



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

JUN 27 2013

Herschel T. Vinyard
Secretary
Florida Department of Environmental Protection
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

Dear Secretary Vinyard:

The U.S. Environmental Protection Agency, Region 4, has completed our review of Florida Department of Environmental Protection's amendments to 62-302.300(19), F.A.C, which incorporates by reference the March 2013 version of the Implementation of Florida's Numeric Nutrient Standards (Implementation Document) that addresses implementation of the State's numeric nutrient standards. These revisions, which FDEP transmitted to the EPA on June 27, 2013, with the necessary certification from the Office of General Counsel, further define or refine FDEP's numeric nutrient standards and are themselves water quality standards. The EPA is hereby approving those specific water quality standards which are contained in the Implementation Document. The details of the approval are discussed in the enclosed decision document.

We want to compliment you on the effort and commitment you and your staff demonstrated in developing your Implementation Document. We believe this document will further enhance your efforts to protect and restore water quality in Florida. We look forward to future communication and collaboration between our Agencies as you move forward with implementation.

If you have any questions or concerns, please do not hesitate to call me at (404) 562-9345 or Ms. Joanne Benante at (404) 562-9125.

Sincerely,

A handwritten signature in black ink, appearing to read "James D. Giattina".

James D. Giattina
Director
Water Protection Division

Enclosure

Executive Summary

On June 27, 2013, Florida Department of Environmental Protection submitted new and revised water quality standards (WQS) for review by the U.S. Environmental Protection Agency pursuant to section 303(c) of the Clean Water Act (CWA). The June 27, 2013, submittal includes a number of new or revised WQS, related to subsection 62-302.300(19), which incorporates by reference FDEP's technical document entitled, "Implementation of Florida's Numeric Nutrient Standards" (Implementation Document). The Implementation Document was submitted in initial form to the EPA in support of FDEP's June 2012 adopted nutrient standards. FDEP incorporated by reference the final Implementation Document, dated March 2013, into the State nutrient rule, and submitted that final Document to the EPA for review and action under CWA section 303(c) on the portions of it that constitute new or revised water quality standards. Although, FDEP only recently submitted it to the EPA for such review and action, the EPA has worked extensively with FDEP over the last few months and has had the final version of the Implementation Document since March 2013.

Section 303 of the CWA, 33 U.S.C. § 1313, requires states to establish WQS and to submit any revised or new standards to the EPA for approval or disapproval. The revisions addressed in this document were approved for adoption by the Florida Environmental Regulation Commission at a public hearing on April 23, 2013. The Rules were submitted to the EPA in a letter dated June 27, 2013, from Matthew Z. Leopold, General Counsel for FDEP, to A. Stanley Meiburg, Acting Regional Administrator of the EPA's Region 4 Office. The General Counsel certified that the WQS revisions were duly adopted pursuant to Florida law.

The March 2013 Implementation Document provides important insight into the scientific basis for FDEP's numeric nutrient standards and their implementation for purposes of NPDES permitting, assessment, and listing under section 303(d) of the CWA. When discussing implementation of the state nutrient rule, some provisions in the Document simply reiterate provisions in the state rule or the accompanying Stream Condition Index Primer which the EPA has already approved as WQS. Other provisions of the Document, however, further define or refine FDEP's numeric nutrient standards and are, themselves, WQS requiring the EPA review. The EPA is taking action on the following major components of the Implementation Document as WQS:

- Floral metric criteria used to determine the biological component of the stream criteria along with a more refined description of algal community composition and the linear vegetative surveys (LVS).
- Information distinguishing waters that are excluded within the definition of stream at subsection 62-302.200(36), F.A.C., i.e., tidally influenced segments, non-perennial streams, or actively maintained conveyances, such as, canals or ditches.

Pursuant to section 303(c) of the CWA, the EPA has reviewed and is approving those portions of the Implementation Document that the Agency has determined constitute new or revised WQS.

Decision Document of the United States Environmental Protection Agency Under § 303(c) of the Clean Water Act: Review of 62-302.300(19)

In a letter dated June 27, 2013, from Matthew Z. Leopold, General Counsel for the Florida Department of Environmental Protection, to A. Stanley Meiburg, Acting Regional Administrator of the EPA's Region 4 Office, FDEP submitted new and revised water quality standards for review by the U.S. Environmental Protection Agency pursuant to section 303(c) of the Clean Water Act (CWA or Act). In the June 27, 2013, letter, the General Counsel certified that the WQS revisions were duly adopted pursuant to Florida law. The June 27, 2013, submittal includes a number of new or revised WQS, related to subsection 62-302.300(19), which incorporates by reference FDEP's Implementation Document. As set out more fully below, where the EPA has determined that amendments to subsection 62-302.300(19), including the specific document referenced in 62-302.300(19), are new or revised WQS, the EPA has reviewed and approved those revisions pursuant to section 303(c) of the CWA.¹

Section 303 of the CWA, 33 U.S.C. § 1313, requires states to establish WQS and to submit any revised or new standards to the EPA for approval or disapproval. The revisions addressed in this document were approved for adoption by the Florida Environmental Regulation Commission (ERC) at a public hearing on April 23, 2013. The State Legislature exempted the document from legislation ratification otherwise required under s. 120.541(3), F.S.re.

