



Triennial Review of Florida's Water Quality Standards

Division of Environmental Assessment &
Restoration/May 14-16, 2019



Agenda

Introduction

Purpose

Background on Triennial Review (TR)

Scope

Topics Currently Under Consideration

Chapter 62-4, F.A.C.

Chapter 62-302, F.A.C.

Chapter 62-303, F.A.C.

Chapter 62-304, F.A.C.

Economic Analysis

Tentative Schedule

Public Recommendations and Comments



Purpose

- Implement DEP's mission to protect, conserve and manage the state's natural resources
 - Water Quality Standards (WQS) describe the healthy conditions of waterbodies (what we are conserving and targets for restoration) and provide the means by which those conditions will be protected and managed
- Purposes of meeting/TR,
 - Continued improvements to the State's WQS
 - Share DEP's thoughts about potential improvements to Florida's WQS
 - Receive input and suggestions from the public to improve Florida's WQS



Background

- **Under the Federal Clean Water Act, states are required to periodically 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**



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 recent revisions to 40 CFR 131.20(a), States must explain basis for the decision if they decide not to adopt**



Scope

- **Notices of Rule Development included all rules with surface water quality standards**
 - **Chapters 62-4 (Permits)**
 - **Chapter 62-302 (Surface Water Quality Standards), Chapter 62-303 (Identification of Impaired Surface Waters, or “IWR”), and**
 - **Chapter 62-304 (Total Maximum Daily Loads)**
- **Published on March 29, 2019**
- **Notices listed all rule sections related to surface water quality standards**
 - **All surface water quality standards are open for potential revision and public comment**



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
- However, we have no planned changes at this time



Proposed Topics for Chapter 62-302, F.A.C.

- This is the main surface water quality standards rule, and entire chapter was listed in Notice
- Considering revision of marine & freshwater Cadmium criteria based on EPA recommendation
 - Marine criterion would decrease from 8.8 $\mu\text{g/L}$ to 7.9 $\mu\text{g/L}$
 - Freshwater criterion is an equation based on hardness and would increase ~ 3 fold, depending on hardness
 - from 0.27 $\mu\text{g/L}$ to 0.72 $\mu\text{g/L}$ at hardness of 100 mg/L



Proposed Topics for Chapter 62-302, F.A.C.

(continued)

- **Plan to clarify application of “Ten percent threshold value” (TPTV) for bacteria criteria**
 - Enterococci and E. coli criteria adopted in 2015 include both a monthly geometric mean value and a TPTV value not to be exceeded in 10 percent or more of the samples in a given month
- **Has been confusion regarding how to handle TPTV if less than 10 samples**
 - Would clarify TPTV is assessed as a single sample maximum if less than 10 samples



Proposed Topics for Chapter 62-302, F.A.C.

(continued)

- Considering revision of turbidity criterion to better protect corals and hard bottom communities and coastal resiliency
 - Current criterion (29 NTU above natural background) was not designed to protect coral, but insufficient current data to set coral-specific numeric criterion
- Exploring a narrative approach that would better protect all waters and specifically protect corals



Proposed Topics for Chapter 62-302, F.A.C.

(continued)

- May add text (narrative) that applies to all waters
“nor shall turbidity levels be increased to levels that negatively affect designated uses or result in increased sedimentation or reduced light transmission to the point that the normal growth, function, reproduction, or recruitment of aquatic life is impaired,” and
- Also add language that would not allow turbidity to increase above background conditions within areas with corals or hard bottom communities
 - With “background conditions” taking into account the natural variability of turbidity levels



