Amendment to Florida's Statewide Mercury Total Maximum Daily Load (TMDL)
All Counties, Florida
TMDL ID FL53320AMD_2024

A. TMDL Background

On November 23, 2013, the Environmental Protection Agency approved a statewide TMDL prepared by the Florida Department of Environmental Protection (FDEP) to address mercury impairments in Florida waters. On September 16, 2014, the EPA amended its decision to include additional waterbodies submitted by FDEP as an appendix to the TMDL. The amendment included marine waterbodies originally intended to be covered under the mercury TMDL, as they were included in the development of the TMDL, but that, due to an oversight, were not included in the original TMDL report submitted to the EPA for approval. On November 29, 2017, the EPA amended its decision to add 25 more waterbodies to the list of 1,132 waters that are verified as impaired for mercury in the appendix to the TMDL. On March 9, 2022, the EPA amended its decision to add 367 more waterbodies to the list. On July 11, 2023, the EPA amended its decision to add 35 more waterbodies to the list that are verified as impaired for mercury in the appendix to the TMDL.

The TMDL target in the original TMDL report was based on fish consumption, since that is a primary source of human exposure to mercury. The statewide TMDL was ultimately represented as percent reductions and was derived under the assumption that there was a linear relationship between mercury emitted, concentration of mercury in the water column and mercury concentrations in fish tissue (the precise relationship can vary between species).

The statewide mercury TMDL allocations approved by the EPA are as follows:

Parameter	**TMDL** (% reduction)	**Wasteload Allocation for Wastewater (kg/year)**	**Wasteload Allocation for NPDES Stormwater**	**Load Allocation** (% **reduction)**	**Margin of Safety**
Mercury	86	23 kg*	**	86	Implicit

*Based on all readily available data, the Department estimated the current permitted mercury load being discharged to waters of the state. This value represents less than 0.5 % of the total mercury load from point and nonpoint sources in Florida. Mercury minimization is expected for major facilities.

**NPDES MS4 Permits may require reductions to meet the TMDL goal if sources of mercury under the direct control of a MS4 permittee or co-permittee are found to exist.

B. Purpose of Proposed Amendment:

The current amendment, submitted to the EPA on January 14, 2025, updates the July 2023 analysis and addresses the addition of 53 Waterbody Identification numbers (WBIDs) to the mercury TMDL. This amendment will add additional Florida Waterbodies shown in Table 1 which are verified as impaired for mercury (in fish tissue) from the Biennial Assessment 2022-2024 adopted on August 16, 2024, for

the following reasons:

- WBID Resegmentation - new information or water quality data were used to more accurately redraw the WBID boundaries, which resulted in new WBIDs being created.
- Meets Data Sufficiency - new information or water quality data were available to assess the waterbody.

C. Justification for Revision

The main assumptions used in the development of the original TMDL remain applicable for the 53 WBIDs addressed by this action.

The submittal states that since TMDL adoption through June 30, 2022; (1) no existing air point sources had increased their permitted mercury air emissions, and (2) all point sources of mercury air emissions had been included in the TMDL atmospheric deposition modeling conducted. Since June 30, 2022, no existing point sources of air emissions have had modifications to increase their permitted mercury emission rates.

Additionally, no new point source dischargers (not accounted for in original model) were identified. However, in the March 2022 update, there was one new permitted source of mercury air emissions, identified as Nucor Steel, Inc., which received a FDEP Permit in January 2024, in Frostproof, Florida. The facility is within 10 km of one mercury (in fish tissue) impaired waterbody, Lake Lotela (WBID 1813B). The department had ongoing coordination with the Florida Fish and Wildlife Conservation Commission for the collection of additional fish tissue data from waterbodies across the state and with the Florida Department of Health (FDOH) to receive updates on waterbodies designated with a fish consumption advisory. The multi-agency coordination effort included new fish tissue data collection for Lake Lotela which included 60 samples from four species and FDOH confirmed that mercury (in fish tissue) remained impaired. The department will provide additional follow up for the upcoming Biennial Assessment 2024-2026 to determine whether revisions are needed to the statewide mercury TMDL update and Verified List of Impaired Waters. The EPA agrees to FDEP's request to leave WBID 1813B in category 4a pending reanalysis of the applicability of the TMDL by 2026.

The FDEP confirmed via email on February 11, 2025, that it had reviewed the discharge and mercury monitoring results for wastewater facilities having mercury monitoring requirements since the 2020-2022 Biennial Assessment. Their analysis indicated that the wastewater discharge conditions used to establish the wasteload allocation (WLA) for the statewide mercury TMDL still apply.

Therefore, the existing statewide TMDL also applies to the WBIDs identified in the table 1 of this document.

D. Revised TMDL Allocations

This amendment does not change the TMDL allocations approved in the original TMDL.

E. Public Participation

This amendment presents no new information nor involves any changes to the sources of mercury pollution, LA or WLA. Therefore, public notice of this action was not required. Nevertheless, all WBIDs referenced in this submittal were public noticed as removals from the 303(d) List through the impaired waters listing process.

F. Conclusion

After a full and complete review, the EPA is approving the amendment to Florida's Statewide Mercury TMDL.

Table 1. List of additional Florida Waterbodies verified as impaired for mercury (in fish tissue). The list included WBIDS from the Biennial Assessment 2022-2024 adopted on August 16, 2024.