EPA's Decision

Each of FDEP's WQS revisions is addressed in detail below along with the EPA's analysis and conclusions.

Subsection 62-302.300(19) was added and reads as follows:

(19) The implementation of numeric nutrient standards under Rules 62-302.531 and 62-302.532, F.A.C., shall be implemented consistent with the document titled "Implementation of Florida's Numeric Nutrient Standards," dated March 2013, which is incorporated by reference herein. Copies of this document may be obtained from the Department's internet site at <http://www.dep.state.fl.us/water/wqssp/swq-docs.htm> or by writing to the Florida Department of Environmental Protection, Standards and Assessment Section, 2600 Blair Stone Road, MS 6511, Tallahassee, FL 32399-2400.

The EPA's November 30, 2012, decision document concluded that "FDEP's September 2012 document titled "Implementation of Florida's Numeric Nutrient Standards Document Submitted to the EPA in Support of the Department of Environmental Protection's Adopted Nutrient Standards for Streams, Spring Vents, Lakes, and Selected Estuaries" (Nutrient Standards Implementation Document)...[was not considered] to include water quality standards," (on page 3) because it was not formally adopted by the state as a binding provision of law. FDEP has now

¹ EPA has provided FAQs on "What is a New or Revised Water Quality Standard Under CWA 303(c)(3)?" at <http://water.epa.gov/scitech/swguidance/standards/cwa303faq.cfm>. The link provides detailed information of such analysis.

revised its WQS to include subsection 62-302.300(19), which incorporates the Implementation Document by reference into state rule. Subsection 62-302.300(19) is approved by the EPA pursuant to section 303(c) of the Act.

Since the Implementation Document has now been incorporated into state rule, the EPA has analyzed the substance of the document to determine whether any provisions in the document are, themselves, new or revised WQS. Additionally, the State included paragraphs (a)-(g), which merely list the additional documents that are referenced in the Implementation Document itself. As set out more fully below, the EPA has determined that some provisions of the Implementation Document, specifically identified below, further define or refine Florida's WQS, and therefore, those provisions constitute new or revised WQS. Where the EPA has determined that a provision in the Implementation Document constitutes a new or revised WQS, the EPA is acting under section 303(c) of the CWA to approve or disapprove that part of the Implementation Document. The EPA found that the remaining provisions in the Implementation Document describe how the state numeric nutrient standards will be implemented, along with the types of data and information, and the sufficiency or reliability of the data and information the FDEP needs for implementation decisions. Such provisions do not constitute new or revised WQS under the CWA and the EPA is not acting on those parts of the Implementation Document in today's decision.

The primary change in content between the September 2012 Nutrient Standards Implementation Document (considered by the EPA as supporting documentation in its review of previously adopted WQS) and the March 2013 version of the Implementation of Florida's Numeric Nutrient Standards (Implementation Document) adopted by reference is the incorporation of a section to outline the information needed to distinguish whether a water is categorized as one of the paragraph (a) or (b) exclusions contained within the "stream" definition at subsection 62-302.200(36), F.A.C. In addition, there were several other minor revisions to the March 2013 document. Following protocol described in its "four-part test" for identifying new or revised water quality standards (see footnote 1), the EPA identified specific text that addresses all of the four parts. Because the Implementation Document is now incorporated into State rule, the entire document meets the first test of being legally binding. The EPA reviewed each provision against the remaining three parts (addressing designated uses, water quality criteria or antidegradation requirements; expressing or establishing a desired condition or level or protection or mandating how such condition or protection will be expressed or established in the future; and establishing a new WQS or revising and existing WQS). The EPA identifies provisions in the March 2013 Implementation Document that represent new or revised WQS below. If not described below, the EPA concluded the provision was not a new or revised WQS.²

² Within the "Review of the "Surface Water Discharge Wastewater Permits" section, there are several descriptions of how WQBELs and other mechanisms related to permitting and implementation program decisions relate to the Hierarchy 1 interpretation approach. The EPA did not conclude such descriptions are new or revised water quality standards. However, the EPA continues to expect that FDEP will complete the necessary administrative WQS rulemaking activities (both ERC adoptions and Secretarial Orders), whether separately or concurrently with the other programmatic activity for Hierarchy 1 site-specific interpretations before submittal to EPA for 303(c) review. Hierarchy 1 site-specific interpretations are not applicable as WQS for CWA purposes until approved by EPA.