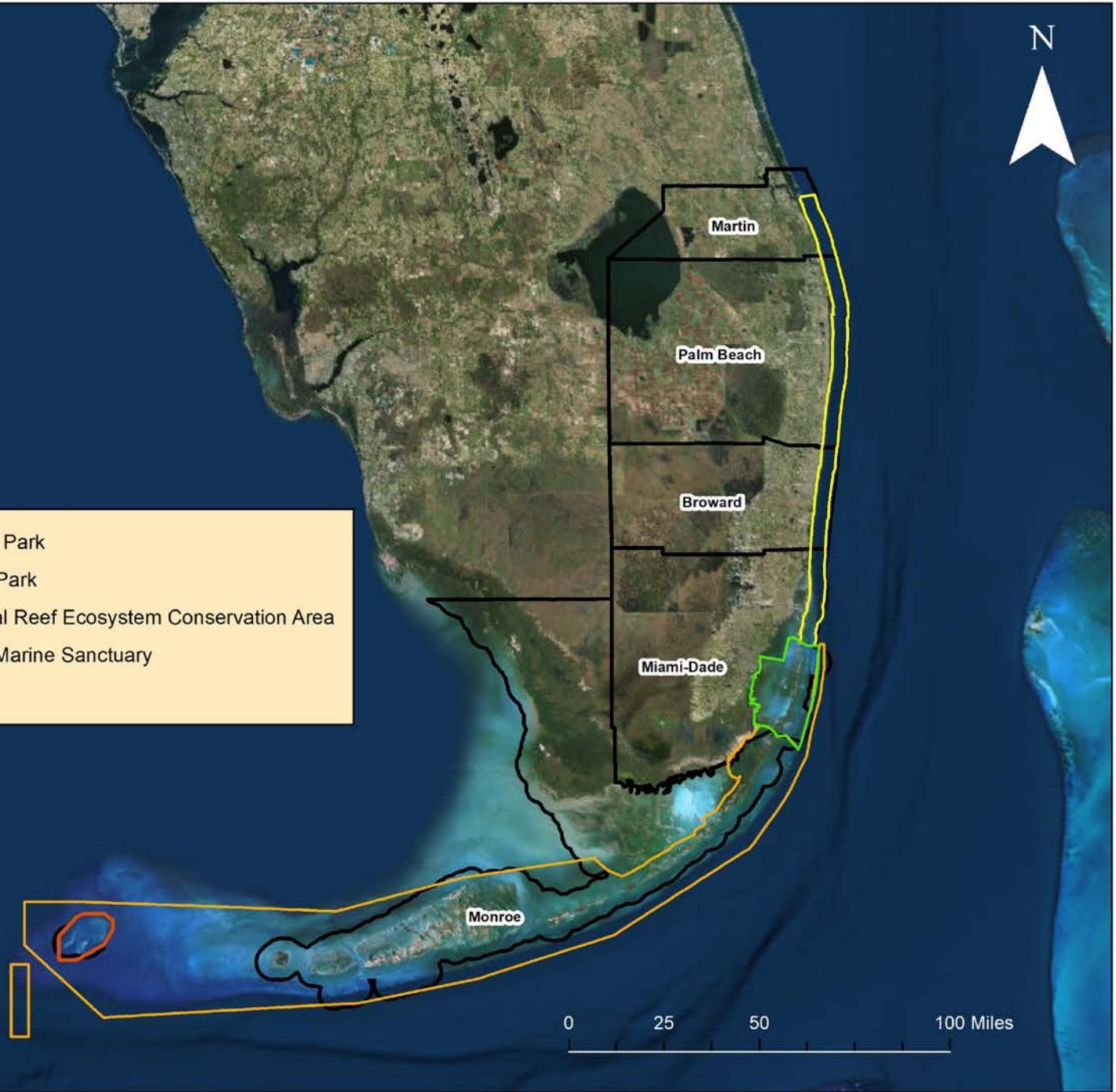
Proposed Topics for Chapter 62-302, F.A.C.

(continued)

- If we take this approach, would include a document, which would be incorporated by reference, to describe how background levels would be determined and implemented in both 303(d) and permitting
- Would either incorporate a map by reference to show where criteria applies or the narrative would apply wherever corals/hard bottom are found



-  Biscayne Bay National Park
-  Dry Tortugas National Park
-  Southeast Florida Coral Reef Ecosystem Conservation Area
-  Florida Keys National Marine Sanctuary
-  Counties





Proposed Topics for Chapter 62-302, F.A.C.

