

*Approved Meeting Minutes  
South Florida Ecosystem Restoration Task Force  
West Palm Beach, Florida  
February 11, 2002*

Welcome and Introductions

Ms. Ann Klee, Task Force Chair, called the meeting to order at 12:52PM. She welcomed everyone to her second meeting and introduced David Struhs as the new Vice Chair. She asked the Task Force to keep several questions in mind throughout the discussions:

- 1) Can we come to some type of consensus on a definition of restoration for the Everglades?
- 2) Are there hydrological benchmarks for restoration?
- 3) Can we create long term benchmarks for restoration and not just hydrology, but for restoration?

Ms. Klee drew everyone's attention to the Strategic Plan in the briefing books and asked that everyone recognize that it is just a draft. Mr. David Struhs moved to approve the minutes and Mr. Clarence Anthony seconded the motion. The minutes were approved without change. The Task Force members were invited to provide any opening comments. The attendees included:

Ann Klee, Chair, U.S. Department of the Interior  
David Struhs, Vice-Chair, Secretary, Department of Environmental Protection  
Clarence Anthony, Mayor, City of South Bay  
Billy Causey for Sloan Rappoport, U.S. Department of Commerce  
Henry Dean, Executive Director, South Florida Water Management District  
Jose Diaz, Mayor, City of Sweetwater  
Thomas Gibson, Associate Administrator, U.S. Environmental Protection Agency  
Mack Gray, Acting Deputy Undersecretary, U.S. Department of Agriculture  
Frank Jimenez, Executive Office of the Governor  
Dexter Lehtinen, Special Assistant, Miccosukee Tribe of Indians  
Neal McAliley for Andrew Emrich, U.S. Department of Justice  
Mike Parker, Assistant Secretary of the Army (Civil Works)  
Steve Walker for Jim Shore, Seminole Tribe of Florida  
Rock Salt, Executive Director, South Florida Ecosystem Restoration Task Force

Mr. Mike Parker stated that OMB is insisting a 90-day review on the Programmatic Regulations. He requested other federal representatives approach OMB to suggest only 30-days to allow more time for input from stakeholders.

Mr. Frank Jimenez stated he was happy to be present to show the Governor's commitment to this effort and looked forward to working with everyone.

Mr. Henry Dean announced that several Governing Board members were present at the meeting to show their support for the Task Force.

Mr. Steve Walker announced Mr. Jim Shore is out of the hospital and is doing well. He asked the Task Force take a leadership role in being creative with this restoration process, particularly in the regulatory areas, instead of falling back on the way business has been done in the past.

Mr. Billy Causey, sitting in for Mr. Sloan Rappoport, reminded the Task Force of the importance of the marine environment and reminded everyone that it was the collapse of Florida Bay that led to a renewed interest in the system. He added that the Department of Commerce remains supportive of this effort.

Mr. Neal McAliley announced he was sitting in for Andrew Emrich who was ill and unable to attend.

Mr. Mack Gray announced he would be down here soon for an educational process and invited others to attend.

Mr. Thomas Gibson stated he too was looking forward to working with this group particularly in making sure the Programmatic Regulations have an emphasis on water quality.

Mayor Jose Diaz announced he was happy to have been appointed to the Task Force by Governor Bush and also looked forward to working with everyone.

Mayor Clarence Anthony stated he hoped the definition of success is spelled out very clearly and he wanted to make sure water storage is done properly. He stressed the importance of looking at indicators to make sure we are on the right track to success.

Mr. Dexter Lehtinen stated he is interested in the role of the Science Coordination Team, and has some concerns and confusion about what a white paper on flows means coming from the Task Force instead of the agencies. He also requested the Strategic Plan note that not every member necessarily agrees with the entire report. He mentioned concerns on the role of RECOVER and requested some explanation on the charts in Tab Two of the Readahead materials. CROGEE has begun to look at storage options and land acquisition and it was his understanding that these were not among the tasks requested by this Task Force. This was more of a policy concern and not a question about science. Ms. Ann Klee stated the Task Force would need to address the question of CROGEE's next tasks, if there are any, since they are nearing completion of their assigned work. Mr. Rock Salt added that there was a task on water storage. He also stated the Working Group's Land Acquisition Team is working on a Plan that will be presented to the Task Force.

Mr. David Struhs noted that no agency should give up their goals for this team, which provides a forum for discussion. The means by which the team takes advantage of the science presented should be dealt with. An independent scientific advisory group is provided for in WRDA, and the Task Force should consider how best to take advantage of that.

