

*Approved Meeting Minutes
 Joint Meeting of the South Florida Ecosystem Restoration Working Group
 and Science Coordination Group
 West Palm Beach, Florida
 July 16, 2008*

Opening Remarks and Administrative Items

Ken Ammon and Rock Salt called meeting to order at 1:10 PM. The agenda (Encl. 1) was reviewed and everyone was reminded to identify themselves since the meeting was being web cast.

	Joint Mtg	Regular Mtg	
	July 16	July 18	Alternates
Working Group Members			
Ken Ammon, Chair – South Florida Water Management District	√	-	Tom Teets (day 2)
Dan Kimball, Vice Chair - NPS - ENP & Dry Tortugas	-	-	Bob Johnson
Stu Appelbaum - U.S. Army Corps of Engineers	√	-	Eric Bush (day 2)
Billy Causey – NOAA, FL Keys Nat'l Marine Sanctuary	-	-	Dave Score
Sheri Coven - Department of Community Affairs	√	√	
Bob Crim - FL Dept. of Transportation	-	-	
Wayne Daltry – Southwest FL Regional Planning Council	-	-	
Gene Duncan – Miccosukee Tribe of Indians of FL	√	√	
Joe Frank – Bureau of Indian Affairs	√	-	
Roman Gastesi, Local Government	-	-	
George Hadley – U.S. Dept of Transportation	-	-	
Veronica Harrell-James - U.S. Attorney's Office	√	√	
Eric Hughes – Environmental Protection Agency	-	√	
Greg Knecht - FL Dept of Environmental Protection	√	√	
Bonnie Ponwith, NOAA, National Marine Fisheries Service	√	√	
Barry Rosen – United States Geological Survey	√	√	
W. Ray Scott - FL Dept of Agriculture and Consumer Services	-	-	
Paul Souza – U.S. Fish and Wildlife Service	√	√	
Jon Steverson, Office of the Governor of Florida	-	-	
Craig Tepper – Seminole Tribe of Florida	√	√	
Kenneth S. Todd – Palm Beach County Water Resources Manager	√	-	
Joe Walsh – Florida Fish and Wildlife Conservation Commission	√	√	
Vacant - Broward County Department of Natural Resource Protection	-	-	
Ed Wright – U.S. Department of Agriculture	-	√	
Greg May, Special Advisor	√	√	
Science Coordination Group Members			
Ken Haddad, Chair – Science Coordination Group	-	-	
Calvin Arnold, U.S. Department of Agriculture	√	NA	
John Baldwin, Florida Atlantic University	√	NA	
Ronnie Best, United States Geological Survey	√	NA	
Joan Browder, NOAA, National Marine Fisheries Service	√	NA	
Bob Doren, Department of Interior	√	NA	
Todd Hopkins, U.S. Fish and Wildlife Service	√	NA	
Bob Johnson, Everglades National Park	√	NA	
Chad Kennedy, FL Dept of Environmental Protection	√	NA	
Cherise Maples, Seminole Tribe of Florida	√	NA	
Susan Markley, Department of Environmental Resource Management	-	NA	
Bill Reck, U.S. Department of Agriculture	√	NA	
Garth Redfield, South Florida Water Management District	√	NA	
Debra Shafer, U.S. Army Corps of Engineers	-	NA	
Rock Salt, Department of Interior	√	√	

Integrated Delivery Schedule (IDS) Workshop

Stu Appelbaum provided a presentation (Encl. 2a) of the latest draft IDS that includes the hydrological projects for Everglades restoration. He reminded the members that the goal is to present the IDS to the Task Force for their approval. He reviewed the discussion at previous IDS workshops. He noted that the Governor's announcement on June 24th regarding the US Sugar acquisition made the IDS is more important than ever. He said that foundation projects such as the Kissimmee River Restoration (KRR) and Modified Waters Delivery need to move ahead as rapidly as possible. Other project such as Aquifer Storage and Recovery will be affected by what is ultimately done in the EAA. The regional studies, modeling analysis, pilot projects along with other analysis will determine how much ASR will be needed. He reviewed the project matrix (Encl. 2b) noting the meaning of the various colored bands.