Review of “The Hierarchical Approach” Section

The sub-section entitled “Floral Evaluation for Determining Achievement of NNC” is largely unchanged from the September 2012 version that constituted important supporting documentation. It includes re-statements of rule language, descriptions of why particular approaches and thresholds were identified as protective, and the specific approaches and quantitative values that determine whether each floral metric is attained. It is the latter category that comprises new or revised WQS. In particular, there are specific “decision key” sections for each floral metric that summarize the thresholds and directions for interpreting floral imbalance. The EPA concluded that the following bold text from the March 2013 Implementation Document constitutes new or revised WQS:

RPS Decision Key

- 1. Were environmental conditions associated with the RPS samples representative of the typical conditions of the system? (e.g., flow between 10th and 90th percentile of long term discharge, light penetration characteristic of system, sampling location representative of waterbody segment, etc).**
 - 1a. Yes, proceed to couplet 2.**
 - 1b. No. Collect additional RPS samples at representative locations and during representative conditions, and return to couplet 1.**

- 2. Results of two temporally independent RPS samplings show that RPS rank 4-6 is 25% or less?**
 - 2a. Yes. Evidence that the waterbody *achieves the algal mat component of floral measures* (other components must still be evaluated). If RPS rank 4-6 results are between 20% to 25%, then algal species composition will also be evaluated (see algal species composition decision key).**
 - 2b. No, evidence that the *nutrient standard at 62-302.531(2)(c) is not achieved.***

Algal Species Composition Decision Key

- 1. Were environmental conditions associated with the RPS samples and algal taxonomic collections representative of the typical conditions of the system? (e.g., flow between 10th and 90th percentile of long term discharge, light penetration characteristic of system, sampling location representative of waterbody segment, etc.).**
 - 1a. No. Collect additional RPS samples and algal taxonomic composition samples at representative locations and during representative conditions, and return to couplet 1.**
 - 1b. If Yes, see couplet 2.**

- 2. Results of two temporally independent RPS samplings show that RPS rank 4-6 is 20% or less?**
 - 2a. Yes. Evidence that the waterbody *achieves the algal species composition component of floral measures* (other components must still be evaluated).**
 - 2b. If No, see couplet 3.**

3. Do dominant taxa³ of algal community include taxa known to be nutrient enrichment indicators? (see list above and references in Appendix).
 - 3 a. Yes. Evidence that the *nutrient standard at Rule 62-302.531(2)(c) is not achieved.*
 - 3b. No. This is evidence that the waterbody *achieves the algal species composition component of floral measures* (other components must still be evaluated).

The Department will evaluate those dominant species that individually constitute approximately 10% or more of the community.

Where the RPS 4-6 coverage is greater than 20%, an evaluation of the algal species composition (identifying the five most dominant taxa) is also conducted to provide additional information whether there is no imbalance of flora.

Changes in algal species composition (through an analysis of autecological information) are also evaluated using the latest scientific references for algal species. The Department maintains a list of the scientific references used in this evaluation.

For example, nutrient enriched Florida springs are typically characterized by an abundance of one or more of the following taxa: *Lyngbya wollei*, *Oscillatoria* sp., *Aphanothece* sp., *Phormidium* sp., *Vaucheria* sp., *Spirogyra* sp., *Cladophora* sp., *Rhizoclonium* sp., *Dichotomosiphon* sp., *Hydrodictyon* sp., *Enteromorpha* sp., and *Chaetomorpha* sp. Other algal indicators of nutrient enrichment from the literature include: *Anabaena* sp., *Euglena* sp., *Chlamydomonas* sp., *Scenedesmus* sp., *Chlorella* sp., *Rhopalodia* spp., *Gomphonema* spp., *Cosmarium* sp., *Nitzschia* spp., *Navicula* spp., and *Stigeoclonium* sp. Dominance of such taxa at a stream where the RPS rank 4-6 >20% would be evidence that the NNC is not achieved.

