**), Meeting Guidelines and Public Comment Guidelines. For meeting Reports, exhibits, Guidelines and other Council documentation go to <http://www.dep.state.fl.us/coastal/WaterMonitoringCouncil/>.

All members and Observers introduced themselves.

LIAISON UPDATE

Council Liaison, Steve Wolfe, delivered his Liaison Update (**Exhibit B**).

Mr. Wolfe covered the following items:

1. The current budget status: The Florida Legislature has not yet passed an amended budget. The Governor's recommended budget did not reduce the amount of the Florida Oceans and Coastal Resources Council budget (upon which this Water Monitoring Council is relying for funds for its Metadata Standards task); however, the Legislature may still cut that budget. Mr. Wolfe will keep the Council members informed of this situation as it resolves.
2. The good news is that the Integrated Data Management (IDM) budget is not involved in the cuts as far as we know, although it is necessary to wait for Legislative action before any project work

can be done; FDEP staff is working toward hitting the ground running once the budget is approved.

3. The Gulf Of Mexico Alliance (GOMA) will be involved with the Gulf of Mexico Coastal Ocean Observing System (GCOOS) in a Harmful Algal Blooms (HAB) Monitoring-System Design Workshop in New Orleans on November 14-16, 2007.
4. Another GOMA workshop is in the works to design nutrient-fate studies in support of establishing coastal nutrient criteria.
5. There is a Southeast Atlantic Alliance in the initial steps of creation. It would be made up of the following states: North Carolina, South Carolina, Georgia and Florida.
6. The Metadata standards: FDEP has begun a series of staff meetings within DEP and other state agencies to raise awareness that these standards are being developed and are coming. In a meeting with the Information Technology (IT) staff of four of the five Water Management Districts, they seem very receptive and just want to know when they must put things in place.
7. The Monitoring Coordination Strategy: we will move forward to develop more details on the second day of this meeting. He suggested the Council use the GOMA Action Plan format and asked members to review it overnight.

Mr. Wolfe touched on proposed changes in the Council's Metadata Strategy and explained that Chair, Ellen McCarron will explain this change in more detail in the next section of this meeting.

Following Mr. Wolfe's Report, Members made these comments:

1. How does the SE Alliance relate to SECOORA?
 - a. Not really, same way GOMA works with GCOOS, they do some coordinating but they are not really the same
 - b. It is all evolving.
2. What is their primary funding mechanism?
 - a. None really, but it was seen that regional groups are more likely to get funded by the federal government rather than individual efforts.
3. Steve Richter, as the Chair of the Expert Panel, said he thought we would always end up with discipline-specific metadata plans.

METADATA STRATEGY-UPDATE AND FURTHER REFINEMENT

Ellen Mc Carron, Council Chair, discussed the newly proposed Metadata Strategy (**Exhibit C**) and showed the group the draft of some initial proposed disciplines (**Exhibit D**-proposed Disciplines and Leads).

Ms. McCarron explained that however disciplines are defined, it will be necessary to identify experts in each of the disciplines in order to ensure that the data is reviewed by experts and obtain their comments and suggestions.

This change in the strategy will then bring about a change in the Consultant's role since the Consultant will no longer have a key role in proposing a standard. The Council's role will remain as oversight of the entire process.

There followed an open discussion during which Council members shared their reactions to this suggested change in strategy:

1. I like this overall approach; how do we get discipline leads and their groups' commitment of time?
2. Basically you will have several "expert" panels.