Stu provided a demonstration using the Version 1 Matrix (Encl. 2c) using a cash flow tool to stimulate discussion and he asked everyone to concentrate on what happens first rather than on the cash flow. He noted that the red bars show you when a particular sequencing won't work, for example, if the lands have not been acquired. All the projects, with the exception of the foundation projects can be moved around and various scenarios can be looked at. Rock Salt asked why the EAA Reservoir was moved out of the blue banded section. Karen Tippett explained they moved it into the white banded section because they do not have any information on it.

Joan Browder asked why the BBCW project turned red when the start date was moved up. Karen Tippett explained there are constraints as to when they can start construction. In this case the real estate certification is not scheduled until August 2015. Joan Browder said there are serious land purchase concerns that make it important for it to start sooner rather than later. Stu noted the constraints with having the PIR done and project authorized to initiate construction and explained that the draft PIR is due out later this month. There was a suggestion to add an additional column noting whether or not the lands have been acquired. Paul Souza said it was his understanding that from a planning perspective they do not have to wait to begin Phase II until the PIR for Phase I is done. He added that construction dates are a function of WRDA bills and funding appropriations. Stu emphasized two drivers - PIR completion and authorization. Rock Salt asked why they weren't starting from the premise of taking everything – structures, levees, pumps, etc - out and put stuff back in as needed. He added that DECOMP and those seepage management projects for DECOMP drive restoration. Ken Ammon said there are other parts of the system that are as equal in importance. He said that was why he was opposed to using themes because although they provide a piece of the puzzle, the themes set up an adversarial relationship with interests such as the estuaries and Lake Okeechobee. All the areas are important and they need to figure out the right sequence to address the entire system. Ronnie Best said that the heart of Everglades restoration is the flow through the greater Everglades and everything else captures the water through storage and ASR.

Ken Ammon said that no one would contest that point, but the C-44 Reservoir captures water to protect the St Lucie Estuary and Indian River Lagoon and he cannot say one is

more important than the other. They are independent basin level fixes that are extremely important so they cannot just look at the Everglades. Paul Souza agreed they have a lot of projects on the table and asked to be provided with the facts they need to make smart decisions. The question of benefits and where they will see the greatest benefits is important to know. The fact that the snail kite population is extremely low is a fact that needs to be considered.

Bob Johnson said that the landscape has changed and CERP was designed around it and he was not sure the northern estuary projects were designed like they were in CERP. He asked whether the reservoirs - C-43 and C-44 were optimally designed. If they are going to change the way they are going to deliver water they may have to revisit how much water they can send south. Ken Ammon said the C-43 and C-44 Reservoirs were not sized to capture regulatory discharges out of Lake Okeechobee and were designed to capture local runoff. Nothing they do in the EAA would affect those designs and they were a solution to the local problem. He cautioned that there are ongoing negotiations with the land deal and it is not a 'done deal'. Ken Todd stressed the need to pick some projects and let the general public see they are making progress and added that he believed they need to look at a combination of all these projects.

Greg May asked if the members saw any need for any big changes to the current sequence (Version 2 Matrix/GANTT chart - Encl. 2d). Bob Johnson said he was comfortable with DECOMP coming later when he thought MWD was doing something significant noting that it is not the only project not living up to its original billing. He asked if they could discuss ways to get the foundation projects to do more adding that they can move a lot of water through the Everglades without being dependent on new water. There is too much water in WCA 3A all the time and too little on the eastern side all the time. There are things that can be done with what is in the system today and asked if there was something they could do now. Ken Ammon said that is a good suggestion. Bob Johnson added that what they do next to Tamiami Trail tells you what you can do next to Shark River Slough and benefits to Taylor Slough. Ken Ammon noted he was not sure how to address Bob Johnson's comments and whether it will be an early phase of DECOMP, a CERP project or strictly an operational change. Bob Johnson agreed that is the dilemma, it is not MWD or DECOMP. They have always prefaced DECOMP on having storage, treatment, additional seepage management and they can do some of that by just moving the existing water. Greg May clarified that there are two issues: operational changes that can be made to better re-distribute existing water and projects that are necessary to provide larger more natural flows. Stu Appelbaum said the Herbert Hoover Dike project is funded separately under flood damage prevention and is not competing for restoration funds.

