



Triennial Review of Florida's Water Quality Standards

Division of Environmental Assessment & Restoration
May 5, 2021



Agenda

Introduction

Background on Triennial Review (TR)

Webinar Ground Rules

Topics Currently Under Consideration

Chapter 62-4, F.A.C.

Chapter 62-302, F.A.C.

Chapter 62-303, F.A.C.

Economic Analysis

Tentative Schedule

Public Recommendations and Comments

Breaks?



Purpose

- **Purposes of meeting/Triennial Review (TR)**
 - Continued improvements to the State's Water Quality Standards (WQS)
 - Share DEP's proposed revisions to improve Florida's WQS, focusing on changes in response to public comments
 - **Changes since last workshop shown in green font**
 - Receive feedback and suggestions from the public



Background

- **Under the Federal Clean Water Act, states are required to conduct a comprehensive review of their surface water quality standards**
 - **Known as “Triennial Review” because must conduct review at least once every three years**
- **Department adopted revisions for last TR on Dec. 9, 2015, and EPA approved the revisions on July 24, 2017**
- **Department held “kick-off” meeting for this TR in May 2019 and public workshops in Nov. 2019**



Background

(continued)

- **General expectation is that States consider adoption of any new or revised EPA recommended water quality criteria**
 - **“304(a) criteria”**
- **States are not required to adopt EPA recommendations, but under 2015 revisions to 40 CFR 131.20(a), States must explain basis for the decision if they decide not to adopt**



Scope of TR

- Notices of Rule Development for TR included all rules with surface water quality standards
 - Chapter 62-4 (Permits),
 - Chapter 62-302 (Surface Water Quality Standards), Chapter 62-303 (Identification of Impaired Surface Waters, or “IWR”)
 - ~~Chapter 62-304 (TMDLs)~~
- Published on March 31, 2021
- Notices listed all rule sections in Chapters 62-4, 62-302, and 62-303, F.A.C., related to surface water quality standards
 - All surface water quality standards are open for potential revision and public comment



Webinar Logistics

- Public participants will be muted during presentations
- To ask questions, use question box
 - Questions will be answered at end of each topic
- Public comments will be taken at end
 - To make a public comment, use the “raise hand¹” function and we will unmute you individually
 - Please provide your name and affiliation
 - If you want to comment but don’t want to speak, you can type comment in question box
- Webinar will be recorded (typed questions and comments will also be part of public record)

¹ Raise hand function will be disabled until comment period.



Proposed Topics for Chapter 62-4, F.A.C.

- Notice listed the following rules:
 - 62-4.242 - Antidegradation Permitting Requirements; Outstanding Florida Waters; Outstanding National Resource Waters
 - 62-4.243 - Exemptions from Water Quality Criteria
 - 62-4.244 - Mixing Zones: Surface Waters
 - 62-4.246 - Sampling, Testing Methods, and Method Detection Limits for Water Pollution Sources
- Only changes are to Rule 62-4.242, F.A.C., related to restoration projects near Outstanding Florida Waters (OFWs)



Proposed Topics for Chapter 62-4, F.A.C.

- **Section (2) prohibits permits for proposed activities or discharges within OFWs or which significantly degrade an OFW unless meets certain requirements**
 - **Revision would add “the discharge or activity is part of an environmental restoration and enhancement project”**
 - **Projects would still be required to meet all applicable water quality standards**



Proposed Topics for Chapter 62-4, F.A.C.

- **Environmental restoration and enhancement” is already defined in chapter (6) “Environmental restoration and enhancement” means activities, other than those proposed as mitigation for a permit required under Part IV of Chapter 373, F.S., conducted by government, research, education or charitable entities that are either not-for-profit or non-profit, that have the sole objective of restoring or enhancing water resources, including water quality and the functions wetlands and other surface waters provide to fish and wildlife, through measures such as: restoring hydrology and water circulation; re-establishing native vegetation; or otherwise restoring more desirable natural conditions that existed prior to human-induced disturbances.**



Proposed Revisions to Chapter 62-302, F.A.C.



Rule 62-302.200, F.A.C. (Definitions)

- **Added two new definitions**

(8) “Coral reef”, shall mean a limestone structure composed wholly or partially of the living or dead skeletal remains of marine invertebrates in the Class Anthozoa and the Orders Scleractinia (stony corals), Stolonifera (organ-pipe corals), Antipatharia (black corals), and Hydrozoa (hydrocoral).

(16) “Hardbottom community” shall mean consolidated hard structure with a living veneer of organisms characterized by the presence of corals, octocorals, and associated reef organisms, excluding worm reefs created by the *Phragmatopoma* species.

- **No changes to “coral reef” but now exclude worm reefs from hardbottom community**



Rule 62-302.300, F.A.C. (Findings, Intent...)

- In response to 2015 revisions to federal WQS regulations, we are incorporating compliance schedule authorization provisions
- Tweaked¹ language in response to public comments

(19) As authorized under section 403.088, Florida Statutes, schedules of compliance for NPDES permits shall be consistent with the requirements of subsections 62-620.610(12) and 62-620.620(6), F.A.C.

¹ Was “(19) As authorized under section 403.088, Florida Statutes, schedules of compliance shall be incorporated in NPDES permits consistent with the requirements of subsections 62-620.610(12) and 62-620.620(6), F.A.C.”



Rule 62-302.300, F.A.C. (Findings, Intent...)

(continued)

- **Changed the reference to the Numeric Nutrient Criteria (NNC) Implementation document to only incorporate by reference the specific portions that EPA considered WQS**

~~(20)(19)~~ The implementation of numeric nutrient standards under Rules 62-302.531 and 62-302.532, F.A.C., shall be implemented consistent with Sections 6.3 to 6.8 and Chapter 12 of the document titled “*Implementation of Florida’s Numeric Nutrient Standards*,” dated March 2021 (Link) April 2013 (<http://www.flrules.org/Gateway/reference.asp?No=Ref-02905>), which are is incorporated by reference herein.

- **Sections 6.3 to 6.8 are the Floral Metrics**
- **Chapter 12 are the Stream Exclusions**



Proposed Changes to NNC Implementation Doc

- **Also proposing updates to the “Numeric Nutrient Criteria Implementation Document,” which was incorporated by reference in 2012**
 - **Want to clarify key issues, streamline document, and make corrections**



Proposed Changes to NNC Implementation Doc

(continued)

- **Changes to Purpose of Document**
 - **No revisions since last workshops**
 - **Previously added text noting**
 - **the specific sections that are incorporated by reference, and**
 - **in the event of conflicts with any provision of Chapters 62-302 or 62-303, F.A.C., the rule provisions control**



Proposed Changes to NNC Implementation Document

(continued)

- **Changes to Discussion of TMDLs as NNC**
 - No new changes, but previously added text noting that nutrient TMDLs for streams replace the entire numeric nutrient standard for streams, including the floral metrics, if the TMDL includes a response variable and establishes site-specific interpretations of the narrative nutrient standard for both TN and TP



Proposed Changes to NNC Implementation Document

(continued)

- **Changes to Nutrient Criteria for Lakes**
 - No substantive changes since last workshop
 - Previously added text clarifying that TN, TP and chl *a* criteria are applied independently
 - This is not new
 - Clarified text that addresses TN and TP criterion when chlorophyll *a* criterion attained
 - Any annual geometric means (AGMs) below maximum in table are in compliance



Proposed Changes to NNC Implementation Document

(continued)

- **Changes to Numeric Nutrient Standard for Streams**
 - **Introductory Text**
 - No substantive changes since last workshop
 - Explains how numeric nutrient standard for streams incorporates both TN and TP “thresholds” and bioassessment data
 - Explains how “thresholds” are different than “criteria”
 - “Threshold” is combined with bioassessment data, and standard can be achieved even if waterbody exceeds threshold if flora and fauna healthy
 - “Criteria” are applied independently



Quick Refresher on the Numeric Nutrient Standard for Streams

- **Achieve Numeric Nutrient Standard for Streams If:**
 - Information on chlorophyll *a* levels, algal mats or blooms, nuisance macrophyte growth, and changes in algal species composition do not indicate an imbalance in flora or fauna;
 - AND EITHER**
 - The average score of at least two temporally independent Stream Condition Indices (SCIs) is 40 or higher, with neither of the two most recent SCI scores less than 35, OR
 - The Nutrient Thresholds (expressed as annual geometric means) are not exceeded more than once in a three-year period



Changes to “Numeric Nutrient Standard for Streams”

(continued)

Section 6.3 – Floral Evaluation

- Still adding text such that streams that fail the Linear Vegetation Survey (LVS) are placed on the Study List (SL) of potentially impaired waters (rather than Verified List) to evaluate whether nutrients contributed to LVS failure
 - Exotic or tolerant plants can occur even without anthropogenic nutrient enrichment
- Still require at least 2 temporally independent (collected ≥ 3 months apart) Rapid Periphyton Survey (RPS) and LVS surveys, but **dropping proposed requirement that surveys be conducted in different hydrological seasons**
 - **Now propose to require at least one survey be from dry season (October – April)**



Changes to “Numeric Nutrient Standard for Streams”

(continued)

Section 6.3 – Floral Evaluation (continued)

- Previously added text summarizing overall assessment
 - Assessment based on two most recent samples
 - If both pass an evidentiary threshold, then passes
 - If both fail, then site fails
 - If one passes and one fails, then either look at third most recent assessment or conduct additional assessment
 - For RPS, third most recent or new sample must be conducted in hydrologic season that failed
 - Assessment determination based on 3rd assessment



Changes to “Numeric Nutrient Standard for Streams”

(continued)

Section 6.4 – Evaluating Algal Mats (RPS)

- No substantive changes since last workshop

Section 6.5 - Evaluating Dominant Algal Species Composition

- Previously added examples of toxin-producing taxa, and noted that dominance of these taxa indicate numeric nutrient standard not achieved
- **Revised list of algal taxa that potentially indicate nutrient enrichment**

Section 6.6 - Evaluating the Presence or Absence of Nuisance Macrophyte Growth (LVS)

- No substantive changes since last workshop



Changes to “Numeric Nutrient Standard for Streams”

(continued)

Section 6.7 - Evaluating Algal Blooms, Chlorophyll *a*, and Phytoplankton Taxonomic Data

- Key chlorophyll *a* assessment elements are still:
 - Streams with Annual Geometric Mean (AGM) < 3.2 µg/L attain,
 - Streams with AGM > 20 µg/L more than once in 3-year period do not
 - Streams between 3.2 and 20 µg/L are compared to reference streams in region,
 - If inconclusive, will be placed on SL
- Added text to evaluate if elevated chl *a* values are due to upstream sources



Changes to “Numeric Nutrient Standard for Streams”

(continued)

Section 6.8 – Floral Measures Summary

- No substantive changes since last workshop

Section 6.9 – Faunal Evaluation for Determining Achievement of NNC

- No substantive changes since last workshop

Section 6.10 – Stream Sampling Locations...