(continued)

- **Want public input on EPA's recommended Selenium criteria**
- **Includes four components**
 - **Fish egg-ovary,**
 - **Fish whole body, and**
 - **30-day average water column concentration, which differ in lakes and streams systems**
 - **Intermittent exposure equation for the water column**
- **Expectation is that States adopt all components, but EPA has not finalized the Implementation Guidance and there are outstanding implementation issues**



Proposed Topics for Chapter 62-302, F.A.C.

(continued)

- **Considering updates to the “Numeric Nutrient Criteria Implementation Document,” which was incorporated by reference in 2012**
 - **Important document, and we want to update to clarify key issues, streamline document, and make some corrections**



Proposed Topics for Chapter 62-302, F.A.C.

(continued)

- **Changes under consideration include**
 - **Removal of references to “weight of evidence approach”**
 - **Clarification of evaluation of floral metrics (for NNC achievement) and conducting floral evaluations during different hydrologic seasons**
 - **Updates to floral and faunal metric decision keys**
 - **Clarification of evaluation of stream chlorophyll *a* values that fall between 3.2 and 20 µg/L**
 - **Also adds options for the evaluation**



Proposed Topics for Chapter 62-302, F.A.C.

(continued)

- **Revising approach for evaluating trends**
- **Addition of an alternative approach to determine perenniality of Florida streams**
 - **New sub-section allows use of the HydroBioGeomorphic (HBG) classification system developed by John Kiefer of Amec Foster Wheeler, Inc. (AMEC)**
 - **Non-perennial streams qualify for exclusion from definition of stream**
- **Restructuring and general wordsmithing of document**



Proposed Topics for Chapter 62-302, F.A.C.

(continued)

- **Evaluating waters listed as impaired for dissolved oxygen (DO) due to natural conditions (Cat 4c) as candidates for Type II Site Specific Alternative Criteria (SSACs)**
 - **Minimum of 50 DO measurements**
 - **Demonstrate healthy biology using Stream Condition Index scores**
 - **Focus on waters not highly influenced by anthropogenic inputs**
 - **Considering calculating the SSACs based on 10th percentile DO saturation of existing healthy condition**



Proposed Topics for Chapter 62-302, F.A.C.

(continued)

- Also plan on variety of miscellaneous, small-scale edits, and variety of administrative changes, including



Proposed Topics for Chapter 62-302, F.A.C.

(continued)

- In response to 2015 revisions to federal WQS regulations, need to incorporate compliance schedule authorization provisions into Standards
- Propose to either
 - Add references in Rule 62-302.300, F.A.C., to compliance schedule authorization provisions in Rules 62-4 and 62-620, F.A.C., or
 - Submit Rules 62-4.160(10) and 62-620.620(6), F.A.C., to EPA as part of Florida's water quality standards



Proposed Topics for Chapter 62-302, F.A.C.

(continued)

- **Propose to adopt maps showing Class II waters (shellfish propagation or harvesting)**
 - **In 2015, we added Class II waters in 10 counties and adopted maps by reference for all counties with new Class II areas**
 - **Plan to adopt maps for all “remaining” counties with Class II areas**



Proposed Topics for Chapter 62-302, F.A.C.

(continued)