Paul Souza asked if it would be sensible to build the STA before they have a Reservoir and whether it makes sense to push it back and use those dollars to move DECOMP up. Ken Ammon said there are a couple of projects such as the C-111 SC Phase I, BBCW and C-44 Reservoir and STA that will end up in the earlier time period. Gene Duncan said there was discussion at a Governing Board meeting with regards to the resizing of the C-44 Reservoir to handle just basin runoff. The Miccosukee Tribe also wants

DECOMP moved up and as soon as MWD is declared complete 'to the extent practicable' they can then move on to DECOMP. Even with the one mile bridge they cannot forget about seepage. The tribe wants MWD done and as long as it is out there it is holding everything up. Rock Salt said he still does not understand why the EAA Reservoir is not in the blue banded section. It may stay an expedited project or it may be a Corps project. There are many assumptions, but getting that storage is important in being able to do DECOMP and it has always been in the initial suite of projects. Ken Ammon noted the schedule will be reviewed on a regular basis and he had no problem with adding the EAA without a schedule.

Rock Salt said he was not sure why they were not demanding that projects, such as Picayune Strand, be moved forward. Paul Souza also asked if DECOMP could be moved up a year. Karen Tippett noted the real estate certification is scheduled for August 2013. Bob Doren asked what Winsberg Farms and Site 1 do for restoration. Stu explained Winsberg Farms increases spatial habitat by improved wetlands and Site 1 is a reservoir. Ken Ammon added that Site 1 takes off a significant pressure from the Refuge/WCA 1 from a water supply perspective.

Ken Ammon reviewed the proposed changes to the Version 2 GANTT Chart. Add A1 to the blue column, move up both phases of Picayune Strand, BBCW, DECOMP (with the understanding the scope needs to be refined). There was a suggestion by Bob Johnson to look at operational and/or structural fixes in the short term to complement MWD and Tamiami Trail improvement project and to try to move water out of 3A into areas that need it. Bob Johnson said there is no project to fix Tamiami Trail and it should be added. Stu Appelbaum said it is in DECOMP Phase II.

Public Comment

John Ogden (Audubon of Florida) noted the growing concern among ecologists and scientists at the rate at which the system continues to deteriorate. They have begun to discuss irreversible changes in the system and there is a growing sense of urgency that he said he did not sense in today's conversations.

Sara Fain (NPCA/Everglades Coalition) noted her surprise at not hearing discussion about how the Governor's EAA announcement will change things. She encouraged the group to be more innovative and take advantage of the opportunities the EAA deal may provide. Ken Ammon replied there will be a lot of discussion when that deal is finalized.

John Marshall (Arthur R. Marshall Foundation) said he concurred with Sara's comments and added that he along with the Foundation's summer interns have developed a list of the top ten issues (Encl. 3) associated with the U.S. Sugar deal that need to be addressed. He asked whether it is true that 50 bridges of 100 feet each will be considered and whether there is resistance to clean the culverts. No one had heard about this proposal and Mr. Duncan said he may be referring to the cleaning of the existing 55 culverts. Rock noted the culverts are clean.

Barry Rosen said the biggest restriction to moving the water is the built system and seepage management needs to be in place. Ronnie Best said the Governor's

announcement was a bold and brilliant move and he challenged everyone involved in Everglades restoration to be just as bold and brilliant adding it will take new ideas.

Stu Appelbaum reviewed the benefits methodology noting that some of the RECOVER staff has been looking at the ecological lift (benefits) you get from sequencing. He noted the difficulty in determining benefits because you then need to determine which metrics to use. He reviewed the definition of ecological lift and urgency adding that the urgency argument was in the Yellow Book and is not a new concept. He reviewed the process they will use to determine CERP ecological urgencies which include holding a series of workshops for each geographic region and determining criteria for selection of urgent needs and the possible consequences of not doing things. They will ask RECOVER and the SCG to define the elements of ecological benefits. He said the IDS is intended to be a living document and the new science piece will not be completed in time for the September Task Force meeting.

Bob Johnson noted his concern about dividing the Everglades into four regions because the problems are interrelated and suggested starting at the system level and identifying the common problems. Rock Salt said he expected the RECOVER and SCG will get together and work through these issues. Joan Browder suggested inviting RECOVER to the next SCG meeting. Paul Souza said this concept would provide an opportunity to deal with IAR and will be one more set of facts they can look at but they have to be careful how it is framed in order to avoid pitting one set of interests against another. They are not going to get one perfect criterion to make sequencing decisions and they need to manage expectations and ensure they provide a forum for others to engage.