3. The SOW for the Consultant is changed somewhat; but the Metadata Expert Panel would still oversee this effort.
4. How do we get the commitment of the discipline staff? This requires time and money from staff.
5. I am a little confused now; we were going to have a potential Consultant and now we have changed that, how do you envision the role of the Consultant in light of this new strategy?
 - a. If we use a facilitated workshop format it may help.
6. Identify discipline leads and then they identify the top five people in each discipline, the Consultant could go out and interview those five people in each discipline and gather their information; the Consultant then has the main responsibility for gathering this data and then incorporating it in the plan for each discipline.
7. A workshop arena is good to get the full input; individual interviews allow for less domination by outspoken folks and people tend to be more open in their own environment.
8. We must have a valid list of entries and content standards.
 - a. We must have only one name for the same thing.
9. We would rely on discipline leads to designate others in the area.
10. I like this idea of different disciplines; does Level One satisfy the Legislature? Do we need to do Level Two- the disciplines?
 - a. You need to shrink it down to assess many types of data.
11. What happens to our deadlines?
 - a. Reality is that until the budget is approved, we can't set any deadlines.
12. Is there a known criterion of the different standards you want? Each group will assess depending on its own needs. Do we want to make that shift?
 - a. What is a "reasonable" level that would serve everyone's use?
13. The approach that we developed at prior meetings would have allowed us to bring a defined deliverable to the Secretary. What is the end goal of what is going to the Secretary under this new strategy?
 - a. The "candidate" goals by discipline form the basis for formation of standards as compared to existing standards.
 - b. Why go for national standard survey?
 - i. Candidate standards may coincide with whatever national standards are found and that further informs the process.
14. The current standards seem to be lacking the assessment part of this effort.
15. I do think this new effort will lengthen the process even though I like it and am fine with a change.
16. This effort of the Council is really a huge effort and needs to be done correctly. We were trying to have our product done by the next Legislative session; this will more than likely change that.
 - a. Our task is to deliver a "strategy"; but there is also the need to have specific projects.
 - b. Don't think the Ocean's Council will be upset about change in strategy and timing if our product is well founded and a quality product.
17. Concern that we are serving two masters now; one that is paying us and one that created us; how do we reconcile this?
 - a. FDEP has a certain focus for how they approach assessments and the Oceans Council wants a more loose definition of assessment for their purposes; how do we reconcile this?
 - b. There is a regulatory component from FDEP for the assessment.
18. FDEP used to have 20 elements that they required but it was so unfriendly (not useable) that has now changed.
19. Those of us from DEP need to take off our TMDL blinders.
 - a. FDEP is aware that final standards may not fully serve their needs.
20. This will not apply to old data.
 - a. Ocean's Council has talked about that, they are addressing what to do with old data separately.

The Council was asked for consensus on the following concept:

There is a need for a suite of core metadata standards along with discipline specific metadata standards:

5	4	3	2	1
7	0	0	0	0

Consensus achieved

The Council then adopted (**with no objections**) the following common task to all potential options:

Consultant develops a survey to see what metadata and use of standards currently exists. List of existing standards is created. Consultant analysis is done to reveal how discipline specific standards compare to what is out there now. There is then a final review and revision by FWRMC.

The Council then began discussing what process would be used to accomplish the development of the metadata standards in light of the newly proposed strategy. Three options were suggested:

Option #1:

Consultant does everything as in original strategy. Consultant would compile options for discipline specific metadata standards.

Funds considered: Need money immediately.

Pros:

1. easy
2. quicker
3. more likelihood of consistency

Cons:

1. costly
2. starts later
3. control issue
4. may be no one with specific discipline expertise

Option #2:

Discipline groups are formed with leads; meet separately to come up with candidate discipline specific standards and common standards.

Funds considered: Cheaper and money not needed right away

Pros:

1. quicker initiation
2. engaging more agency participation right from the beginning

Cons:

1. potential lack of consistency
2. potential lack of commitment and time
3. longer process

Option #3:

Consultant works with discipline leads to identify top experts for each discipline. Consultant interviews top experts in each discipline and develops both discipline specific metadata and core suite standards strawman.

Candidates for core suite metadata standards and discipline specific metadata standards are revised and refined in one workshop (including breakout groups).

Funds considered: money needed immediately.

Pros:

1. more likelihood of consistency
2. engaging more agency participation right from the beginning

Cons:

1. cost
2. longer timeframe

Questions to consider if this is decided upon:

1. Who selects leads?
2. How many experts for each discipline to be interviewed?

Option #4 was suggested at the end of the day and there was much discussion:

FDEP writes a strawman standard. Final review and revision by FWRMC.

Reasons:

1. Some of the standards are more developed than others. The work could get started while we are awaiting funding decisions. The strawman would be brought to discipline groups for comment and this would allow the Council to go back to its oversight role.
2. If we go this route we must still decide on the disciplines.

In the audience during the meeting were several individuals who had been asked about being potential discipline leads. They were asked what they thought and they made the following comments:

1. I like Option #3 and would want:
 - a. Consultant assistance
 - b. Data types that must be considered
 - c. Offer up names of discipline experts
 - d. Metadata standards currently used in that discipline
 - e. Lot of value in interviews
 - f. Would like discipline lead and experts to discuss consultant findings, don't have a plenary workshop
 - g. Be forced to prioritize the elements
 - h. Possibly have a plenary workshop at very end
2. I prefer Option #3:
 - a. Two types of information: Semantics and syntax
 - b. The data is easily available, I would just have to collect and provide to Consultant
 - c. Making it interoperable is the challenge
 - d. I like the Consultant working with the lead, but we would provide the information to the Consultant
3. I prefer Option #2:
 - a. Will not have to recreate the wheel in order to get a Consultant up to speed
 - b. Everyone is going to bring their real life scenarios to the table, we work in the field
 - c. Cheaper because a lot of work is already done
 - d. Won't require so much Consultant input
 - e. Buy in should be greater if we work as a separate group
 - f. Consultant comes in at the end

