



SARASOTA BAY
ESTUARY PROGRAM
Protecting Our Water Heritage

Sarasota Bay Estuary Program
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November 29, 2005

Mr. Drew Bartlett
Chief
Standards, Monitoring and TMDL Branch
US EPA, Region IV
61 Forsyth Street, SW
Atlanta, Georgia 30303-3104

Subject: Comments on Proposed TMDLs

Dear Mr. Bartlett:

On November 18, 2005, the Sarasota Bay Estuary Program (SBEP) Policy Board discussed the proposed Total Maximum Daily Loads (TMDLs) for the Sarasota Bay area {WBIDs -1982A (South Creek), 1984 (Catfish Creek), 1984A (North Creek), 1975A (Clower Creek), and 1975 (Elligraw Bayou)}. The Policy Board by motion requested that staff provide comments accordingly to US EPA using the following guidelines.

- 1. The WBID boundaries need to be corrected to match watersheds identified as potentially impaired in the 1998 303d report and the consent decree.**
- 2. The boundaries for tidal basins, creeks and bayous also need to be established, and clearly defined and mapped in relation to the 1998 303d list.**
- 3. A monitoring program can be established in those WBIDs (creeks and bayous) to determine impairment once boundaries and watersheds are identified.**
- 4. Both Bay waters adjacent to and freshwater portions within most of the WBIDs under review have been assessed.**

The Policy Board also reviewed and discussed comments provided by FDEP (Attachment #1) indicating a commitment to scientific analysis in the evaluation and development

process. Additionally, the Policy Board discussed the definitions in the State Impaired Waters Rule (IWR) regarding boundaries for tidal basins and freshwater creeks and specifically the 2.5 ppt salinity criteria dividing freshwater and estuarine systems; these segment boundaries within watersheds need to be established for strategic water quality assessment. A copy of the IWR definition section is provided (Attachment #4).

Using this framework, the SBEP has reviewed the proposed TMDLs in the Sarasota Bay basin (1975, 1975A, 1982A, 1984 and 1984A). A location map (Attachment #2) is provided for reference.

The SBEP is committed to partnering in the development and implementation of an appropriate monitoring program for each of these WBIDs once the basin boundaries are clearly established. The SBEP Policy Board has appropriated funds specifically for this purpose.

Elligraw Bayou (1975)

WBID 1975 encompasses portions of three watersheds: Matheny Creek (labeled 1975B for reference because a very narrow WBID actually exists for Matheny Creek which does not include the watershed), Elligraw Bayou and Catfish Creek (Attachment #2 and #3). The watersheds drain to two main Bay segments: Roberts Bay (1968D) and Little Sarasota Bay (1968E) as shown in the map provided (Attachment #2).

Elligraw Bayou is, therefore, a small sub-set of WBID 1975 as described by FDEP (attachment #1, item #2). A TMDL for nutrients and dissolved oxygen only needs to be considered for the Elligraw Bayou portion of the WBID 1975 because this is the only portion named in the consent decree.

The Matheny Creek portion of WBID 1975 is also included in the Roberts Bay (1968D) TMDL for historic chlorophyll with a proposed .6 % load reduction for nitrogen. A very low water quality target of 7.2 ug/l for chlorophyll has been set for Roberts Bay; the state standard is 11 ug/l. The Roberts Bay system was impaired due to exceeding the .1 ug/l chlorophyll target in 2004.

Little Sarasota Bay (1968E) which receives flow from Elligraw Bayou is not impaired for nutrients according to FDEP and SBEP analysis. The freshwater portion of Elligraw Bayou (draining to 1968E) is a drainage ditch with intermittent flow and would not be characterized as a free flowing stream. Therefore, consideration needs to be given as to the validity of a TMDL for the freshwater portion of this system. The bayou is not a free-flowing stream (attachment #4, section 14) as defined in the IWR (Chapter 62-303-200-14).

Clowers Creek (1975A)

EPA recommends delisting for coliform bacteria.

South Creek (1982A)

South Creek is a small stream which flows to Blackburn Bay (1968F) in lower Sarasota Bay (Attachment #2)).