Ronnie Best agreed they need to move forward with ecological lift and urgency but encouraged members to attend the first day of the GEER Conference and listen to the discussions on ecosystem services, which is a method that could be used to justify projects on a broad scale. Lorraine Heisler said that she is a member of RECOVER and part of the intent is to get scientists to look at benefits and urgencies on a level playing field using the conceptual ecological models as a basis. It can be done quickly if they build on the foundation already there. Garth Redfield said the ecosystem services concept is that you look at all the things that ecosystem provides to the entire area. Ken Ammon said that this is something that goes into the tool box but cautioned against making this your sole decision making tool.

Project Implementation Report (PIR) Streamlining Workshop

Overview

Dennis Duke provided a presentation (Encl. 4a) about the length of time associated with preparing a PIR. The delays in completing a PIR contribute to delays in authorization, funding and project completion and the goal is to explore options to streamline and improve the process. He reviewed the factors which guide the development of a PIR as well as the laws and stakeholders involved and challenged everyone to get a better understanding in order to make recommendations to the Task Force on improving the overall process and quality of PIRs. He noted that other programs are envious of the

effort here adding that three PIRs have been approved to date and two are awaiting approval. He did recognize they are further behind than the Yellow Book envisioned.

CERP PIR Streamlining Analysis

Larry Gerry reminded everyone that the IRL was the first PIR completed. Although it is an award-winning project, at a cost of \$1.3 billion they have learned that money is a constraint. Eric Bush noted that he had worked on restoration since the original conceptual plan and has been involved in every PIR. He explained that they were going to review several case studies and go through what is involved in preparing PIRs and added that everything they do is done to satisfy some requirement. Frank Metzler reviewed the CERP PIR process which includes those things required by the pro regs. He noted that the duration from the Project Management Plan to the Record of Decision is 3 years and 8 months and does not include contingencies.

Greg Knecht noted that they are going to see higher costs. Larry Gerry said many of the assumptions have changed including cost increases due to materials. Stu Appelbaum added that one of the points of contention with the PDTs is that costs are important. Ken Ammon explained the increased costs are driven by land values and basic assumptions that were in the Yellow Book from a construction perspective. Once you incorporate lessons learned, such as impacts from Katrina and flood protection, the ultimate cost of a project will change. He said he did not believe that they have appropriately managed expectations by the PDTs. Bob Doren said that he has not experienced a typical PIR process and every one has required the interpretation of ecological and biological benefits. The biggest impediment is that you are dealing with biological systems and not just construction projects.

Frank Metzler reviewed three case studies (EAA, C-43 and C-111 SC) and provided an in depth review of the standard PIR template duration versus the actual project duration., He said the PDT takes the template as a starting point and comes up with a reasonable estimate of a schedule. He reviewed the various impediments to PIR completion with the bottom line being that there is no one problem. Impediments include everything from money, staff turnover and the length of time to resolve policy hang-ups. They have created a complicated process in an effort to allow everyone the opportunity to engage and there are a lot of obligations on the team.

Paul Souza said the U.S. Sugar deal may provide them with an opportunity to take a strategic pause so that they can think about how they can do better. He asked for some specific items regarding the pro regs that the group should focus their attention on for streamlining. Rock Salt noted only two of the impediments are related to the pro regs. Todd Hopkins suggested having the PDT members provide their input since they are the ones who actually worked on the PDTs on a weekly basis. Ken Todd stated that there were some wild ideas circulated in the PDTs that exceeded the money available and the make-up of the PDT has a lot to do with its success. Bob Johnson said that many times money is not sufficient to achieve the objectives of the project. Stu Appelbaum explained that those projects that are authorized are subject to the 902 constraint.

Facilitated Discussion

Greg May presented a proposed list of categories (organizational procedures, analytical procedures, emerging or changing policy, other business models, relationship with other laws) to serve as a framework for the facilitated discussion. The members accepted the framework. He said they should consider those things that can be changed internally as well as those things that would need help from the Task Force. He said a special meeting in August would be used to prepare recommendations for the Task Force and to discuss the snail kite issue.

Stu Appelbaum explained that for analytical procedures, they are trying to justify each and every project on its own, so it is about the individual project justification versus the program. The members provided bulleted recommendations that they want to tee up for further analysis. The members were asked to think about this further for further discussion the following day.

Meeting adjourned at 6:00 PM.

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Welcome and Whiparound

Greg Knecht - chairing the meeting for Ken Ammon - called the meeting to order at 8:35 AM. Eric Hughes announced that EPA finalized the TMDL for Lake Okeechobee tributaries on June 30th adding that they re-evaluated the methodologies based on public input. Craig Tepper suggested that the modeling center should look into using linear programming which is used in ecosystem science and allows you to project out into future horizons.

