

Florida Water Resources Monitoring Council

March 21 & 22, 2007

Tallahassee, Florida

REPORT OF PROCEEDINGS

COUNCIL MEMBERS PRESENT:

Chris Brooks, Florida Dept. of Agriculture and Consumer Services (DACCS)
Kevin Carter, Florida League of Environmental Resource Agencies (FLERA)
Graham Lewis, Northwest Florida Water Management District (NFWFMD)
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)
Bob Vincent, Florida Department of Health (DOH)

MEMBER ALTERNATES PRESENT:

Megan Wetherington, Suwannee River Water Management District (SRWMD)
Nenad Iricanin, South Florida Water Management District (SFWMD)

There were 6 observers.

DAY ONE: MARCH 21, 2007

WELCOME AND OPENING COMMENTS

Council Liaison, Steven Wolfe, after welcoming everyone back, announced that Ellen McCarron, Council Chair, is out of town and would not be present at this meeting. He then turned the meeting over to Council Facilitator, Janice Fleischer.

AGENDA REVIEW/ MEETING GUIDELINES

Ms. Fleischer reviewed the Agenda (**Exhibit A**), explained public comment opportunities and guidelines to new visitors, reminded Observers and Members that there are comment cards available to allow them to add information they want to appear in the Report of Proceedings. She also mentioned that, since the Council may be asked to make some interim decisions, there would be two opportunities for public comment on Day One although it is a short (4 hour) meeting. This is designed to allow the public to comment prior to any final decisions being made and then give the public an opportunity to comment again at the end of the day.

Ms. Fleischer directed members to their meeting packets for a review of the four (4) charges of the Council:

1. Develop a list of water quality metadata standards for agencies and water management districts to adopt.

2. Support development of a STORET database replacement as a repository for stakeholder water quality monitoring data.
3. Coordinate fresh water and coastal statewide monitoring program networks.
4. Coordinate Florida's monitoring efforts with federal programs.

In reviewing the Agenda, she noted that on the first day of the meeting, members would be concentrating on charges #1 (Metadata Standards) and #2 (STORET replacement support), while on the second day they would have several presentations on data and have an initial opportunity to discuss charges #3 and #4, the two charges which target the Council's duties to assist in coordination of monitoring.

All Reports of Proceedings of the Committee, Meeting and Public Comment Guidelines and other Committee related information, can be found on the FDEP website at:

www.dep.state.fl.us/coastal/WaterMonitoringCouncil.

LIAISON UPDATE

Steve Wolfe, Council Liaison, delivered his liaison update.

At the last meeting of the Council, there was interest expressed by the public and supported by some members in expanding the Council's membership. While this is a possibility in the future, at the present time, pursuant to the desires of the past (Colleen Castille) and current (Michael Sole) Secretary of the Florida Department of Environment Protection, there will be no additional members added to the Council. However, a structure on how we get information from all the other stakeholders needs to be developed as the Council moves forward.

Mr. Wolfe then gave a presentation (Exhibit B) on the Governor's proposed FY 2007-2008 budget for the Florida Oceans and Coastal Resources Council. He also noted that the Ocean's Council and the Water Monitoring Council are composed and operate differently.

Member comments following presentation and update:

1. Who will manage the contracts and projects of the Oceans Council?
 - a. Probably DEP but Legislature decides this
2. This budget is still just proposed not final yet.
 - a. Yes, still just proposed but more optimistic this year since actually in the Governor's budget
3. Secretary Castille had decided to keep this Council at the size it is, how about new Secretary Sole?
 - a. Secretary Sole was present at the meeting where the Council composition was decided and was in favor of the small Council.
4. Kevin Carter of FLERA made a comment that his constituency will be very disappointed with this decision. FLERA feels there should be more seats on this Council.
5. Gail Sloane is willing to communicate with FDEP but feels Ellen McCarron should be the conduit
6. How was Oceans' presentation received at the Senate panel?
 - a. Very well
7. Is there a spot in House or Senate for the Oceans budget?
 - a. It is in the works
8. It doesn't look like the Oceans Council is going to get cut out of the budget.
 - a. You never know and can't really predict the Legislature's actions
9. SECOORA (Southeast Coastal Ocean Observing Regional Association_ will be meeting in June; Broward County has become a member, also FDEP, and FLERA. The June meeting will be to establish their governance, membership, etc.

