

**Science Coordination Group
Meeting Summary – Meeting #6
Florida International University
Graham Center – East Ballroom
11250 SW 8th Street
Miami, Florida
August 10, 2004**

Attendance:

Members:

Calvin Arnold	Susan Markley	Barry Rosen
Ronnie Best	Greg May	Rock Salt
Joan Browder	John Ogden	Jay Slack
Ken Haddad	Peter Ortner	
Dan Kimball	Terry Rice	

Staff, Contractors, Public:

Jim Barnes	David Erne	Rafael Olivieri
Walter Cybulski	Jack Gentile	
Bob Doren	Rafaela Monchek	

Members not present: Richard Harvey, Greg Knecht, Loren Mason, Fred Rapach, Bill Reck, John Volin

Whiparound:

Jay Slack distributed a handout on multi-species management developed by the Working Group. The Working Group held a workshop at their July meeting, and determined that sound science was the highest ranked challenge in multi-species management. The handout included a list of definitions, key issues, strategies, and management challenges. Rock Salt called attention to the definition of multi-species management and noted that it included more than just endangered species.

Greg May informed the Group that during the conference call on August 6th, the Task Force tasked the SCG to devise an open process for developing a comprehensive set of system-wide indicators. After the Task Force provides guidance on the recommended process, a follow-on task will be to develop the indicators to include peer review. Rock Salt said the DOI Science Plan is being used to develop the Department's science budget. In the future they are interested in involving other entities.

Calvin Arnold announced the USDA has been hosting meetings. Five issues were identified and workshops will be held on each issue.

Peter Ortner announced a revised science strategy for Florida Bay was developed and will be distributed soon. The strategy is the successor to the 1997 interagency science plan.

John Ogden distributed a handout on the CERP Adaptive Management Framework. This was created by RECOVER through workshops and sessions. A performance assessment and management/science integration diagram were also developed. A narrative section is in the process of being created to describe the arrows between the boxes. RECOVER has been reduced from 6 teams to 3.

Ken Haddad announced the FWC has been restructured. FMRI is now FWRI (Fish and Wildlife Research Institute). A Habitat and Species Conservation Division and an exotics section have been created. Additional information is available at the FWC website, www.myfwc.com.

Plan Review:

David thanked everyone that was interviewed and provided feedback for the plan. The team reviewed each section of the plan and provided feedback for additional changes.

Gap Analysis:

General Needs and Gaps changes:

- Build the Plan needs and gaps to match the Conceptual Ecological Models
- Include the models in the appendices
- Clarify details on the gaps

- Add a paragraph to explain what is being done well
- List ongoing monitoring programs

David said he will change the structure of the document to identify what is being done well and explain the following gaps.

Nutrients:

Requested Changes:

- Clarify that historic nutrient levels are the goal, this should be taken into account when historic flows are reestablished. Need to understand how the system will respond when reestablishing natural hydro-period when other changes have been made.
- More carefully capture issues while focusing on the gaps on page 10
- Redo the first paragraph of Florida Bay Science needs and gaps
- Rework and review the Florida Bay section (this will be done by Peter Ortner)
- Indicate that essential monitoring is not being funded, nor are water quality models
- Indicate that less than 50% of southern estuaries MAP are funded by the USACE and SFWMD. The rest is assumed to be covered by other sources, but may not be.

Operational and Structural Changes Gaps:

The document will indicate this draft is an initial phase and there will be future phases.

Contaminants:

Needs:

- Do not restrict this section to vertebrates
- If the decision is made to include EPOCs (emerging pollutants of concern), then indicate that there are also known toxins whose pathways are unknown (example – not knowing how mercury is being moved around even though we know the toxicity of it).

Gaps:

- Newest version of the CEM doesn't have contaminants, but they may be in other models.
- Remove the contaminant reference to the Total System CEM, and move to another place as a subset of the Total System or overarching issues.
- Further clarify that CEMs are retrospective and individuals working on CEMs provided prospective information and other information outside of the CEM discussion

Nutrients:

- Add carbon
- Correct the inaccuracy and indicate information is available

Spatial Extent

Needs:

- Indicate there is a spatial extent on the Total System CEM
- Include space for storing water in the diagram
- Change continuous to contiguous

Exotics:

Bob Doren believed the following should be included as the exotic needs:

- Understand and characterize the relationship between invasive exotic species (current and future invaders) and the ecosystems they invade, and how to predict which species will become invasive within a year.
- Understand the effects of hydrology and fire that improve the establishment and invasion of the ecosystem by invasive species and the effects the species have on the ecosystem.
- Understand the property of an ecosystem that effects the recruitment, establishment, invasion and spread of exotic species and which environments are effects most and how to minimize those impacts.

System-level Assessment and Management needs:

“Interim goals and targets” wording needs to be changed to reflect its specific meaning.

Quality Assurance:

The team identified the following changes for this section:

- Remove “program” and replace with “quality assurance” on page 19
- Reference monitoring under quality science
- Change “Systematic, well documented, experimental” in the second bullet to say “and” analytical methods instead of “or”
- Remove the word “program” in the last sentence of the first paragraph on page 6
- Change “quality assurance” to “ensuring quality science”

Additional Plan changes:

- Change the title of bullet 4 on page 5
- Remove the “adaptive management” box from the display on page 10 that is supposed to define meta-analysis and synthesis; change synthesis to the new the title of bullet 4 on page 5.
- Review the process items (Susan, Peter, John and Rock will meet before August 23rd)
- Add Application needs and gaps
- Address coordination needs and gaps
- Include CEM based needs and gaps, prospective, process, integration and synthesis needs and gaps
- Re-craft the upfront material to accurately reflect where the needs and gaps for the four types of science came from. CEMs only provided the first three.
- Revise pages 3 through 18 based on input during this meeting
- Send comments on the definitions (entire team)
- Changes on pages 7 and 8 – bioaccumulation is not an ecological effect (Jack will send changes)
- Replace definition of adaptive management in the glossary with the one on page 9
- Remove elements that imply the SCG has to correct the Task Force – first bullet, page 21
- Delete lines 118 – 119

Remaining items for Phase 1 of the Plan:

- Determine gaps that haven’t been fully developed

Items for Phase 2 of the Plan:

- Flesh out proposed action steps, relative to gaps
- Don’t necessarily need to determine which agencies are responsible
- Determine the “elegant few set of actions”

The team established the following deadlines:

Future Deadlines:

Subgroup Meeting	August 13 th
Revised Draft	August 20 th
Comments on draft	August 24 th
Conference call for members with outstanding issues on the Plan	August 26 th
Document to the Task Force	August 31 st

Next meeting:

The next meeting was scheduled for October 7th (but it was later changed to October 5th).