

**Technical Oversight Committee Meeting**

August 1, 2002

South Florida Water Management District Headquarters  
3301 Gun Club Road  
West Palm Beach, Florida 33414

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**Attendees:**

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| Garth Redfield, TOC chair, SFWMD       | Linda Lindstrom, SFWMD                              |
| Carlos Adoriso, SFWMD                  | Paul McCormick, NPS/ENP                             |
| Nick Aumen, NPS/ENP                    | Paul McGinnes, SFWMD                                |
| Bill Baker, MFL                        | Ben McPherson, USGS                                 |
| Bill Baxter, USACE                     | Damon Meiers, SFWMD                                 |
| Tim Bechtel, SFWMD                     | Cheol Mo, SFWMD                                     |
| Kelly Brooks, Miccosukee Tribe         | Frank Nearhoof, FDEP                                |
| Kirk Burns, SFWMD                      | Vincent Peluso, SFWMD                               |
| Bahram Charkhian, SFWMD                | Barbara Powell, SFWMD                               |
| Maxine Cheesman, SFWMD                 | Dean Powell, SFWMD                                  |
| Linda Crean, SFWMD                     | Lisa Smith, SFWMD                                   |
| Naomi Duerr, SFWMD                     | Ron Smola, USDA/NRCS                                |
| James Erskine, Miccosukee Tribe        | Kim Taplin, USACE                                   |
| Joetta Follon, Miccosukee Tribe        | Sharon Trost, SFWMD                                 |
| Gary Goforth, SFWMD                    | Carrie L. Trutwin, SFWMD                            |
| Larry Grosser, SFWMD                   | Stuart Van Horn, SFWMD                              |
| Matt Harwell, USFWS/LOX                | Mike Waldon, USFWS                                  |
| Delia Ivanhoff, SFWMD                  | Bill Walker, Department of the Interior             |
| Jennifer Jorge, SFWMD                  | Jeff Ward, Sugar Cane Growers<br>Cooperative (SCGC) |
| Bob Kadlec, Department of the Interior | Ken Weaver, FDEP                                    |
| Chad Kennedy, SFWMD                    | Mike Zimmerman, NPS/ENP                             |
| Julia Lacy, SFWMD                      |   |
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**Introductory comments – Garth Redfield**

**Garth Redfield** opened the meeting at 10:05 a.m. He announced that the minutes from the previous TOC meeting were not yet available.

**Item 1: Water Quality Conditions reports to the Technical Oversight Committee – Tim Bechtel, Cheol Mo and Delia Ivanhoff**

**Tim Bechtel** presented the Water Quality Conditions report (Attachment A). He noted a change to the Arthur R. Marshall Loxahatchee National Wildlife Refuge (Refuge) graph, which was that the horizontal line was put at 15.42 feet, representing the minimum stage. Bill Walker asked why there was no ongoing effort to look at other data, suggesting that since a long-term data set exists, then the TOC should be open to looking at data from individual stations. Bechtel explained that some of those areas are within the Refuge and it's possible they could be experiencing contamination from suspended solids. He added that during the last two dry years the District did not comply with either the long-term or the interim limit for phosphorus, and the District hasn't been in compliance with the interim limit for some time. Bechtel expressed a concern with meeting the interim limit by the effective date of October 1, 2003, leaving only 15 months

for the District to come into compliance with the limit. Bechtel deferred further discussion of the issue to Bill Walker.

Walker explained that in 2001 the P concentrations increased and there essentially was no flow during the last two years, when most of the flow came through the S-12 and S-233 structures. The water changed in December, though, where the S-12A, B and C were closed, forcing more water through the S-12A. Regarding Taylor Slough, Walker said that up until this report, because sampling was started at the pump station, two sets of data were run: S-332D and S-174 versus S-332 and S-175. 1999 had a higher total phosphorus (TP) concentration; 2000 was the same, and last year the TP concentration was lower. He noted that the issue was discussed at the previous TOC meeting, when a decision was made to drop that monitoring. He said there have been minor discharges since July 2000, and most of the flow is now going through S-332D. Walker noted that "frequency" is not a required value and it also doesn't affect compliance; only the flow-weighted mean affects compliance. Frank Nearhoof agreed, saying that since there is a revised project at that location and since S-332B has just added a detention area, he doesn't think compliance is an issue. He also said that because of the way the new 332-C is constructed it's not an issue there, either. However, regarding S-332D Nearhoof said the question is whether the TOC is going to continue sampling at the S-332D pump station or out of the west. Bechtel suggested the sampling should continue at both locations. He noted that there would be a meeting to discuss the issue as soon as the U.S. Army Corps of Engineers turns the site over to the District. Bechtel also noted that the District had been surprised by the discovery of a flowway that is coming out of the detention system and is completely contained in the Frog Pond. He suggested the flowway should be monitored, but acknowledged that no one has figured out a way to do that. There was further discussion about the flow at S-332D, the issue of seepage, and water quality. Walker emphasized that since the system is operational at this time, then now is the time to monitor. Bechtel agreed, suggesting that since the best source of flow is at the pump station, then that would be the best location to monitor.