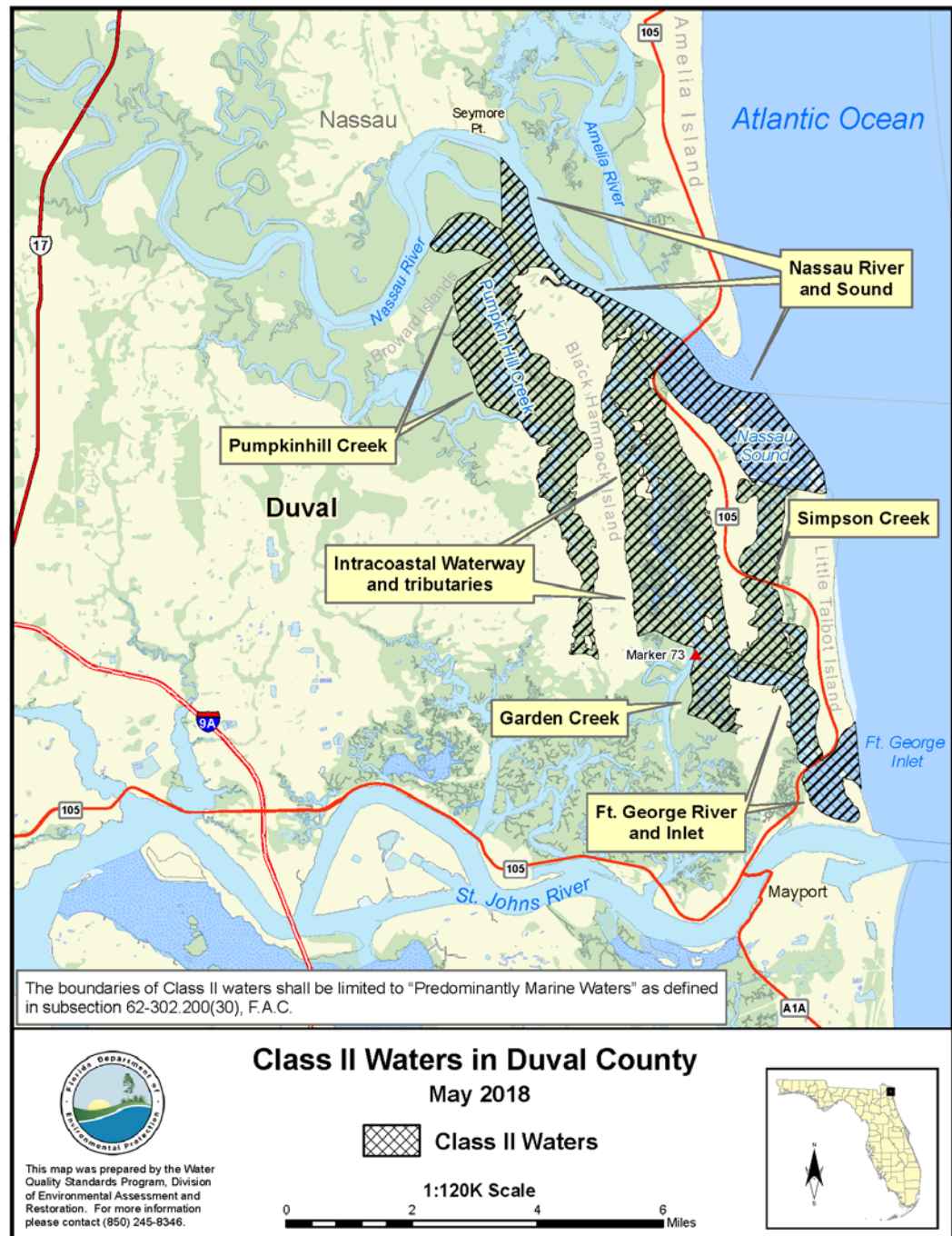
- Do not intend to change classification of waters, but paragraph 62-302.400(16)(b), F.A.C., was revised in 2013 to limit the boundaries of Class II waters to “predominantly marine waters”
- Maps will reflect this change and implement paragraph 62-302.400(16)(a), F.A.C., which states that landward extent of classification is landward extent of waters of the state, which includes wetlands
- Will use GIS resources to estimate extent of predominantly marine waters and wetlands



Example 1 Duval County

Rule Language

- Ft. George River and Simpson Creeks – Ft. George Inlet north to Nassau Sound.
- Intracoastal Waterway and Tributaries – Confluence of Nassau and Amelia Rivers south to Flashing Marker 73 thence eastward along Ft. George River to Ft. George Inlet and includes Garden Creek.
- Nassau River and Creek – From the mouth of Nassau Sound, (a line connecting the northeasternmost point of Little Talbot Island to the southeasternmost tip of Amelia Island westerly to a north-south line through Seymore Point.
- Pumpkinhill Creek