Concerns have been raised as to whether “creek” systems should be characterized as estuarine under the IWR. Estuarine systems are characterized in the IWR as regions of interaction between rivers and near shore-ocean waters, where tidal action and river flow mix fresh and salt water. Such areas include bays, mouths of rivers and lagoons { Attachment #4, section 5). Although “creeks” are characterized as “streams”, and “streams” as “rivers” in the IWR, it is uncertain as to whether the tidal portions of creeks should be assessed independently for impairment under the consent decree or as a part of the coastal lagoonal system receiving flow.

A “creek” is defined in Chapter 62-303.200-17 of the IWR as “free-flowing, predominately fresh water system”; whereas marine and estuarine waters are defined as surface waters with chloride concentrations greater than 1500 milligrams per liter (Attachment #4, sections 14 and 5). Therefore, a creek system is classified as free flowing, and having chloride concentrations less than 1500 milligrams per liter (roughly equivalent to 2.5 parts per thousand, salinity).

South Creek has been assessed by the SBEP and FDEP and determined not to be impaired for nutrients (in the predominately freshwater portions) as described in the IWR.

A boundary in the South Creek system needs to be set at the 2.5 ppt divide between the freshwater and estuarine system. Blackburn Bay (1968F), which receives flow from South Creek, is impaired for historic chlorophyll with a proposed target set at 4.5 ug/l for chlorophyll; the state standard is 11 ug/l. A TMDL will be established in 2009 for Blackburn Bay (1968F) which will include South Creek (Attachment #2).

Catfish Creek (1984) and North Creek (1984A)

North Creek and Catfish Creek drain to an unnamed tidal basin complex (Attachment #2) adjacent to the former location of Midnight Pass in Little Sarasota Bay (1968E).

Similar to South Creek, the North Creek (1984A) watershed was determined by the SBEP and FDEP not to be impaired for nutrients. There was not enough data to evaluate impairment on Catfish Creek (1984). Under the consent decree, Catfish Creek requires a TMDL for nutrients.

A decision needs to be made on combining the tidal basin complex for analysis or incorporating the basin into the Little Sarasota Bay WBID. The SBEP recommends an independent WBID.

A monitoring program is planned to determine impairment in the creek system(s) once boundaries are corrected and formally established.

Summary

The following summarizes the comments:

- Most of WBID 1975 (Elligraw Bayou) has been incorporated into the nutrient TMDL for Roberts Bay 1968D. The appropriateness of a freshwater TMDL for a ditch (Elligraw Bayou) needs to be reassessed.
- North Creek (1984A) and South Creek (1982) have been assessed and determined not to be impaired.
- South Creek (1982A) will be included in the TMDL for Blackburn Bay (1968F).
- Catfish Creek requires a TMDL with revisions.
- A decision needs to be made on the appropriateness of separate TMDLs for very small tidal basin leading to the Bay: North, South and Catfish Creek. The attention should focus on the Catfish/North Creek tidal complex that is presently not covered under a TMDL.

In conclusion, the SBEP is committed to developing a monitoring program in each segment to characterize water quality conditions. The Sarasota Bay system, however, needs to be managed at a slightly larger scale in relation to proposed WBID size.