As another example of this approach, the Everglades TP criterion was largely based on observed shifts in the dominant algal taxa from those characteristic of reference conditions (e.g., *Scytonema* sp., *Schizothrix* sp.) to taxa indicative of nutrient enriched conditions (e.g., *Gomphonema parvulum*, *Navicula minima*, *Nitzschia amphibia*, *Nitzschia palea*, *Oscillatoria* sp., *Rhopalodia gibba*, *Scenedesmus* sp., *Anabaena* sp., *Cosmarium* sp., and *Lyngbya wollei*).

LVS Decision Key

1. Were environmental conditions associated with the LVS samples representative of the typical conditions of the system (e.g., flow between 10th and 90th percentile of long term discharge, light penetration characteristic of system, sampling location representative of waterbody segment, etc.).
 - 1a. No. Collect additional LVS samples at representative locations and during representative conditions, and return to couplet 1.
 - 1b. Yes, proceed to couplet 2.

2. Given that invasive exotic species can occur even in the absence of nutrient impacts and that aquatic plant management practices can also affect LVS results, is there evidence the LVS results can be linked to anthropogenic nutrient inputs?
 - 2a. Yes, proceed to couplet 3.
 - 2b. No. The LVS results are inconclusive and other lines of floral evidence should be used.

3. Results of two temporally independent LVS samplings show that C of C score is ≥ 2.5 and the frequency of occurrence of FLEPPC exotic taxa is $\leq 25\%$?
 - 3a. Yes. Evidence that the waterbody *achieves the nuisance macrophyte growth component of floral measures* (other components must still be evaluated).
 - 3b. No. Evidence that the *nutrient standard at 62-302.531(2)(c) is not achieved*.

If there is $<2 \text{ m}^2$ of vascular plant coverage present in a 100 m stream reach, there are no floral imbalances attributable to aquatic plants.

Chlorophyll/Algal Bloom Decision Key

1. Were environmental conditions associated with the chlorophyll samples representative of typical conditions for the system? (*e.g.*, flow between 10th and 90th percentile of long term discharge, light penetration characteristic of system, sampling location representative of waterbody segment, etc.).
 - 1a. No. Collect additional chlorophyll samples at representative locations and during representative conditions, and return to couplet 1.
 - 1b. If Yes, see couplet 2.

2. Annual geometric mean chlorophyll $\leq 3.2 \text{ ug/L}$?
 - 2a. Yes. Evidence that the waterbody *achieves the chlorophyll a/algal bloom component of floral measures* (other components must still be evaluated).
 - 2b. If No, see couplet 3.

3. Annual geometric mean chlorophyll $\geq 20 \text{ ug/L}$ more than once in a three year period?
 - 3a. Yes. The *narrative nutrient standard at 62-302.531(2)(c) is not achieved*.
 - 3b. No, annual geometric mean chlorophyll is between 3.2 and 20 ug/L, see couplet 4.

4. After considering site specific factors that affect chlorophyll concentrations, such as system morphology, water residence time, or consistency with other functionally similar reference sites, can it be documented that the chlorophyll *a* values represent a healthy well balanced phytoplankton community?
 - 4a. Yes. Evidence that the waterbody *achieves the chlorophyll a/algal bloom component of floral measures*.
 - 4b. No.
Evidence that the *nutrient standard at 62-302.531(2)(c) is not achieved*.
 - 4c. Inconclusive because of insufficient contemporaneous data from other functionally similar reference sites. Waterbody will be placed on the Study List if either of the TN or TP thresholds were exceeded.

If all floral measures are achieved, a stream meets the floral component of a healthy, well balanced aquatic system, because it is within the minimally disturbed Benchmark stream condition. However, if any one [of] these floral measures indicates an imbalance, then the stream does not attain the NNC.