- g. Duplication is ok initially

PUBLIC COMMENT

1 person commented:

Katherine Byrd, FDEP

Note: Public comment is not transcribed. If anyone from the public desires to have his/her comments appear in the Report of Proceedings, they can submit their comments in writing on the comment cards provided at each meeting or email the Facilitator, Janice Fleischer (janice@flashresolutions.com) within the first week following the meeting.

BREAK

A short break was taken at this point in the meeting.

METADATA LOCATOR STATUS UPDATE

Prior to continuing the discussion regarding the options, the following presentation was made.

Gretchen Ehlinger, Consultant to the Army Corps of Engineers (ACOE) **Exhibit E.**

Following the presentation the members made these comments:

1. How did you develop the elements?
 - a. Workshop to get buy in on the elements considered.
2. Did you start from scratch or did you have a template?
 - a. We started with blank paper on the wall and allowed people to write things down.
3. Real time vs. non real time was determined by what the agencies offered.
4. Basic framework is currently pretty much built. Could we borrow it and forward it somewhere else?
 - a. Maybe by January, 2008 the data would be started to be loaded.
5. When would it be ready for it to be borrowed? How about a demo?
 - a. Not sure, but maybe by January or February, 2008.
6. Are you familiar with FWC GAME program? Are they similar?
 - a. No, I am not.
7. GAME has no link to real data; this program just has the 35 elements and where they are located.
 - a. One is where information is located and this one is where monitoring is taking place.
 - b. USGS has SOFIA.
8. What platform is it written in?

ADJOURN

The meeting was adjourned for the day and the Chair and Mr. Wolfe announced they would discuss how to proceed with the Strategy discussion and make that announcement in the morning.

Day Two: Wednesday, September 12, 2007

WELCOME BACK

Members reconvened for the second day of the meeting.

METADATA STRATEGY CONTINUED

Upon reconvening, Ms. McCarron announced that she and Mr. Wolfe would modify the Metadata Strategy as needed to accommodate the new decision concerning discipline specific standards and keeping the format of the original strategy developed by the Council as much as possible. It was decided no further discussion regarding the change in strategy was necessary at this juncture. Ms. McCarron and Mr. Wolfe indicated that the previous day's discussion was very helpful to them and thanked everyone for their input.

The facilitator suggested that the Council make a decision on what disciplines they thought needed to be included before moving into the IDM discussion. Council member were directed to a draft list of disciplines for their consideration which were developed by the Chair and Mr. Wolfe. **Exhibit F** includes potential leads for each discipline.

Members commented:

1. How did you come up with these draft items?
 - a. Just tried to group data that might have one set of questions.
2. Common set could end up being very large.
3. We need to let the experts bring their information to the table and then the groupings we made could always be changed.

What follows are the refinements made to the list of Disciplines:

1. *Satellite remote sensing*
 - a. Do satellite and aerial remote sensing need separation
 - i. Yes

Accepted, No objections
2. *Aerial remote sensing*
 - a. this will need digital and analog separation

Accepted, No objections
3. *Analytical/Laboratory/Field Measurements*
 - a. What is the key part/ distinct from biochemistry
 - i. Anything measured in a lab not a field
 - b. Does this leave out fish census, chlorophyll etc.
 - c. Measurements using instrumentation
 - d. I also want to know more about field data re: collection
 - e. Biological measurements will cross several fields
 - f. Groundwater

Accepted, No objections
4. *Spatial*
 - a. GPS unit and recording

- b. Remote sensing might incorporate this
- c. Vertical datums, mapping, cartography are all in this
- d. Is this also land use, GIS databases?
- e. Deserves its own category

Accepted, No objections

5. ~~Water Quality~~

- ~~a. what is in this that hasn't already been covered;~~
- ~~b. not separate, just a different way of measuring~~

Eliminate this item

6. *Ocean Observing*

- a. We heard yesterday that there already is a set of metadata that they are ready to put on the table (from one of the experts who attended the meeting).
- b. Ocean observing is not a single thing, there are parts that are different that don't fit in other categories.
- c. Non-measurement part of the ocean observing.
- d. Physical oceanography is different from fresh water hydrology.
- e. May be too broad.
- f. Treat it by itself because there are several integrated ocean observing groups.
- g. Separate salt water and freshwater.