Sincerely,



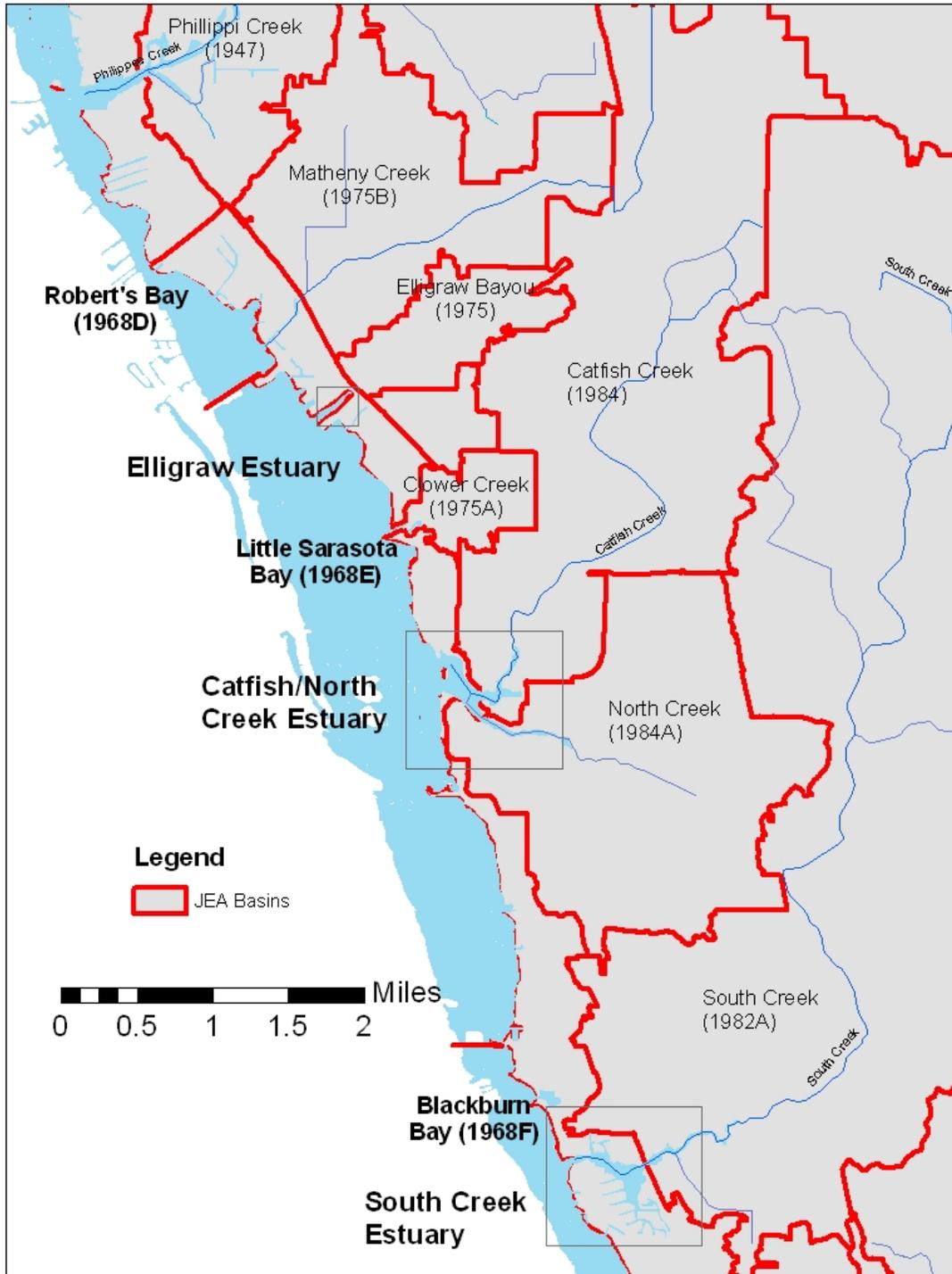
Mark Alderson, Executive Director
Sarasota Bay Estuary Program