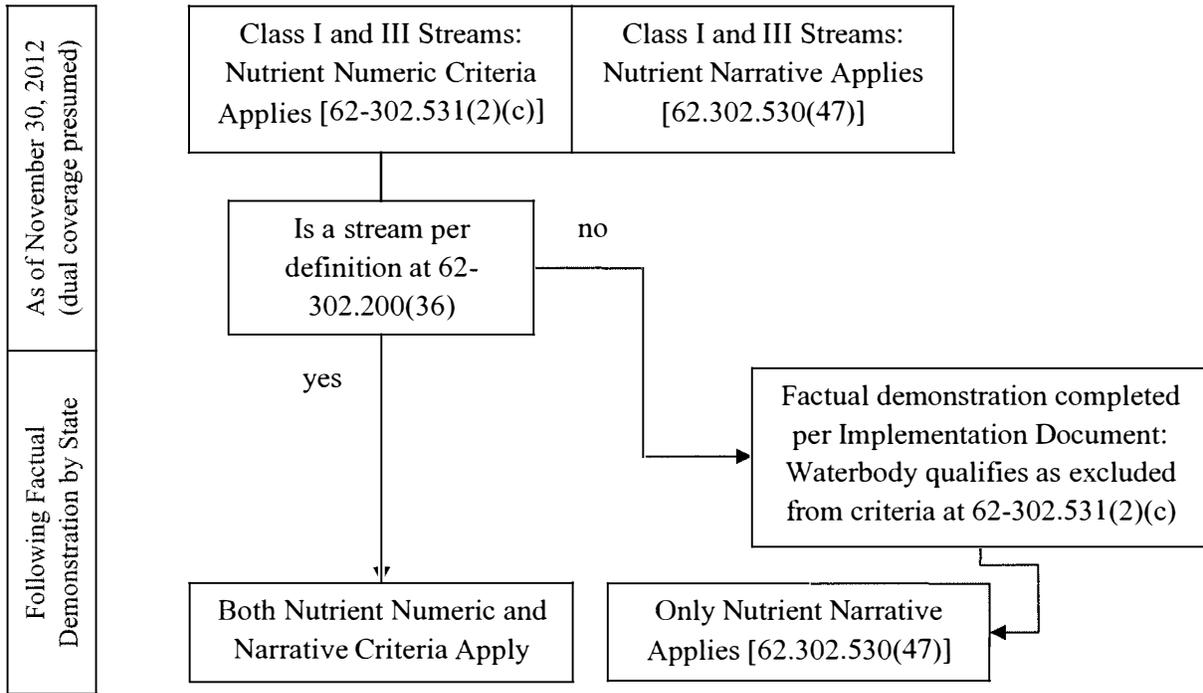
As stated above, this material has been thoroughly reviewed as supporting documentation for the EPA review and approval of previously adopted WQS. For the same reasons outlined on pages 32-43 of the EPA's November 30, 2012, decision document (see Attachment A), these revisions are consistent with the CWA section 303(c) and 40 CFR Part 131 and are approved by the EPA pursuant to section 303(c) of the Act. The one part of the floral metric description that substantively changed from the earlier version that the EPA reviewed in support of its November 30, 2013, action is with respect to the algal species composition evaluation. In the September 2012 version, there is a specific list of references provided in an appendix. In the March 2013 version under review, this appendix is replaced with a Department maintained list of "latest scientific references." The EPA finds that it is more appropriate to refer to "latest scientific references" in a document adopted as rule by reference to ensure the latest science can be utilized.

Overview of the "Basic Information Needs for Distinguishing Flowing Waters Under 62-302.200(36), F.A.C." Section

As outlined on page 2 of the EPA's November 30, 2012 decision document, it is the EPA's "understanding that FDEP's numeric water quality criteria apply to all Class I and/or III flowing waters (except South Florida flowing waters) unless and until FDEP makes an affirmative determination that a particular water body meets one of the exclusions under F.A.C. 62-302.200(36), i.e., it is a tidally influenced segment, non-perennial stream, or an actively maintained conveyance, such as a canal or ditch." Pages 49-57 of the Implementation Document describe in more detail how the State expects such decisions to be made.

It is the EPA's view that any waters excluded by Florida's stream definition that are Class I and/or III still merit the protection afforded by nutrient criteria because these waters may provide important habitat for a diverse range of aquatic plants and animals and may be vulnerable to the effects of nutrient pollution. These waters will continue to be protected by the existing narrative nutrient criteria.

Diagram Depicting Applicable Criteria for Streams



In reviewing the provisions contained within pages 49-57 of the Implementation Document, the EPA concluded that some provisions serve as new or revised WQS because they either provide additional exclusion specificity or relate to the required factual demonstration of excluded waters.

The EPA understands that, in some cases, there may be questions regarding the appropriate designated use for some of these waters (e.g., hydrologically modified waters/canals), and FDEP has developed a mechanism for addressing those waters through the Class III-Limited Use category. It is the EPA’s expectation that for waters falling into this category FDEP would conduct a use attainability analysis (UAA) and adopt and submit to the EPA a revised designated use of Class III-Limited for such water(s). The EPA approval is necessary before such a change would be effective for CWA purposes. The conclusion of the EPA’s review of the stream definition “exclusions” is that FDEP is not establishing a process for changing the designated use(s) through the adoption of the Implementation Document and its subsequent implementation, but rather demonstrating where the stream numeric nutrient criteria apply in conjunction with the narrative or where the narrative alone applies for a specific waterbody. The remainder of this section of the decision document addresses the EPA’s review of those provisions determined to be new or revised WQS relating to modifying the existing stream definition and the process by which such demonstrations are made.