Accepted, No objections

7. *Acoustical measurements*

- a. SONAR
- b. There are many other acoustical based measurements, i.e. Fish spawning.
- c. Are these the same?
- d. Real issue may be benthic mapping and bathymetry.
- e. What about the terrestrial side?
- f. Mapping might be the biological side.

Accepted, No objections

8. *Biological Measurements*

- a. Fisheries, macrovertebrates.
- b. What are populations?
- c. Benthic communities.
- d. Observations.
- e. How broad do you want this to be? Incredibly diverse, do you want all the possibilities, like:
 - i. Field
 - ii. Census
 - iii. Gene mapping
- f. Look at current biological parameters that are currently reported.
- g. Taxonomy.

Accepted, No objections

9. *Meteorology, Hydrology and Hydraulics*

- a. Flow measurements, streams and canals, water control structures.
- b. Meteorology.
- c. Fluid dynamics.

Accepted, No objections

10. Field Sampling methods

- a. Separate from analytical.
- b. Different techniques.

Accepted, No objections

11. Groundwater

- a. What makes it different from surface water?

Accepted, No objections

One of the experts present suggested that the experts chosen be asked to consider freshwater observing.

ST. JOHNS RIVER WATER MANAGEMENT DISTRICT (SJRWMD) PRESENTATION

Scott Snyder, SJRWMD, was the first presenter. (Exhibit G)

Member comments following Mr. Snyder's presentation:

1. What is the estimated resource in time?
 - a. it pretty much drives itself, but was a several year set up process

Ed Lowe, SJRWMD, was the second presenter. (Exhibit G)

BREAK

A short break was taken at this time.

PUBLIC COMMENT

2 people commented

Catherine Katsikis, Private Consultant
William E. VanSickle, GIS Analyst, SJRWMD

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IDM SYSTEM DESIGN – STATUS AND DISCUSSION

Steve Wolfe, Council Liaison, delivered a short presentation (Exhibit H).

Member Comments:

1. Members should begin to think about putting their teams together.
2. Members need to make their agencies aware that IDM is coming.
3. Steve Wolfe will contact agencies to make sure they are aware and beginning to work on this.
4. Private sector: Kevin Carter can get the word out and help identify entities that might need to weigh in.
5. Florida Society of Environmental Analysts: you may want to present to them, they are meeting Oct 17-19, 2007 in Cocoa Beach, Fl.

6. SHRUG: Seven Hills Regional Users Group is meeting.
7. Stormwater Group meeting.

MONITORING COORDINATION STRATEGY

The Facilitator, Janice Fleischer, explained the process to be used in the next exercise to further develop and detail the Council's Monitoring Coordination Strategy. First the members were asked to review the goal groups which were drafted at the last meeting. They agreed on the following goals (with a change to #1 as reflected below):

- #1: Create a collaborative culture that is protective of natural resources.
- #2: Create a strategy for an oversight structure to coordinate monitoring.
- #3: Establish long term funding sources for coordination.
- #4: Coordinate monitoring strategies.
- #5: Create a workplan for data sharing and coordination. (who, what, when, where, why)

The Facilitator explained that the Council would break into two small groups to begin drafting Objectives for the Goals. Kevin Carter, Linda Lindstrom, Gail Sloane, and Graham Lewis, as a small group, worked on Goals #1-3. Paul Carlson, Steve Richter, Mark Rials and Megan Wetherington, as a small group, worked on Goals #4 and 5.

Ms. Fleischer reviewed the small group instructions:

1. Review the issues under your Goal Groups
2. Finalize the goal statement
3. Begin drafting Objectives
 - a. An Objective reaches the Goal while resolving the Issues
 - i. Number the issues and put the number of the issues that the Objective addresses next to the Objective

At the end of this exercise, the Small Groups reported the following results and those members not in the small group commented:

Goal #1: ~~Create a collaborative culture that is protective of natural resources.~~
Increase stewardship of Florida's water resources through a collaborative effort.

Objectives:

- 1-1. Getting Buy In from elected and appointed officials (or public officials and citizens), public and funding sources through awareness and education.
- 1-2. Getting Buy In from all monitoring stakeholders through awareness and education (private, and local to federal government).
- 1-3. Leveraging monitoring resources through the creation of partnerships.
- 1-4. Sustain the collaborative effort.

