

MINUTES

Everglades Technical Oversight Committee Meeting

Monday, May 21, 2001

10 a.m. to 3 p.m.

South Florida Water Management District Headquarters,
Storch Conference Room
3301 Gun Club Road, West Palm Beach, Florida 33406

TOC members present

Laura Brandt, USFWS, A.R.M. Loxahatchee National Wildlife (Refuge)

Mike Zimmerman, NPS, Everglades National Park (ENP)

Garth Redfield, South Florida Water Management District (SFWMD)

Bo Smith for Bob Barron, U.S. Army Corps of Engineers (USACE)

Kenneth Weaver for Frank Nearhoof, Florida Department of Environmental Protection (FDEP)

Others present

Adorsio, Carlos	SFWMD		
Aumen, Nick	NPS, ENP	McGinnes, Paul	SFWMD
Bechtel, Tim	SFWMD	Meiers, Damon	SFWMD
Brown, Susan	U.S. Sugar Corp.	Miedema, Barbara	Sugar Cane Coop
Charkhian, Bahram	SFWMD	Mo, Cheol	SFWMD
Fink, Larry	SFWMD	Schuster, Glenn	USACE
Federico, Tony	MacVicar, Federico and Lamb, Inc.	Sievers, Pamela	SFWMD
Fontaine, Tom	SFWMD	Smith, Lisa	SFWMD
Heisler, Lorraine	USFWS	Struve, Dave	SFWMD
McCafferty, Randy	SFWMD	Van Horn, Stuart	SFWMD
McCarthy, Linda	SFWMD	Waldon, Michael	USFWS
		Weaver, Ken	FDEP

1. Introductory Comments: Garth Redfield

- Garth Redfield opened the meeting at 10:05 a.m. The draft TOC meeting minutes for February were made available for review, and comments were requested within one week. TOC agenda modifications were made for the May meeting to allow for individual schedules. Introductions were requested from everyone in the room; all persons identifying themselves are listed above.

2. Water Quality Conditions Report: Tim Bechtel

- Tim Bechtel examined the Settlement Agreement Report for October—December 2000, giving data on water quality for the Everglades Protection Area. Bechtel explained that

the total phosphorus geometric mean exceeded the interim limits in the ARM Loxahatchee National Wildlife Refuge, and recommended that the TOC principals be contacted by letter. Bechtel noted the earlier exceedances in the Refuge, and he indicated that there were no obvious reasons for the October mean. Rapid changes in water level may have been involved since there was a major event early in October. The TOC agreed that a letter should be written examining the circumstances for the exceedance. Redfield and Bechtel agreed to provide a draft to the next TOC for review.

- The review of data collected for Shark River Slough also suggested the levels are above interim limits (Table 2). This exceedance reflects the relationship between flow and concentration; levels go up as flows go down for Taylor Slough. The interim limit is not in effect until 2003, but is tracked to provide a long-term record. Tony Federico noted that a spike during low flow does not have much effect on loading because of very low flow. Also, other participants noted that changes in flow in the Shark Slough area might cause differences in concentrations. Taylor Slough data show that all inflow structures have been in compliance (Table 3), although changes have been made in the compliance points. Comments are welcome on these water quality conditions to the chairperson or Tim Bechtel.
- Nick Aumen offered an electronic copy of the complete and up-to-date Settlement Agreement to any interested person, and indicated that there is a Website at the University of Miami that has all the legal documents concerning the federal Everglades lawsuit.

3. Update on Water Quality Conditions in the C-111: Lab Working Group Recommendations for Improving the Process – Glenn Schuster and Bo Smith

- Glenn Schuster noted that there have been productive interactions between lab personnel, particularly the QA staff. Guidelines are being developed to improve data consistency. Latest data from laboratory split-sample analyses appear promising.
- Schuster discussed USACE draft memorandum on ideas to enhance cooperation in laboratory analyses. Discussion included a requirement for CERP participation and standardization, the suggestion that all agencies need to be involved, track a problem earlier, and correct it, and identify data anomaly. It is particularly important that trends in data levels or variability that are not generated in the field are handled expediently. When a lab has differing performance, a method needs to be determined for official correction in data sets.
- Kenneth Weaver explained the variations in reported data PPB lab using a paired data analysis. He noted the necessity to deal with problems consistently, particularly when multiple projects are being affected. PPB appeared to have precision problems at low levels. Periphyton-based Stormwater Treatment Area data from PPB split samples show a bias in which PPB had higher level of variance and higher means than analyses from IFAS. Should such data be flagged?
- Glenn Schuster discounted the data variation and said that USACE's position is that there is no immediate compliance issue or identifiable laboratory problem. Quality Assurance

