

Federal responses to DEP presentation authored by Jerry Brooks December 20, 2006 TOC Meeting

Slide 2. Points of Comparison

The question of which is lower is the only relevant topic for TOC decision.

Slide 3. Statistical Comparison

The long-term expectation for the Consent Decree levels is 7 ppb, not 10 ppb.

Slide 5. SA Long-Term Levels

The comparison of the long-term level of 7 ppb to the criterion of 10 ppb is the only question before the TOC. We are not directed by the Consent Decree to compare compliance tests.

Slide 6. Is “Expectation” Correct?

This is a graph of the Consent Decree compliance level; the expected (actually median) level is 7 ppb as a long-term mean.

Slide 7. Actual Long-Term Level

It is unclear why this has any relevance.

Slide 8. Area of Application

This is a discussion of compliance testing, and is not relevant to the question before the TOC. We are not limited to the 14 stations by the Consent Decree. Indeed, the Decree suggests that additional stations could be added. DOI representatives have, for years, asked to expand monitoring. The remedy approved by the TOC did recommend expanded monitoring, though the TOC did not discuss expanding the network used for the Consent Decree test.

Slide 9. 4-Part Test

Florida's rule does not require net improvement in impacted areas. It requires monitoring and application of the four-part test. If the test is not met, "no action shall be required, provided that the net improvement or hydropattern restoration provisions" are met. Net improvement is defined as BAPRT and the Long-Term Plan. "Net improvement" is not improvement in phosphorus condition in the water body – it has nothing to do with conditions within the waterbody.

Slide 12. EPA Finding – 4-Part Test

USEPA's review of the Phosphorus Rule did not include a comparison of the protectiveness of Appendix B with the Phosphorus Rule. The purpose of EPA's CWA section 303 review of the criterion was limited to whether the criterion, if applied and met throughout the waterbody, was adequate for preventing nutrient-induced imbalances in native flora and fauna, thereby protecting the Class III designated use of the waterbody. EPA determined that the four-part test is a "useful and protective methodology for determining achievement of the adopted phosphorus criterion." EPA ultimately determined that for purposes of applying the 10 ppb criterion, the 14-station network by itself would not measure water quality conditions in the entire Refuge, as required to ensure that the State's numeric criterion is applied throughout the water body. This conclusion was based on USEPA's understanding that if the four-part test is applied, the Refuge will have a monitoring station network with adequate spatial coverage to protect the entire Refuge. This understanding was based in part on Florida's formal submittal of the Rule to EPA which stated that the Department's goal in establishing the four-part test monitoring network will include assuring protection of the entire waterbody, assuring potential future impacts to presently unimpacted areas, and detecting trends in improvement of the impacted areas. Florida stated that the four-part test monitoring network will include existing SFWMD ambient monitoring sites and permit monitoring sites, "additional sites will be added to existing monitoring sites as needed to provide adequate spatial coverage of the entire area", and "new sites will be located near the impacted/unimpacted area boundary as needed to detect any potential expansion of impacted areas."

It also is important to note that the Refuge is designated as an Outstanding Florida Water, part of the State's anti-degradation requirements. This status requires that the ambient condition that existed in the waterbody the year prior to March 1, 1979 shall be maintained. This is in addition to the requirement to maintain the Class III designated use and prevent nutrient-induced imbalances. The OFW designation is the basis for the Appendix B 7 ppb long-term requirement for the Refuge.

Slide 13. EPA Finding – Appendix B

EPA has not made a determination that Florida's rule is more protective than Appendix B. EPA's CWA determination regarding the 10 ppb criterion for protecting the designated use 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.' The slide 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’s concern was that Florida’s rule explicitly limited application of the 10 ppb criterion to only part of the waterbody. 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. And, OFW requirements still apply regardless of the TOC’s deliberations regarding the 7 ppb goal of Appendix B and the 10 ppb goal of the criterion..

Slide 14. Required Actions

This is irrelevant to the question. Note that the LTP is solely a state product, with only public informational meetings. Stakeholders have no decision-making role.

Slide 15. State Implementation

Note that STA-1W and STA-1E are both discharging at concentrations at or near 100 ppb, but would not be in violation of the current permits because the STAs are deemed by the State to be in stabilization phase, and thus the 50 ppb limit does not apply.

Slide 16. Components of LTP – STA-1W

This is irrelevant to the question.

Slide 17. Components of LTP Benefiting the Refuge

This is irrelevant to the question. Currently planned additional acreage has no direct benefit to the Refuge.

Slide 18. Appendix B

Note that all discharges into the Refuge presently are greater than 50 ppb, and that action under the Consent Decree may be warranted.

Slide 19. Sensitivity

This is irrelevant to the question, and we disagree. Lack of correlation does not prove lack of causal relationship. There is no evidence the state’s compliance test is any more sensitive.

Slide 20. Square of the Pearson product moment correlation coefficient

This is irrelevant to the question. Dr. Marks concludes that there is a significant relationship between inflow concentration and interior concentrations at the 14 sites. And, the arguments presented in this slide have been refuted in Federal Court.

Slide 21. Final Assessment on Points of Comparison

The only issue before the TOC is which is lower.