

**FEDERAL RESPONSES TO 6/26/06 TOC QUESTIONS**  
**11/03/06**

Reprinted in **red** font, below, is the contents of a document posted by the TOC on its website asking “the Principal” to “provide guidance in answering . . . questions” concerning a technical assessment the TOC is responsible for making under the consent decree. The TOC’s questions call for a legal interpretation of certain provisions in the consent decree related to this technical assessment. Presented below, in black font, are a background discussion of the relevant consent decree provisions and federal answers to the TOC questions:

**I. BACKGROUND:**

1) The consent decree has a number of provisions that call for a comparison between the long-term *limits* and *levels* prescribed in Appendices A and B for the Park and Refuge, respectively, on the one hand, and the Class III numeric phosphorus *criterion*, on the other hand. There are eight sentences in the consent decree that implicate this comparison:

a) ¶ 8.C: “TOTAL PHOSPHORUS CONCENTRATION LEVELS AND DISCHARGE LIMITS FOR THE REFUGE. \* \* \* Inflows to the Refuge must result in compliance with Class III water quality criteria or long-term concentration levels, whichever are lower, by December 31, 2006, as set forth in Appendix B. Research and monitoring will be conducted under this Agreement to interpret what phosphorous concentration levels comply with Class III water quality criteria.”

b) ¶ 8.D: “TOTAL PHOSPHORUS CONCENTRATION LEVELS AND DISCHARGE LIMITS FOR THE REFUGE. \* \* \* DER will require compliance with a maximum annual discharge limit of 50 ppb for Refuge inflows if the interim or the lower of the long-term marsh concentration levels or Class III nutrient criteria are not being met by the effective dates.”

c) ¶ 8.D: “TOTAL PHOSPHORUS CONCENTRATION LEVELS AND DISCHARGE LIMITS FOR THE REFUGE. \* \* \* By December 31, 2006, if the 50 ppb maximum annual inflow discharge limit is being met but the lower of the long-term marsh concentration levels or Class III nutrient criteria is being violated, DER will enforce more stringent inflow discharge limits.”

d) ¶ 10.B: “IMPLEMENTATION OF STORMWATER TREATMENT AREAS: \* \* \* The Class III phosphorus criteria when interpreted by research will be implemented by December 31, 2006, if lower than the long-term concentration levels.”

e) App. A: “PHOSPHORUS LIMITS FOR INFLOWS INTO EVERGLADES NATIONAL PARK: \* \* \* If research to determine the numeric value for the Class III narrative nutrient criteria results in a more stringent Park phosphorus limit, then the more stringent inflow limit shall apply.”

f) App. B: “PHOSPHORUS LEVELS AND DISCHARGE LIMITS FOR LOXAHATCHEE NATIONAL WILDLIFE REFUGE: \* \* \* If the interim, or the lower of the long-term Refuge interior marsh station concentration levels or Class III criteria, are not met with the current control program, DER will require additional components to be added to the control program to meet a maximum annual discharge limitation of 50 ppb for all discharges into the Refuge from the EAA.”

g) App. B: “PHOSPHORUS LEVELS AND DISCHARGE LIMITS FOR LOXAHATCHEE NATIONAL WILDLIFE REFUGE: \* \* \* **Class III Criteria** \* \* \* If the TOC determines Class III total phosphorus concentration levels are lower than the long term total phosphorus concentration levels then the lower levels shall apply.”

h) App. B: “PHOSPHORUS LEVELS AND DISCHARGE LIMITS FOR LOXAHATCHEE NATIONAL WILDLIFE REFUGE: \* \* \* **Class III Criteria** \* \* \* If the lower of the Class III or long-term levels is not met by December 31, 2006 and the 50 ppb maximum annual discharge limit is being met at all inflow structures into the Refuge from the EAA, the TOC will recommend a lower maximum annual discharge limit for the structures to be enforced by DER.”

2) In comparing the consent decree’s long-term levels/limits with the Class III numeric criterion, a determination must be made for the Refuge as to which is “lower,” *see* consent decree ¶¶ 8.C, 8.D, 10.B, App. B, and for the Park as to which is “more stringent.” *See* Consent decree App. A. Specific numerical values for the long-term levels and limits are prescribed in the consent decree. However, at the time the consent decree was executed, no analogous numerical values had yet been established for the numeric criterion. Such values have now been established by the State of Florida. Consequently, it is now possible to make the comparison of numerical values for the levels/limits and criterion called for under the consent decree.