10. SECOORA is building their organizational structure as part of the federal requirements to have a formal organizational structure to be part of the federal IOOS (Integrated Ocean Observing System) and to receive federal funds for that effort.

COUNCIL CHARGE #1: METADATA STANDARDS

PART ONE: BRIEFING: MARCH 14, 2007 OCEANS COUNCIL MEETING INTERACTION

Council member Gail Sloane, FDEP reported (Exhibit C) on her presentation to the Florida Oceans and Coastal Resources Council at their March 14, 2007 meeting. She gave the Oceans Council an overview of this Council's work. Additionally, she went over issues that were raised by Oceans Council members regarding their Integrated Data Management and Dissemination recommendation (IDM). She had asked Oceans Council members for their comments and whether the Oceans Council would want to formally align with this Council to get the metadata portion of the IDM accomplished.

PART TWO: DISCUSSION: METADATA-INITIAL STEPS

Following Ms. Sloane's report, Mr. Wolfe presented a timeline of tasks and dates for Council members to consider for initiating this Council's work. An initial timeline will need to be established during this meeting. (Exhibit D) His next (Exhibit E) was a possible organizational chart for how this Council approaches the work to be done for Charge #1- Metadata Standards. Mr. Wolfe suggested a format using working groups.

Mr. Wolfe went on to stress that stakeholder input will be very important to the Council's process. He counseled the members to get "buy in" as they proceed, not "imposition" at the end. Ms. Fleischer, the Facilitator, pointed out that there are sunshine issues regardless of how this effort is organized. Kelly Samek, Esq., Council's advisor regarding Sunshine Law issues, addressed the group regarding Sunshine requirements. As a Council which must adhere to Sunshine Law mandates, any delegation of decision-making functions, makes that delegated body, too, subject to sunshine. The same notice and timeline strictures must be followed. The only possibility of a group created by this Council not having to follow sunshine requirements is to have them conducting fact finding only, not making recommendations. If the group does any "culling" or limiting of options at all it is deemed to fall under the sunshine requirements. As long as they provide the full universe of data, even if sorted, their work would not fall under the sunshine requirements.

In this same regard, before you would set up a group like this that falls under sunshine requirements, it would be necessary to alert potential members that their work would be subject to sunshine because, due to sunshine restrictions on communications among members, some individuals may not want to be on a sunshine group.

Members made the following comments following Ms. Kelly's overview:

1. What is the difference in "starting from scratch" or "complete review"?
2. If we are going to look at a full list of metadata standards and we are going to look at each of them, then that is essentially the same as "starting from scratch"
3. Thank Gail Sloane for representing this Council to the Oceans Council.
4. Do we have the structure of the other metadata efforts?
 - a. There are a number of groups that establish metadata standards for particular reasons, there is not one in particular that "cross walks" the data.
5. The necessity of a Water Council liaison to the Oceans Council is not set, it may be that Gil McCrae or Steve Wolfe can already be the liaison as they are already working with both groups.
6. How does Oceans Council see this group? Are we the expert group?
 - a. Council did not really answer that
7. Our timeline may make it impossible for us to get this done without working groups.
8. The bulk of agencies are on this Council and if they all agree to metadata standards, then you won't necessarily need to wait for the Legislature to mandate the Oceans' Council IDM recommendation.
9. Tasks that need to be done:

