WES-PP-03: BACTERIA TOTAL MAXIMUM DAILY LOADS

COMMITTEE RECOMMENDATION: ADOPT

PROPOSED POLICY: FAC SUPPORTS a thorough and methodical approach to bacteria Total Maximum Daily Load (TMDL) development for individual waterbodies based on adequate data regarding source identification, as opposed to the general consolidated statewide approach currently drafted by the Department of Environmental Protection.

BACKGROUND: Bacteria TMDLs are more complex than TMDL development for nutrients. According to the Florida Stormwater Association: There is a much lower correlation between bacterial best management practices (BMPs) and actual FIB [Fecal Indicator Bacteria] reductions; it is much more difficult and expensive to determine the actual source of FIB; and, it is much more difficult to accurately allocate pollutant reduction responsibilities among various stakeholders.

ANALYSIS: FDEP's March 2022 draft Fecal Indicator Total Maximum Daily Loads for southwest Florida has extensive ramifications for MSR permittees statewide; all stakeholders need to collaborate on an approach that will promote water quality improvements while assigning responsibility to appropriate parties.

FISCAL IMPACT: Unknown

FAC STAFF NOTES:

- 2022 Policy Conference
  - WES-PP-03 was recommended for adoption by the Committee.
- Federal Regulation:
  - Section 303(d) of the Federal Water Pollution Control Act, popularly known as the Clean Water Act, governs impaired waters within the U.S., and establishes a two-pronged approach to restoration and maintenance of impaired water bodies for states to follow:
    - 1) States identify impaired or threatened water bodies within their jurisdiction, as well as develop a priority ranking of impaired and threatened water bodies.
    - 2) States calculate a Total Maximum Daily Load (TMDL) for these waters, indicating the greatest amount of a pollutant that can be present in a water body while still meeting water quality standards.
- Florida Administrative Code:
  - Ch. 62-302, F.A.C. – *Surface Water Quality Standards* establishes the state standards by which water quality is measured.

- Ch. 62-303, F.A.C. - *Identification of Impaired Surface Waters* provides the methodology for cataloguing the state's impaired and threatened surface waters.
- Ch. 62-304, F.A.C. - *Total Maximum Daily Loads* establishes the TMDL's for all verifiably impaired and threatened water bodies, as well as waste load allocations for point-source pollution entities, and load allocations for nonpoint-source entities.

- DEP Fecal Indicator Bacteria TMDL Development:
  - As of March 2022, DEP drafted a report regarding *Fecal Indicator Bacteria TMDLs for the Everglades West Coast Basin*.
  - The report documents fecal indicator bacteria (FIB) TMDL's for surface water bodies, according to the Surface Water Quality Standards of Ch. 62-302, F.A.C.
  - Ultimately, DEP intends to expand this report into a comprehensive statewide report concerning FIB TMDL's for all impaired state water bodies.
  - The report specifies *E. Coli* bacteria, Enterococci bacteria, and Fecal coliform bacteria as the relevant FIB to monitor.
- US Environmental Protection Agency (EPA) Guidance:
  - The U.S. EPA released the following guidance on the subject:
    - "Studies conducted by EPA to determine the correlation between different bacterial indicators and the occurrence of digestive system illness at swimming beaches suggest that the best indicators of health risk from recreational water contact in fresh water are E. coli and enterococci. For salt water, enterococci are the best. Interestingly, fecal coliforms as a group were determined to be a poor indicator of the risk of digestive system illness. However, many states continue to use fecal coliforms as their primary health risk indicator."
  - The EPA lists the following as the primary sources of fecal contamination to surface waters:
    - Wastewater treatment plants
    - Failing septic systems
    - Domestic and wild animal manure
    - Stormwater runoff
  - Several of these represent nonpoint and non-discrete sources of FIB and are therefore hard to isolate as a causal source for a given water body.

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ASSIGNED COMMITTEE: WES

BOARD SUPPORT: No Position

UNFUNDED MANDATE: No

PROTECTIVE OF HOME RULE: N/A