Paul Souza said that a number of large landowner and environmental organizations have been working together to come up with an agreement that will: create a new panther mitigation fund, increase mitigation requirements, promote big habitat protection rather than fragmented protection and provide incentives for agricultural lands to remain in agriculture. The effort is focused to protect panther habitat in Collier County and the hope is to expand this effort to other counties. Joe Walsh suggested inviting one of the representatives of this committee to a future meeting.

Barry Rosen invited everyone to attend the GEER Conference schedule in a few weeks. He also reported he attended the 11th Int'l Symposium on Coral Reef, hosted by NOAA and DOI (around 3,000 attendees from around the world). Bonnie Ponwith added there were over 100 people involved from NOAA and the quality of the papers was outstanding. It provided the opportunity to leverage new findings and methodologies. Greg Knecht noted the Governor signed the ocean outfall legislation during the symposium.

Ed Wright announced they have a Farm Bill. He said there is concern with land acquisition in the Wetland Reserve Program because the current language says that units of government cannot be applicants but producers and that will change they way they have been operating. They are keeping a close eye on this as the rules are being written.

Sheri Coven provided a White paper (Encl. 5) prepared by Chris Doolin on the U.S. Sugar acquisition for information. She reported the department is reviewing the City of Miami's Comprehensive Plan Amendments. She noted the concerns of the marine fisheries association and said there are going to be some objections and concerns that will be raised by the department. She also said the Governor held his 2nd Climate Change Summit and signed HB 7135, a comprehensive energy bill which created a new office of Energy and Climate within the office of the Governor.

Eric Bush representing Stu Appelbaum highlighted the Herbert Hoover Dike and Picayune Strand projects. The Corps will obligate 100 % of the funding for the Herbert Hoover in FY08 totaling \$80 million for dike rehabilitation for reach 1. The Corps is also preparing a re-evaluation report for reaches 2 and 3. Picayune Strand Restoration is

scheduled to go to construction next year and plans and specs are underway. They will have significant challenges with incomplete real estate acquisition of adjacent lands that will be impacted by construction as well as completing Endangered Species Act consultation. The monitoring plan and funding of that plan will be difficult issues for them to complete over the next several weeks adding that if it takes months to complete then it could jeopardize the construction start.

Gene Duncan announced the tribe discovered during the revision to the long term plan that the District's contractor has created many alternatives analysis for the build out of compartment B and C. The recommendations appear to be headed towards degrading the levies and re-introducing STA water that does not meet the criterion for the net benefit of more water in the system. As a downstream user, the tribe is opposed and the Secretary of DEP will have to make a determination in December 2008. On a different track, the EIS is out for Compartments B and C and it incorporates the changes. He urged everyone to read and comment on the hydropattern restoration component of Compartments B and C. He said the tribe's position is that they should be discharging into areas that have already been impacted.

Joe Walsh said the Climate Change Workshop scheduled for August will be focused on how they will deal with wildlife management in the face of climate change and he encouraged everyone to attend and participate in the break-out sessions. Greg May reminded everyone they are planning a special WG/SCG meeting in August to deal with PIR Streamlining, IDS schedule refinement; Snail Kite population and possibly a presentation on the Panther Agreement.

Rock Salt reported on behalf of Ken Haddad that the SCG has been working on developing an evaluation protocol and communication tool for the system-wide indicators. The fruits of the SCG's efforts are included on pages 146-147 of the Draft Strategic Plan. A longer report is out for independent review, the methodology and the science are being peer reviewed and will be published in a journal in the fall. The SCG also endorsed the Draft Plan for Coordinating Science (PCS) and will be presenting it to the Task Force for approval at the September meeting. He noted that there will be a workshop on Ecosystem Services on the first day of the GEER Conference noting the conference is designed in a way for managers and planners to interact with scientists.

Tom Teets attending for Ken Ammon reported that the negotiations are ongoing for the U.S. Sugar acquisition. He said that the River Watershed Plans are due on January 1, 2009. Bob Johnson for Dan Kimball reported their highest priority is to complete the work on the LRR for Tamiami Trail and to work through all the impediments in order to get to the proposed Ground Breaking in October.