is the main issue, in his view, and he suggested that all QA documents were followed by PPB and that he was uncertain whether a real data problem exists. He noted that PPB is a commercial lab and, as such, does not have time to hone data as long as QA is followed. In addition, he explained that scatter is greater for commercial labs. Dave Struve explained that QA is only general guidance, and that low levels need additional attention and special QA plans. District contracts specify data-quality objectives, and they are generally tighter than is typical for commercial labs. He suggested that an outside entity be hired to review the audited results. Others present at the meeting questioned whether QA reviews would be useful, noting that most data cannot be excluded on the basis of QA. They pointed out that split data indicate a problem, and variability is clearly different between labs. Just because QA does not identify a problem does not mean a problem does not exist. Nick Aumen suggested the data patterns show a clear problem with the autosampler data for the C-111, the causes for which must be looked at, found, and remedied.

- There was a discussion of future lab guidelines and tighter CERP contracting. It was suggested that comparison guidelines are critical to identifying problems. The latest PPB data are better and more comparable with the District's and DEP's. Some earlier low-level data were flagged by DEP for 2000, as mentioned in a memo from DEP. Closure is needed on how to use existing high-level data, since differences exist in agency perspectives as to how to interpret data, and these are very large differences in average values between the District and USACE data sets.
- Mike Zimmerman presented some data from C-111 from USACE autosamplers. He noted spikes in the data, but in light of the discussion of laboratory-generated variability, any detailed interpretation of these spikes should await clarification of causes for PPB variability.
- Comments were requested on the USACE's memorandum, and closure is needed on the entire data issue for the C-111. Kenneth Weaver will continue as the lead on data issues and will accept comments from TOC members or the public.
- Dewey Worth noted huge differences in C-111 data, and Glenn Schuster indicated that sampling regimes caused the problem. Redfield and Aumen noted that sampling regimes should lead to the same overall load; the longer the data sets, the closer the mean values. Grab versus auto sampling is not an explanation for the higher and more variable PPB data.

4. Elimination of Physical Parameters at S114 and S146 Structures: Bahram Charkhian (Item 4 on the agenda)

- Bahram Charkhian provided handouts and explained that the District would discontinue sampling some parameters at these locations because representative data are being collected at nearby sites (S145) and, therefore, sampling these sites is redundant. DEP has approved the plan.
- The importance of physical measurements was discussed. No concerns were expressed on these changes by TOC members.

5. Update on Mercury Anomaly in STA-2: Larry Fink

- Larry Fink explained the mercury permit conditions and background for STA-2, the recent STA status, and important changes in laboratory precision and accuracy. Mercury is considered on a sample-by-sample basis, so lab precision is vital for this metal.
- He said that the methylmercury concentrations were greater in Cell 1 versus Cell 2 because of the dryout and subsequent wetting conditions. Fish concentrations in Cell 1 were up, associated with the dryout, and were above the Everglades "hotspot," based on these composite data.
- Reasons for differences between cells are not clear, but dryout is a likely factor, along with land-use history of the cells. Soils appear to be the key to explaining internal processing. To date, soils data show that Cell 1 has higher methylmercury concentrations and associated sulfate levels. Fink explained the three-phase linkage between sulfur and methylmercury production.
- He also explained that the risks involve the methylmercury pulse moving up through the food chain, as discussed by Darren Rumbold's ecological risk assessment as updated in the *2002 Everglades Consolidated Report*. No immediate effects are predicted for STA-2 generated mercury, and no evidence is available for any long-term effects in Everglades wildlife at the levels associated with STA-2. Long-term effects to sensitive species can not be dismissed entirely and must be tracked, along with detailed sampling of water quality and mercury levels. Will the sulfide break actually go on if water is added to Cell 1? DEP is considering a change to the STA permit to allow flow-through operations in an effort to reduce mercury levels through sulfide interactions.

7. Everglades Consolidated Report and Open Public Comment

- Garth Redfield requested comments on contents of the *2002 Everglades Consolidated Report* (Report) and provided a memorandum summarizing the new outline. Dates were provided on the public review for the Report. Aumen mentioned that comments were provided last year, and he felt that they were not addressed fully (Chapter 8 on ATTs was specifically cited). The chapter authors are required to respond to review comments and document their responses in the Report. Redfield asked Aumen to provide an official comment outlining concerns, and this would be given to the authors for their consideration relative to the 2002 Report.
- No other public comment was given at the meeting.

8. Adjournment

- The meeting adjourned at 12:30 p.m. A videotape of the meeting was saved with the record.