- a. I like the strawman that Steve proposed but I don't think we need two separate groups.
- b. I think we need help to gather the information; we can't do it ourselves.
- c. Is there a budget for us to hire a consultant?
 - i. Basically FDEP has no funding in this year's budget.
 - ii. Also, this needs to be done by June 30, 2007.
 - iii. Even if we hire someone, we still need to tell them what needs to be done.
- d. What is the volume of metadata standards out there? Do we deal with all possibilities?
 - i. We have to deal with all of them.
 - ii. How is this done? If someone is just gathering the universe of data, that would be outside the sunshine purview.
- e. The Oceans' Council's timeline was July-December, 2007 to come up with strategy.
- f. Maybe what we could be doing is gathering the information together to recommend a strategy.
- g. Once a strategy is established, we could then go with next budget cycle to hire a consultant.
- h. We need to come up with a list of items/agencies/entities that have metadata standards for a consultant to use.
- i. How about a mass mailing with the request for giving us the metadata standards?
 - i. Who does and pays for the mass mailing?
 - ii. Often you get no response to letters like that.
- j. You need to have local, state, regional, federal, international and NGOs.
- k. Direction seems to be do a survey of metadata standards and see how many are consistent; then we recommend a standard.
- l. We need to find out from stakeholders how feasible our recommendations are; we can't use just the survey results, we must send out our draft for input.
- m. Will our final end product change what FDEP is currently doing?
 - i. Yes
- n. Where are we going with all this? How will it be applied?
 - i. Look to Oceans Council statement of needs regarding metadata standards:
 1. *portability*
 2. *sharing*
 3. *use across agencies*
- o. What is the evaluation period?
- p. There is a concern about incorporating old data; which data is worth inputting and incorporating.
- q. Where is national effort on this task?
 - i. They have comprehensive standards but they are different sets; some are more detailed than others.
- r. This is not useful unless it is universal; or at least very broad.
- s. We might beat out the federal government in putting forward metadata standards.
- t. How is the federal government going through their process?
- u. We do not want to be at cross purposes to the federal effort.
- v. We want the minimum requirements of metadata standards in order to be able to share the data across entities/agencies.
- w. We should go back to our agencies/constituencies and find out what the problems are now with metadata.

At this point in the meeting the Council took a break.

PUBLIC COMMENT

1 person commented: Jyotika Virmani, FI COOS Consortium

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.

CHARGE #1 DECISION

Proposed elements of a strategy for consensus:

This is only regarding water resources metadata standards –details to be developed

- WRMC does oversight and coordination of the metadata standard process
- Private consultant to gather all data beginning in July, 2007 (or before if funds available)
- Stakeholder-input meetings

Member comments before consensus:

1. Charge #1 included water quality data standards; now we are only doing metadata standards for this strategy.
2. Are we only focusing on water quality metadata standards? Oceans Council included biological?
 - a. We are focusing on water *resources* metadata standards. Yes, it includes the biological

First ranking on strategy for metadata standards only, see the yellow highlighted text above

5	4	3	2	1
0	7	2	0	0

Consensus achieved

After consensus was achieved on this conceptual strategy, the Council considered the timeline and tasks (see Exhibit D)

Member Discussion:

1. Our recommendation goes to Secretary Sole.
2. We could make tiered recommendations.
3. RE: consultant to data mine: let's try to keep the budget for the consultant below RFP cutoff.
4. Are there two tasks, data mining and common elements?
5. Chris Brooks offered an outline of a strategy
 - a. *Members provide list of agencies*
 - b. *There is a survey of all agencies.*
 - c. *Survey of each county's environmental protection arm.*
 - d. *Find out what data standards exist and what is still needed*
 - e. *Compilation of data into a matrix*
 - f. *Analysis of frequencies*
 - g. *Summary*
 - h. *Then this end product goes to this Council, Council discusses*
 - i. *Council presents to public and other agencies for comment*

The following timeline was adopted with no objections:

Task	Date
Initiate strategy formulation	Mar-07
Initiate stakeholder input	Apr-07
Initiate stakeholder metadata info collection	
Complete strategy	May-07 to June 07
Start stakeholder workshops	Jul-07
Start stakeholder metadata info collection	

CHARGE #2: STORET - PRESENTATION

Katherine Byrd, FDEP Division of Water Resource Management, Tallahassee, delivered a PowerPoint presentation (**Exhibit F**) on STORET, U.S. EPA's StorageRetrieval water quality database. Ms. Byrd asked how many members know about the current STORET and how many were currently downloading into the current STORET. A few members raised their hands.

Ms. Byrd explained that FDEP wants to replace STORET. The current version of STORET is an improvement on the original version but is still not adequate. The original version was not user friendly. The modern version was put into use in January, 1999. Not all states use STORET. Whatever replaces STORET in Florida will have to be used for determining Impaired Waters according to the IWR rule (Impaired Waters Rule).