Naomi Duerr asked about the CH2M Hill measurements. Bechtel explained that those were only for the first two weeks of CH2M Hill's monitoring and they indicate that a lot of the water going into those cells is going into the groundwater. He noted that the monitoring plan that was submitted would probably be revised to some degree. Nearhoof asked whether the TOC had seen the monitoring plan. Bechtel said the TOC had not seen the plan. Nearhoof pointed out that the monitoring plan would be in the permit. Duerr said that the District had acknowledged that it might not be able to implement the entire monitoring plan at that time. Bechtel asked if there were any other questions or comments. There were none.

**Delia Ivanhoff** presented the Quality Assessment Report for Water Quality Monitoring, January through March 2002 (Attachment B). She noted that out of 600 blanks collected, fewer than two percent were positive. She also noted that in the past, a routine sample, a split sample, and a representative sample have traditionally been collected. Totals are calculated based on those three values. She noted that field precision is generally meeting the criteria. She pointed out that the only deficiency was that FDEP requirements were not being followed. She presented a summary of the March 1 changes and detailed how the District would be making those changes. One major change would be that the field duplicate would be dropped unless project managers specifically requested it. Split samples would also be scaled back. At this time, then, she said three kinds of samples would be collected: routine, split, and two-way split, which would function as a tiebreaker. Another change is that a replicate sample will no longer be required; nevertheless, the District will continue to collect a

replicate sample, but will scale back the collection frequency to once every quarter. Regarding laboratory quality control (QC), Ivanhoff said precision targets for accuracy had been met, and that beginning March 1 there would be a lot less field data. Ivanhoff asked if there were any questions or comments. There were none.

### **Item 2: Modifications to monitoring programs in Manatee Bay and Long Sound – Bahram Charkian and Chad Kennedy**

Chad Kennedy and Bahram Charkian presented modifications to monitoring programs in Manatee Bay and Long Sound as a follow-up to the last TOC meeting. Kennedy noted that the District would be dropping stormwater sampling in Manatee Bay that was begun in 1991 to document discharges from Manatee Bay and Long Sound. He pointed out that the Miami Dade Department of Environmental Resource Monitoring (DERM) also samples in that area, and those samples are available to the District if requested. Sampling is conducted monthly; Miami-Dade DERM also conducts quarterly metals sampling, he noted. In addition, Florida International University routinely monitors eight sites in eastern Florida Bay. In summary, the District will have access to a total of 19 sites being sampled in Manatee Bay and Long Sound. Kennedy asked if there were any questions or comments.

There was extensive discussion regarding the District's decision to drop storm event monitoring. Nick Aumen expressed concern about dropping the monitoring, and he asked whether District staff had talked to anyone regarding potential uses of storm event monitoring data. Kennedy said District staff had spoken to both Lisa Smith and Dewey Worth. Aumen asked whether District staff had spoken to anyone from Everglades National Park (ENP). Kennedy acknowledged that no one from the District had spoken to ENP staff regarding storm event monitoring. Linda Lindstrom reiterated that the District would no longer be conducting storm event monitoring. Aumen expressed a concern that storm event monitoring was being dropped solely because of a need to save money. He suggested the District look at the bigger picture before dropping storm event monitoring entirely. He also noted that no evaluation of the data had been done. Chad Kennedy pointed out that the District had, in fact, done an informal evaluation of the data. Aumen said he would like to see that evaluation, adding that he thought it was important to spend time considering the data and results. Naomi Duerr noted that the District is in the process of evaluating seven regions to evaluate the impact of dropping the monitoring sites. She said the District understands the importance of conducting such evaluations and would be doing a mailout of its findings. She reiterated that the District's goal is not to save money on monitoring just so it can hire more public relations people. To the contrary, she said, District funding is increasing significantly because of CERP. Mike Zimmerman pointed out that some of the monitoring might begin again once the CERP starts up. Redfield asked if there were any further comments on Manatee Bay/Long Sound. There were none.