“Basic Information Needs for Distinguishing Flowing Waters under 62-302.200(36)” Section

In implementing water quality standards and evaluating whether a particular waterbody meets the provisions of 62-302.200(36)(a) or (b) F.A.C., the Department

will provide public notice and request information relevant to the application of water quality standards, including the purpose of the waterbody such as flood protection, stormwater management, irrigation, water supply, navigation, boat access to an adjacent waterbody, or frequent recreational use relevant to 62-302.200(36)(b)1. F.A.C. The Department will consider all relevant information in implementing water quality standards and maintain the administrative records of such decisions, which are available to the public.

Because the purpose of this provision is to implement the provisions of the stream definition at 62-302.200(36), the State's provision makes it clear that notice of the request for information relating to the application of WQS, specifically the stream numeric nutrient criteria at 62-302.531(2)(c), are subject to a public notice and request for data availability. This procedure, and the fact that the Department will maintain the administrative records of the decisions and make those available to the public, allows all affected parties to participate, enables the Department to obtain relevant information from all parties, and provides transparency regarding the determination of applicable criteria for the given waterbody.

The procedures laid out in this provision are consistent with 40 CFR Part 131 and the CWA and are approved by the EPA pursuant to section 303(c) of the Act. As stated previously, these determinations are for those waters that still maintain the Class I or III designated use and as such these determinations do not have to be presented to the EPA for review under Section 303(c) of the CWA.

“General Information” Section

Until a Class I or III stream segment is identified as meeting the provisions in Rule 62-302.200(36)(a) or (b), F.A.C., the criteria in Rule 62-302.531(2)(c), F.A.C., will apply. Interested parties wishing to distinguish the characteristics of a waterbody with respect to provisions in Rule 62-302.200(36), F.A.C., may provide the Department with the applicable information set forth in the stream definition.

A clear delineation of the geographic boundaries of the segment in question is necessary so that the Department knows exactly where applicable criteria apply.

For waters that meet the definition of 62-302.200(36)(a) or (b) F.A.C., the Department shall follow the Impaired Waters Rule at 62-303 F.A.C.

The EPA has determined that the text excerpted above, within the “General Information” section, are new WQS, because these provisions provide general descriptions of how the definition of stream in Rule 62-302.200(36), F.A.C. will be implemented. The clarification that the criteria in Rule 62-302.531(2)(c), F.A.C. will apply until a stream is identified as meeting the provision of Rule 62-302.200(36)(a) or (b), F.A.C. ensures that numeric nutrient criteria necessary for many types of flowing waters will be in place until such time as it is affirmatively determined by FDEP that an exclusion applies. The requirement to clearly delineate the geographic boundaries of the segment in question allows all interested parties to know where the applicable criteria apply. The final provision regarding the application of the Impaired Waters Rule clarifies how the waters

will be assessed for CWA Section 303(d) purposes. These provisions clarify the implementation of the stream definition.

These provisions provide protection of stream designated uses by ensuring coverage by appropriate criteria, clearly identifying the geographic scope of the coverage and clarifying the application of the Impaired Waters Rule. The EPA finds that the provisions identified above as new WQS are consistent with CWA section 303(c) and 40 CFR Part 131 and are approved by the EPA pursuant to section 303(c) of the Act.

“Non-Perennial Water Segments” Section

To identify whether a segment is a non-perennial water segment, the biological information identified below will be evaluated by the Department. Other methods that provide this demonstration with similar accuracy will be accepted by the Department if they are a means to predicting the resulting biological conditions discussed below.

[T]he presence of certain facultative or facultative-wetland herbaceous species within the stream bed can be a valid indication that the stream is non-perennial, as these taxa may require moist or saturated conditions to germinate and grow, but would not tolerate the inundation of a perennially flowing stream. Examples of these taxa include, grasses such as *Chasmanthium latifolium* and *Tripsacum dactyloides*, sedges such as *Cyperus esculentus* and *Cyperus retrorsus*, forbs such as *Cuphea cartagenensis*, *Bidens pilosa*, and *Sphagneticola trilobata*, and ferns such as *Woodwardia virginica* and *Thelypteris* spp. (see complete lists of obligate wetland, facultative wetland and facultative taxa in Chapter 62-340, F.A.C.). [The lists of obligate wetland, facultative wetland and facultative taxa in Chapter 62-340 are considered new or revised WQS in their entirety although they are not repeated here]. During a habitat assessment or Linear Vegetation Survey conducted during a site visit, the presence of facultative and facultative wetland herbaceous vascular plant taxa in the channel bed would be an indicator that the system is non-perennial.