Mr. Wolfe explained what the charge to the Council meant regarding their "assistance" in replacing STORET. Members will not be responsible for designing the replacement, but rather, will assist with the replacement's adoption and implementation in their agency/entity.

Member Discussion

1. Florida STORET is what is being replaced.
2. Why is STORET being replaced and we have not heard about it yet?
 - a. Right now there is no replacement.
3. Upset that agencies that will have to use the replacement have not been consulted in the development of the replacement.
4. Steve Wolfe: fully-implemented IDM from Oceans' Council may make STORET or any replacement unnecessary.
 - a. If IDM goes to fruition, STORET or some replacement could be used but might not be needed.
5. In EPA's WQX (their planned next implementation/replacement for STORET, the database will be completely different.
6. How does this relate to "water data central" on FDEP's site?
7. Does FDEP think less or more time will be needed to get data into the new system? (WISKI= Water Information System Kisters International)
8. Will WISKI allow you to link to other databases?
 - a. No, you will still need to get into a central database
9. Why have duplication/triplication of efforts rather than a linked system?
10. I would prefer that folks not be able to get into our database.
11. WISKI is only designed for surface water and springs and ground/well water.
12. If WISKI is to be used, they will take it out to districts and stakeholders-major data providers and get input.

The website where more information can be found: <http://storet.dep.state.fl.us/wrmspa>

*NOTE FROM FACILITATOR: *There are several acronyms used in the PowerPoint, these may assist:*
Stream Condition Index= SCI
LCI= Lake Condition Index= no longer used
LVI=Lake Vegetation Index

PUBLIC COMMENT

No one commented.

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ADJOURN

The meeting was adjourned for the day.

Day Two: Thursday, March 22, 2007

WELCOME BACK

Mr. Wolfe and Ms. Fleischer began the meeting. Mr. Wolfe reminded Council members that they would be concentrating on Charges #3 and #4 regarding coordination of monitoring efforts on this day of meeting. After several presentations, members would be divided into two small groups to begin looking at their work in more detail.

PRESENTATION: TRENDS IN DATA SHARING

Kathleen O'Keife, FWC Fish & Wildlife Research Institute, St. Petersburg, Florida, gave a presentation on the current trends in sharing data (**Exhibit G**). She said that this Council has a lot in common with a lot of other Councils. Most other Councils are also looking at data and how to manage it. In the early days, sharing data was often attempted and failed because there was no common language. The presentation is designed to go through what is out there now so the Council members are aware of how to begin their task.

Ms. O'Keife explained that data is often not in one spot; it could be found in home offices, boxes, shared computers, etc. She mentioned the FGDC: Federal Geographic Data Committee (www.FGDC.gov) - The FGDC was established in the 1970s or 1980s; they are the standards committee but there are others now. Some questions posed by Ms. O'Keife for the members to consider were:

- Who is responsible for archiving?
- Who keeps the data (clearinghouse-data steward)?
- What is the format of the data?
- How long is data held?
- What is the value of older data; i.e., what is worth keeping?

Ms. O'Keife encouraged members to visit the Marine Metadata federal website at <http://marinemetadata.org/> She said it was a wonderful site with lots of information; the purpose of the

site is for interoperability. Another very good data sharing initiative can be found at <http://gos2.geodata.gov/wps/portal/gos>. Additionally, GAME is a searchable catalog of databases of all datasets collected in Florida.

In closing, Ms. O'Keife suggested strongly that members take time to decide on their minimum requirements

Member Comments following the presentation:

1. Project finder site: is that all state projects?
 - a. First an internet statewide project
 - b. Initially it is only FWC
2. Who developed it?
 - a. Staff at FWC
 - b. FWRI has a large staff for doing GIS and this kind of work
3. The Water Portal is an initiative of three water management districts: SWFMD, SJWMD and SFWMD, to share data and link; it is a cooperative effort and establishes minimum standards
 - a. Permit data is what is driving it because permittees cross WMD boundaries
4. MERMAid: <http://www.ncddc.noaa.gov/Metadata> what is it? [apparently, this link is case sensitive]
 - a. Developed by NOAA; it is a web-based tool to develop, validate, manage and publish metadata records via secure internet access; it is good because it also includes biological data where many other water data sites do not have biological data.
5. Although water management districts can be parochial; our mission is to help the whole state.
6. Data quality filters don't go into the metadata itself.