Mr. John Ogden then provided a Power Point Presentation on the definition of restoration. His conclusion was that restoration can be defined and characterized at different scales and from different perspectives, and that collectively the definitions will help us reach our goal. He included Independent Scientific Definitions, Policy-level goals and definitions, CERP Performance Measures, CERP Planning Parameters, CERP Interim goals, and the CERP Annual Report Card as the places to take the definitions from. He went into further detail on the process for developing CERP hydrological performance measures for the natural system. As part of this process, he pointed out the Conceptual Ecological Models that were created through a team with representations from many different agencies. The performance measures let us know how to get back to historical conditions dictated by the ecological models. He continued to review the CERP stressors and performance measures. He offered five system-wide CERP planning objectives for the natural system to determine restoration. Everglades protection Area and Big Cypress NSM matches 8-in-10 years; Estuarine Health; Salinity Regimes; Lake Okeechobee Health: Lake Stages 8-in-10; System-wide nutrient loading: Nutrient and Phosphorus loads and Exotics. He concluded that restoration is heading towards a pre-drainage ecosystem and pre-drainage hydro-patterns.

Mr. Jim Jackson provided a presentation on the Five-Year Incremental Analysis of the Water Management District's Lower East Coast Water Supply Planning. This Supply Plan will have a 20-year span with many of the storage facilities online by 2015. ASR will probably show the most change. Everglades Protection Areas were included in the model. Several key assumptions were made in terms of demands, irrigation, and other aspects. Operationally, the regulation schedule was also taken into consideration in the model. Lower East Coast (LEC) high-resolution groundwater models were also created. Over 1,000 Hydrologic performance measures were determined. The evaluation criteria very close to CERP and results were displayed in almost the same way. Flow improvements were also estimated over time. He presented tables summarizing the findings of the study, including incremental modeling results for the annual average hydro-period differences, relative to the Natural System Model (NSM), LEC Natural Areas, Lake

Okeechobee Service Area Water Restriction Information. He presented a list of the areas that the models predict will reach their goals, and which would not.

Ms. Klee led a discussion on the five-year Incremental Analysis of the Lower East Coast Regional Water Supply Plan and Measures of Ecosystem in the Context of CERP. She asked Mr. Jackson about the process used to develop the performance measures identified for the Lower East. Mr. Jackson explained that the hydrologic performance measures were developed by an inter-agency. At the interagency team level, if some party wanted a parameter included in the performance measures, it was included. Ms. Klee asked if the team assumed that meeting hydrological goals would lead to ecological restoration. Mr. Ogden explained that the same process was used in the Restudy, an all-inclusive process based on replicating natural system conditions.

Ms. Klee asked whether there was a consensus of the validity and appropriateness of these measures. Mr. Ogden responded that the 1,000 suggested measures were more than were needed. That initial list was reduced to 50 hydrological and 100 biological performance measures. Of that list of 150, 30-40 measure quantity and 73 measures quality. Ms. Klee asked if we focus on hydrological measures, is this appropriate to assume that this approach will lead to ecological restoration? Mr. Ogden responded that the conceptual models allows them to formulate their hypothesis. For example, setting the hydrological performance measure of water depth to meet the NSM would allow them to measure the response of tree islands, towards of goal of healthy tree islands. Ms. Klee stated that initially we could not set the ecological response goal, but the hydrological measure would allow a measurement of success towards achieving that goal.

Mr. Lehtinen added that the water depth can be called a performance measure and the health of the tree island will be measured over time. But there is a danger to mixing the independent measure (water depth) and dependent measure (health of tree islands). If the health of tree islands becomes a performance measure, the danger is the independent judgment of what is a healthy tree island. Improvements of native flora and fauna will occur as a result of improved hydroperiod. Don't want to free everyone up to do their own thing. For example, the goal is to restore natural flow, but when you put in the goal to do something about birds you can conceivably block the ability to restore natural flows.

Mr. Parker asked for more explanation of the graphic on the relationship of hydrological restoration to the ecological restoration in Mr. Ogden's presentation. Mr. Ogden stated that if we set up independent biological targets, we open the door for management actions that contribute to achieving those goals and we could lose focus of the hydrological restoration goals. Keeping with the tree island example, as performance measures are developed, the health of tree islands is solidly linked to the hydrological performance measure. He added that predictions of hydrological and ecological restoration are dependent on today's understanding. The Adaptive Assessment program is designed to refine those performance measures. Mr. Struhs added that not all measure are created equal with some easier to measure than others. There is a need to distinguish between the independent and dependent measures may lead away from the restoration goal assuming that the understanding of water levels is correct.

Mr. Lehtinen stated that data would have to be collected for some time to actually use the response of the system to determine the ecological response. If you collect data on the response of the natural system and make modifications too quickly, then faulty conclusions can be made. Need to stick with the hydroperiod hypothesis and with water quality and quantity as the primary focus of CERP. Collect the data but be wary of the usage of that data. Mr. Parker asked that if we set hydrological goals and tree islands begin to react negatively, should we stay the course. Mr. Lehtinen said yes, but if the data shows adverse biological effects, then the NSM needs to be reviewed and question whether the date is being interpreted correctly.

