

# **Draft Summary**

SOUTH FLORIDA ECOSYSTEM RESTORATION SCIENCE COORDINATION GROUP  
(SCG)

Coral Springs Marriott, Orchid Room  
11775 Heron Bay Blvd., Coral Springs, FL 33076  
Wednesday, May 26, 2010

## **Opening Remarks and Administrative Items**

Susan Markley reviewed the goals for the meeting and recognized the interns from the Arthur Marshall Foundation in the audience.

## **Member's Whip Around**

Bill Reck provided an update on the Chesapeake initiative.

Matt Harwell announced that the senior FWS position on RECOVER was open. He said that the Adaptive Management Implementation Manual is getting close to finished and suggested scheduling a briefing to the SCG and perhaps the Task Force.

Bob Johnson said that DOI was heavily involved with efforts related to the oil spill and that Dan Kimball is the DOI liaison for south Florida. He provided a brief overview of the Everglades Summit. He announced that the Draft EIS for Tamiami Trail Next Steps is out for 60 day public review and it is available online.

Gil McRae said that FWCC was also focused on responding to the oil spill. He noted that FWCC has historical data and staff is working closely with the Corps on a contingency plan that is available online.

Susan Gray said that SFWMD is involved in providing science to the state's emergency management response to the oil spill. She noted that they are going through the budget process and that there is good news related to participation in RECOVER.

Susan Markley noted that the county was working with the emergency management center to be prepared and provide technical support related to the oil spill. She said that one advantage of southeast Florida is that we have a long history of collaboration and great long-term monitoring programs. She announced the draft April 2010 meeting summary would be voted on after lunch.

Greg May reported that the next TF meeting is scheduled on June 24 in Miami in conjunction with the Climate Change Listening Session on June 23. He noted that the Climate Change Listening Session would be a good segue to the TF discussion regarding the development of a conceptual model for climate change.

Chris Kelble explained that he was spending a lot of time on the oil spill response and that NOAA was examining the far field reaches on the loop current.

## **Draft Summary**

Calvin Arnold announced that a small plant hopper would be released on May 18 to help control water hyacinth.

Ronnie Best said the detailed GEER conference schedule is available online. He noted that the SCT, a precursor to the SCG, started the conversation about the need to bridge the trail.

Dave Tipple said that they are working to start the Site 1 impoundment phase 1 project, a recipient of stimulus funding.

Lisa Beever reported that CHNEP is receiving support to develop a CEM for climate change and thought the initiative could be leveraged with the TF's initiative on climate change.

### **2010 Update of the Plan for Coordinating Science Discussion**

Susan Markley reviewed the PCS 2010 update discussion from the April meeting and explained the concept of phase 1 and 2 updates. She thanked Matt Harwell for the draft outline that was rolled into the outline that Bob Doren developed for today's discussion. Greg May explained that Bob Doren would be helping with the development of the PCS update and he noted that Bill Reck recommended including ecosystem services in the update.

### **MARES**

Chris Kelble reviewed the MARES presentation noting that Bob Doren was involved because of his indicator experience. He said the goal is to reach a science based consensus about the defining characteristics of the coastal system and added that they have a social science component to help consider a sustainable economy as well as the ecosystem. He reviewed the map and explained that mangroves have been incorporated into the initiative.

Chris Kelble explained improvements such as the inclusion of the human dimension. He said the process was inclusive (stakeholders, academics, government agencies) and included interaction with managers. He added that there were dedicated resources in addition to volunteers.

He explained that adding the human dimension frames the case for preservation and gives managers a dollar value to help make decisions. One goal is to establish the value of the ecosystem services and do cost-benefit analyses; and that the process was evolving.

He went over the model noting they flipped the sub-model so what the managers care about is at the top. He explained that the ecosystem attributes are a step below ecosystem services. He said that in the end they plan to take all the regions and merge them to get a total report card. He explained that they would define success as the ability to provide ecosystem responses for different management scenarios.