- **Better defined near-field and far-field sampling sites**



Proposed Changes to NNC Implementation Document

(continued)

Section 7 – Nutrient Criteria in Estuaries

- No substantive changes since last workshop

Section 8 – Protection of Downstream Waters

- No substantive changes since last workshop

Section 9.0 – Other Components of NNC

- No substantive changes since last workshop

Section 10 – Implementing the NNC in the IWR

- No substantive changes since last workshop
- WBIDs listed as impaired if any station within a WBID conclusively fails a floral evidentiary threshold

Section 10.3 – Assessment of Waterbodies with NNC Expressed as Loads or Delivery Ratios

- No substantive changes since last workshop



Proposed Changes to NNC Implementation Document

(continued)

Section 10.4 Evaluation of Trends

- Revised trend test as described during public workshops, and key details include:
 - Same statistical method to evaluate trends in Annual Geometric Means (AGMs)
 - No longer place waters on SL to assess for “confounding factors” nor extrapolate into future
 - List on Verified List if there are
 - An increasing trend in nutrients or chl a over the Period of Record (POR) and last 7.5 years, and
 - Annual slope over last 7.5 years $> 20\%$ of difference between current levels and NNC
 - Current Levels = avg of AGMs for last 7.5 years



Proposed Changes to NNC Implementation Document

(continued)

Section 10.4 Evaluation of Trends (continued)

- Previously, could only list on Verified List (VL) due to increasing trend in chl *a*, but now can be TN, TP or chl *a*
- Now establish minimum requirements for POR (10 years with sufficient data) and 7.5 year (5 years with data)
- Define length of POR



Proposed Changes to NNC Implementation Document

(continued)

Section 11 – WQBELs for Surface Water Discharges

- No substantive changes since last workshop



Proposed Changes to NNC Implementation Document

(continued)

Section 12 – Basic Info Needs for Distinguishing Flowing Waters (Stream Exclusion)

- No substantive changes since last workshop, but worth reminding that
 - The numeric nutrient standard for streams only applies to “flowing waters” meeting the stream definition
 - Default assumption is that any flowing water meets the definition unless demonstration is made that the waterbody meets one of the exclusions,
 - All exclusions will be tracked/documentated
 - If excluded, water still assessed for nutrient impairment using nutrient impairment thresholds
 - Chl *a* > 20 µg/L for freshwater and > 11 µg/L for marine
 - “Other information” and Trends



Proposed Changes to NNC Implementation Document

(continued)

Section 12.1 – Non-Perennial Water Segments

- Previously could only demonstrate non-perennial based on taxa present, but proposed to allow two additional methods to demonstrate non-perennial
 - Stream flow data, and
 - Drainage area using the HydroBioGeomorphic (HGB) classification system
- No longer proposing to use HGB method, though can be used as ancillary information
- Also added text that biological data supersede flow data if results contradictory



Proposed Changes to NNC Implementation Document

(continued)

Section 12.1.1 – Stream Flow as an Indicator

- No substantive changes since last workshop
- Defined several terms:
 - Perennial – measurable flow for at least 180 consecutive days in at least 90% of years
 - Likely Perennial – measurable flow for at least 180 consecutive days in at least 50% of years
 - Seasonally Perennial – measurable flow for at least 90 consecutive days in at least 75% of years
 - Non-perennial – flows less than any of the above
- Meet stream exclusion if neither perennial nor likely perennial



Proposed Changes to NNC Implementation Document

(continued)

Section 12.1.3 – Vascular Plants as Indicators

- No substantive changes

Section 12.1.4 – Macroinvertebrates as Indicators

- No substantive changes

Section 12.2 – Tidally Influenced Segments

- No substantive changes since last workshop

Section 12.3 – Water Management Conveyances

- No substantive changes since last workshop

Appendix A. Minimally Disturbed and Healthy Streams

- Still deleted



Rule 62-302.400, F.A.C. (Classification...)

- **Added text to paragraph 62-302.400(17) to address the fact that Class I-Treated waters classification is not currently effective**

(b): The following listed waterbodies are classified as Class I, Class I-Treated, Class II, Class III-Limited, or Class V. Waters listed as Class I-Treated have not been submitted to or approved by the U.S. Environmental Protection Agency and will remain Class III until the reclassification is approved by EPA.



Rule 62-302.400, F.A.C. (Classification...)

(continued)

- DEP incorporating maps by reference to show spatial extent of Class II waters (shellfish propagation or harvesting) in
 - Nassau, Duval, St. Johns, Flagler, Martin, Palm Beach, Monroe, Collier, Lee, Jefferson, Wakulla, Gulf, Okaloosa, Santa Rosa, Escambia, **Manatee, and Bay** Counties
- Also refined rule language describing the spatial extent
 - Rule only – Charlotte and Sarasota Counties
- For today's workshop, **only showing new or revised maps and text**



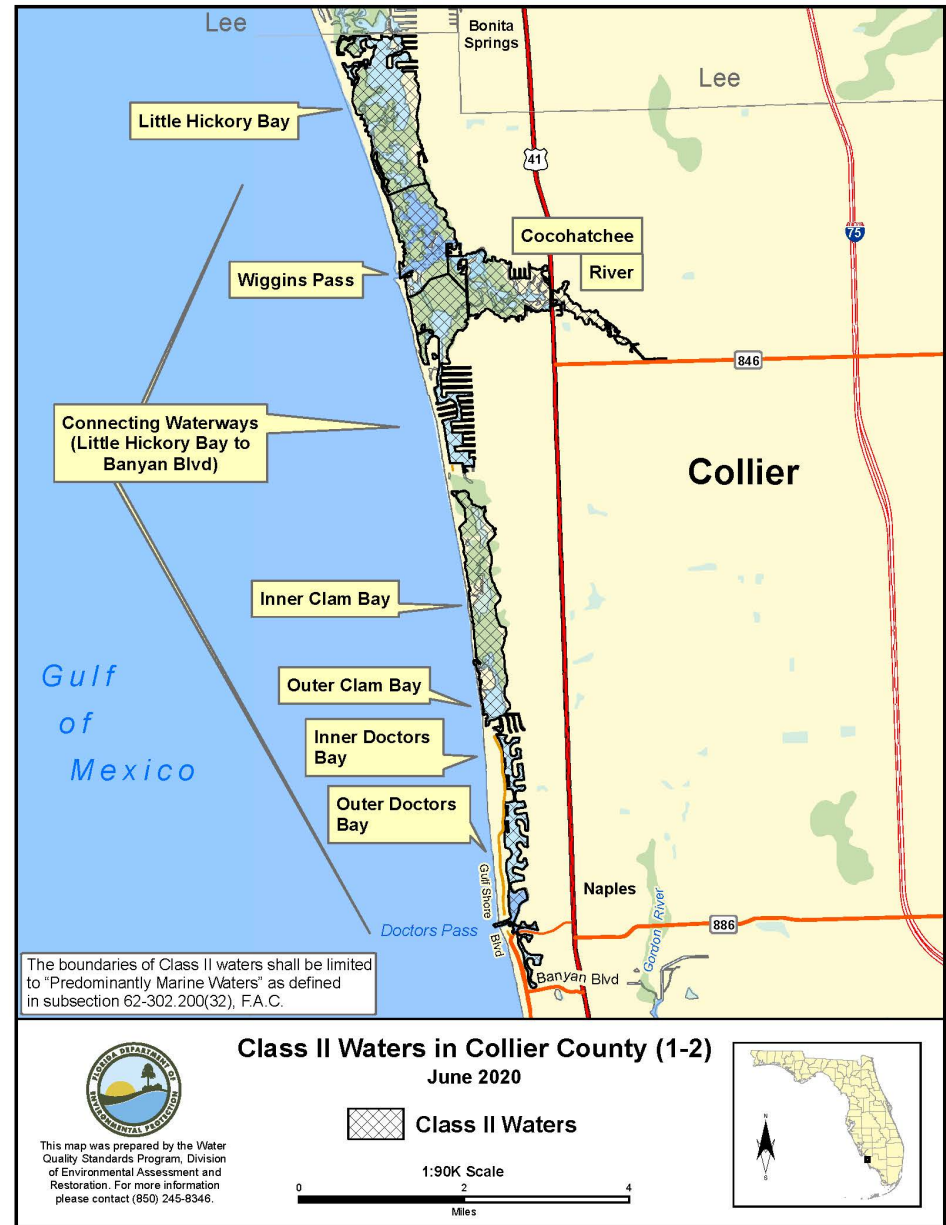
Rule 62-302.400, F.A.C. (Classification...)