### **Item 3: Atmospheric Deposition Monitoring – Naomi Duerr**

Naomi Duerr presented an update on atmospheric deposition monitoring. She noted that she had mailed out a related manuscript and that the District had put forth a proposal to eliminate nine monitoring sites. However, she noted that before a proposal could be presented to the TOC it would be necessary to look at the data where the splashguards were put up. Duerr said that at the next TOC meeting District staff would give a presentation on the data and talk about what to do with it. There was discussion regarding models of wet and dry deposition and the ELM model. Redfield said he and

Duerr would ask Dean Powell if he could help out with running some of the models. Redfield noted that the ELM model's sensitivity would be a follow-up item at the next TOC meeting. He asked if there were any other comments on Item 3. There were none.

**Item 4: Evaluation of the phosphorus concentrations in the Refuge and Shark River Slough – Bill Walker**

Bill Walker presented an analysis of recent phosphorus data from Shark River Slough Inflows to Everglades National Park (Attachment C). He made suggestions as to what should be considered in the coming years regarding compliance with the phosphorus limit and he presented seven final recommendations:

1. Compilation of one or more consistent long-term stage records for WCA-3A.
2. Investigation of trends at individual S-12 and S-333 structures, with and without adjustment for hydrologic factors.
3. Tracking of trends in concentration and load at WCA-3A inflow points and trends in concentration at marsh and intermediate canal stations within WCA-3A.
4. Discussion of how to interpret compliance monitoring results from years when stage exceeded the calibration range.
5. Discussion of whether concentration increases resulting from shifts in flow distribution (i.e. Cape Sable Seaside Sparrow protection measures) should be considered in determining compliance. The effects on inflow concentration could be estimated in each year by quantifying the actual flow shift and the flow-weighted concentrations at each structure.
6. Discussion of how potential delays in response to loading control measures attributed to P release from impacted areas can be evaluated and considered in interpreting compliance determination during the upcoming years.
7. Further discussion of technical details regarding computation of limits in years when flow is released through S-334.

Garth Redfield asked if there were any questions regarding Walker's presentation. Kim Taplin noted that the shunting of more water through S-333 is seasonal. Susan Rice expressed a concern that this was being treated as a natural phenomenon when in reality it is a water management operation that is changing the system and causing higher phosphorus concentrations. Walker acknowledged that there is a conflict between water management and water quality concerns, adding that as long as the canal concentrations are higher than the marsh concentrations, there will continue to be problems. Redfield asked if there were any further questions or comments. There were none. The TOC adjourned for lunch and reconvened at 1 p.m.

**Item 5: Interim Operation Plan for the Cape Sable Seaside Sparrow – Kim Taplin**

Taplin presented information on WCA flow patterns; the 1999 biological opinion of the Florida Fish and Wildlife Conservation Commission; reasons for changing from ISOP to IOP (infiltration was a lot lower than expected, minimize impact to Everglades National Park); IOP Recommended Plan Alternative 7R (includes operation of C-111 and MWD project features currently under construction. It will be in place until the MWD and C-111 Projects are completed and ROD is signed on the Combined and Structural Operation Plan); and the 10 C-111 and MWD Project features currently under construction, which are:

1. Degrade four miles of the L-67 extension levee
2. S-356 pump station, 500 cfs
3. S-333 structural modification
4. S-332B north seepage reservoir, 240 acres
5. S-332C pump station, 575 cfs
6. S-332C seepage reservoir, 300 acres
7. S-332B/S-332C connector, 141 to 1,262 acres
8. Frog Pond seepage reservoir, 810 acres
9. 2000-foot degradation of the southern end of the L-31W levee
10. S-332D to L-31 divider levee and outlet flowway

She also detailed IOP Alternative 7R primary operational changes, which include the L-31N canal levels (two modes of operation); priority for flow into L-31N given to releases from S-333/S-334 when WCA-3A is above schedule; S-335 structure operations return to pre-ISOP operating criteria; seepage reservoirs (normal maximum depth of two feet except in flood emergencies, when it could be increased to four feet. No direct overflow to ENP, except at existing S-332B during flood emergencies, during construction phase, but is also greatly reduced during construction phase); Normal operations of S-332B, C, and D pump stations targeted to achieve marsh restoration, proposed E-W hydraulic gradient; S-356 pump station limited to seepage rate along reach of L-31N between S-335 and G-211, but cannot operate until 6 weeks after ROD due to judge's ruling; SFWMD to recommend pre-storm drawdown to enhance protection against tropical storms when antecedent conditions already very wet (i.e. no name storm) and the Corps of Engineers to advise other agencies and make a decision to implement; Miccosukee Tribe to recommend operational changes to S-12's when conditions threaten the Tribe's safety, and the Corps of Engineers to advise other agencies and make a decision to implement.