3) The formulae in the consent decree describe long-term levels in the Refuge applied to a geometric mean calculated from data from monthly samples collected at 14 interior stations. *See* Consent decree App. B. Under the conditions specified in the decree, compliance with the long-term levels is expected to provide a long-term average 14-station interior marsh total phosphorus concentration of 7 ppb. *See id.* The Phosphorus Rule establishes a long-term geometric mean of 10 ppb as the numeric phosphorus criterion throughout the Refuge. *See* Fla. Admin. Code § 62-302.540(4)(a). Compliance with the Phosphorus Rule requires, among other things, a “five year geometric mean averaged across all stations [of] less than or equal to 10 ppb.” *See id.* §§ 62-302.540(4)(d)(1), (2). The State has not yet finalized the monitoring station network

in the Refuge at which compliance with this criterion is to be measured. However, in reviewing the Phosphorus Rule under section 303 of the Clean Water Act, USEPA determined that “the Refuge will have a monitoring station network with adequate spatial coverage to protect the *entire Refuge*.” Letter from Regional Administrator J. Palmer to Director M. Drew dated January 24, 2005, Attachment at 11 (emphasis added). Thus, the consent decree’s long-term average 14-station interior marsh total phosphorus concentration levels for the Refuge can be numerically compared to the Rule’s five year geometric mean averaged across all stations. The same comparison can be made across the 14 interior sites that are included in both monitoring programs. It would appear self-evident that the Refuge long-term level under the consent decree, 7 ppb, is lower than the numeric criterion for the Refuge, 10 ppb, under the Rule.

4) The formulae in the consent decree describe long-term inflow limits in the Park applied to an annual flow-weighted mean calculated from bi-weekly samples composited across all inflow structures. *See* Consent decree App. A. Under the conditions specified in the decree, compliance with the long-term limits is expected to provide a long-term flow-weighted mean total phosphorus concentration of 8 ppb for inflows to the Shark River Slough Basin, and 6 ppb for the Taylor Slough and Coastal Basins. *See id.* The Phosphorus Rule establishes a long-term geometric mean of 10 ppb as the numeric phosphorus criterion throughout the Park. *See* Fla. Admin. Code § 62-302.540(4)(a). Compliance with the Phosphorus Rule requires, among other things, a “five year geometric mean averaged across all stations [of] less than or equal to 10 ppb.” *See id.* §§ 62-302.540(4)(d)(1), (2). The State has not yet finalized the monitoring station network in the Park at which compliance with this criterion is to be measured. However, in reviewing the Phosphorus Rule under section 303 of the Clean Water Act, USEPA’s approval of the Rule was predicated on its “assume[ption] that monitoring stations in the Park [would be] evenly distributed with adequate spatial coverage to protect the designated use of the *entire Park*.” *See* Letter from Regional Administrator J. Palmer to Director M. Drew dated January 24, 2005, Attachment at 11 (emphasis added). Thus, the consent decree’s long-term flow-weighted mean total phosphorus concentration limits for inflows to the Park can be numerically compared to the Rule’s five year geometric mean averaged across all downstream marsh stations. It would appear self-evident that the Park long-term inflow limits under the consent decree, 8 and 6 ppb, are more stringent than the numeric criterion for the Park marsh, 10 ppb, under the Rule.

## II. Q/As:

### **Questions for TOC Policy Makers (revised 6/26/06)**

The TOC requests that the Principals provide guidance in answering the following questions. We request any additional guidance that might help the TOC direct it’s technical analysis and focus.

N. Aumen

1. When making the comparison, are we comparing to the standard, the criterion, or the level?

The comparison should be made to the Class III numeric phosphorus *criterion*. Seven of the eight sentences that reference the comparison in the consent decree expressly state “criteria.” None of the relevant sentences in the consent decree use the term “standard.” One sentence uses the term “levels” instead of “criteria,” *see* Consent decree App. B (“g” above), but it is clear from its context, including the subsection heading for this provision (“Class III Criteria”), that the term “levels” as used in this sentence refers to the numerical value of the criterion. Further, paragraph 8.C expressly relates the concept of “levels” with “criteria” (“Research and monitoring will be conducted under this Agreement to interpret what phosphorous concentration *levels* comply with Class III water quality *criteria*”).