Dave Score said that many forget that corals are animals. He reported there are 300 – 400 year old corals being killed by disease and there is a sense of urgency to address this issue. He invited everyone to attend the Water Quality Steering Committee meeting scheduled for the 24th in Marathon adding they are not seeing improvements in Florida Bay. Bob Doren said that anywhere between 400 – 2,000 tons of wildlife is being

consumed by pythons over 2,000 miles of canals and there is also a sense of urgency in dealing with these invasive species.

Consultation Workshop

Biscayne Bay Coastal Wetlands

Matt Morrison reported they are releasing the PIR and supporting documentation for internal review the following day. He provided a presentation (Encl. 6) reviewing the project objectives, study area and PIR features. He noted project located in Miami Dade County where land costs are a big factor in driving the project costs up. A two PIR approach will be used with the first containing the analysis to support implementation of the first increment of Alternative O. The second PIR will contain additional analysis and information gained through adaptive management actions to support implementation of the second increment. He reviewed the major features contained in Alternative O noting the total project cost for the first PIR is \$103 million. He has been working with cost estimators and the costs may go up slightly. Alternative O, Phase I will provide the lowest cost per unit of output and provides 75% of the benefits at 1/3 of the cost. Eric Bush clarified that the project will provide redistribution of existing water and not provide new water. Matt reviewed how the water would be reserved or allocated for the natural system. The team is working on completion of the PIR noting DOI's concerns with water reservations. The Corps plans to initiate project construction of Phase 1 in March 2016.

Greg Knecht asked whether the concerns raised by DOI are on volume or process. Matt said the concerns are on process. He said the state will identify and protect the water the CERP project makes available and it is the existing water going to the bay that is not being capture by the project that is in question. Paul Souza stated the PDT has done a great job on this PIR. He said it is a good project and the water and land constraints need to be worked through in order to achieve the full vision of alternative O. He asked how the March 2016 date was selected and whether it will be on the next version of the IDS. He was told that the PM teams in Jacksonville developed the dates and Karen Tippet added the land acquisition would take it to August 2015. Matt Morrison noted he was not sure if the date is construction start or completion noting the Project Manager was deployed to Iraq.

Bob Johnson referring to the seasonal draw downs asked where they are in modifying the rate at which water level recedes relative to PIR 1. Matt clarified that some of the benefits to the project are achieved by elimination of the agricultural drawdown which are predominantly freshwater and they have been removed from the first phase of the project due to the assurances and savings clause issue. There are some landholdings that could be economically impacted and it was deferred to the second phase. However, he has money in the FY09 budget to have a consultant do some field reconnaissance to look at what is out there today. They will then develop a workshop to determine what the next steps would be. Bob Johnson clarified that the water levels are not being raised but the rate at which it recedes is being reduced. The drawdowns extend all the way upstream and a huge area of Miami Dade County is drained to protect a very small area. There are

many critical resources that are being impacted and he said he hoped they could do other things between the two projects to fill the gap.

Public Comment

Khaleel Kettering (NPCA) noted everyone knows that Biscayne Bay is in a dire situation and they will only be reserving a portion of the water needed while they need to reserve the total amount. He said storage in dry season is most important. He urged them to look at the agricultural drawdown as well as land acquisition in the future.

Evan Skornick (Chair, BBRRCT) reported the team received this presentation from Matt and provided similar feedback. The team hopes the project will be done sooner than 2016.

Martha Musgrove asked what percentage of direct benefits will go to Biscayne National Park for Phase I. Matt Morrison said the freshwater wetland benefits, saltwater benefits and nearshore salinity will all benefit Biscayne National Park.

In summary Greg May noted there was huge and overwhelming support for this project. He noted there were concerns with the timing and the delivery of benefits. He said there were questions about the proposed adjacent FPL project, which is going on simultaneously. He noted that Phase II needed to be optimized to get the benefit percentage up in the years to come. He clarified that there is no new water with this project but they will redistribute the water and improve the timing of the deliveries. If they are able to identify new sources of water and provide for storage in the future, then the project will be able to handle that. There was also discussion on the gap between Phases I and II and the possible steps they can take to provide interim benefits. Greg Knecht added that the land certification issue needs to be resolved before this goes to the Task Force.