(continued)

- We are not changing classification of waters, but maps reflect
 - Paragraph 62-302.400(16)(b), F.A.C., was revised in 2013 to limit the boundaries of Class II waters to “predominantly marine waters”
 - Paragraph 62-302.400(16)(a), F.A.C., extends landward extent of classification to extent of waters of the state, which includes wetlands
- GIS resources were used to estimate extent of predominantly marine waters and wetlands

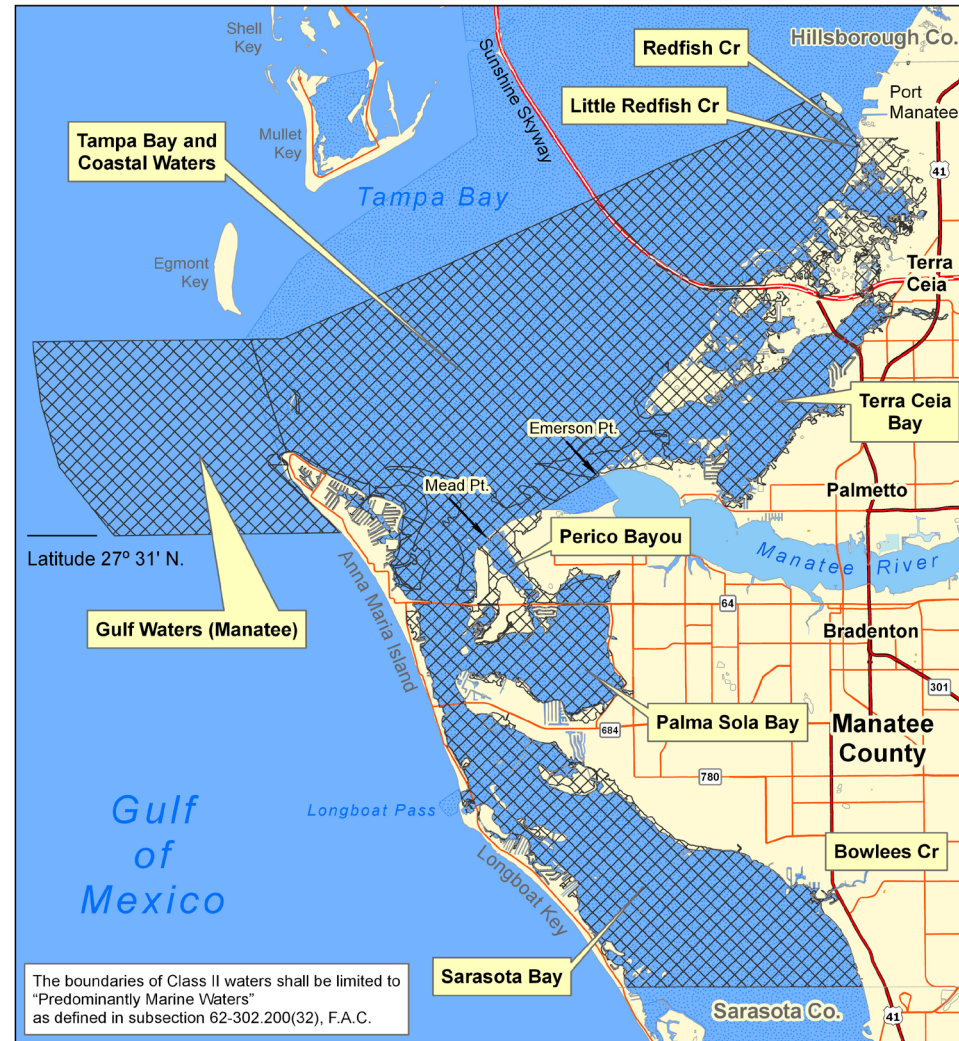
Collier County Class II

- All or portions of the following waters as shown on the map titled “Class II Waters in Collier County (1-2), June 2020” (Link), which is incorporated by reference herein:
- Little Hickory Bay, Wiggins Pass, and the Cocohatchee River.
- Connecting Waterways – From Little Hickory Bay south through Inner and Outer Clam Bay, Wiggins Pass south Inner and to Outer Doctors Bay, Moorings Bay, Doctors Pass to Banyan Blvd.
- Dollar Bay.
- Inner and Outer Clam Bay.
- Inner and Outer Doctors Bay.
- Little Hickory Bay.



Manatee Class II

- All or portions of the following waters, as shown on the map titled “Class II Waters in Manatee County, March 2021” (Link), which is incorporated by reference herein:
- Gulf and Coastal Waters of Tampa Bay – (Including, but not limited to, Terra Ceia Bay, Perico Bayou, Palma Sola Bay, and Sarasota Bay), excluding waters east northward of a line from the southern shore of the mouth of Little Redfish Creek northwesterly through the red marker (approximately one nautical mile away) to the nearest point of the spoil island west of Port Manatee continuing along the western shore of the island to the Hillsborough county line and; excluding Manatee River upstream of a line from Emerson Pt. to Mead Pt.
- Gulf Waters – North of 27°31' N. Lat.



This map was prepared by the Water Quality Standards Program, Division of Environmental Assessment and Restoration. For more information please contact (850) 245-8346.

Class II Waters in Manatee County
March 2021

 **Class II Waters**

1:140K Scale

0 2.5 5 Miles



Bay Class II

- East Bay and Tributaries – East of U.S. Highway 98 (**Dupont Bridge**) to, but excluding, Wetappo Creek.
- North Bay and Tributaries – North of U.S. Highway 98 to Deer Point Dam (**CR 2321 / 77A**), excluding Alligator Bayou and Fanning (**Fannin**) Bayous north of an east-west line through Channel Marker 3.
- West Bay and Tributaries – West of North Bay (line from West Bay Point on the north to Shell Point on the **sSouth**), except West Bay Creek (northwest of Channel Marker 27C off Goose Point), Crooked Creek (north of a line from Crooked Creek Point to Doyle Point), and Burnt Mill Creek (north of a line from Graze Point to Cedar Point).





Questions?



Proposed Revisions to Criteria Table (Rule 62-302.530, F.A.C.)



Total Ammonia Nitrogen

Subsection 62-302.530(3), F.A.C.

The 30-day average TAN value shall not exceed the average of the values calculated from the following equation, with no single value exceeding 2.5 times the value from the equation:

$$\text{30 - day Average} = 0.8876 \times \left(\frac{0.0278}{1 + 10^{7.688 - pH}} + \frac{1.1994}{1 + 10^{pH - 7.688}} \right) \times (2.126 \times 10^{0.028 \times (20 - \text{MAX}(T, 7))})$$

$$\text{30 - day Average} = 0.8876 \times \left(\frac{0.0278}{1 + 10^{7.688 - pH}} + \frac{1.1994}{1 + 10^{pH - 7.688}} \right) \times (2.126 \times 10^{0.028 \times (20 - T)})$$

T and pH are defined as the paired temperature ($^{\circ}\text{C}$) and pH associated with the TAN sample. For purposes of total ammonia nitrogen criterion calculations, pH is subject to the range of 6.5 to 9.0. The pH shall be set at 6.5 if measured pH is < 6.5 and set at 9.0 if the measured pH is > 9.0 . The temperature (T) shall be constrained to values greater than or equal to 7°C . Temperature values less than 7°C shall be set to 7°C for purposes of calculating the TAN criteria.



Bacteriological Quality (Fecal Coliform Bacteria)

Paragraph 62-302.530(6)(a), F.A.C.

- **Revised fecal coliform bacteria criterion applicable to Class II (shellfishing) waters to delete incorrect reference to TPTV and 800 maximum**
 - MPN or MF counts shall not exceed a median value of 14 with not more than 10% of the samples exceeding the Ten Percent Threshold Value (TPTV) of 43 (for MPN) or 31 (for MF), nor exceed 800 on any one day...
- **Only kept fecal criterion for shellfishing waters**



Bacteriological Quality (*Escherichia coli* Bacteria)

Paragraph 62-302.530(6)(b), F.A.C.

- **Revised E. coli criterion applicable to Class III freshwaters to address small sample sizes**
 - MPN or MF counts shall not exceed a monthly geometric mean of 126 nor exceed the Ten Percent Threshold Value (TPTV) of 410 in 10% or more of the samples during any 30-day period. Monthly geometric means shall be based on a minimum of 10 samples taken over a 30-day period. If there are fewer than 10 samples in a month for a given location, the TPTV is assessed as a single sample maximum.
- **Added similar language to text for Class I waters**



Bacteriological Quality (*Enterococci* Bacteria)

Paragraph 62-302.530(6)(c), F.A.C.

- **Enterococci criterion applicable to Class III marine waters to address small sample sizes**
 - MPN or MF counts shall not exceed a monthly geometric mean of 35 nor exceed the Ten Percent Threshold Value (TPTV) of 130 in 10% or more of the samples during any 30-day period. Monthly geometric means shall be based on a minimum of 10 samples taken over a 30-day period. If there are fewer than 10 samples in a month for a given location, the TPTV is assessed as a single sample maximum.
- **Added similar language to text for Class II waters**



Cadmium Criteria

Subsection 62-302.530(15), F.A.C.

- **Revision of marine & freshwater Cadmium criteria based on EPA 2016 recommendations**
 - **Protects aquatic life**
- **Marine criterion would decrease from 8.8 µg/L to 7.9 µg/L**
- **Freshwater criterion is a hardness-based equation**
 - $Cd < e^{(0.7977 \times \ln(\text{hardness}) - 3.909)}$
 - **Criterion would increase (for example, 0.27 µg/L to 0.72 µg/L at hardness of 100 mg/L)**



Why did the Freshwater Cadmium Criterion Increase?

- **Section 5.9.2 of the EPA technical document provides a comparison between the 2001 and 2016 criteria recommendations**
- **Differences between criteria recommendations relate to new/revised data and refined approach**
 - **New test organism toxicity data**
 - **Use of revised toxicological endpoints**
 - **Change in the most sensitive species**
 - **Smaller range of variation (reduced uncertainty) for the four most sensitive taxa**



Rule 62-302.532, F.A.C.

Estuary NNC

- **Revised Estuary Nutrient Region (ENR) maps for three estuaries**
 - Blackwater Bay (ENRL6)
 - Lower Halifax River Estuary (ENRS1)
 - St. Marks River Estuary (ENRX3)
- **No changes to maps shown previously, but no longer updating map for Estero Bay (ENRD10)**
- **Also updated Florida Coastal Segment Map**



Rule 62-302.533, F.A.C.

Dissolved Oxygen Criteria

- **Keeping previously proposed text to include time-of-day adjustments for ambient DO data**
 - **Same text that is currently in IWR**

62-302.533(1)(a) - When assessing ambient surface water samples, the freshwater DO criteria shall be assessed preferentially using daily average values calculated from full days of diel monitoring data consisting of 24 hours of measurements collected at a regular time interval of no longer than one hour. If diel monitoring data are not available, instantaneous surface water samples may be used to assess the DO criterion by comparing the instantaneous value with a time-of-day-specific translation of the daily average criterion using the procedure described in subparagraph 62-303.320(4)(b)4., F.A.C.



Rule 62-302.533, F.A.C.