2. Are we to make this same comparison for the Park?

Yes. For the Park, “the numeric value for the Class III narrative nutrient criteria” should be compared to the “Park phosphorus . . . inflow limit” to determine which is “more stringent.” *See* Consent decree App. A (“e” above). The “limit[s]” referenced are the “long-term total phosphorus concentration limits . . . [c]ompliance with [which] is expected to provide a long-term average flow-weighted mean inflow concentration” specified in Appendix A of the consent decree. *See* consent decree ¶ 7.C. Although the phrase “more stringent” is used instead of “lower” to describe the test, the meaning in this context is the same because a numerically “lower” phosphorus inflow limit would be “more stringent.”

#### M. Harwell

1. Does the determination result in one of the tests being used (after December 2006) forever, or do we make that determination at some interval (monthly basis, yearly, every 5 years, etc.) as new information becomes available and as new projects and changes to water management occur?

The comparison of the levels/limits and the criterion required under the consent decree is a straightforward numerical comparison of values that have now been established. *See* Background ¶¶ 3, 4, above. There would be no point in revisiting these determinations in the future unless there were a change either in the long-term levels or limits prescribed under the consent decree or a change in the State’s Class III numeric phosphorus criterion.

#### F. Nearhoof

1. Do the Principals agree lower is synonymous with more protective?

The terms are not necessarily synonymous, but for purposes of the comparison required under the consent decree, it is anticipated that utilization of the “lower” Refuge level and the “more stringent” Park limit will provide more protection for the areas they cover in both resources.

### M. Waldon

#### 1. Appendix B states in part:

If the lower of the Class III or long-term levels is not met by December 31, 2006 and the 50 ppb maximum annual discharge limit is being met at all inflow structures into the Refuge from the EAA, the TOC will recommend a lower maximum annual discharge limit for the structures to be enforced by DER. Additional actions, such as regulatory measures and increased STA acreage, as appropriate from the empirical data on performance of each program, will be required by either DER or the District to meet the lower discharge limit.

1.a.: Do we need to decide if the 50 ppb discharge annual maximum is being met by December 31, 2006? If yes, when do we need to decide? If it is not being met, do we need to later identify when it is being met?

Under the consent decree, if interim Refuge levels, or the lower of long-term Refuge levels or the numeric criterion, are ever violated, a “50 ppb maximum annual discharge limit” must be enforced by the state parties for all “Refuge inflow discharge concentrations.” *See* consent decree ¶ 8.D (“The STA and best management practices (‘BMPs’) programs are designed to limit Refuge inflow discharge concentrations to a long-term average of 50 ppb. DER will require compliance with a maximum annual discharge limit of 50 ppb for Refuge inflows if the interim or the lower of the long-term marsh concentration levels or Class III nutrient criteria are not being met by the effective dates. By December 31, 2006, if the 50 ppb maximum annual inflow discharge limit is being met but the lower of the long-term marsh concentration levels or Class III nutrient criteria is being violated, DER will enforce more stringent inflow discharge limits.”). If the 50 ppb discharge limit is already being met by December 31, 2006 but the lower of long-term Refuge levels or the numeric criterion are nevertheless violated, the state parties must enforce a lower discharge limit. *See id.*

The discharge limit must be enforced as of the date of violations of applicable levels in the Refuge. In light of the violations of the Refuge interim levels in November 1999 – and subsequent violations in October 2000, October 2001, and July 2002 – the 50 ppb maximum annual discharge limit went into effect as of November 1999 and must now be enforced. Inasmuch as the discharge limit is a “maximum annual” value, one

year of data collected after the effective date – here, November 1999– is required to evaluate compliance with this limit. Generally, untreated bypasses must be considered in the compliance determination. Bypasses resulting from storm events in the Everglades Agricultural Area that are outside the parameters of the 1979-1988 base period for STA designs need not be considered in the compliance determination for the discharge limit (although they will be considered for purposes of compliance with the load reductions requirements). In the future, the TOC will have a continuing responsibility to “review . . . compliance” with the discharge limit, as part of the TOC’s prescribed functions under the consent decree. *See* consent decree ¶ 18.