Comments:

1. May need to reword #1 re: funding sources.
2. Why are #1 and #2 separate?
 - a. Different approaches needed.
3. Who is the ultimate audience?
 - a. Public, agencies, supporters

1A Issues generated:

1. politics (Objectives: 1-1, 1-2, 1-3, 1-4)

2. no real political will or ongoing funding for coordination effort (freshwater, saltwater) at state/local/federal levels (Objectives: 1-1, #3, 1-2, 1-3, 1-4)
3. need long term support to make this happen (Objectives: 1-1, 1-2, 1-3, 1-4)
4. regulatory agencies have different policies affecting monitoring requirements (Objectives: 1-1, 1-2, 1-3, 1-4)
5. legal mandates (1-1, 1-2, 1-3, 1-4)
6. is there a carrot? Is there a stick? (Objectives: 1-1, 1-2, 1-3, 1-4)
7. regulatory flexibility (possible under Goal #4 or #5)
8. lack of stability in programs (Objectives: 1-1, 1-2, 1-3, 1-4)
9. variability in local/state/federal goals (Objectives: 1-1, 1-2, 1-3, 1-4)
10. bottom up vs. top down (Objectives: 1-1, 1-2, 1-3, 1-4)

1B Issues generated:

1. determine the “why” and outcome to benefit involvement of agencies, etc. (*action step*)
2. maintaining interest in the effort throughout time by agencies/organizations involved (Objectives: 1-1, 1-2, 1-3, 1-4)
3. establish liaison with federal partners (*action step*)
4. what about key organizations that might refuse to participate? (1-1, 1-2, 1-3)
5. buy in (Objectives: 1-1, 1-2, 1-3, 1-4)
6. need continued cooperative effort freshwater/coastal (different agencies) (Objectives: 1-1, also goes with Goals #4 and #5, 1-2, 1-3)
7. partnerships vs. mandates (objective: 1-2)
8. buy-in from all government levels and agencies (Objectives: 1-1, 1-2, 1-3)

#2: Create a strategy for an oversight structure to coordinate monitoring statewide. (*suggest this comes as an Objective under Goal #4*)

Issues generated:

1. how do we address dynamic nature of monitoring
2. monitoring clearinghouse; controlling new monitoring/requests for more monitoring
3. what about review of this process? Who and when will this be evaluated?
4. what is the intended definition of “coordinate”? what is a universal definition?
5. defining roles and responsibilities
6. need to establish who can do oversight
7. creation of an oversight committee to conduct the actual coordination
8. who will be the oversight entity to make coordination happen?
9. entity to oversee coordination, who?

#3: Establish long-term funding sources for coordination.

Objectives:

- 3-1: Identification of funding needs.
- 3-2: Pursue grant funding.
- 3-3: Develop Legislative budget requests
- 3-4: Identify potential internal budget sources.

These issues are all covered in the above Objectives.

Issues generated:

1. funding for oversight
2. need funding for coastal monitoring *-this is not relevant to tasks #3 and #4*
3. need money
4. funding
5. lack of long term dedicated funding sources

6. what about money to achieve the coordination?
7. crisis management drives funding

New goal Group Suggested: Pursue legislation to improve water resource monitoring coordination statewide.

Objectives:

- NG -1: Write legislation to establish a dedicated entity for monitoring coordination.
- NG-2: Write legislation that provides funding to fill the gaps in monitoring identified through the coordination effort.

Comments:

1. Needs more fleshing out.

Small Group Work results for Goals 4 and 5:

#4: Coordinate and optimize monitoring activities. (change in wording) (issues changed to objectives or action steps)

- a. *Identify key indicators for freshwater/coastal integration*
- b. *Agree on the information that must be shared in order to coordinate at a desired level*

~~Standardize~~ See c

- c. *Encourage agencies to adopt standardized and complementary monitoring designs*

Must be intra-agency review of monitoring to coordinate with outside agencies (action step)

- d. *update monitoring networks as necessary*
- e. ~~*need paradigm shifts in approach to monitoring*~~

Explanation of this item: we must change the idea that doing things the same way that is not working should be changed, new approaches must be considered

- f. *Establish data -quality objectives*
- g. *Implement communication between state/federal/local monitoring efforts especially on east coast similar to GOMA and NERRs*
- h. ~~*Change/update monitoring needs to better coordinate. ??*~~
- i. ~~*Establish regional coordination among monitoring groups with common goals/needs by location/region*~~

~~Assist agencies and organizations with data delivery data in proper format~~

Develop mechanisms for sharing data (action step)

- j. ~~*redundant monitoring perception*~~
- k. *what is the scope of the necessary coordination See #5*

#5: Characterize monitoring activities (Note: emphasize management need that the monitoring addresses)

- a. *identify/group monitoring programs by common needs/goals*
- a. **Catalog monitoring methods: sampling and analytical, quality and quantity, frequency and duration (action step)**
- b. **create a site map detailing all existing current activities (action step)**
- c. **create a site map detailing all historic activities (action step)**
- a. *Make best use of existing information about monitoring programs*

Expand it?