(continued)

Dissolved Oxygen Criteria

- **Proposed to remove text in subsection (5) related to maintenance of DO levels (trend assessment), but decided to keep it based on public comments**

(5) - Ambient DO levels above the minimum criteria specified in subsections 62-302.533(1) and (2), F.A.C., shall be maintained in accordance with and subject to Rules 62-302.300 and 62-4.242, F.A.C. Ambient DO levels will be considered to have declined, for purposes of this subsection if, after controlling for or removing the effects of confounding variables, such as climatic and hydrologic cycles, quality assurance issues, and changes in analytical methods, a waterbody segment is shown to have a statistically significant decreasing trend in DO percent saturation or an increasing trend in the range of daily DO fluctuations at the 95 percent confidence level using the one-sided Seasonal Kendall test for trend..



Rule 62-302.800, F.A.C.

Site Specific Alternative Criteria

- **Proposed new requirements for SSAC petitions to require information about threatened and endangered species, but dropped out proposed demonstration**
 - 62-302.800(1)(a) The affirmative demonstration required by this section shall mean a documented showing that the proposed alternative criteria would exist due to natural background conditions or man-induced conditions which cannot be controlled or abated. Such demonstration shall be based upon relevant factors which include:
 - 1-3. Unchanged
 4. A discussion of any impacts of the proposed alternative criteria on the designated use of the waters and downstream adjoining waters
 5. A description of the occurrence of any Federally listed threatened or endangered plant or animal species and critical habitats within the water or downstream waters. ~~An affirmative demonstration that the alternative criteria will not negatively affect threatened or endangered species or critical habitats must be included if any are present in the water or downstream waters.~~



Rule 62-302.800, F.A.C.

Site Specific Alternative Criteria

- Updated text for Type II SSACs
 - Dropped previous proposed revisions to subparagraph 62-302.800(2)(c)2., F.A.C., to switch from Indicator Species Procedure to Water-Effect Ratio Approach, but keeping new text listing parameters for which the method is not applicable
 - Not applicable to nutrients, nutrient response variables, dissolved oxygen, alkalinity, specific conductance, transparency, turbidity, biological integrity, iron, total ammonia nitrogen, or pH.



Type II DO SSACs

- Department is proposing Dissolved Oxygen (DO) Site Specific Alternative Criteria (SSAC) for 8 streams
 - Dropping proposed SSACs for Peters Creek, Eaton Creek and Taylor Creek (Downstream of the Reservoir)
- Streams were selected from a list of candidate waters listed in Category 4c (impaired for one or more criteria or designated uses, but do not require TMDL development because the impairments are not caused by a pollutant)
 - Low DO levels were determined to be caused by natural background conditions
 - Support healthy biology (Stream Condition Index, SCI)



Identifying Waterbodies for SSAC Development

- To identify waterbodies appropriate for SSAC development, several different screens were used:
 - Landscape Development Intensity Index (LDI)
 - Land use: the WBIDs needed to be composed of either
 - a) 20% or more wetlands; or,
 - b) at least 50% combined wetland, forested and/or shrub and brushland uses, and have no more than 20% urban land uses
 - Minimum of 50 DO values collected from 2006 to 2020
 - At least 2 temporally independent SCIs of 40 or higher, with neither of the 2 most recent SCI scores < 35

Streams Selected

Waterbody	WBID	Bioregion	County
Black Creek	679	Panhandle	Walton
Stafford Creek	723	Panhandle	Calhoun
Pony Creek	1426	Peninsula	Polk
Reedy Creek ¹	1685B	Peninsula	Polk
Daughtrey Creek	3240F	Peninsula	Charlotte/Lee
Popash Creek	3240Q	Peninsula	Charlotte/Lee
Cypress Creek	3235C	Peninsula	Charlotte/ Glades/ Hendry/Lee
Black Water Creek	2929A	Peninsula	Lake

¹This system was previously named Livingston Creek and was re-named Reedy Creek during IWR Run 56.





SSAC Derivation

- To account for natural variability, the proposed SSACs were calculated as the 10th percentiles of existing (2006-2020) DO saturation levels within each waterbody
- The proposed DO SSACs will be applied such that no more than 10 percent of the DO saturation measurements collected within each waterbody during a calendar year shall be below the specified SSAC
- The 10 percent allowable exceedance frequency is consistent with the derivation of the SSAC based on the 10th percentile of the existing distribution
 - Approximately 10 percent of the measurements would be expected to be below the 10th percentile under typical conditions

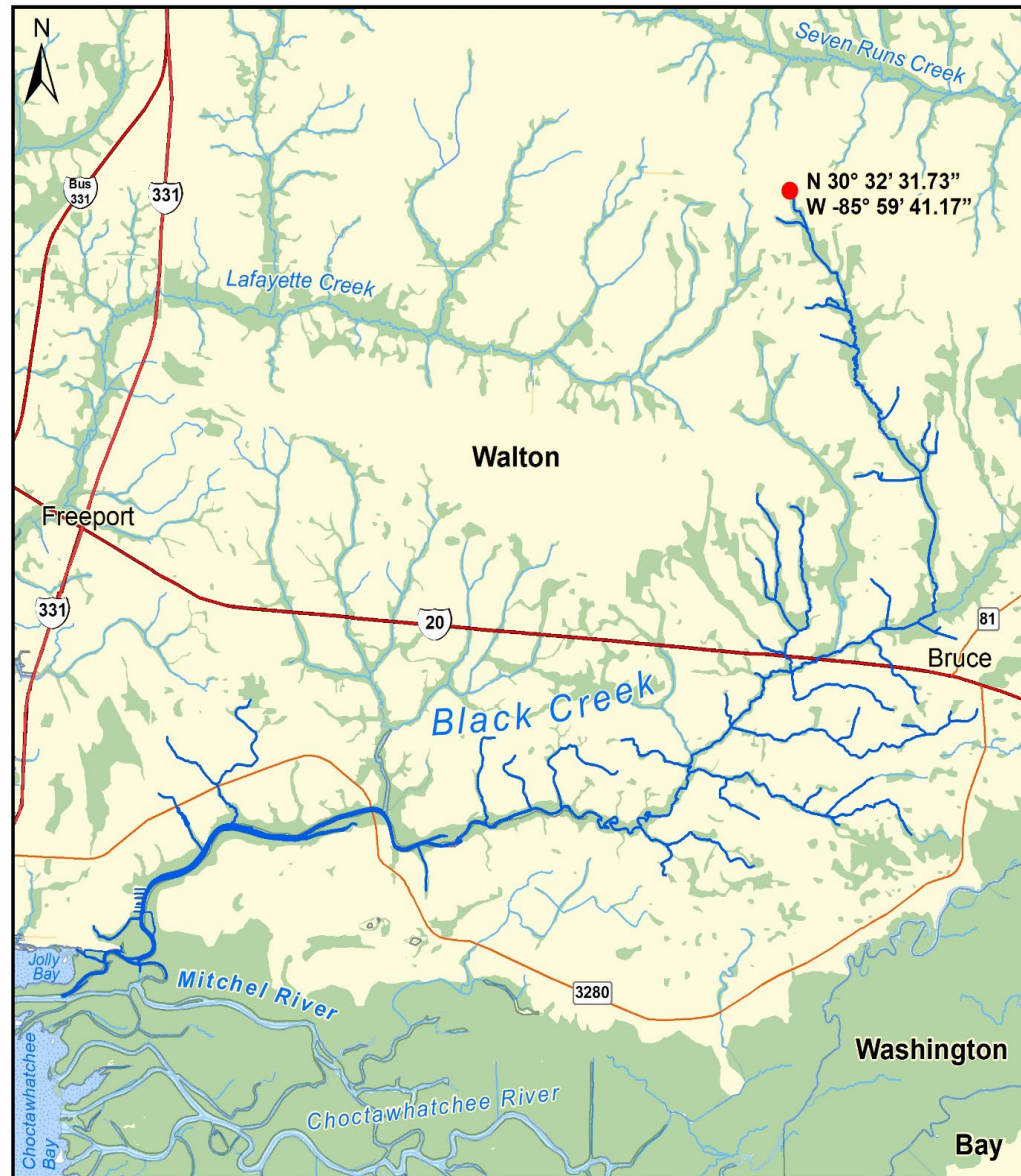
Black Creek

DO SSAC Extent

Proposed
Type II DO
SSAC

The freshwater portion of Black Creek and its tributaries from the geographic coordinates, latitude: N 30° 32' 31.73" and longitude: W -85° 59' 41.17" to the confluence with the Mitchell River

31%



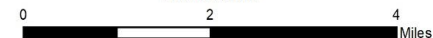
SSAC Extent for Black Creek

June 2019

 SSAC Extent

This map was prepared by the Water Quality Standards Program, Division of Environmental Assessment and Restoration. For more information please contact (850) 245-8346.

1:85K Scale



Proposed Type II DO SSACs

WBID	Waterbody	DO SSAC Extent	Proposed Type II DO SSACs ¹
679	Black Creek	The freshwater portion of Black Creek and its tributaries from the geographic coordinates, latitude: N 30° 32' 31.73" and longitude: W -85° 59' 41.17" to the confluence with the Mitchell River	31%
723	Stafford Creek	Stafford Creek and its tributaries from the headwaters of Stafford Creek east of Highways 275 and 71 to the confluence with the "Bayou"	46%
1426	Pony Creek	Pony Creek and its tributaries from the headwaters north of Dean Still Road to the geographic coordinates: longitude: N 28° 19' 53.42" and longitude: W -81° 54' 27.8"	34%
1685B	Reedy Creek	Reedy Creek from the confluence of Reedy Creek and Livingston Creek downstream to Lake Arbuckle	36%
3240F	Daughtrey Creek	The freshwater portion of Daughtrey Creek and its tributaries from Charlotte/Lee County line to the confluence with the Caloosahatchee River	21%
3240Q	Popash Creek	The freshwater portion of Popash Creek and its tributaries from the Charlotte/Lee County line to the confluence with the Caloosahatchee River	22%
3235C	Cypress Creek	Cypress Creek and its tributaries from the geographic coordinates, latitude: N 26° 49' 2.61" and longitude: W -81° 36' 54.36", to the confluence with the Caloosahatchee River	28%
2929A	Black Water Creek	Black Water Creek and its tributaries from the outlet of Lake Norris to the geographic coordinates, latitude: N 28° 51' 44.56" and longitude: W -81° 23' 3.3".	26%

¹The recommended DO SSACs are based on the 10th percentile for DO saturation calculated based on a normal distribution using the calculated mean and standard deviation. These SSACs will be applied such that no more than 10% of the measured DO saturation levels shall be less than these proposed values.