Group Name	WBID	Waterbody Name	Waterbody Type	Waterbody Class	Conditions Causing the New Listing
Caloosahatchee	3240J1	Billy Creek (Marine Segment)	Estuary	3M	WBID resegmentation
Charlotte Harbor	2065H2	Sanibel Canal System West	Estuary	2	WBID resegmentation
Charlotte Harbor	2065H3	Sanibel Canal System East	Estuary	2	WBID resegmentation
Choctawhatchee - St. Andrew	906D	Joes Bayou	Estuary	3M	WBID resegmentation
Everglades	3260G	Holey Land Wildlife Management Area	Stream	3F	WBID resegmentation
Everglades	3289IA	Whitewater Bay / Ponce De Leon Bay	Estuary	2	WBID resegmentation
Everglades	3289IB	Everglades West Lakes	Estuary	2	WBID resegmentation
Everglades	3289R1	Shark Slough A (Everglades National Park)	Estuary	2	WBID resegmentation
Everglades West Coast	3259M 1	Ten Thousand Islands	Estuary	2	WBID resegmentation
Everglades West Coast	3259M 2	Faka Union (Marine Segment)	Estuary	2	WBID resegmentation
Everglades West Coast	3259M 3	Barron River (Marine Segment)	Estuary	2	WBID resegmentation
Everglades West Coast	3278Q4	Clam Bay	Estuary	2	WBID resegmentation
Florida Keys	8071A	Inner Gulf Shelf	Coastal	3M	WBID resegmentation
Kissimmee River	3170FG	Old Lake Davenport	Lake	3F	WBID resegmentation
Kissimmee River	3188C1	Kissimmee River Above S-65D	Stream	3F	WBID resegmentation
Lower St. Johns	2227B	Sherman Creek (Marine Portion)	Estuary	3M	WBID resegmentation
Middle St. Johns	2964B3	Little Puzzle Lake	Lake	3F	WBID resegmentation

Group Name	WBID	Waterbody Name	Waterbody Type	Waterbody Class	Conditions Causing the New Listing
Sarasota Bay - Peace - Myakka	1975C	Matheny Creek	Stream	3F	WBID resegmentation
Sarasota Bay - Peace - Myakka	1975E	Elligraw Bayou	Stream	3F	WBID resegmentation
Sarasota Bay - Peace - Myakka	1975F	Elligraw Bayou (Marine Segment)	Estuary	3M	WBID resegmentation
Sarasota Bay - Peace - Myakka	1984B	Catfish Creek	Stream	3F	WBID resegmentation
Southeast Coast - Biscayne Bay	3226H5	ICWW - Northern North Bay	Estuary	3M	WBID resegmentation
Southeast Coast - Biscayne Bay	3226H6	ICWW - Southern North Bay	Estuary	3M	WBID resegmentation
Southeast Coast - Biscayne Bay	6001D	Biscayne - North Central Inshore	Estuary	3M	WBID resegmentation
Southeast Coast - Biscayne Bay	6001E	Biscayne - North Central Outer-Bay	Estuary	3M	WBID resegmentation
Southeast Coast - Biscayne Bay	6001F	Biscayne - South Central Inshore	Estuary	3M	WBID resegmentation
Southeast Coast - Biscayne Bay	6001G	Biscayne - South Central Mid-Bay	Estuary	3M	WBID resegmentation
Southeast Coast - Biscayne Bay	6001H	Biscayne - South Central Outer-Bay	Estuary	3M	WBID resegmentation
Springs Coast	1341K	Miller Creek Spring	Spring	3M	WBID resegmentation
Springs Coast	1345Z	Halls River Head Spring	Spring	3M	WBID resegmentation
Springs Coast	1348C1	Otter Creek Spring	Spring	3M	WBID resegmentation
Springs Coast	1361Z	Blue Run Spring	Spring	3M	WBID resegmentation
Springs Coast	1389B1	Weeki Preserve Spring	Spring	3M	WBID resegmentation
Springs Coast	1400Z	Double Keyhole Spring	Spring	3M	WBID resegmentation
St. Lucie - Loxahatchee	3226C1	Loxahatchee River (Southwest Fork)	Estuary	2	WBID resegmentation
St. Lucie - Loxahatchee	3226C2	Sims Creek	Estuary	2	WBID resegmentation
St. Lucie - Loxahatchee	3226C3	Jones Creek	Estuary	2	WBID resegmentation

Group Name	WBID	Waterbody Name	Waterbody Type	Waterbody Class	Conditions Causing the New Listing
Suwannee	3649A	Waters Lake	Lake	3F	Meets Data Sufficiency
Tampa Bay Tributaries	1807G	Manatee Creek above Gamble Creek	Estuary	3M	WBID resegmentation
Tampa Bay Tributaries	1975D	Matheny Creek (Marine Segment)	Estuary	3M	WBID resegmentation
Upper East Coast	2363L	ICWW (St Johns County; Flagler County)	Estuary	2	WBID resegmentation
Upper East Coast	2363M	Washington Oaks Gardens State Park	Estuary	3M	WBID resegmentation
Upper St. Johns	2893X2	Sawgrass Lake	Lake	1	WBID resegmentation
Florida Keys	8077B	Western Florida Bay	Coastal	2	WBID resegmentation
Florida Keys	8077C	Central Florida Bay	Coastal	2	WBID resegmentation
Florida Keys	8077D	Southern Florida Bay	Coastal	2	WBID resegmentation
Florida Keys	8077E	East Central Florida Bay	Coastal	2	WBID resegmentation
Florida Keys	8077F	Eastern Back Bay	Coastal	3M	WBID resegmentation
Florida Keys	8077G	Western Bay Side	Coastal	3M	WBID resegmentation
Florida Keys	8077H	Southern Bay Side	Coastal	3M	WBID resegmentation
St. Lucie - Loxahatchee	3234B	C-18 South	Stream	1	WBID resegmentation
Upper St. Johns	2893X2	Sawgrass Lake	Lake	1	WBID resegmentation
Middle St. Johns	2964B3	Little Puzzle Lake	Lake	3F	WBID resegmentation