Ms. Klee asked whether we should be setting up hydrological performance measures now and then setting biological goals in the future, perhaps in the next 10-15 years. Mr. Ogden responded that we are developing a sophisticated set of hydrological measurement goals and will be releasing the plan this summer. The question is how to report this information so that it is useful to managers and assist decision makers by synthesizing the performance measures.

Mr. Walker reported that hydrologic changes made on the reservation have shown adverse biological responses in the Tribe's work to restore cypress. There has been die off of vegetation that should not have been there. This also shows that you can kill native vegetation just by putting the NSM hydrology in place.

Mr. Struhs stated that CERP is not just an opportunity to use adaptive management in implementing the plan, but also an opportunity to do multi-species management. Ms. Klee responded that CERP provides an opportunity to implement the Multi-Species Recovery Plan. Mr. Walker pointed out that adaptive management could be measured by looking at whether the computer model has accurately predicted what will occur in the system when the hydrologic targets are met. It is also important to verify those expectations by monitoring the biological indicators. Mr. Odgen added that ten conceptual ecological models have been developed. These models represent the best thinking of the group. A set of working hypothesis has been developed identifying what the stressors to the system are. CERP is based on the premise that these hypotheses are correct. The biological measures are just the opposite side of the hydrological performance measures.

Ms. Klee said that she understood measuring both the hydrological and biological response of the system. Keeping with the tree island example: the model determines that a certain amount of water is necessary for healthy tree islands. She asked what would prevent them from just focusing on tree island health. Mr. Odgen replied that they could abandon the working hypothesis; he never thought you could separate the hydrological from the biological. Mr. Parker stated that hydrological goals are quantifiable while biological goals could be subjective. Mr. Odgen replied that the team has scientists that can identify what constitutes a healthy tree island.

Ms. Klee suggested another example: what if the goal was the recovery of a particular species? How can we avoid a situation where we don't abandon the hydrological goal if we are focused on the recovery of a species. Aren't we better served by setting hydrological goals now and establish biological goals later? Mr. Odgen cited the Woodstork as an example of a species that has been extensively studied in the Everglades system. The current hypothesis is that woodstorks have declined because of the timing of freshwater flows into the estuaries. Freshwater flow will be measured and the number of storks nesting to assess the hypothesis. The hypothesis could be wrong and the predictions flawed if the monitoring does not show a positive impact to woodstorks. CERP may need to be refined or the storks could be responding to something unrelated to CERP, the hypothesis would need to be reviewed.

Ms. Klee responded that there may be situations where we do have the knowledge we need to set biological performance measures. Mr. Odgen responded that we have varying levels of confidence in the biological performance measures. Mr. Gray stated that there are many factors that can't be controlled, but we can control the hydrology. Need to measure both, but the hydrology is the most easily measured. We need to test our hypothesis against the system's response. May find that the response is better under certain regimes. Mr. Odgen said they would like to measure both biological and hydrological performance measures from the beginning. They would gain the greatest confidence in their approach by measuring what really happens out there. Do have some biological performance measures that can be measured in the 3-5 year increments.

Ms. Klee asked whether we have the information needed to establish biological baselines. Dr. Odgen responded that it depends on the biological measure. Need to get the right set of biological indicators in place, agree on the method to measure those indicators and figure out whether we have the baseline information on these species. For example, everyone wanted crayfish as a biological indicator, but we have no baseline data for these species. Mr. Causey said that the Task Force decided to implement the Multi-Species Recovery Plan, but we have not focused on this enough and tend to focus on single species. The FKNMS has 6 years of baseline data for most of the flora and fauna in this section of the system. There is time to fill in more baseline data to assist in setting those goals. Ms. Klee responded that she would like the Task Force to discuss at a future meeting how the Multi-Species Recovery Plan fits into ecosystem restoration.

Mr. McAliley said there are two questions. First, what is the ultimate goal? Restoration of the environment is an ecological goal. The issue is how to measure progress over the course of restoration.

Most people want to see restoration achieve recovery of most of the species endemic to the system. Ann Klee agreed that ecosystem restoration is ecological restoration but this will take time to measure and achieve. The National Academy of Sciences have said that the end goal must be set and that we must define some performance measures that allow us to measure progress towards meeting that goal. We need to provide this information to Congress and others that need this information.

Mr. Gray said there is a need to focus on the biological indicators that will respond quickly enough so that we can still make changes in the CERP projects. Mike Parker stated that the Kissimmee River restoration project has shown that the natural system has responded much more quickly than was expected. This project has demonstrated that restoration can be done. Billy Causey responded that pink shrimp was chosen as one of the performance measures because of its short life span (1 yr), so we know quickly how it responds. He suggested that we could look at some short term, medium and long-term biological indicators. Before the tree islands die, the pink shrimp will tell us something. Mr. Struhs asked if the red/yellow/green code could be applied to the 150 performance measures? Mr. Ogden responded that this was the approach in the Yellow Book. RECOVER will put out an annual report card using 10-15 performance measures to report progress.