Questions?



Turbidity Criterion

Paragraph 62-302.530(70)(a), F.A.C.

- **No longer proposing to revise the generally applicable turbidity criterion**
 - Had proposed adding a narrative but it was too vague
- **Criterion is:**
 - **< 29 above natural background conditions**



Turbidity Criterion for the Protection of Corals

Paragraph 62-302.530(70)(b), F.A.C.

- Still proposing new turbidity criterion for corals and hardbottom communities (HB), but **no longer incorporating a map nor an implementation document**

Turbidity shall not be increased above background conditions within areas of the state where coral reef or hardbottom communities are currently found or have been demonstrated to have occurred since November 28, 1975. To evaluate this criterion, background conditions shall take into account the natural variability of turbidity levels, not to exceed 29 NTU.

- **Implementation in permitting will be on case-by-case basis and implementation in IWR addressed in IWR rule**



Turbidity Literature Review

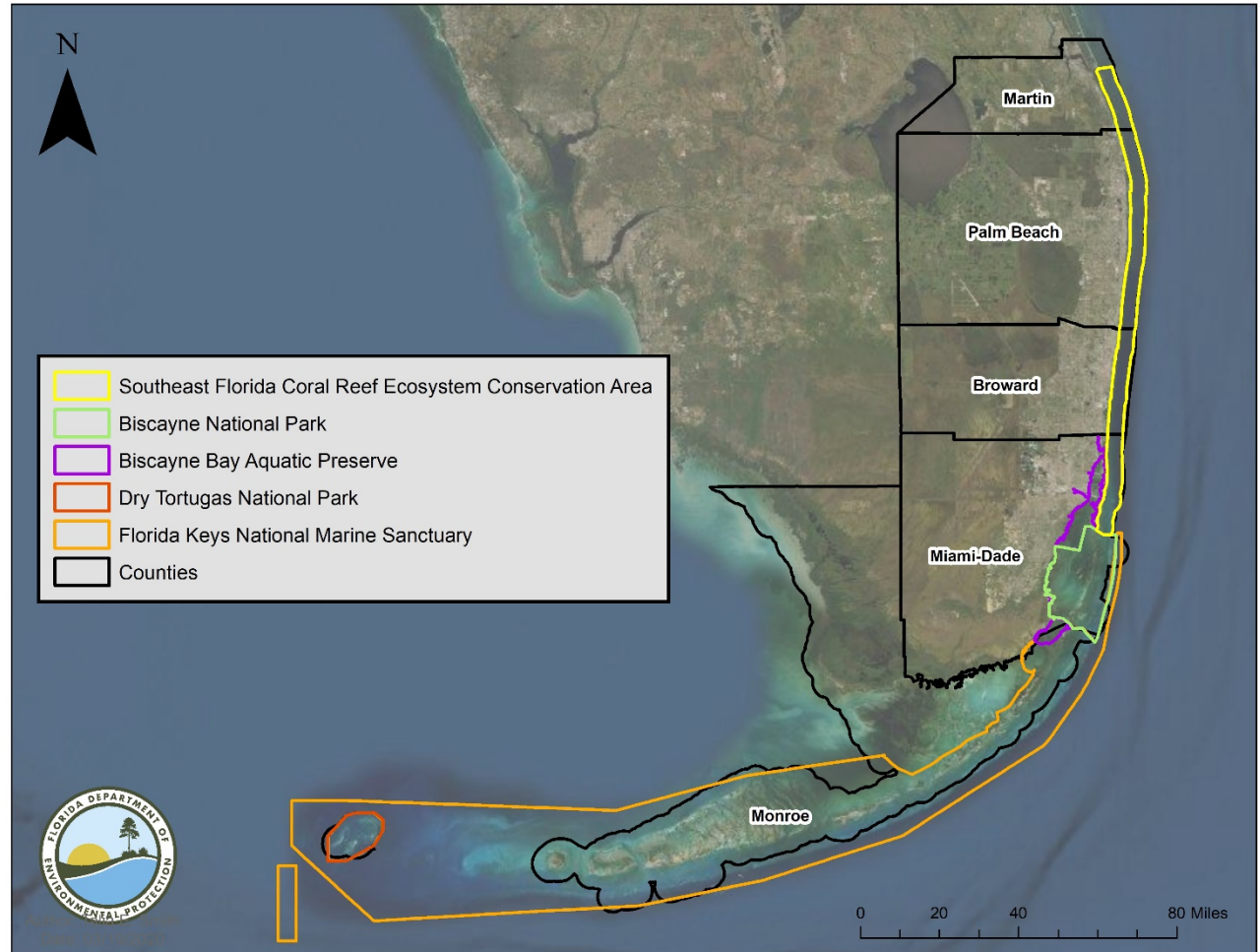
- DEP conducted comprehensive search for studies addressing effects of turbidity on corals and concluded that 29 NTU is not protective of corals/hard bottom
- However, there are insufficient data to establish a numeric criterion
 - Must demonstrate that criterion is protective
- Must also address complexity of natural spatial and temporal variability
 - Resident corals are adapted to the natural variability



Spatial Extent

Paragraph 62-302.530(70)(b), F.A.C.

- Most corals/HB are located within Florida's Coral Reef

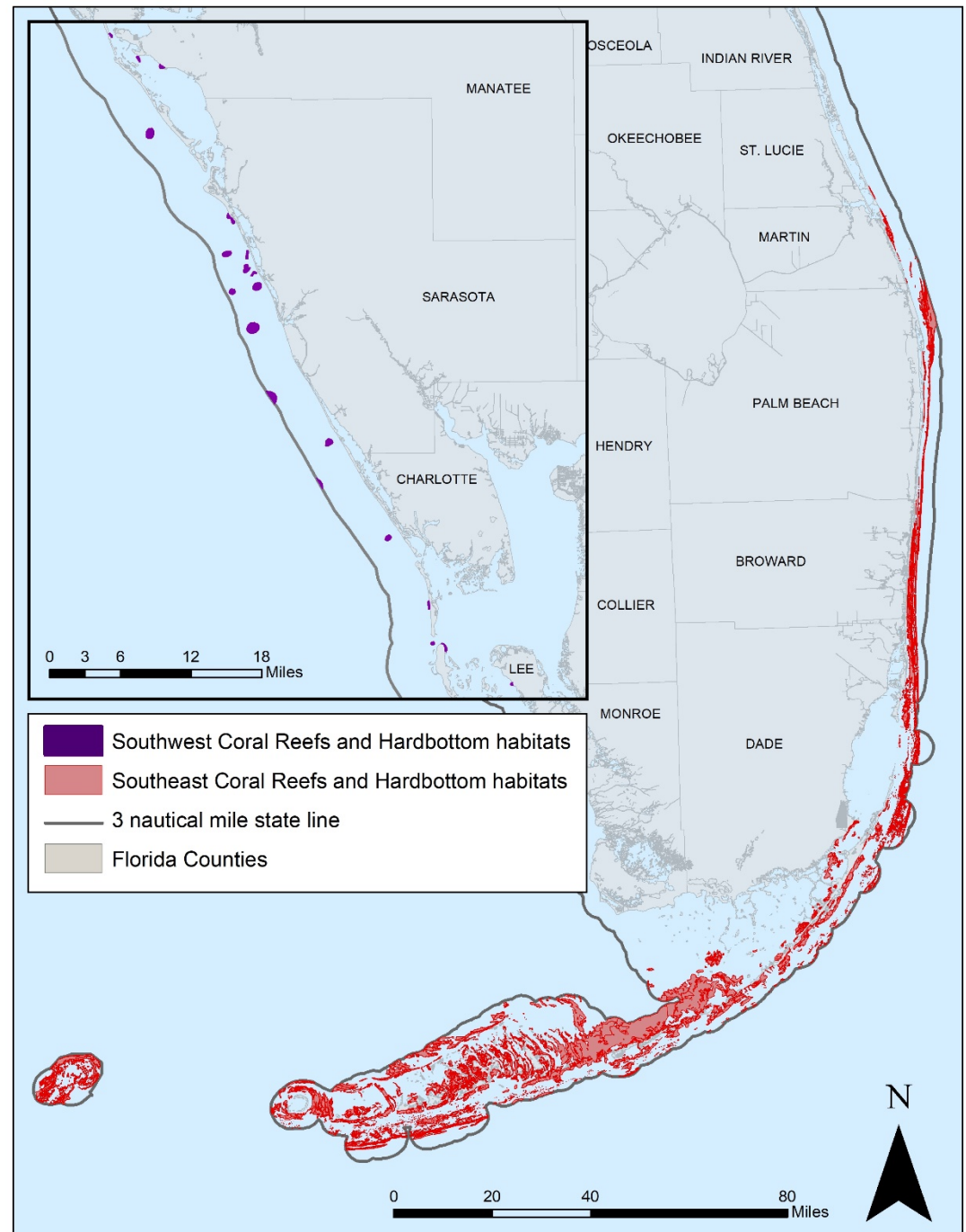




Spatial Extent

(continued)

- Corals/HB are patchy outside of FCR
- Maps are shown for illustrative purposes only



Questions?