Lisa Beever asked if this was a country-wide initiative or just in south Florida. Chris Kelble said it is only being done in south Florida for now.

# Draft Summary

## Outline for 2010 PCS

Bob Doren explained that he thought it was important to keep the update similar to the 2008 PCS. He added that the best thing is to keep it short and simple so people can see what is most fundamental. He also thought it was important to include the new science that has taken place since 2008. He felt that section 4 was important because it talks about synthesis. He said that the indicator report format for biennial report and the SSR are examples of reports that speak the same language, which is helpful in communicating. Susan Gray noted that they plan to go to web based reporting for the SSR. Matt added that they put an indicator report up to show how the stoplights are linked to the data. Bob said that we can make the report read like other reports and that even though reports like the SFER are not going away, it would be good for agencies to work toward consistent reporting format as a goal to make it very reader friendly.

Greg May explained that they are reviewing the TF reports for opportunities to streamline, combine, and better communicate. The strategy and biennial report for example are going to be streamlined and combined this year with the detailed information web based.

Susan asked if the repetition of similar topics in sections 3 and 4 could be eliminated. Greg and Bob asked if this could be done with a “What’s New” section. Susan said she would have to see the write-up and thought there may be a graphical way to present the information. Susan Gray thought they could write about the new items as a stand-alone document and then roll it into the full update. Greg May thought that it was important to make connections to the SCG under the “What’s New” section, where appropriate. Ronnie Best thought we should focus on climate change, sea level rise, ecosystem services, MARES and any other examples of new information. He believes we are moving to implementation. Chris Kelble agrees and is worried that the focus now indicates that we are in the midst of implementing the plan. Ronnie said that there should only be 1-3 pages to show how we planned to coordinate science.

Susan Gray asked that the “Knowledge Gained” initiative be added to the report. Susan Markley noted that the 3 briefing papers are finished and should also be added. She thought we could link the knowledge gained to the 3 briefs. Bob Johnson thought the NRC Biennial report should added as well as CROGEE information. Greg May asked about how this would fit into the framework of section 4. Chris Kelble said that the update of the synthesis and workshops should be enough. Susan Markley believed that Chris’s suggestion may provide ways to consolidate the information and there may not be a need for a highlight of “What’s New.”

Bill Reck thought that ecosystem services should be captured in section, 3.3.5. Greg asked what specifically would fit into the report and Bill replied MARES and Florida Ranchlands Environmental Services Project (FRESP). Dave Tipple thinks it is important to talk about value. Bob Doren believes that there is a big difference between paying a landowner to maintain land naturally and valuing the services the ecosystem provide. Bill disagreed and stated that the value of that service is what his agency is trying to find out to pay the landowner.

Ronnie Best noted that a lot of research is going on right now to try to quantify ecosystem services but we don’t know the answers. Susan Markley thought the report needs to talk about

## **Draft Summary**

science activities and task that already happened and then contain a brief section about where things are heading. John Baldwin favored talking about implementation since the 2008 PCS and thought we also need to talk about what is still needed, such as information on ecosystem services. Bob Doren worried that focusing too much on the new stuff would move the PCS from a report that talks about how we coordinate science and he believed there could be a separate science report that deals with new stuff.

Greg May reviewed the purpose of the document and said there is value in communicating in plain language and linking it to other reports. He said another goal is to communicate what has happened in the last 2 years. Greg cautioned the group to be judicial in coming up with a list of things to explore over the next 2 years due to busy schedules, and to focus on priorities for the group. Susan Markley said that she could see Greg's point to focus on what's happened in the last 2 years and thought the PCS could talk about the list of needs in a conceptual way. Ronnie thought the key items for the PCS was to inform the TF of the actions that help coordinate science; highlight where we are making progress on moving forward/facing new challenges; and include a section on climate change and ecosystem services.