PRESENTATION: THE DATABASE OF GAME (GEOSPATIAL ASSESSMENT OF MARINE ECOSYSTEMS)

Kathleen O'Keife, FWC Fish & Wildlife Research Institute, St. Petersburg, Florida, continued with another presentation on GAME. She explained that GAME uses an ecoregional approach. (Exhibit H). GAME was the brainchild of Kacky Andrews, former Director of DEP's Office of Coastal and Aquatic Managed Areas (CAMA) The purpose of GAME is to say "What is out there?" For now it is metadata "lite" because otherwise it would be too onerous for those scientists that are assisting for free. The site can be found at: <http://research.myfwc.com/game>.

Member Comments at the conclusion of the presentation:

1. This is an IMS site so a user can move around in the site in layers.
2. Is this an iterative situation, i.e. is it constantly updated?
3. GAME is a database of metadata, it is not a database of the data itself.
4. The bounding boxes are only around the data areas.
5. The map can be zoomed in, they are not trying to show precision, they are trying to show gaps.
6. Concern that there are not "place holders" for some sets that don't have data yet, should create a "place holder".
7. Would you note the contact if the data is not digitized so folks will know who to contact for the data?
 - a. Yes, it is noted who the custodian of the records is
8. GAME survey was filled out by Broward County; survey is very easy to complete
9. It is great that GAME can handle the entire body of data, all different types
10. Do you get a lot of fresh water and estuarine data?
 - a. Mostly estuarine, not a lot of freshwater

At the conclusion of this presentation and discussion, the Council took a short break

PRESENTATION: FLORIDA WATER ATLAS

Following the break, Shawn Landry, Interim Director, Florida Center for Community Design & Research, University of South Florida, Tampa, gave members a presentation on the Florida Water Atlas (**Exhibit I**). He explained that the atlas is an ongoing iterative process. It is a statewide water atlas and it is being compiled knowing there is not a lot of metadata out there. The vision of the Atlas covers the entire state and tries to include ALL water resources. It was initially started as citizen-based gathered data, meaning it is a bottom-up effort. The primary water sources are surface water, but they are trying to go to ground water. The primary audience is citizens and resource managers. The primary sponsoring agents are local and county governments. They each have their own specific needs and these needs must be balanced with the desire to be a statewide portal and trying to serve all citizens.

The Atlas began as an effort to support volunteer monitoring for Lakewatch. (Keystone Lake in Hillsborough County). He explained that the Atlas is not “firewalled” so folks can get into the site.

Member Comments:

1. The 20 elements required by TMDL program made it very hard and sometimes impossible to have data ready for STORET, so it really needed more work.
2. Groundwater is limited, but some select monitoring wells are included.
3. Why is there a more comprehensive record than STORET?
 - a. Because we are not waiting for people to develop the data to go into STORET, we don't care about what format the data is in; we will take and work with that
 - b. The more metadata the better
4. Do you think you can maintain this approach as the data keeps expanding?
 - a. It gets easier and easier because as we go along we are improving.
5. The benefit of the Atlas will be at the local level.
6. Do you have a problem with redundancy with the data sets?
 - a. You always have to pay attention to the data coming in.
 - b. We make sure we know where data is coming from and only take it from one source for a particular area.
7. All the information is one central warehouse; a user can pull information out as it is needed.
8. How are you managing “real time data”, do you store it and then what do you do with USGS data when it comes in?
 - a. Real time data is brought in to the Atlas, then everyday the USGS finalized data is reviewed and brought in to the Atlas.
9. Do you overwrite the “real time” once the USGS data is brought in?

At the conclusion of this presentation and discussion, public comment was taken.

PUBLIC COMMENT

2 people commented: Kurt Spitzer, FLERA and FSA (Florida Stormwater Association)
Jyotika Virmani, Florida COOS Consortium

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provided at each meeting or email the Facilitator, Janice Fleischer (janice@flashresolutions.com) within the first week following the meeting.