Cyanotoxin Criteria

- **EPA finalized national recommended recreational water quality criteria and swimming advisory thresholds for cyanotoxins on May 22, 2019**
 - **Addressed both Microcystins and Cylindrospermopsin**



EPA Recommended Cyanotoxin Criteria/Advisory Thresholds

Table 6-1. Recreational Criteria or Swimming Advisory Recommendations for Microcystins and Cylindrospermopsin^a

Application of Recommended Values	Microcystins			Cylindrospermopsin		
	Magnitude (µg/L)	Duration	Frequency	Magnitude (µg/L)	Duration	Frequency
Recreational Water Quality Criteria	8	1 in 10-day assessment period across a recreational season	More than 3 excursions in a recreational season, not to be exceeded in more than one year ^b	15	1 in 10-day assessment period across a recreational season	More than 3 excursions in a recreational season, not to be exceeded in more than one year ^b
Swimming Advisory		One day	Not to be exceeded		One day	Not to be exceeded



Basis for EPA Recommended Cyanotoxin Criteria/Advisory Thresholds

Recreational Value = $RfD \times \text{Body Weight} / \text{Ingestion Rate}$

where RfD = reference dose

$0.05 \mu\text{g/kg/day} \times 31.8 \text{ kg} / 0.21 \text{ L/day} = 8 \mu\text{g/L}$ microcystins

$0.1 \mu\text{g/kg/day} \times 31.8 \text{ kg} / 0.21 \text{ L/day} = 15 \mu\text{g/L}$ cyclindrospermopsin

- Assumes 100% of child's exposure (ages 6 – 10) comes from incidental ingestion during swimming
- 2016 draft document applied a Relative Source Contribution (RSC) factor of 0.8 and an incidental ingestion estimate of 0.33 L/day, yielding draft values of 4 $\mu\text{g/L}$ microcystins and 8 $\mu\text{g/L}$ cyclindrospermopsin
- DEP received a petition requesting that we adopt EPA 2016 draft thresholds as water quality criteria



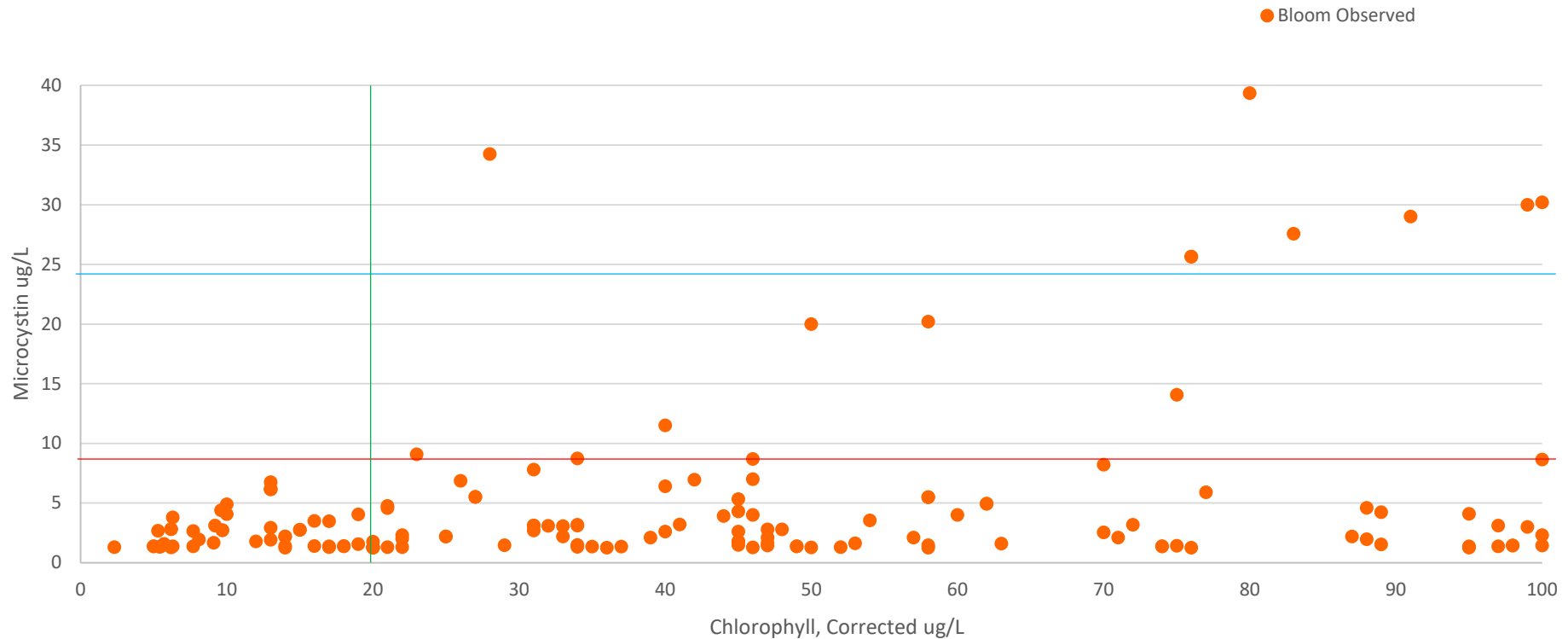
Basis for EPA Recommended Cyanotoxin Criteria/Advisory Thresholds

- EPA recommended cyanotoxin criteria are specifically designed to protect human health
- DEP has already adopted NNC designed to be protective of aquatic life use support, which was determined to be most sensitive use
 - Also protects human health
- Adopted NNC for streams, springs, lakes and estuaries
- Highest adopted chlorophyll *a* criterion is 20 µg/L (for colored lakes at 20 µg/L), and data indicate that microcystin concentrations are well below recommended cyanotoxin criteria at 20 µg/L chl *a*



Microcystin Versus Chlorophyll *a* Threshold

January 2019- April 2021 CyanoHAB Sampling Results
number of samples = 198



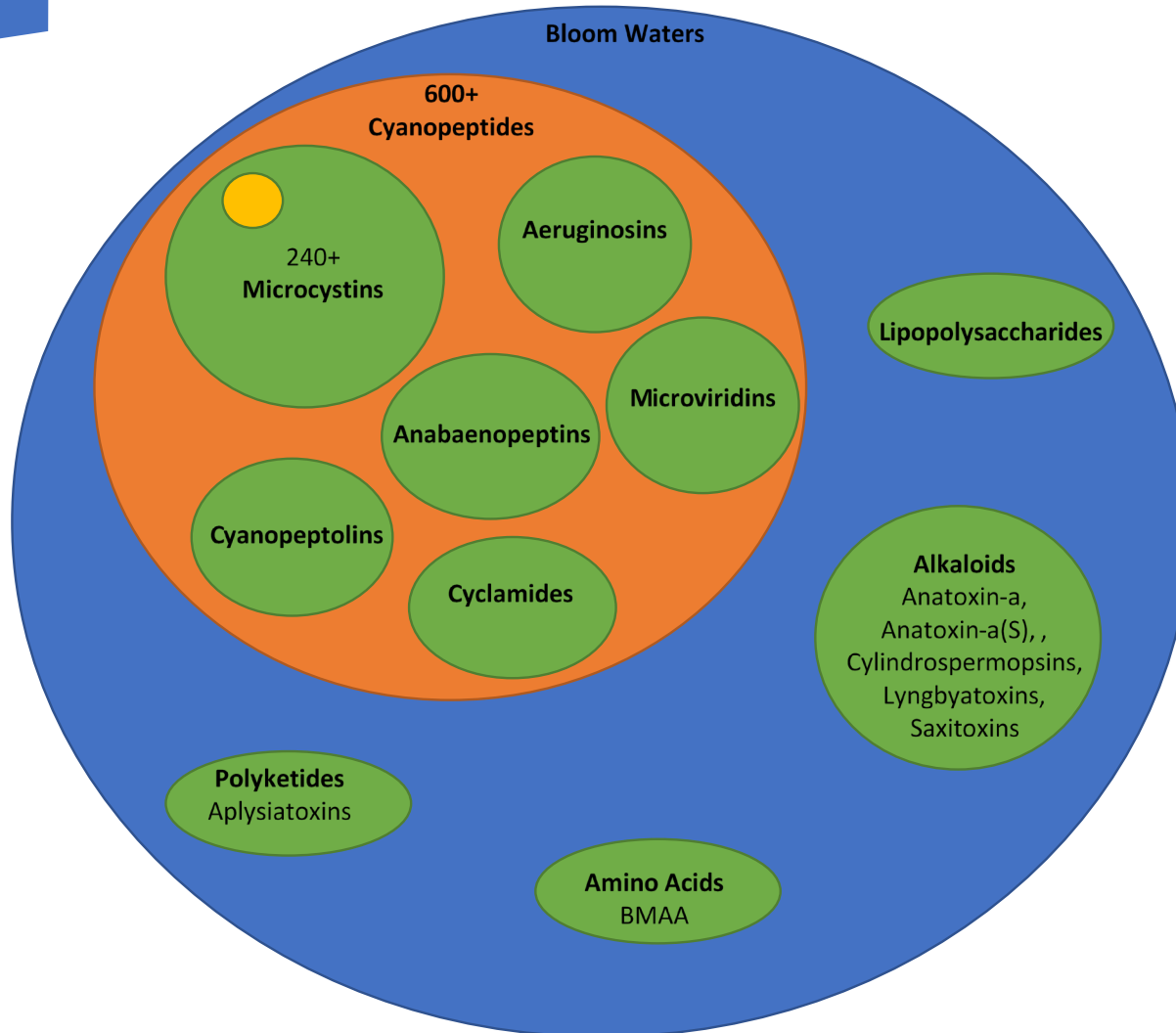


Cyanotoxin Exposure

- Florida currently monitors surface waters for cyanotoxins when blooms are reported/detected
- Cyanotoxins are not regularly monitored in fish tissues, sediments, or air, but have been detected in all 3 media
- EPA's recommended recreational thresholds assume 100% of exposure is through incidental ingestion of water during recreational activities
- There are few commercially available cyanotoxin analytical standards compared to the overall number of known toxins
- More realistic estimates of cyanotoxin risk to people, pets, livestock, and wildlife would require additional monitoring and research



Cyanotoxins





Current Florida Practice for Algal Bloom Response

- **DEP and DOH use visual presence of an algal bloom as one threshold**
 - Used as a trigger by DEP to perform Algal Bloom Response Sampling (cyanotoxins, algal ID, Nutrients, and Chl *a*)
- **If cyanobacteria are present but no toxins detected, DOH encourages local county health units to issue a Caution Notification**
- **If cyanotoxins are detected (at all), DOH encourages local county health units to issue a Health Alert Notification**
 - DEP performs repeat sampling at sites with detectable toxin levels until toxins are no longer detected
 - Alerts are removed once cyanobacteria bloom or toxins are no longer present per DEP HAB Dashboard



Precautionary Principle

- **Visual presence of bloom used as threshold instead of numeric toxin value because:**
 - **Lag time between sample collection and dissemination of results**
 - **Allows the public to make decisions about recreating in a water at the time of use**
 - **High spatial and temporal variability in algal cell and toxin concentrations**
 - **Very low incidence of toxins in waters without visible bloom present**
 - **Application of EPA's recommended criteria would not cause any new waters in Florida to be listed as impaired**
 - **Concerns regarding EPA's derivation of cyanotoxin thresholds**



Blue Green Algae Task Force

- **Blue Green Algae Task Force (BGATF) was formed in 2019 and produced consensus recommendations (Document #1, October 11, 2019), including**
 - **Basin Management Action Plans (BMAPs)**
 - **Agriculture and Best Management Practices (BMPs)**
 - **Human Waste**
 - **Onsite Sewage Treatment and Disposal Systems**
 - **Sanitary Sewer Overflows**
 - **Stormwater Treatment**
 - **Innovative Technologies**
 - **Public Health**
 - **Monitoring Needs**



Blue Green Algae Task Force

Public Health Recommendation

Defensible health advisories should be established by the Florida Department of Health and defensible water quality criteria should be established by the Florida Department of Environmental Protection. These actions should be supported by the best available science and monitoring, and updated as new information becomes available. The task force further recommends that the Department of Health work collaboratively with the Department of Environmental Protection to implement a transparent, consistent and comprehensive communication plan that recognizes the diverse population in Florida in order to inform the public about the potential health impacts associated with exposure to algae and/or algal toxins.