John Baldwin said he wanted to clarify the purpose and asked if we were going to discuss other ways to coordinate science that we may not be doing now. Greg May said that John made a good point about the framework for coordinating science and that it was important to look at what we are doing and what we are not doing. He added that this would be part of the phase 2 update.

Greg May recapped what he thought the group wanted in the update. He said that he believed the group agreed to include: 1) a summary of the framework of the 2008 PCS and 2) a discussion about what has happened over the last 2 years and 3) a general conversation that points to the future. Ronnie Best added that we need to discuss making progress/implementing the plan. Greg asked Ronnie to help define section 4 and send it to Bob Doren. Susan Markley noted that many members have contributed and requested they send paragraphs to Carrie Beeler.

### **Public Comment**

John Marshall introduced several interns and they introduced themselves. John talked about the top 10 science needs and gaps his interns put together for the last GEER. He informed the group about another paper an intern did on ecosystem services. He went through the 10 top science needs list and the status.

Dr. Joe Boyer informed the group of the initiative to update nutrient criteria for the estuaries and coastal areas. He noted that the initiative has engaged scientists to work together to come up with a process to develop the criteria. He discussed the statistical approach and added that if the areas of the bays are found to be degraded then they will ask for input on what criteria to use for those areas.

### **Meeting Summary**

After lunch the group discussed the meeting summary from April and decided to accept them with edits from Lisa Beever and Bill Reck.

# Draft Summary

## Climate Change – Next Steps Discussion

Greg May explained that Barry Rosen volunteered to be an internal coordinator for the climate change (CC) topic. He also informed the group that he and Barry had spoken with Jack Gentile about his potential involvement.

Barry Rosen told the group that the Wetlands issue from 2005 has a compendium of all the CEMs to date and he reviewed them as examples of ways to develop a conceptual model for CC. He said that he looked at the model Chris Kelble presented and thought that could be good too. He asked the group for help and guidance. Greg May asked Ronnie Best to talk about what is going to happen at the GEER Conference regarding CC. Greg noted that we haven't heard from the WG yet on this topic. Ronnie Best said that folks have been talking about science of CC and sea level rise separately and now it is time to put it into context to help us know how to handle CC. One step is developing a conceptual model as a starting output. He said that GEER provided some framework to help with this.

Greg May asked the group what were the most important topics. Ronnie Best said he would talk about the effects on natural system or restoration, but the built environment should be addressed as well. He said the Everglades will be wetter because water cannot flow. Barry liked the non-multidimensional model. Matt Harwell said that last month the SCG tried to figure out where to go with CC. He asked what the group wants to get out of it, what is the purpose. Susan Markley said that SCG may not be the group to handle all the parts of CC. She suggested starting out with the conceptual model approach and thought it could help outline what the WG could tackle. She said that we need to have a better grasp of the hydrologic model and how it interacts with salt water intrusion and understand why current infrastructure isn't going to work. Chris Kelble said it is helpful to identify what we know and what is still unanswered. He advocated focusing on research needs and human dimension to help managers. He also thought it was important that the process be inclusive.

Ronnie Best believed that whichever conceptual model was chosen, it should include the built environment. Susan Markley summed up the teams suggestions. Greg asked how the group wanted to pitch the idea to the WG and then the TF. Chris Kelble said that we could pull out precipitation. Greg said that the group had also talked about creating a clearinghouse for CC. Susan Markley believed that the effort might lead to measures or indicators down the road. Greg asked if folks wanted to invite Jack Gentile to participate and members said yes.

## Invasive Exotics

Dan Thayer introduced some members of ECISMA including Tony Pernas, LeRoy Rogers, and Skip Snow. He explained that there is a need for a better early detection system. He went over the exotic statistics and cost. He explained that exotics impact native flora and fauna and gave an example of Lygodium completely covering a tree island. He told the group that it is important to stop exotics before they get into the country. He said that most aquatic problems are caused by humans dumping their aquarium. He said the difficulty in regulating entry of exotics, lies in the

## Draft Summary

trades that have been established and lots of groups try to get in way of a common sense approach.