These TOC questions also implicate the issue of timing for determining compliance with the criterion and/or long-term levels (whichever is lower). Although these determinations must be timely made, they cannot and need not be made by December 31, 2006 for several reasons. First, it may take some time after December 31 for the TOC to analyze compliance data and deliberate. Further, it will necessarily take some time after December 31 to collect the data that are relevant to evaluating compliance with these metrics. The consent decree defines noncompliance with the long-term levels – an “exceedance” – as “occur[ing] if the 14 station mean concentration is greater than the computed concentration level *two or more times in any 12 consecutive sample collections.*” Consent decree App. B (emphasis added). Thus, at least two months of data collected after December 31, 2006 will be required to evaluate initial compliance with the long-term level. Similarly, the phosphorus rule defines a “four-part test” for compliance with the numeric criterion. Under that test, at least one year of data collected after December 31, 2006 will be required to evaluate initial compliance with the numeric criterion. Fla. Admin. Code §§ 62-302.540(4)(d)(1), (2). Because the State has announced that it intends to apply that test on the basis of a “water year” that begins on May 1<sup>st</sup> and ends on April 30<sup>th</sup> of the following year, the twelve months of data necessary to evaluate compliance with the numeric criterion will not be available until the end of April 2007. Consequently, depending on which metric is determined by December 31, 2006 to be lower – it will take as little as two months to as much as sixteen months after December 31, 2006 to evaluate compliance with the long-term levels or the criterion and, thus, to determine whether it is necessary for the state parties to enforce a discharge limit lower than 50 ppb.

**1.b: When does the TOC need to decide, if ever, that the lower of the levels is not being met? Do we need to decide in December 2006, January 2007, after the first excursion of the long-term levels after 2006, after the 50 ppb discharge is achieved, or at some other time or following some other event?**

*See generally* the answer to Question no. 1.a, above. The TOC has a continuing responsibility to “review . . . compliance” with the levels/limits and criterion as part of the TOC’s prescribed functions under the consent decree. *See* consent decree ¶ 18.

2. After Dec 2006 if the TOC selects a Class III criteria as lower, who will determine violations of the Consent Decree and how will they be determined?

“Violations” of the consent decree after 2006 will be determined through the same procedures that have been used to address the past exceedances of the interim Refuge levels and the Park limits.

### G. Redfield

1. What is the role of the determination made by the USEPA indicating that the Appendix B approach or equation is not protective of the Refuge?

EPA’s determination has no role in the comparison required by the consent decree. EPA’s determination addressed the lawfulness of the State of Florida’s water quality standards under the Clean Water Act, not the compliance methodology of the Consent Decree. This is not to discount the significance of EPA’s determination – under the Clean Water Act and state water quality law, the numeric criterion must necessarily be applied in the Refuge, and must be applied in a manner that comports with applicable law. However, the requirements of the consent decree are distinct. The comparison called for under the consent decree is based on a straightforward numerical comparison of metrics to determine which is lower, not on the concept of ‘protectiveness.’ It should be noted that this question wrongly implies that EPA has determined that Appendix B is “not protective of the Refuge.” EPA determined that “[t]he use of the specific network of 14 interior marsh stations for the purpose of determining achievement of the phosphorus criterion does not fully represent water quality conditions throughout *all areas* of the Refuge.” Letter from Regional Administrator J. Palmer to Director M. Drew dated January 24, 2005, Attachment at 9 (emphasis added). Thus, EPA concluded it would not approve “Subparagraph (4)(c)(1) [of DEP’s January 12, 2005 submittal of the Phosphorus Rule] because . . . it limits applicability of the phosphorus criterion to certain portions of the . . . Refuge and thus USEPA is not able to conclude that it is protective of the designated use of the *entire* Refuge.” Letter at 2 (emphasis added). EPA made no determination concerning the ‘protectiveness’ of the Appendix B equation with respect to the area of the Refuge covered by the 14 interior marsh stations.

2. Is it sufficient to show that the compliance levels required by the Phosphorus Rule are lower than the compliance levels of Appendix B.?

See Background discussion ¶ 3, above.