#### Public Comment

Mr. John Adornato (South Florida Regional Representative for the NPCA) NPCA is looking to Task Force to guide the process. The Programmatic Regulations are very important in determining the path. The deferral of many decisions to Protocols and the role of Interior are disappointing elements in the draft Programmatic Regulations. Tradeoffs must not be made in defining restoration. It must be scientific and technical.

Mr. John Arthur Marshall (Arthur R. Marshall Foundation) Table 5-1 in the Yellow Book contains the definition of restoration. He proposed that these definitions be posted in future Task Force meetings. The Goals and Standards Guidance for the Dept. of Defense requires establishing baselines. Failure to adhere to these common sense guidelines has resulted in confusion that will continue the conflict among the stakeholders.

Ms. Brenda Chalifour (Save Our Shores Land Use Attorney) said she is interested in protecting beaches and shores. Our coastal resources are one of South Florida's most important economic assets. She asked for more attention on this issue by a Task Force responsible for ecosystem restoration as these resources are part of the ecosystem. She reported that the Port Everglades expansion plan may require the deepening and widening of the port by an agency in this room. The river of sand will be disturbed. She exhibited two bottles of water from Hollywood area beaches and addressed the differences in resource management that caused the different water quality of these samples.

Mr. John Alden Briggs (Smokey Mirror Limited) would like to see the definition of restoration in the Programmatic Regulations. The EPA website has a good definition of restoration. He questioned the involvement of local government in ecosystem restoration and CERP. He understands that on April 28, there will be retreat on CERP for local government, but on April 2, the Palm Beach County ordinance on invasive non-native plants (exotics) will come before the County Commissioners. He urged someone from the Task Force to attend this meeting.

Ms. Shannon Estenoz (World Wildlife Fund) addressed the issue of single species management. Her organization is focused on restoring eco-regions and moving away from single species management but WWF thinks that while moving in that direction, extinction is unacceptable. She felt it was a good discussion of the performance measures and she is in agreement with the points made by the Task Force. The interim goal discussion in the environmental community's comments to the Corps on Programmatic Regulations focused on hydrological goals. But we need to be measuring the response of the natural system: that is why setting out the process for adaptive assessment and adaptive management is so critical. These processes should be in law through the Programmatic Regulations.

Mr. Frank Jackalone (Sierra Club) addressed the earlier discussion on independent scientific review. The Everglades Coalition supported CERP with the understanding that independent scientific review would be

part of the process. He was concerned about comments made about the need to review CROGEE and the discussion of possible sunseting for the CROGEE and creating an independent scientific review panel that works for the Task Force. If Task Force determines what issues can be reviewed, the timing of the review and how that information is received, then its no longer independent scientific review. Ms. Klee responded that the issue is whether there is a need for both a panel as required in WRDA 2000 and the CROGEE and the question is couldn't these groups be merged. We welcome independent scientific review.

Mr. Fred Rapach (member of Working Group and Palm Beach Water Utilities) stated CERP was crafted through consensus with a balance of all stakeholders needs. No one got everything they wanted. It concerns him that he keeps hearing that restoration is the only goal of CERP; as authorized, it's a multi-goal plan. We need to maintain a balancing act in implementing the plan. The Programmatic Regulations is the process to achieve the goals of the plan. If performance measures are included in the Programmatic Regulations, performance measures must be set to measure the progress towards achieving all the goals of the plan.

Mr. Anthony agreed with Mr. Rapach. He was interested in the discussion of how science determines the process of restoration. NPCA said we should look at a scientific and technical success. We are concerned about the built environment. The Programmatic Regulations should not define all the variables but develop a process for developing those performance measures. He does agree with setting hydrological measures but there are some missing criteria in regards to the built environment.

Mr. Parker returned to the issue that OMB wants to take 90 days to review the Programmatic Regulations and moved for the Task Force to ask OMB to limit their review period to 30 days to allow more time for comment and consultation among the stakeholders, the public, Indian Tribes, state agencies and federal agencies in accordance with WRDA 2000. **Action: Task Force passed motion without objection.**

Ms. Klee announced that the next Task Force meeting March 21 in Washington, D.C. There was discussion of the next steps of communicating the Task Force's motion to OMB. It was suggested that the meeting with OMB should be a joint request from the State of Florida, the Federal agencies and the Tribes on behalf of the Task Force.

Meeting adjourned at 3:15 p.m.

Enclosures:

1. Briefing Binder