The Department has compiled lists of taxa to assist with distinguishing perennial from non-perennial streams/wetland systems (Tables 8 and 9). [Tables 8 and 9 are considered new or revised WQS in their entirety although they are not repeated here].

The presence of long-lived aquatic species (benthic macroinvertebrates that require water for their entire life cycle) is another reliable method to determine if a stream is more characterized by perennial flow or wetland/terrestrial conditions. A list of long-lived taxa is included in DEP SOP SCI 2100. [The list of long-lived taxa included in DEP SOP SCI 2100 are considered new or revised WQS in their entirety although they are not repeated here]. For purposes of establishing segments that are excluded from the stream definition, the Department shall evaluate the taxa that occur in the segment, as well as the vascular plant information described above.

The EPA has determined that the provisions excerpted above, within the “Non-Perennial Waters Segments” section, are new WQS because they describe the demonstration requirements and information needed to conclude the waterbody falls within the paragraph (a) exclusion of the stream definition at 62-302.200(36). The remainder of this section provides discussion to explain the rationale behind the approach to rely on the plant and aquatic species that are present or absent from perennial and non-perennial waters to support the factual demonstration that a given waterbody qualifies as a paragraph (a) exclusion. The allowance for other methods “with similar accuracy that will be accepted by the Department” provides an additional option for supporting the factual demonstration.

The EPA has determined that the lists of taxa provided in Chapter 62-340, F.A.C., DEP SOP SCI 2100, and Tables 8 and 9 of the Implementation Document provide appropriate indicators for determining a water segment is non-perennial. The lists are extensive and are based on sound science. Allowing other methods with similar accuracy in making a determination provides appropriate flexibility while ensuring (with the requirement for similar accuracy and Department acceptance) scientific rigor in the demonstration.

For these reasons, the EPA finds that the provisions identified above within the “Non-Perennial Waters Segments” section are consistent with the requirements of 40 CFR Part 131 of the CWA and is approved by the EPA pursuant to section 303(c) of the Act.

“Tidally Influenced Segments” Section

Tidally influenced segments are those that fluctuate (daily, weekly, or seasonally) between predominantly marine and predominantly fresh waters during typical climactic and hydrologic conditions.

Typical hydrologic conditions exclude periods of high rainfall or drought that would create flow conditions well outside of average annual flow conditions.

The EPA has determined that the provisions excerpted above within the “Tidally Influenced Segments” section are new or revised WQS because they provide additional details on how to make a determination that a segment is tidally influenced. The EPA concludes that these are accurate means of determining “tidal influence” and thus for making the distinction of where numeric nutrient criteria apply.

For this reason, the EPA finds that the provision identified above as a new WQS is consistent with CWA section 303(c) and 40 CFR Part 131 and is approved by the EPA pursuant to section 303(c) of the Act.

“Water Management Conveyances” Section (only the bolded text below is considered to be new or revised)

The following information will be used in identifying segments meeting the requirements in Rule 62-302.200(36)(b):

Delineation

Only those sections that meet the requirements in Rule 62-302.200(36)(b), F.A.C., are eligible to retain the narrative nutrient criteria. **A map of the applicable areas for review must clearly delineate the upstream and downstream extent of the artificial conveyance.**

Primary Water Management Purpose

Information must show that the current purpose of the man-made or physically altered conveyance is primarily water management such as flood protection, stormwater management, irrigation, or water supply. Relevant documentation can include photographic evidence, funding authorizations, operational protocols, local agreements, permits, memoranda of understanding, contracts, or other records that indicate how the conveyance is operated and maintained, and must verify that the design or maintenance of the conveyance allows the conveyance to currently function in a manner consistent with the primary water management purpose. The phrase “primarily used for water management purposes” in Rule 62-302.200(36)(b)1., F.A.C., does not include use for navigation or boat access to an adjacent waterbody, or frequent recreational activities. The purpose of the design of the conveyance in conjunction with the purpose of any subsequent alterations or maintenance is evaluated to help differentiate whether its primary function is navigation, boat access to adjacent waterbodies, or frequent recreational activities; versus flood protection, stormwater management, irrigation, or water supply. If available information provided by the public, in response to public notice and request for information, or otherwise known by the Department, demonstrates that the segment is commonly used for navigation, boat access, or other frequent recreational activities such as swimming or boating, then the primary purpose is not water management and the department will apply the nutrient standards in Rule 62-302.531(2) F.A.C. Freshwater finger canals dug during the construction of neighborhoods designed to create homes with boat access to waterbodies are an example of a navigation or access as a primary purpose.