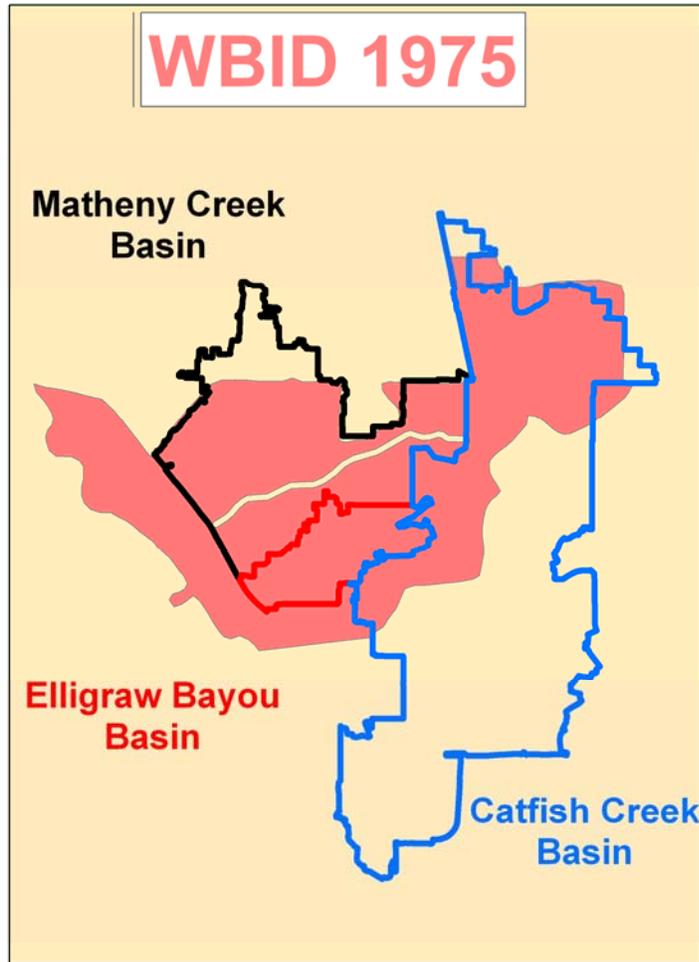
cc: Policy and Management Board

Attachment #1 – Received November 17, 2005

1. DEP revised the state's wbid and monitoring station coverage in 2005 to correct numerous errors identified by the SBEP in the wbid boundaries, wbid names, wbid numbers, and wbid station assignments.
2. These revisions need to be reflected in the EPA TMDLs. The revisions are not reflected in the EPA TMDL for Eligraw Bayou, which was incorrectly identified by DEP as Matheny Creek (wbid 1975). To correct this error, DEP has corrected the wbid name and number and reassigned the stations for Eligraw Bayou to Matheny Creek. Note: there are no stations sampled in Eligraw Bayou.
3. At the request of the SBEP, the DEP revised the state's wbid and monitoring station coverage in 2005 to properly reflect water quality conditions in some tidal basins (evaluated for impairment via FDEP). The revisions resulted in the subdivision of existing wbids into freshwater and estuarine segments.
4. Similar revisions to the wbid coverage and the assignment of monitoring stations need to be made for the following EPA TMDLs: (North Creek, South Creek and Catfish Creek).

Attachment 2





Attachment #4. Definitions from IWR FS 62-303.

62-303.200 Definitions.

As used in this chapter:

- (1) "BioRecon" shall mean a bioassessment conducted following the procedures outlined in "Protocols for Conducting a Biological Reconnaissance in Florida Streams," Florida Department of Environmental Protection, March 13, 1995, which is incorporated by reference.
- (2) "Clean techniques" shall mean those applicable field sampling procedures and analytical methods referenced in "Method 1669: Sampling Ambient Water for Trace Metals at EPA Water Quality Criteria Levels, July 1996, USEPA, Office of Water, Engineering and Analysis Division, Washington, D.C.," which is incorporated by reference.
- (3) "Department" or "DEP" shall mean the Florida Department of Environmental Protection.
- (4) "Designated use" shall mean the present and future most beneficial use of a body of water as designated by the Environmental Regulation Commission by means of the classification system contained in Chapter 62-302, F.A.C.
- (5) "Estuary" shall mean predominantly marine regions of interaction between rivers and nearshore ocean waters, where tidal action and river flow mix fresh and salt water. Such areas include bays, mouths of rivers, and lagoons.
- (6) "Impaired water" shall mean a water body or water body segment that does not meet its applicable water quality standards as set forth in Chapters 62-302 and 62-4, F.A.C., as determined by the methodology in Part III of this chapter, due in whole or in part to discharges of pollutants from point or nonpoint sources.
- (7) "Lake Condition Index" shall mean the benthic macroinvertebrate component of a bioassessment conducted following the procedures outlined in "Development of Lake Condition Indexes (LCI) for Florida," Florida Department of Environmental Protection, July, 2000, which is incorporated by reference.
- (8) "Natural background" shall mean the condition of waters in the absence of man-induced alterations based on the best scientific information available to the Department. The establishment of natural background for an altered waterbody may be based upon similar unaltered waterbody or on historical pre-alteration data.
- (9) "Nuisance species" shall mean species of flora or fauna whose noxious characteristics or presence in sufficient number, biomass, or areal extent may reasonably be expected to prevent, or unreasonably interfere with a designated use of those waters.
- (10) "Physical alterations" shall mean human-induced changes to the physical structure of the water body.
- (11) "Planning list" shall mean the list of surface waters or segments for which assessments will be conducted to evaluate whether the water is impaired and a TMDL is needed, as provided in subsection 403.067(2), F.S.
- (12) "Pollutant" shall be as defined in subsection 502(6) of the CWA. Characteristics of a discharge, including dissolved oxygen, pH, or temperature, shall also be defined as pollutants if they result or may result in the potentially harmful alteration of downstream waters.