Blue Green Algae Task Force

- **Blue Green Algal Task Force held a follow-up meeting in July 2020 to focus on cyanotoxin criteria and advisories**
- **Some task force members shared FDEP's concerns regarding EPA's derivation of their recreational cyanotoxin criteria and said additional data are needed to derive more defensible criteria**
- **Some task force members said they thought the precautionary approach that DEP and DOH are using is more protective than EPA's recommended criteria**



Blue Green Algae Task Force

- **Blue Green Algal Task Force requested that DEP and DOH work together to create a document that more clearly explains the process by which:**
 - **DEP samples, analyzes, and transmits the results to DOH**
 - **DOH interprets and transmits the results to the local county health departments**
 - **The local county health departments issue notifications, signage, and other public health messaging**



DEP/DOH HAB Response Plan

- **DEP and DOH are currently working on a draft cyanobacteria bloom response document**
- **DEP and DOH representatives are participating on the Florida Harmful Algal Bloom Task Force's Harmful Algal Bloom Communication Workgroup**

Questions?



Proposed Revisions to Chapter 62-303, F.A.C.

- **Propose variety of revisions to IWR, with most designed to clarify, but some new provisions:**
 - Revising the trend test for nutrients and chlorophyll *a*
 - Revising the acute toxicity threshold for cadmium
 - Adding assessment of the proposed turbidity criterion
 - Revisions to streamline the biological health assessments
 - Assessment of additional expressions of NNC
 - Revisions that incorporate portions of the NNC Implementation Document in the IWR Rule
 - Revising the listing methodology for the LVS floral metric
 - Revising text for listings based on FDOH fish consumption advisories
 - Revisions related to data uploads to WIN



Proposed Revisions to Chapter 62-303

(continued)

- **Non-substantive changes that won't be presented**
 - Clarified definitions for “predominantly fresh” and “predominantly marine” waters
 - Revisions to assessment period terminology
 - Updates to rule citations, including new hyperlinks, formatting changes, renumbering, duplicative text, and changes to text related to documents incorporated by reference



Proposed Revisions to Rule 62-303.320, F.A.C. (Aquatic Life-Based Criteria)

(continued)

- **Added subsection 62-303.320(16), F.A.C., for assessment of proposed coral reef turbidity criterion**
- **No longer establishing baseline turbidity values for all assessment units with coral reefs and HB because assessment units sometimes change**
- **Instead defining baseline turbidity levels as:**
 - **the 90th percentile of the data for that waterbody from the beginning of the period of record (POR) through December 31, 2020, excluding data from stations within canals or within 200 meters of shore**
- **Also have specific data requirements**



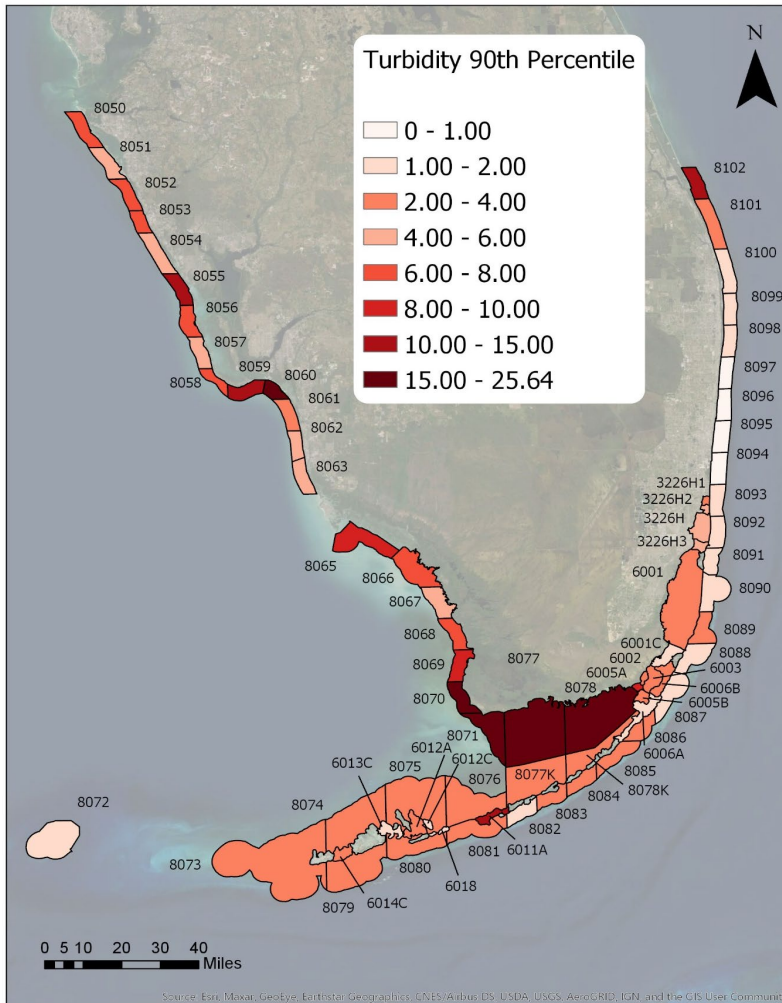
Proposed Revisions to Rule 62-303.320, F.A.C. (Aquatic Life-Based Criteria)

(continued)

- **Attainment of the 90th percentile baseline values will be evaluated using binomial hypothesis test**
 - **80 percent confidence level for Planning List**
 - **90 percent confidence level for Verified List**
- **Waterbodies that exceed the number of exceedances for a given sample size in Tables 1 and 3 in IWR will be placed on the Planning and Verified Lists, respectively**



Example Baseline Turbidity Thresholds



WBID	Area	Sample Size (N)	Mean (NTU)	90 th (NTU)
8091	Coral ECA	54	1.8	3.6
8100	Coral ECA	76	0.6	1.2
8101	Coral ECA	158	1.0	2.0
6001	Biscayne Bay	9470	1.3	2.9
8088	Biscayne Bay	339	1.3	1.8
8089	Biscayne Bay	316	1.7	2.7
8076	Florida Keys	464	1.7	2.1
8079	Florida Keys	723	1.6	2.2
8080	Florida Keys	281	1.6	2.4
8065	10,000 Islands	125	4.8	8.9
8066	10,000 Islands	253	5.9	8.2
8050	Gulf of Mexico	91	2.8	6.1
8051	Gulf of Mexico	364	2.7	5.8

Coral ECA = Southeast Florida Coral Reef Ecosystem Conservation Area



Proposed Revisions to Rule 62-303.330, F.A.C. (Biological Assessment)

- Revisions to biological health assessments for Planning List
 - In paragraph 62-303.330(3)(b), F.A.C., added that if average score of all SCIs is below 40, waterbody placed on Planning List
 - In paragraph 62-303.330(3)(e), F.A.C., added that if average score of all LVIs is below 43, waterbody placed on Planning List
 - Now added single-sample threshold of 30 such that list lake if one of two most recent LVIs is below 30 or if average of all LVIs is below 43
 - Language is consistent with VL methodology and allows for earlier identification of potential impairments and consistency in assessment periods



Revisions to Rule 62-303.350, F.A.C. (Assessments of Numeric Interpretations of Narrative Nutrient Criterion)

- In subsection (1), clarified text related to “other information” indicating an imbalance in flora/fauna
 - Added “native” in text that discusses decreases in submerged aquatic vegetation
 - Now considering the word “natural” rather than “native”
 - Added “and other scientifically credible and compelling information meeting the requirements of Chapter 62-160, F.A.C., indicating a waterbody is imbalanced”
- In subsection (4), clarified data requirements for calculating NNC expressed as long-term averages of annual means
 - Added “annual medians” & “annual geometric means”
 - Requires at least 3 years of data, with 4 data points in each year and meet nutrient seasonal component



Revisions to Rule 62-303.350, F.A.C. (Assessments of Numeric Interpretations of Narrative Nutrient Criterion)

(continued)

- **In subsection (5), clarified data requirements for calculating NNC expressed as long-term averages**
 - **Added “seven-year” average**
 - **At least 10 data points over at least 3 years, with at least 2 temporally-independent data points each year that meet nutrient seasonal component**
- **Added subsection (6) to clarify data requirements for assessment of salinity or specific conductance dependent nutrient criteria**
 - **Measurements shall be based on same station and time as the applicable nutrient concentration samples**
- **In subsection (7), clarified data requirements for NO₂/3 criteria expressed as monthly average to be “minimum of one sample collected within the month”**



Proposed Revisions to Rule 62-303.351, F.A.C. (Nutrients in Freshwater Streams)

- **In subsection (1), clarified that floral metrics are sufficient to place a waterbody on the Planning List (PL), and incorporated relevant sections of NNC Implementation Document by reference**
- **In subsection (3), clarified that other information indicating an imbalance in flora or fauna due to nutrient enrichment will be considered to place a waterbody on the Planning List**
- **In subsection (5), removed text for trend test citation and updated name of the “Mann-Kendall Trend Test”**
 - **As noted previously, it’s the same trend test**



Proposed Revisions to Rule 62-303.352, F.A.C. (Nutrients in Freshwater Lakes)