Physical Alteration that Limits Habitat

The definition at Rule 62-302.200(36)(b)2., F.A.C., outlines that the conveyance must have marginal or poor stream habitat or habitat components that limit biological function because the conveyance has cross sections that are predominantly trapezoidal, has armored banks, or is maintained primarily for water conveyance. Photographic evidence of these limitations can demonstrate the habitat condition of the conveyance. Also, **Standard Operating Procedures for conducting stream Habitat Assessments have been adopted by the Department in DEP SOP FT 3000. In order to qualify under Rule 62-302.200(36)(b)2., F.A.C., the overall Habitat Assessment score must score either marginal or poor.**

The Habitat Assessment procedures include long-established criteria that can be used to demonstrate physical alterations in a system, and can provide information verifying that ongoing maintenance activities are associated with perpetuating those physical alterations. The lack of substrate and degree of artificial channelization are part of the

definition and components of the Habitat Assessment scoring system, and a Habitat Assessment score must be completed by an individual with demonstrated proficiency (as per DEP SOP 3000) to indicate that the definition related to the segment's modification is met. **If there are different segments within the conveyance that exhibit different features, a Habitat Assessment is needed for each segment.** The Department will conduct a Habitat Assessment if one was not previously conducted.

To ensure adequate water volume delivery, routine maintenance activities associated with conveyances used for water management purposes often involve removal of aquatic substrate (*e.g.*, woody debris, aquatic and wetland vegetation), dredging of sediments, and/or removal of riparian trees. **If the Substrate Diversity and Availability and Artificial Channelization metrics in the Habitat Assessment score in the Poor category, then one can conclude that the conveyance is predominantly altered and is being maintained in a manner to serve the primary purpose for water management.** The overall habitat assessment may not rank as Poor due to other factors, but a primary factor being considered in the definition is the alteration and the maintenance of the conveyance. **If the Substrate Diversity and Availability or Artificial Channelization scores are currently in the marginal range due to lack of maintenance of the conveyance at the time the assessment was completed, the Department will evaluate whether there is a maintenance program with a schedule to demonstrate that the conveyance is still being maintained for its primary water management purpose. If the overall Habitat Assessment score is other than poor or marginal, the conveyances would not meet the definition.**

The bolded text within the "Water Management Conveyances" section above establishes the demonstration requirements to conclude the waterbody falls within the paragraph (b) exclusion of the stream definition at 62-302.200(36). The new or revised WQS within this section provide further detail regarding the delineation of paragraph (b) exclusions, as well as specific documentation and demonstrations that are used to support the factual demonstration that a given waterbody qualifies as a paragraph (b) exclusion.

The requirement to clearly delineate the geographic boundaries of the segment in question allows all interested parties to know where the applicable criteria apply. These provisions also require information demonstrating that the current purpose of the segment is primarily water management and does not include navigation, boat access or frequent recreational purposes. Such requirements appropriately protect waters with recreational or other uses. The provision regarding information from the public on uses of the water segment allows interested parties to provide input into the decision-making process.

These provisions utilize a Habitat Assessment score in determining whether the segment is a conveyance. This tool provides a measure of the extent of physical alteration which is a critical factor in the determination of conveyance status. The provisions that the EPA are acting on as WQS provide that the overall Habitat Assessment score be either marginal or poor. This requirement ensures that higher quality waters are protected with appropriate numeric nutrient criteria. The requirements regarding the Substrate Diversity and Availability and the Artificial Channelizations metrics of the assessment ensure that only waters that are predominantly altered

and maintained for the primary purpose of water management are included in the category of conveyances.

As outlined in an earlier provision, FDEP “will provide public notice and request information relevant to the application of water quality standards.” Because the conclusion that a waterbody is a paragraph (b) exclusion has the effect of removing application of the stream numeric nutrient criteria, the incorporation of a public process is important to ensure that the resulting determination reflects all of the available information.

Although not a new or revised WQS, the EPA would like to speak to the sentence “Only those sections that meet the requirements in Rule 62-302.200(36)(b), F.A.C., are eligible to retain the narrative nutrient criteria.” The narrative nutrient criteria remain in place for all Florida waters. The EPA interprets this sentence to mean that only those water segments that meet the requirements in Rule 62-302.200(36)(b), F.A.C., are eligible to be exempt from the numeric nutrient criteria in Rule 62-302.531(2), F.A.C.

For the reasons discussed above, the EPA finds that the demonstration requirements specific to the bolded text within the “Water Management Conveyances” section above are consistent with the requirements of 40 CFR Part 131 and the CWA and are approved by the EPA pursuant to section 303(c) of the Act.

6/27/13
Date


James D. Giattina
Director, Water Management Division