Example 2 Lee County

Rule Language

- Charlotte Harbor
- Matanzas Pass, Hurricane Bay, and Hell Peckish (Peckney) Bay – From San Carlos Bay to a line from Estero Island through the southernmost tip of the unnamed island south of Julies Island, northeastward to the southernmost point of land in section 27, T46S, R24E.
- Matlacha Pass – Charlotte Harbor to San Carlos Bay.
- Pine Island Sound – Charlotte Harbor to San Carlos Bay.
- San Carlos Bay – From a line from point Ybel to Bodwitch Point northward to a line from the eastern point at the mouth of Punta Blanca Creek, southeast through the southern point of Big Shell Island to the mainland and westward to Pine Island Sound.





Proposed Topics for Chapter 62-302, F.A.C.

(continued)

- **Plan to update other selected maps that were previously incorporated by reference**
 - **Update map for coastal NNC segments, and**
 - **Few minor changes to Estuary Nutrient Region maps**

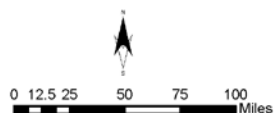


Current Map



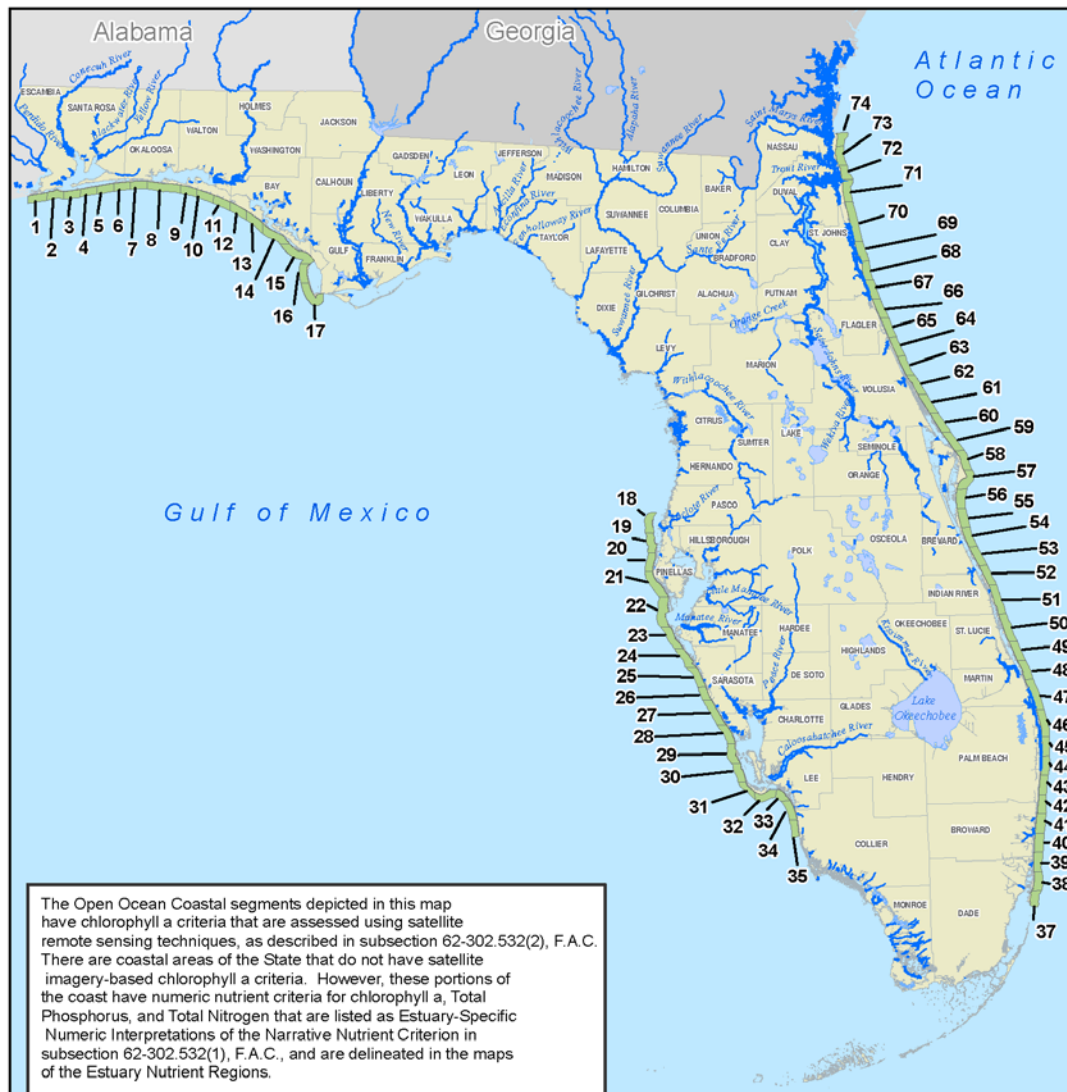
Florida Coastal Segments

May 13, 2013



This map was prepared by Devan R. Cobb with the Division of Environmental Assessment and Restoration.
For more information please contact devan.r.cobb@dep.state.fl.us or kenneth.weaver@dep.state.fl.us





The Open Ocean Coastal segments depicted in this map have chlorophyll *a* criteria that are assessed using satellite remote sensing techniques, as described in subsection 62-302.532(2), F.A.C. There are coastal areas of the State that do not have satellite imagery-based chlorophyll *a* criteria. However, these portions of the coast have numeric nutrient criteria for chlorophyll *a*, Total Phosphorus, and Total Nitrogen that are listed as Estuary-Specific Numeric Interpretations of the Narrative Nutrient Criterion in subsection 62-302.532(1), F.A.C., and are delineated in the maps of the Estuary Nutrient Regions.