Aquifer Storage and Recovery Program – Interim Report

Bob Verrastro provided a presentation (Encl.7) updating the group on the ASR program. He said one of the attractive features of ASR is that it usually does not require land acquisition. Several ASR systems have been in operation throughout Florida and there are currently 30 ASR wells within the SFWMD boundary including Boynton Beach, Miami Dade and Marco Island. He reviewed the proposed CERP ASR locations. Four CERP pilot projects are about to become operational, two north of Lake Okeechobee and two in Boca. He reviewed the details for the Hillsboro ASR Pilot Project which will be operational in late summer or early fall. The Kissimmee River ASR Pilot Project located on the banks of Kissimmee River was also reviewed and it was noted that the system will be operational late this year. He reviewed the ASR Regional Study which will be looking at south Florida in its entirety and the region wide impacts associated with implementing full scale ASR as envisioned in CERP. They have completed the regional hydrogeologic framework, initiated construction of large groundwater models, hydro fracturing and geochemical evaluations have been conducted and they hope to complete it in 2012. Pilot projects need to be operational so they can test the efficiency of the recovered water.

They recently completed the ASR Interim Report (Encl. 7b) which summarizes all of the work conducted in the first five years. They have found that ASR will work anywhere in south Florida with some degree of success. Test wells have been drilled and show that 4 out of 5 places are conducive and available for ASR wells. The preliminary mercury evaluation has determined that the risk is low but arsenic has emerged as a constituent of concern for some ASR systems and they are working to overcome that issue. The CERP ASR Program Report Card evaluates the issues identified by the ASR Issue Team which are known as the 'seven deadly sins'. In addition, the PMP was reviewed by the NAS and they developed a series of recommendations, which are being investigated. The ASR Regional Study PMP was reviewed by the NAS and they developed a second series of questions and recommendations and they continue to work on tasks that will address the recommendations. They hope to have the final report for the Regional Study by 2012. In addition, the SFWMD has initiated new ASR projects north of the lake as a result of the Lake Okeechobee and Estuary Recovery Plan. They are partnering with the Seminole tribe on the Brighton Reservation and are in the process of filing the permit application. In addition there will be a well at Paradise Run and they will re-activate the well at Taylor Creek.

He noted there are several ASR systems in southwest Florida that are recovering water with arsenic levels that exceed 10 ppb. As the wells are operated and cycled the concentration goes down. DEP is working with the facilities to try and let them continue operating the system so that the concentrations go below the standard. The SFWMD is partnering with SWFWMD and SJWMD to get the systems into compliance. Upcoming events include having the initial groundwater results by 2010, final report of the ASR regional study by 2012 and CERP ASR Project Implementation Report by 2015.

Barry Rosen commented that the arsenic issue is not just a physical issue but it has a biological component which they are studying and he hopes to have a report that everyone will be able to use. Eric Bush said this is an unprecedented model development effort and added he is impressed with the work being done.

Public Comment

John Arthur Marshall (Arthur R. Marshall Foundation) asked how many of the 30 wells are offline due to problems. Bob Verrastro said that half are operating and the other half are in various stages of permitting, or design or finalization of the construction phase. John also asked about the energy costs associated with the ASR wells adding that he has worked with the City of West Palm Beach to develop an energy cost model and it was estimated that replacing 215 ASR wells would save \$6.5 billion in energy costs over the CERP life cycle. Decision makers will need to know about these huge economic costs and trade-offs.

Rock Salt added that surface storage is the most cost effective and if the EAA deal goes through, then they will need to run the numbers. He said they may still need some ASR to make it all work. Greg Knecht added that detailed accounting makes a lot of sense and they need to be able to evaluate it when the time comes. Bob Johnson added that if they try to put surface storage in the EAA it will take a lot of land but you will not be able to

replace ASR completely noting there are places where it works great and is a critical piece. He cautioned people not to think they can replace ASR with surface water everywhere. Bob Verrastro said ASR can be integrated with laser precision exactly where you want it usually on land already purchased to augment storage. ASR can still be used throughout the system to adjust timing or have a storage feature integrated.

PIR Streamlining Workshop - Continued

Greg May said he hoped the members had given some additional thought to how the process could be improved. He restated the objective which is to identify specific elements of the PIR process that have the most potential for improvement or streamlining and to provide initial recommendations to the Task Force at its September meeting. Greg Knecht said the modeling issue seems to be a good candidate. They seem to model alternatives until they get the answer that makes them feel good. Eric Bush said they are doing the modeling to justify the millions of tax payer dollars and they are also looking at detailed project performance, down to the grid cell in order to determine potential impacts to habitat or species. They will quantify those impacts until there is a paradigm shift in how they evaluate these projects. They are currently using five different baselines with and without project conditions and the modeling is time consuming and the modeling baselines need to be simplified.