(13) "Pollution" shall be as defined in subsection 502(19) of the CWA and subsection 403.031 (2), F.S.

14 "Predominantly marine waters" shall mean surface waters in which the chloride concentration at the surface is greater than or equal to 1,500 milligrams per liter.

(15) "Secretary" shall mean the Secretary of the Florida Department of Environmental Protection.

(16) "Spill" shall mean the short-term, unpermitted discharge to surface waters, not to include sanitary sewer overflows or chronic discharges from leaking wastewater collection systems.

(17) "Stream" shall mean a free-flowing, predominantly fresh surface water in a defined channel, and includes rivers, creeks, branches, canals, freshwater sloughs, and other similar water bodies.

(18) "Stream Condition Index" shall mean a bioassessment conducted following the procedures outlined in "Development of the Stream Condition Index (SCI) for Florida," Florida Department of Environmental Protection, May, 1996, which is incorporated by reference.

(19) "Surface water" means those waters of the State upon the surface of the earth to their landward extent, whether contained in bounds created naturally or artificially or diffused. Water from natural springs shall be classified as surface water when it exits from the spring onto the earth's surface.

(20) "Total maximum daily load" (TMDL) for an impaired water body or water body segment shall mean the sum of the individual wasteload allocations for point sources and the load allocations for nonpoint sources and natural background. Prior to determining individual wasteload allocations and load allocations, the maximum amount of a pollutant that a water body or water segment can assimilate from all sources without exceeding water quality standards must first be calculated. A TMDL shall include either an implicit or explicit margin of safety and an consideration of seasonal variations.

(21) "Verified list" shall mean the list of impaired water bodies or segments for which TMDLs will be calculated, as provided in subsection 403.067(4), F.S., and which will be submitted to ERA pursuant to paragraph 303(d)(1) of the CWA.

(22) "Water quality criteria" shall mean elements of State water quality standards, expressed as constituent concentrations, levels, or narrative statements, representing a quality of water that supports the present and future most beneficial uses.

(23) "Water quality standards" shall mean standards composed of designated present and future most beneficial uses (classification of waters), the numerical and narrative criteria applied to the specific water uses or classification, the Florida antidegradation policy, and the moderating provisions (mixing zones, site-specific alternative criteria, and exemptions) contained in Chapter 62-302, F.A.C., and in Chapter 62-4, F.A.C., adopted pursuant to Chapter 403, F.S.

(24) "Water segment" shall mean a portion of a water body that the Department will assess and evaluate for purposes of determining whether a TMDL will be required. Water segments previously evaluated as part of the Department's 1998 305(b) Report are depicted in the map titled "Water Segments of Florida," which is incorporated by reference.

(25) "Waters" shall be those surface waters described in Section 403.031 (11), Florida Statutes.

Specific Authority 403.061, 403.067, FS. Law Implemented 403.062, 403.067, FS.
History-New 6-10-02.