Update it?

Create it?

- b. Establish metadata standards (*see Metadata Strategy?*)
- ~~c. dealing with metadata issues~~
- d. Defining clear monitoring objectives and key indicators
- ~~e. Catalog the needs and goals of monitoring programs~~
- ~~f. Is monitoring short or long term? Event driven? Resource management or regulatory~~
- ~~g. Identify metadata in use by monitoring programs~~

Comments:

1. Do you feel that “d” includes programmatic things as well?
 - i. Want to see what the program was about.
2. Did you have something in there about the tool to hold all this together?
3. On original sheet issue #6, it was moved to #4 above

NEXT STEPS

The next meeting of the Council will be held on November 7 & 8, 2007 in Tallahassee.

One member suggested the Council should try to have the January, 2008 meeting in Live Oak, Florida.

Any additional issues/items:

1. FDEP reorganization formed Division of Environmental Assessment and Restoration (DEAR). New division director is Jerry Brooks, Deputy Director is Drew Bartlett (just hired from EPA).
2. 2008 SFWMD Draft South Florida Environmental Report is out and peer review is October 2 and 3, 2007. One item is to reengineer and review their monitoring networks. Multi-year effort to accomplish this.

EVALUATIONS

Members were reminded to complete their Evaluations.

ADJOURN

The meeting was adjourned.

COMMENTS RECEIVED FROM OBSERVERS

Comments for the FL Water Resources Monitoring Council Meeting
September 11-12, 2007
By Katherine Byrd, Environmental Administrator – FDEP, Tallahassee

- *Remember to keep the “minimum metadata set” to just that – a minimum. Too many imposed standards will create data gaps, which I believe is contrary to the Council’s purpose. I and others from our agency can share with you the pains of imposed standards. If the standards are set too stringently you will end up with SJRWMD and SFWMD giving you their data since they have the capacity. You already receive their data, so all of this work will have been for nothing gained.*

- *By establishing a discipline lead, you will not be re-creating the wheel. Each lead would, presumably, be chosen based on a level of expertise, knowledge base and contacts. Each lead-person will be aware of current or standard practices and procedures or be aware of who to contact for this information. This will help eliminate the need to do research from scratch, which a contractor will have to do.*
- *A lot of work has already been completed by my agency on a set of water quality monitoring standards. We have experienced the pains of what not to do and what to learn from in the future. EPA has also done this on a national level.*
- *You will need buy-in from all the agencies and entities that will be impacted by this mandatory meta-data standards listing. Getting them involved from the beginning will lessen the severity later. Teams of experts should have a diverse cross-section from the various state, county, city and local agencies.*
- *Contractors will take a great deal of time to get up to speed in addition to moving forward.*
- *Consistency with contractors is not a "given" as some felt to be true during the Council meeting.*
- *Duplication of data types across the disciplines while brain-storming is okay. When the groups are brought back together in a final workshop to determine a final set of standards, this information will be useful to determine a level playing-field for all the disciplines. Again, this ties back to buy-in by the masses. It leads us to believe much thought has been put into the standards and we are in agreement.*
- *Discipline groups can work without immediate financing. Some work, as stated previously, has already been completed within each working-groups employment. The group would come together with a compilation of lists to begin the process that each person brings from their own personal experience. When you give these folks the ownership of a process you will tend to get a better product.*
- *Face to face workshops can help create synergy and better flow of ideas if moderated appropriately. No one wants to take perceived "orders" from a faceless entity.*
- *During a time of increased budget cuts, why even put the Consultant option as a "number 1"? The experience is already available within the staffing across the board in agencies statewide.*
- *Setting metadata standards will not completely assess the quality of the data. A cleansing-tool will still need to be addressed.*

*William E. VanSickle, GIS analyst III/GIS Liaison, Division of Environmental Sciences, SJRWMD:
 "GIS terms: how does the effort dovetail with the federal Geographic Data Committee? Content standard for digital geospatial metadata?"*