OCEAN'S COUNCIL RESEARCH REVIEW UPDATE

Steve Wolfe, Council Liaison, delivered a short presentation on the Florida Oceans Council's Research Review. (Exhibit J) The Research Review is intended by the Legislature as an inventory of ongoing and past oceans and coastal research within Florida. The present Research Review, collected through a web survey, has only a fraction of the actual list of all research that has taken place in the state. Depending on what happens with the Oceans Council's budget, it should be expanded. The review is a long-term effort and should be continually updated.

Member Comments:

1. Are there other such research reviews underway?
 - a. Yes, but you must look at the scale of the other reviews
 - b. Most are more specific efforts
 - c. We are not aware of a full list of all these efforts.
 - d. There is an EPA website that has an index of metadata standards that have been developed all over on many different subjects. All at the national level and these are all approved standards.
2. There are at least 6-7 different efforts in cataloging going on.
 - a. Some may be just modeling; others may be dealing with other aspects.
3. The intent of the Legislature in giving the Oceans Council the charges of the Resource Assessment and the Research Review was to get a comprehensive datasets established.
4. It seems like the state effort is going to have to compete with other, especially federal, efforts.
 - a. No one wants repetition and overlap; how do we do this in the most efficient way

The group broke for lunch.

PRESENTATION: OVERVIEW OF FLORIDA EFFORTS

Upon returning from lunch, Mr. Wolfe gave the Council an overview of current mostly estuarine/marine science efforts in Florida (Exhibit K). This was intended to help the Council understand where their efforts fit within "the big picture"

SMALL GROUP WORK: INITIAL STEPS (INCLUDES BREAK)

Members broke into two small groups to work on the following questions:

1. What steps need to be taken to launch the metadata effort?
2. What are the initial steps to begin the coordination efforts?

Council members were given approximately 1.5 hours to work in their small groups. At the end of this time, each group reported on their work and the members who were not in that small group commented.

SMALL GROUP REPORTS

GROUP ONE: CHARGE #1: METADATA STANDARDS

Group Report:

WHAT	WHO	WHEN
Determine what constitutes water resources data. What fields are required: water, biological, hydrometeorological	Florida Water Resources Monitoring Council (FWRMC)	May, 2007 meeting
Compile list of parties to contact about metadata for consultant	Liaison for Council	July, 2007
Establish a working group of experts to review analysis from consultant*	FWRMC	July, 2007
Develop scope of work and select consultant	Funding agency	May meeting for potential funding; August for scope and selection
Survey of all existing metadata fields by consultant	Consultant	2 months after contract initiated
Survey of metadata standards by consultant	Consultant	2 months after contract initiated
Analysis of existing fields vs. existing standards by consultant	Consultant	4 months after contract initiated
Develop preliminary recommendations to take to stakeholders at local meetings	FWRMC	5 months after contract initiated
Local meetings to discuss/input original analysis of metadata standards	Council representative	May, 2008
Revise recommendations with stakeholder comments	FWRMC	July, 2008

*This group to be made up of a Council member chair and other experts, possibly other Council members, (Note: Steve Richter has volunteered to Chair)

Comments following small group #1 report:

1. Should we bring in someone from EPA to the small expert group to assist?
2. What are the minimum required fields needed to access everyone's data; then work on making more comprehensive: this would be part of the working group.
3. You need to go out to the stakeholders to clarify what the minimum standards are.
4. Local and state stakeholders will have 3 points on input:
 - a. When consultant comes on
 - b. When working group is formed
 - c. When draft is ready for input
5. Then the scope can only be as large as folks who respond to the survey. A survey limits the scope because you usually get limited response to surveys.
6. Timeline works nicely for to mesh with Governor's budget cycle.
7. Both consultants referenced in outline are same consultant.
8. These requests should go only to labs and database folks; they are the target audience.