He also discussed rapid response initiatives that get people involved in early response such as folks taking water samples or doing research looking out for exotics. He recommended establishing a full time position to help coordinate this.

He informed the group that biologic controls are really helping with *Melaleuca*, but still is worried that the funding will be cut when they are so close to finish line. He said that managing exotics is working. He added that they are now engaging industry and working cooperatively developing tools. He explained that management methods need to be studied to prove that new species entering the system won't become issue for the environment. He said it took a dozen years to figure out how they were going to manage *Melaleuca*.

He explained some outreach tools for involving the public and increasing awareness such as the "Don't Let it Loose" campaign and "Amnesty Day." He said that there are still barriers to working cooperatively together, such as obtaining proper permits for right of entry. He went over a list of recommendations to improve exotic management and coordination.

Calvin Arnold asked if the reduction in *Melaleuca* was due to biologic control. Dan Thayer said that it is a big part and the insects released were chosen because they affect seedlings or young trees so there would not be dead trees in yards. Lisa Beever said invasive removal through partnership and grant application to get multiple species at once is a good idea, but noted that the tools you use for different species are different. Matt Harwell noted that there are more and more contracts to do multiple species at once. Joan Browder asked about the status of managing Brazilian Pepper. Dan Thayer explained that it is easy to kill with herbicides, but the pests exposed to the herbicides become poisonous to birds. Susan Markley remarked that there is a lot of Brazilian Pepper located in the Hole-in-the-Donut and as part of EEL program; they are managing more acres for less cost. Greg May noted the challenge of getting a common unit of measurement for acres.

Bob Johnson explained some of the financial issues with early detection and response. The group thought that something similar to the fire fund would be helpful. Matt pointed out that there was a lack of a mechanism for response and that was still needed. Greg May thanked the team for being here and said that they made a strong case to develop some possible recommendations for next steps to the TF and WG. Joan Browder asked if the refined set of next steps goes to TF from the SCG. Greg explained that it depends and that they may want to get the WG involved. Joan said she would like to see something about need for legislation that requires a screening process for new species.

### **Synthesis – Next Steps Discussion**

Bob Johnson noted that we are very early in the process and still talking about what our role is on this. He explained why the SCG should track the progress on science synthesis projects and referenced the science coordination goal. These projects will help the TF and the SCG ensure

## **Draft Summary**

that incorporation into decision making is as effective and efficient as possible. He added that we can use the synthesis projects to do the review of the plethora of science projects.

He explained that there are similarities of approaches across the synthesis efforts. Bob explained that they don't have ecological performance models. He said that they are looking at using similar tools to MARES. He asked if the SCG should work with the 3 synthesis projects to ensure consistency. He asked if the group wanted these projects discussed at regular meetings Susan Gray felt that these are similar efforts and this is what the SCG should be doing to be effective in coordinating. She added that this will help identify any redundancy and gaps. Dave Tipple said he was glad Bob teed it up and explained that one thing he wrestles with is how to allow for open dialogue. Ronnie Best said that this emphasizes our role in coordination and occasional updates should be given as appropriate.

Bob Johnson went over the next steps. He informed the group about the sessions at GEER on the knowledge gained, SERES and MARES. He recommended that the SCG members go to these workshops. Greg May asked if the next SCG meeting should be rescheduled to coincide with the GEER conference. He proposed meeting before and after the synthesis sessions on Wednesday. The group discussed different ways to incorporate a meeting into the GEER and decided that we should poll the members with dates and times.

### **Public Comment**

John Marshal said he assigned summer interns to address ecosystem services. He added that the NRC 2005 was the ecosystem services bible and said that ecosystem services were typically underestimated and that the value should be about 6 times the cost. He believed that we could look at the oil spill and the aftermath to help show economic impacts of the loss of resources.