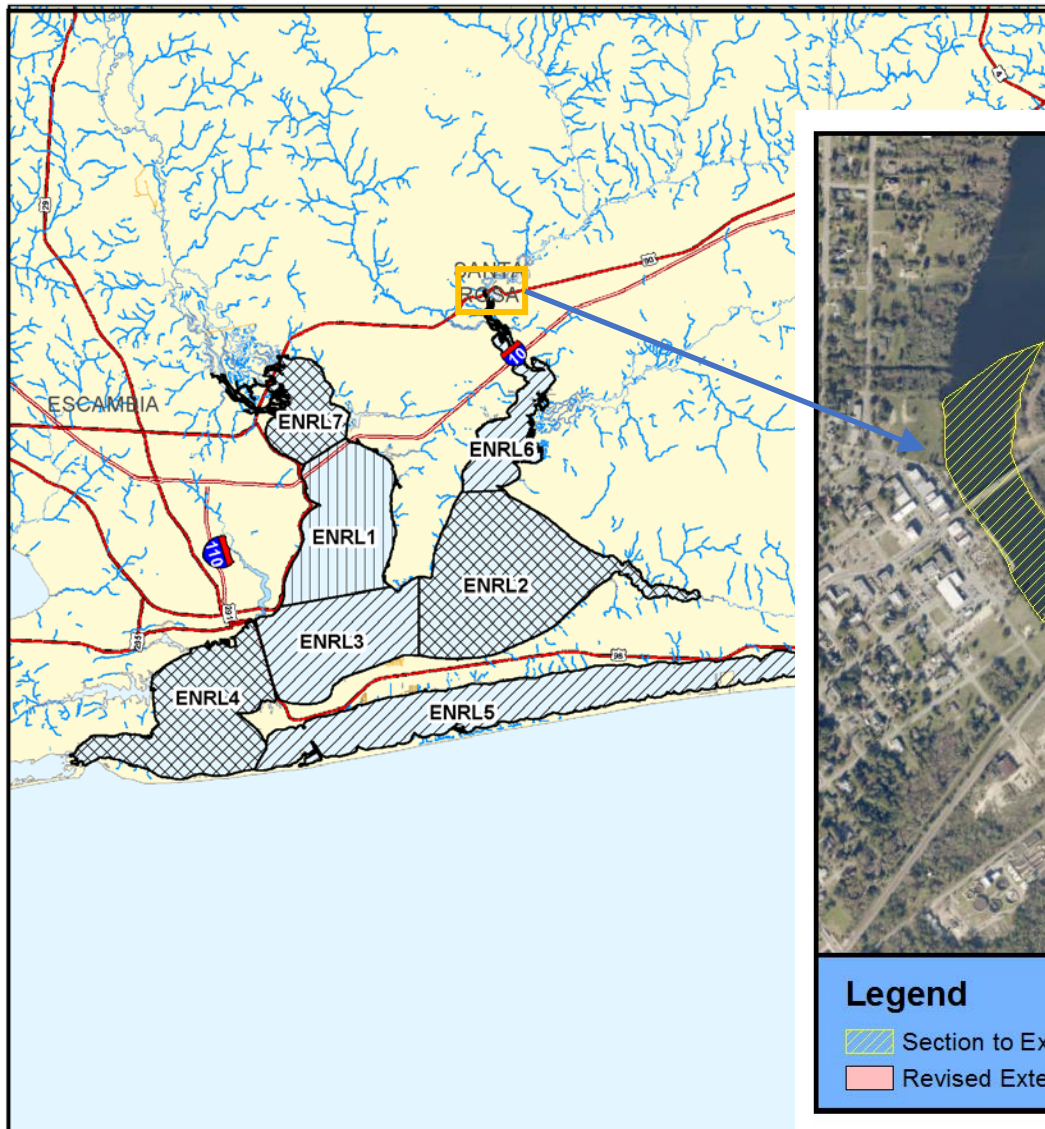
Florida Coastal Segments

November 2nd, 2018

Open Ocean Coastal Segments

0 20 40 80 120 Miles





Legend

Revision to the Blackwater Bay ENR

-  Section to Exclude
-  Revised Extent

0.25

Miles

Estuary Nutrient Regions

Label, Estuary, Segment

-  ENRL1, Pensacola Bay, Lower Escambia Bay
-  ENRL2, Pensacola Bay, East Bay
-  ENRL3, Pensacola Bay, Upper Pensacola Bay
-  ENRL4, Pensacola Bay, Lower Pensacola Bay
-  ENRL5, Pensacola Bay, Santa Rosa Sound
-  ENRL6, Pensacola Bay, Blackwater Bay
-  ENRL7, Pensacola Bay, Upper Escambia Bay

Estuary Nutrient Regions

October 2014

Pensacola Bay



0 2.25 4.5 9 13.5 18 Miles





Proposed Topics for Chapter 62-302, F.A.C.

(continued)

- **Revise references to definitions of “canals” and “channels” in the descriptions of Special Waters OFWs listed in Rule 62-302.700, F.A.C.**
 - **Current reference for definition of canals is subsection 62-312.020(3), F.A.C., which has been repealed, and propose to change reference to 403.803(2), Florida Statutes (F.S.), which is the statutory definition**
 - **Current reference for definition of channels is subsection 62-312.020(4), F.A.C., and propose to change to 403.803(3), F.S.**
- **Definitions very similar**



Proposed Topics for Chapter 62-303, F.A.C.

- Entire chapter was listed in notice, but few changes anticipated
 - Revise definition of “predominantly marine waters” and “predominantly fresh waters”
 - Reference new water quality database Water Information Network (WIN)
 - Clarify listing thresholds for both Planning List and Verified List based on bioassessments
 - Add text to assess more expressions of NNC
 - Monthly, seven-year average, and salinity-dependent criteria
 - Define “limited consumption advisory”



Proposed Topics for Chapter 62-303, F.A.C.