GROUP TWO: CHARGES #3 AND #4: COORDINATION EFFORTS

First steps:

- a. Complete and analyze CAMA survey
- b. Look for existence of freshwater version of CAMA survey
- c. Ask other portals what they would do different

Second steps:

- a. Identify extent of information needed to mesh information
- b. Achieve buy in/cooperation of monitoring sources

Third steps:

- a. Identify or hold conferences/workshops/working groups where other data sources work
- b. Identify sources of freshwater and saltwater monitoring (CAMA monitoring survey partly did this)
- c. House survey GIS/Mapping and Maintenance
- d. Identify the purpose/objective of monitoring

Fourth Steps:

- a. Identify administrators and technical personnel of each program.
- b. Identify source and duration of funding and monitoring
- c. Identify the "what" of the monitoring
- d. Identify data sharing and data access method
- e. Identify geographic area
- f. Request or create shapefile of monitoring locations.

Fifth steps:

- a. Map

Sixth step:

- a. Perform gap analysis of freshwater/marine survey.

Seventh step:

- a. Create a forum to enhance monitoring efforts
- b. Create a mechanism to update survey perpetually.

Comments following small group #2 report:

1. Data is often "event" oriented and otherwise many times data is not gathered.
2. There is a trend monitoring network too.
3. Sometimes it is not funding that is driving the monitoring, it is events or other items.
4. What about duplication in addition to gap analysis and making people aware of it.
5. Monitoring inventory and data elements inventory might as well be the same effort.
6. Make sure the stakeholders know they are not being asked for the same thing more than once, either make them distinct or make it a package.
7. Different folks may be seeing this to respond.
8. Target audience is program managers.
9. It is a possibility that you could go to one source in some cases for both group one and group two requests.
10. Concern that there will be thousands of monitoring programs.
11. Depends on how you characterize them; the main project or sub-projects.

EVALUATIONS/ADJOURN

Ms. Fleischer reminded members to complete their Evaluations and the meeting was adjourned.

WRITTEN MEMBER COMMENTS RECEIVED AT MEETING

"Good meeting; always tough though to get away from the office to attend it."

PUBLIC COMMENTS RECEIVED SUBSEQUENT TO MEETING

"These comments reflect issues developed for meetings #2 and #3 because of the process adopted by the facilitator which limits public interaction with the Council. The policy states that public comment (limited to 3 minutes) is not recorded and must be submitted in writing within "the first week" following the meeting.

- 1. Many professionals participated in one or both FWRMC retreats in 2004 and 2005. Following the last retreat, FDEP apparently chose to ignore the consensus of the stakeholders and dismissed the mission of the adopted resolution (October 12, 2005) which stated, "Florida Water Resources Monitoring Council for the purpose of representing a **broad-based collaborative body** (emphasis added) to help achieve effective and efficient collection, interpretation, integration and dissemination of water resource data and information in Florida". FDEP instead chose to create a Council of State agencies (including all Water Management Districts), excluding participation from those expressing an interest through attendance at the retreats. Stakeholders excluded include: universities, private industries, federal agencies, environmental organizations and many local jurisdictions. The only explanation given for not including representative stakeholders on the Council was that the FDEP Secretary "wanted to keep the group small" so that they would be able to accomplish their given tasks. These accomplishments might be limited due to lack of buy-in from stakeholders that have been deleted from the process.*
- 2. The facilitator's rules governing the public Council meetings limit the member's interaction with interested stakeholders. The public comments are limited to 3 minutes and are not recorded. The agenda limits the comment period to 15 minutes and is sometimes positioned to where consensus votes are taken before public comment is presented.*
- 3. As seen through presentations (i.e. RAMP, Water Atlas, etc.) at the last 2 meetings, local jurisdictions have contributed a lot in terms of technology, commitment and resources to improvements in water resource monitoring and data quality. The Council should embrace and enhance these accomplishments and try to avoid conflicts when adopting policy.*
- 4. The Council's task regarding the standardization of metadata should be limited to the development/adoption of minimum standards only. The more complex, detailed metadata criteria should be developed by each program, user, or group.*
- 5. The role of the Council in recommending a STORET replacement appears to be limited to endorsing the program already chosen by FDEP called WISKI. It should be FDEP's responsibility to make sure the replacement program is efficient and user-friendly so that data providers are encouraged to utilize the system. This could be accomplished by inviting stakeholder comment during the initial development and evaluation period."*

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