- **In paragraph (1)(b), clarified that other information indicating an imbalance in flora or fauna due to nutrient enrichment will be considered to place a waterbody on the Planning List**
- **In paragraph (1)(c), removed text for trend test citation and updated name of the “Mann-Kendall Trend Test”**



Proposed Revisions to Rule 62-303.352, F.A.C. (Nutrients in Freshwater Lakes)

(continued)

- For lakes with insufficient color, alkalinity or specific conductance data to determine lake type, we previously changed paragraph (1)(d) to list lakes on PL if
 - The annual geometric mean chlorophyll *a* value is greater than 6 µg/L, rather than 20 µg/L
- Now proposing text that would also add lakes to PL if lake TN or TP AGM exceeded minimum of range for clear, low alkalinity lakes
 - $TN > 0.51 \text{ mg/L}$ or $TP > 0.01 \text{ mg/L}$



Revisions to Rule 62-303.353, F.A.C. (Nutrients in Estuaries & Open Coastal Waters)

- In subsection (3), clarified that other information indicating an imbalance in flora or fauna due to nutrient enrichment will be considered to place a waterbody on the Planning List
- In subsection (4), removed text for trend test citation and updated name of the “Mann-Kendall Trend Test”
 - **DEP intends to delete the proposed new text “For the assessment of nutrient trends in estuaries and open coastal waters, there shall be at least one station with a minimum of 10 temporally independent samples.”**
- In subsection (5), clarified that, for estuary NNC expressed as not to be exceeded in more than 10% of samples, data must meet certain data sufficiency provisions in Rule 62-303.320, F.A.C.



Revisions to Rule 62-303.354, F.A.C. (NO₂/3 in Freshwater Spring Vents)

- In subsection (2), clarified that other information indicating an imbalance in flora or fauna due to nutrient enrichment will be considered to place a waterbody on the Planning List
- In subsection (3), removed text for trend test citation and updated name of the “Mann-Kendall Trend Test”
- In subsection (4), clarified that springs with a nitrate-nitrite criterion expressed as a monthly average will be evaluated based on subsection 62-303.320(1), F.A.C. (Binomial in Table 1), and data must meet certain data sufficiency provisions in Rule 62-303.320, F.A.C.



Proposed Revisions to Rule 62-303.370 (Fish & Shellfish Consumption Use Support)

- **In subsection (1), clarified the language for placing a water on the Planning List due to FDOH fish advisory**
 - **Changed from “limited to or no consumption” fish advisory to “an advisory to limit consumption of any fish species from that water to one meal per week or less frequent consumption”**
- **In subsection (2), updated name of DACS’ section that address shellfish harvesting**
 - **“Shellfish Harvest Area Classification Program”**



Proposed Revisions to Rule 62-303.390, F.A.C. (The Study List)

- In subsection (1),
 - Removed text related to adverse trend in nutrients or nutrient response variables (if water will become impaired within 10 years)
 - Clarified that a TMDL will not be established “by the Department” for a waterbody on the SL
- In subsection (2),
 - Removed text for placing a water on the SL for increasing trend in nutrients or chlorophyll *a*



Proposed Revisions to Rule 62-303.390, F.A.C. (The Study List)

(continued)

- In paragraph (2)(e), added text to list streams on the SL if they fail the LVS and the LVS results cannot be linked to anthropogenic nutrient inputs
 - If they also meet the stream definition and do not have a site specific numeric interpretation of the narrative
- In subsection (3), removed text for waters placed on the SL due to adverse trend in nutrients or chl *a*
- In subsection (6), added text for waters placed on the SL due to failing LVS floral metric noting DEP will conduct a site-specific assessment of the stream to determine potential causes of the nuisance macrophyte growth
 - Considering adding text to address change in listing/assessment status depending on outcome of study



Revisions to Rule 62-303.400, F.A.C. (Methodology to Develop Verified List)

- In subsection (2),
 - Clarified that additional data and information for waters on the Planning “and Study List” will be evaluated for placing waters on the Verified List, and
 - Clarified the timeframe for collecting additional data through the department’s watershed management approach
 - Subsequent cycle



Proposed Revisions to Rule 62-303.420, F.A.C. (Aquatic Life-Based Criteria)

- **In subsection (10), removed duplicate text requiring identification of causative pollutant for DO impairments**
 - **Requirement already in subsection 62-303.710(3), F.A.C.**
- **In subsection (11), clarified that, for assessment of the DO criteria for endangered species in the Suwannee, Withlacoochee (North), and Santa Fe Rivers, waters will be placed on the Verified List when 50% of the “daily average values”, rather than “measurements,” exceed the applicable criteria**
- **Added subsection 62-303.320(16), F.A.C., for assessment of the proposed turbidity criterion**
 - **Same text as for PL except references VL provision**



Proposed Revisions to Rule 62-303.430, F.A.C. (Biological Impairment)

- In paragraph (2)(a), clarified that an additional SCI will be collected for the biological health assessments if the average score is below 40
 - In cases where there are only two SCIs and there is > than a 20-point difference between the two scores
- In paragraph (2)(b), added provision to place a lake on Verified List if “either of the two most recent temporally independent LVI scores is less than 43” or if “either of the two most recent temporally independent LVI scores is less than 30”
- Also in paragraph (2)(b), clarified that an additional LVI will be collected if the average score is below 43
 - In cases where there are only two LVIs and there is greater than a 20-point difference between the scores



Revisions to Rule 62-303.450, F.A.C. (Assessments of Numeric Interpretations of Narrative Nutrient Criterion)

- **In subsection (1), updated reference to data sufficiency requirements to subsections “62-303.350(2)-(3), F.A.C.”**
- **In subsection (5), expanded trend assessment to include “nutrients” and revised assessment as described previously such that will list on VL if there is**
 - **A statistically significant increasing trend at 95 percent confidence level over both the POR and the most recent 7.5 years using the Mann-Kendall Trend Test, and**
 - **The slope of the trend over the most recent 7.5 years expressed in units per year is at least 20% of the difference between current levels and the applicable NNC**



Revisions to Rule 62-303.450, F.A.C. (Assessments of Numeric Interpretations of Narrative Nutrient Criterion)

(continued)

- **In subsection (8), added provision for data sufficiency to assess the POR trend assessment**
 - **Shall be at least 10 years with sufficient data to calculate AGMs**
 - **POR shall start in the most recent year with sufficient data and go as far back in time as possible as long as at least 50% of the years in the POR have sufficient data to calculate AGMs**
- **In subsection (9), added provision for data sufficiency to assess 7.5-year trend assessment**
 - **“there shall be at least 5 years with sufficient data to calculate AGMs.”**



Revisions to Rule 62-303.470, F.A.C. (Fish and Shellfish Consumption Use Support)

- **In paragraph (1)(a), revised the data sufficiency needed to place a waterbody on the Verified List from 12 fish to 8 fish**
 - **This is consistent with the FDOH fish data collection methodology**



Revisions to Rule 62-303.600, F.A.C. (Evaluation of Pollution Control Mechanisms)

- In subsection (1) addressing evaluation of pollution control programs (Cat 4b candidates), updated text to reflect changes in trend assessment
 - Added language to include waters with increasing trends in “nutrient response variables” and specifically reference VL trend assessment provision
 - Removed text that required “with a reasonable expectation that the waterbody will become impaired within 5 years” as no longer part of trend assessment
- In subsection (3) addressing waters on the SL for ongoing restoration programs (Cat 4e), added text noting how DEP will assess progress and list water on VL if insufficient progress



Revisions to Rule 62-303.700, F.A.C. (Listing Cycle)

- Clarified description of assessment cycle
 - Previously changed focus from “basins” to “all surface water” and **now made surface water plural**
 - Deleted “preliminary basin” since no longer use that term
 - Replaced reference to STORET with WIN, the new water quality database
 - Require data be loaded to WIN no later than “June 30” of the year of the assessment, rather than 60 days after the end of the verified period



Proposed Revisions to Rule 62-303.720, F.A.C. (Delisting Procedure)

- In paragraph (2)(k)2, clarified provision for NNC expressed as AGM or annual means not to be exceeded more than once in three years
 - Delist if magnitude of criterion met for three most recent consecutive years
- In paragraph (2)(k)5, added language to include NNC “expressed as a monthly average”
- In paragraph (2)(k)6, we will add language similar to paragraph (2)(k)2



Proposed Revisions to Rule 62-303.720, F.A.C. (Delisting Procedure)

- In paragraph (2)(k)7, revised provision for delisting waters listed as impaired for increasing trends in “nutrients”
 - If data shows that the trend is no longer statistically significant or the “slope of the trend over the most recent 7.5 years expressed in units per year is no longer at least 20% of the difference between current levels and the applicable numeric nutrient criterion”
 - Deleted language that the “water is no longer expected to become impaired within 5 years”



Questions?



Planned Revisions to Chapter 62-304, F.A.C.

- Quick reminder - Pursuant to Rule 62-302.531(2)(a), F.A.C., nutrient TMDLs that interpret the narrative water quality criterion for nutrients are considered changes to Florida's water quality standards
 - Are “primary site specific interpretation” or “Hierarchy 1 (H1)”
- No planned changes as part of TR



Economic Evaluation

- **As part of rulemaking, Department will conduct an economic evaluation of impact of rule changes**
 - **For new or revised criteria, will evaluate whether change will result in increased listing of impaired waters, new requirements for regulated sources, or if there will be additional violations for point sources**
 - **Part of Statement of Estimated Regulatory Costs (SERC)**
- **Need information about potential costs of treatment**



Schedule

- **Written comment period through May 19**
 - **Comments to Avril Wood-McGrath at**
 - **Avril.Wood-McGrath@FLORIDADEP.gov, or**
 - **2600 Blair Stone Road, Mail Station 6511, Tallahassee, FL 32399-2400**
- **Plan to bring to Environmental Regulation Commission (ERC) for adoption in late summer/early fall**
 - **45-day notice period prior to adoption hearing**



Public Comments

- To make a public comment, use the “raise hand” function and we will unmute you individually
 - Please provide your name and affiliation
- If you want to comment but don’t want to speak, you can type comment in question box
- We may need to limit time for individual comments depending on how many people want to comment
- And thanks in advance for your participation!

