NPDES MS4 Update

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Impacts to MS4s Due to EPA's Proposed Revision to WOTUS

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FDEP's Proposed Bacteria TMDL
Impacts to MS4s Due to EPA Proposed Revisions to WOTUS
Background

• EPA and USACE proposed revisions on April 24, 2014.

• Goal: To clarify those waters that are covered (and not covered) by the CWA.

• Traditional Definition:

  Waters available to be used in interstate or foreign commerce, interstate waters, certain wetlands, territorial seas, impoundments, and tributaries.
Background

- Proposed Definition (40 CFR 230.3)
- WOTUS expanded and include:
  - Adjacent waters
  - Neighboring waters
  - Tributaries now include man-altered systems (ditches & canals)
  - Other waters with a significant nexus or effect on other waters in the region
Background

• Exemptions

  • Ditches that are excavated wholly in uplands, drain only uplands, and have less than perennial flow.

  • Ditches that do not contribute flow, either directly or indirectly to waters.

  • Waste treatment systems, including treatment ponds or lagoons, designed to meet the requirements of the Clean Water Act.
Ditches & Canals = Waters

- Loss of SW treatment credits
- New permitting requirements for maintenance activities
- Increased MS4 outfall inventories
- Increased inspection & maintenance costs
- MS4 boundary revisions
  - Loss of WCD & CDDs?
- Increased inspection and maintenance costs
- Water quality criteria
- Regulatory responsibility
Lee County Map of the MS4 Boundary Post Outfall Protocol Cycle 3, circa 2011
Lee County Map of the MS4 Boundary Post Proposed New Waters Definition
EPA extended comment period to October 21, 2014

- Exemption for MS4 conveyances (ditches, canals, swales)
- State agencies are preparing comments (FDEP, FDOT, FDACS)
- Professional organizations (FSA, SESWA)
Fecal Indicator Bacteria TMDL

"Rule development is intended to comprehensively revise fecal indicator bacteria surface water quality criteria and the associated impaired water methodologies, establish a methodology that derives individual fecal indicator bacteria TMDLs, and establish appropriate restoration actions to implement the TMDL."
FDEP’s Current Process

1. Public Input
2. Monitor
3. Verification
4. Adopt TMDL
5. Public Input
6. Adopt BMAP
7. Public Input
FDEP’s Proposed Concept

Monitoring, but no determination of anthropogenic → Automatic TMDL → BMAP implementation

Possible calculation / verification of anthropogenic
Current Criteria for Surface Water Quality for Class III Waters

Fecal Coliform

- Number per 100 ml [Most Probable Number (MPN) or Membrane Filter (MF)]
- MPN or MF counts shall not exceed a monthly average of 200, nor exceed 400 in 10% of the samples, nor exceed 800 on any one day. Monthly averages shall be expressed as geometric means based on a minimum of 10 samples taken over a 30 day period.
Proposed Criteria for Surface Water Quality for Class III Waters

Escherichia coli (E. coli) for predominantly fresh water

• Number per 100 ml MPN or MF

• MPN or MF counts shall not exceed a monthly geometric mean of 126 nor exceed 410 in 10% or more of the samples during any 30 day period. Monthly geometric means shall be based on a minimum of 5 samples taken over a 30 day period.
Proposed Criteria for Surface Water Quality for Class III Waters

Enterococci for predominantly marine waters

- Number per 100 ml MPN MF

- MPN or MF counts shall not exceed a monthly geometric mean of 35 nor exceed 130 in 10% or more of the samples during any 30 day period. Monthly geometric means shall be based on a minimum of 5 samples taken over a 30 day period.
Greatest Risk to Humans
Responsible Entities

- The owner (local government, utility, special district) for the sanitary sewer system
- DOH, local county health unit for septic tanks
- FDACS for agriculture
- Local government for trash
- MS4s for stormwater infrastructure
MS4 Requirement vs. BMAP

• Per the MS4 permit language, TMDL implementation requirements only if the MS4 discharges to the waterbody with TMDL
• Per the BMAP, TMDL implementation requirements if the MS4 is in the WBID
• Permitted Phase I MS4s already prioritized TMDLs for implantation plans and restoration
Issues

- Lack of public involvement in TMDL
- Implementation plan required unless verified 100% non-anthropogenic source
- Verification of anthropogenic sources is expensive
- Restoration plan schedule is unrealistic
- Fecal Coliform TMDLs remain
- Duplication of effort
- Implementation through MS4 permit
Questions / Comments?