Taplin also detailed canal-level changes to G-211, S-332B, S-332D and S-196. She continued with where operations currently are (6<sup>th</sup> amendment state WQC emergency order for construction of C-111 and MWD project features and operation of S-332B and S-332D pump stations and pertinent structures in accordance with ISOP until September 28, 2002; 7<sup>th</sup> amendment state WQC emergency order signed August 1, 2002 for operations of S-332B, C, and D pump stations and pertinent structures in accordance with IOP until January 2003; draft WQ certification plan submitted, monitoring plan is under development). She detailed components of the pre-operations and startup monitoring plan, present monitoring parameters and monitoring frequency at S-332D, and ended with a synopsis of the future and CSOP (combined structural and operational plan being developed for operations with MWD and C-111 in place; facilitated collaborative process being employed to obtain ROD in December 2005).

Sharon Trost asked whether there had been a lot of opinion as to the court's ruling on the 8.5-Square-Mile area. Taplin said there has been a lot of opinion and the court ruled that the pump station can't operate until six weeks after the ROD has been signed.

Garth Redfield asked if there were any further comments or questions. There was discussion about whether there was any change in IOP or S-7. Redfield asked Taplin to e-mail her presentation to TOC members. Mike Zimmerman suggested that the TOC reveal where it does compliance tests and that it should somehow come up with a different way of determining compliance. There was discussion regarding taking over monitoring of 332-D. Bill Walker offered clarification that the shift in flow only occurs during the dry season, and when he had explained earlier how the flow would be measured, that explanation was based on a particular value if the flow was seasonal, not annual. Redfield suggested that should be a follow-up item at the next TOC meeting. There was discussion regarding what to do with 332-D and how to measure flows going into the Park. Redfield suggested that the TOC get a group together and get a team involved. Naomi Duerr suggested that each of the five TOC member agencies should provide a couple of people to serve on the team. Redfield agreed. He suggested that at the next TOC meeting the agencies should have a plan in writing. Redfield asked if there were any other comments. There were none.

**Item 6: Status Report on Phosphorus Control Programs – Gary Goforth, Sharon Trost, Jennifer Jorge and Garth Redfield**

Gary Goforth presented highlights of the Judge Hoeveler status report on phosphorus control programs. He said the bottom line is that the P control programs of the Settlement Agreement are performing better than expected. Jennifer Jorge announced that the District is getting ready to move forward with an RFP. Goforth asked if there were any questions. There were none. Redfield asked if there were any further comments. There were none.

**Item 7: TOC Discussion of Compliance Methodology for P Load Reduction Targets of the Settlement Agreement – open discussion**

Garth Redfield opened the discussion by suggesting that the TOC talk about overall load reduction and how to track it. Bill Walker suggested that such a discussion would not be all that straightforward because of variations in rainfall and other factors. Goforth suggested that the TOC bring the issue to official closure. Frank Nearhoof said Walker's approach had been implemented and that the FDEP had issued permits on it. Redfield summarized by saying that the STAs are doing what the permits say they are doing and that the reductions would then follow. Goforth reiterated that it would be helpful if the TOC brought the issue to closure, perhaps annually, in a report on its findings. Zimmerman said that he felt the District has been reluctant to accept Walker's hypothesis, noting that it isn't a direct part of the consent decree. There was discussion regarding the perception that the District and the public had been reluctant to accept the hypothesis. Walker said his recollection was that there was a reluctance to accept the requirements of the Settlement Agreement. Redfield noted that there is no paragraph in the Settlement Agreement that the public can turn to and find out what the reduction has been. Walker pointed out that the Settlement Agreement is a long-term average. Rice suggested that it was unfair to refer to a paper from 1996 and not give everyone a chance to look at it. There were comments regarding discomfort with voting on

something that not everyone has read. Nearhoof commented that there seemed to be some discrepancy in some of the calculations. Redfield announced that the TOC would make the paper a follow-up item for the next TOC meeting so that everyone has a chance to read it.

There was further discussion regarding the loads from the structures. Redfield noted that though the target date for posting the information to the Web and reviewing it was August 29, the document was running late and was going through an internal review process. He said that if the information was going into the 2003 ECR at all it would be available at the public workshop in September. He noted that there would be a follow-up item on compliance at the next TOC meeting in November. He encouraged those wishing to distribute further information or materials to the TOC not to hesitate.

Trost announced that at the STA design meeting on August 21 her group would be presenting further information on water quality on areas that discharge into each of the basins.

Redfield asked if there was any further discussion. There was none. He asked if there were any other comments from the public. There were none. Nick Aumen asked if the TOC would be reviewing the entire report. Goforth noted that it was only five or six pages in length and that TOC members should review it and, at the next TOC meeting, bring it to closure. Redfield adjourned the meeting at 2:30 p.m.