Rock Salt asked if there is a case to be made for the next added increment (NAI). Larry Gerry explained it is a 2050 scenario and looks at the demands they will have looking at the approved CERP projects and add on the next set of projects. He said he did not see that much value in projecting out fifty years and include a mix of projects that you hope will be there. Tom Teets said they have to use models that have been peer reviewed or risk adding more time to the process. Joe Walsh said the NAI is the only model that allows you to look what you know is going into the ground and allows you to see possible impacts.

Ed Wright asked if there were plans to involve the PDT members in these discussions since they are involved in the process. Greg said that it is a possibility if the members think it will help.

Paul Souza noted the comments made regarding the Endangered Species ACT (ESA) requirements and the time it takes to complete the analysis. He acknowledged it is a legitimate concern but they have to be mindful of the question of transition and unwittingly cause a negative impact on a species. FWS works hard to meet its timelines but it is not to say that they can't find a better way to do this.

Joe Walsh said that although there are legitimate concerns there are no mechanisms in place for handling issues. Bob Doren said he worked on a PDT that had three alternatives and they were told that three were not enough. This added six months to the PIR process although ultimately all but the original three were rejected. Craig Tepper suggested PDT members should have a common set of training with clear rules and direction. Eric Bush said they do have mechanisms for conflict resolution however they are not using them very well. He said his personal opinion is to change the program in a

fundamental way and if the goal is to produce PIRs faster then they need to consider rescinding the pro regs.

Rock Salt said they have too many baselines and asked which one is the right one to use. Eric Bush said one with and without project conditions. He said the problem with NAI is how they evaluate the benefits and added they could do all the planning with one baseline condition including savings clause and water reservations. Dennis Duke said NEPA requires you to have three alternatives as a minimum. Another issue is Project Managers experiencing burnout and you have to deal with it. He noted that the feasibility scoping meeting is the first place where many engage and he felt it was too late at this point and offered that earlier on involvement would help avoid many of the issues that come up later.

Tom Teets relayed Ken Ammon's comments on this issue which included: model development; decision making; policy and procedure; DCT should be the first stop; timely elevation of issues; habitat units process is broken and is artificially put together and Corps' HQ and others will need to work on this as they look at the principles and guidelines, possibly use hydrologic surrogates; getting bogged down in the design detail which takes more time and money and needs to be looked at since the PIR is what they need to justify a project to Congress; assurances analysis, could be a trust issue between the federal and state governments; and use best available information. Greg May noted the recommendations will be compiled and reviewed at the special August meeting.

Strategy and Biennial Report and Land Acquisition Strategy

Greg May reported that the members have received the draft Strategy and Biennial Report (Encl. 8) as well as the Plan for Coordinating Science. He noted the comments received to date have been incorporated in the draft documents. He asked the members if there were any fundamental concerns with the draft reports and noted there were none. He said that staff will be available after the meeting to address detailed questions or comments one on one (there were none). He noted the initial drafts are getting better due to the phenomenal cooperation from the agencies. He said that the reports will be posted on the website and will be presented to the Task Force for approval at the September meeting.

The minutes were presented for review. Ed Wright made a motion to approve the minutes, which was seconded by Joe Walsh. During discussion Joe Walsh said he would provide corrections via e-mail. Veronica Harrell James noted on page 2 the word 'trials' should be changed to 'cases'. The motion carried and the minutes were approved as corrected.

Meeting adjourned at 12:20 PM.

Enclosures:

1. Agenda
2. Integrated Delivery Schedule (IDS)
 - a. Presentation

- b. GANTT Chart
 - c. Version 1 Chart
 - d. Version 2 Chart
 - e. Map
3. JAM handout
 4. Project Implementation Report (PIR)
 - a. Streamlining and Improving Presentation
 - b. CERP PIR Streamlining Analysis Presentation
 - c. Greg's Presentation
 5. U.S. Sugar Acquisition - Chris Doolin White Paper
 6. Biscayne Bay Coastal Wetlands (BBCW) AFB Briefing
 7. Aquifer Storage and Recovery
 - a. Presentation
 - b. ASR Interim Report
 8. Draft Meeting Minutes, April 2008