

Florida Department of Environmental Protection



Upper Wakulla River and Wakulla Springs BMAP

OSTDS Initiative Review

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Onsite Sewage Treatment and Disposal Systems (OSTDS) Initiative



Background

- Additional time and data are needed to confirm the ultimate nitrate + nitrite concentration reductions realized at the spring in response to the recent and planned management actions in the basin, mainly the City of Tallahassee's WWTF sprayfield's nitrogen loading reductions.
- The Department considers it prudent to employ thoughtful consideration before requiring additional reductions from the next largest source category, OSTDS, until the results of the implemented reductions can be confidently determined.
- The OSTDS Initiative is intended to position the BMAP and stakeholders with ready-to-implement load reduction strategies by the end of the first BMAP iteration through carefully vetted planning for viable strategies with commitments for implementation.
- The Initiative focuses on management strategies to address OSTDS contributions within the BMAP Priority Focus Areas (PFAs).



OSTDS Initiative Objectives

- Identify effective and feasible strategies to reduce nutrient loads from OSTDS sources.
- Establish stakeholder OSTDS management strategy implementation responsibilities along with a mechanism for nitrogen reduction strategy development and implementation.
- Ensure implementation through stakeholder commitments and BMAP authority.



General Direction

- The adopted BMAP will include management strategies and implementation plans ready for inclusion as an enforceable responsibility.
- In lieu of currently implementable strategies, the stakeholders will commit to participate in a process where such details will be established.
- A post-adoption schedule will be developed to include stakeholder responsibilities for preparing and reaching agreement on an overall OSTDS strategy to be implemented in the BMAP's second five-year iteration.
- The schedule would be timed to take into account funding needs and the completion of the Florida Department of Health (FDOH) study.
- The water quality status and OSTDS load reduction achievements/needs will be reported each year at a BMAP meeting.
- Additional OSTDS load reduction strategies will be identified, as necessary, based on water quality trends.



Phase I

- Phase I will occur during current BMAP development:
 - Identify the existing number and geographic distribution of OSTDS within the PFAs.
 - Estimate existing nitrate + nitrite loads from OSTDS within the PFAs to the Upper Wakulla River and Wakulla Springs.
 - Obtain commitments for continued participation in the OSTDS Initiative during the development phase following BMAP adoption.



Phase II

- Phase II will occur after BMAP adoption, to evaluate potential management strategies and identify barriers to implementation.
- Potential strategies include:
 - Project future growth and distribution of OSTDS within the PFAs through at least the first BMAP iteration.
 - Evaluate current OSTDS ordinances and requirements and identify needed modifications.
 - Consider creation of a comprehensive wastewater management strategy that coordinates OSTDS stakeholder responsibilities.
 - Determine the availability of central wastewater collection system locations and relationship to areas of dense OSTDS concentrations.
 - Assess the feasibility of expanding the existing wastewater treatment plants' collection systems and extending service to areas of dense OSTDS concentrations.



Phase II, continued

- Potential strategies, continued:
 - Create localized central wastewater collection systems (smaller capacity < 1.0 million gallons per day [MGD]) with no discharge of nitrate/nitrite effluent to ground water and extending service to areas of dense OSTDS concentrations.
 - Assess the pros and cons of cluster systems to centralize OSTDS drainfields and determine effluent impacts to ground water
 - Review septic system commitments in the comprehensive plans, land development regulations, and elsewhere.
 - Evaluate pros and cons of implementing a requirement for regular inspection, regular maintenance, and replacement of malfunctioning OSTDS.



Phase II, continued

- Potential strategies, continued:
 - Review existing requirements for new development to be served by central wastewater at a comprehensive plan, zoning, or subdivision level to determine enforcement actions and incentives for sewer connections.
 - Determine education strategies for homeowners.
 - Determine education strategies for local government decision-makers.
 - Evaluate formation of a Regional Management Entity (RME).
 - Determine need for requirements to connect to an available central wastewater system if an OSTDS is malfunctioning or in need of repair.



Phase II, continued

- Potential strategies, continued:
 - Evaluate opportunities for OSTDS treatment upgrade requirements allowed by repeal of House Bill 1263.
 - Evaluate recommendations from the FDOH Florida Onsite Sewage Nitrogen Reduction 231 Strategies Study and use of passive, nitrate/nitrite-reducing OSTDS.
 - Estimate growth of nitrate + nitrite loads from future OSTDS within the PFAs to the Upper Wakulla River and Wakulla Springs.
 - Estimate increased nitrate + nitrite loads from new OSTDS within the PFAs, and potential impacts to the Upper Wakulla River and Wakulla Springs.
 - Identify other strategies, not listed above, as appropriate to the basin.



Phase II, continued

- Potential barriers to implementation include:
 - Absence of central wastewater service in areas where OSTDS reductions are needed.
 - Financial impediments to extension of central wastewater service areas.
 - Distribution of OSTDS and practicality of connection to central wastewater service.
 - Financial impact on homeowners of connection fees and utility bills.
 - Practicality of cluster onsite systems.
 - Administrative and financial needs, potential opposition for development of a RME.



Phase III

- Phase III will develop the management strategies and implementation responsibilities by:
 - Continuing to evaluate OSTDS contributions and track ongoing reduction activities by responsible stakeholders.
 - Reviewing monitoring results.
 - Determining proposed target reductions to be achieved after adoption of first BMAP iteration.
 - Identifying potential future loading prevention policy strategies for consideration.
 - Presenting OSTDS Initiative findings in terms of clear statements that capture the consensus on central wastewater treatment and septic systems to give direction on future decision making.
 - Preparing a Department agency report on management strategies (proposed completion at 30 months after BMAP adoption). May potentially result in a comprehensive wastewater management strategy for the PFAs.



Phase III, continued

- The Department agency report will:
 - Describe the selected BMAP management strategies.
 - Prioritize the individual strategies and identify stakeholder responsibilities.
 - Identify the relative responsibilities for nitrogen reductions from OSTDS systems within the PFAs, including commitments for strategy implementation and schedule development in the BMAP's second implementation period.
 - Potentially develop components for comprehensive wastewater management for the PFAs, to include all wastewater treatment systems regardless of size (OSTDS to central sewer) and integration with local planning components to identify existing/future wastewater needs required to ensure meeting the restoration targets.



Phase IV

- Phase IV is the implementation of OSTDS management strategies:
 - Based on the Department's agency report, stakeholders would be required to prepare detailed implementation plans that apply the selected management strategies to their areas of responsibility.
 - The implementation plans would be presented to the Department, evaluated to ensure they address responsibilities for nitrogen reductions identified in the agency report, and included in the next implementation of the BMAP.



Milestones

- December 2013: Adopt the Upper Wakulla and Wakulla Springs BMAP.
- January 2015: Projected completion of FDOH's Florida Onsite Sewage Nitrogen Reduction Strategies Study.
- July 2016: Complete Department agency report that identifies nitrogen reduction targets and appropriate management strategies.
- January 2019: Complete an assessment of success reaching TMDL targets and revise the BMAP to include additional management strategies based upon the OSTDS Initiative.



Questions on the OSTDS Initiative