(continued)

- **Revise “trend assessment” to no longer project future nutrient or chlorophyll *a* concentrations**
- **Refine/streamline description of listing cycle (planning and verified assessment periods)**
- **Miscellaneous, small-scale edits**



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

- 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)”



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

(continued)

- **130 nutrient TMDLs (WBID*s) have been approved by EPA as changes to Florida water quality standards**
- **Additional 23 TMDLs (WBIDs) awaiting EPA approval**
 - **See Handout**

***Waterbody Identification**



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

(continued)

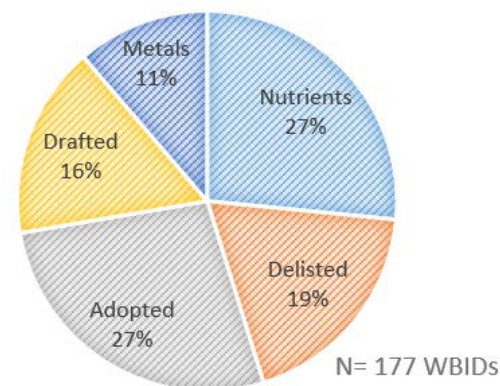
Will be separate “streamlining” rulemaking

- To shorten the rule and help ensure uniformity, duplicative text will be consolidated into one location in the rule
 - Rule 62-304.100, F.A.C.
 - Examples include text noting Margin of Safety is implicit and not abating natural conditions
- Clean-up of Total Coliform TMDLs
 - 62-304.415 (Lower St. Johns River Basin TMDLs)
 - 62-304.500 (Ocklawaha River Basin TMDLs)
 - 62-304.505 (Middle St. Johns River TMDLs)
 - 62-304.610 (Hillsborough River Basin TMDLs)



TMDL Prioritization Update

TMDL WORKLOAD 2015-2022 UPDATED DEC. 2018



303(d) Long-Term Vision announced in Dec. 2013

- Provided a framework for greater efficiency & success in achieving WQ Goals
- Removes the “one size fits all” expectations
- Ensures accountability through new measures (areas addressed by TMDLs & recognition of TMDL alternatives)
- Implemented in FFY16 (Oct. 2015)
<https://floridadep.gov/sites/default/files/PriorityFrameworkDocument.pdf>



Check-In period (re-evaluate) FFY19

- Perform the original analysis but with updated data and layers
- Top ranking HUCs selected has not changed (15 total)
- WBIDs added are concentrated in the Kissimmee River HUC, Fisheating Creek HUC and Taylor Creek HUC
- Aligns with Governor Executive Order #19-12 (*Achieving More Now For Florida's Environment*)



TMDL Resources

- EPA site for the 303(d) long term vision
<https://www.epa.gov/tmdl>
- Florida DEP site for TMDLs
<https://floridadep.gov/dear/water-quality-evaluation-tmdl>
- Florida DEP interactive map gallery
<http://fdep.maps.arcgis.com/home/index.html>

Questions and comments on TMDLs/Chapter 62-304 can be addressed to:

Erin Rasnake

Program Administrator

Erin.Rasnake@FloridaDEP.gov

Ansel Bubel

Environmental Administrator

Ansel.Bubel@FloridaDEP.gov



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)**
- **Once we have more details on any new or revised criteria, we will solicit information about potential costs of treatment**



Schedule

- **Written comment period through end of month**
 - **Comments to Kaitlyn Sutton at**
 - **Kaitlyn.Sutton@FLORIDADEP.gov, or**
 - **2600 Blair Stone Road, Mail Station 6511,
Tallahassee, FL 32399-2400**
- **Hold Public Workshops later this summer**
 - **Would like input on suggested locations**
 - **Will provide new/revised criteria, incorporated materials, rule language and maps**
- **Bring to Environmental Regulation Commission (ERC) for adoption by end of calendar year**
 - **45-day notice period prior to adoption hearing**



Public Comments

- **Public Comments**
 - Any recommendations on scope of TR
 - Comments on any issue identified in this presentation
 - Suggestions on any additional issues or topics to include in this TR or future WQS revisions
- Please provide your name and affiliation
 - Also need contact information if you didn't sign in

