

FLORIDA DEPARTMENT OF Environmental Protection

Marjory Stoneman Douglas Building 3900 Commonwealth Boulevard Tallahassee, FL 32399 Ron DeSantis Governor

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Blue-Green Algae Task Force Staff Minutes

Feb. 10, 2022 10 a.m.

University of Florida, Straughn IFAS Extension Professional Development Center and GoTo Webinar

General subject matter considered: The Blue-Green Algae Task Force met to discuss on-site sewage treatment and disposal systems (OSTDS) and consider the recommendations of the OSTDS Technical Advisory Committee (TAC) in advance of final Florida Department of Environmental Protection (DEP) rulemaking, especially as related to water quality and harmful algal blooms.

Attendee Name	Title	Status
Dr. Mark Rains	Facilitator	Present
Dr. Evelyn Gaiser	Member	Present
Dr. Wendy Graham	Member	Present
Dr. Michael Parsons	Member	Present (Virtual)
Dr. Valerie Paul	Member	Present (Virtual)
Dr. James Sullivan	Member	Present

- 1. Dr. Rains provided opening remarks and facilitated the meeting.
- 2. Adam Blalock, DEP Deputy Secretary of Ecosystems Restoration, provided introductory comments on OSTDS systems in the state and the need to address this potential source of nonpoint source pollution. He provided an update on the task force recommendations regarding septic-to-sewer programs, noting the creation of the Wastewater Grant Program by Senate Bill (SB) 712. He also detailed the septic-to-sewer funding received over the past three years, including:
 - a. DEP currently receives funding for septic tank upgrades, septic-to-sewer projects, construction upgrades and expansions of wastewater facilities to advanced treatment, and septic tank upgrades to enhance nutrient-reducing systems.
 - b. DEP currently receives federal ARPA funding specifically dedicated to septic-to-sewer projects.

- c. Other funding over the years has been dedicated to septic-to-sewer, including funding from DEP's springs program.
- 3. Sara Davis, DEP Director of the Office of Environmental Accountability and Transparency (OEAT), presented an overview of OEAT, including the office's purpose and key focus areas, the role OEAT plays in facilitating and funding research and monitoring, updates on the types of research and monitoring funded to date, and future initiatives of the office.
- 4. Dr. Rains and task force members asked questions to clarify points of the presentation and participated in points of discussion, including:
 - a. The OEAT budget and the monitoring, research and data analytics OEAT has been involved with to date.
 - b. Appropriateness of research priorities.
 - i. The state typically funds and/or facilitates research focused on understanding drivers (e.g., the dynamics of nutrient loading) and responses (e.g., the rapid identification and/or prediction of blooms) because this could inform state policy and practice.
 - ii. There may be an opportunity to research the biology of the organisms themselves.
 - c. Legacy nutrients as a poorly understood source of recurring nutrients.
 - d. Types and goals of modeling efforts that the state could target.
- 5. John Truitt, DEP Deputy Secretary of Regulatory Programs, gave a presentation on the Onsite Sewage Program. He provided a broad update with an emphasis on ongoing OSTDS rulemaking. Presentation topics included septic-to-sewer projects, nutrient-reducing technologies and policies, Onsite Sewage Program activities, standards for OSTDS, and rulemaking efforts.
- 6. Dr. Rains and task force members asked questions to clarify points of the presentation and participated in points of discussion, including:
 - a. OSTDS inspections and the current requirements.
 - b. Current OSTDS setback distances.
 - c. Identification of adequate reduction of nitrogen and phosphorus and where technology can help obtain the reductions.
 - d. Future funding.
 - e. Approximate timeline moving forward for charges from the OSTDS TAC and from the Clean Waterways Act that have not yet been addressed.
 - f. Increased sampling and field data.
- 7. The first public comment period included the following topics:
 - a. Updating OSTDS setback distances, standards and regulations.
 - b. Reviewing the OSTDS TAC recommendations, BGATF recommendations and SB 712 charges to determine those that have not been addressed.
 - c. Challenges to implementing nutrient-reducing OSTDS technologies in the state.
 - d. Funding challenges and concerns.

- e. Recommendations for Basin Management Action Plans (BMAPs) and Total Maximum Daily Loads (TMDLs).
- f. Monitoring of in-ground nitrogen-reducing biofilters.
- g. Reasons why septic systems are permitted for new construction.
- h. Climate change considerations.
- i. Installation failures and maintenance issues with septic-to-sewer conversions.
- 8. Dr. Rains and task force members discussed the following:
 - a. Conversion of septic-to-sewer or other enhanced nutrient-reducing OSTDS technologies.
 - i. Instances in which septic systems are necessary.
 - ii. How to determine whether existing funding for septic conversions is sufficient.
 - Suggested the state should establish a goal and a procedure by which to measure progress toward that goal. The basic procedure could be a mass balance approach, with:
 Existing + New Conversion = Change,
 where this could be measured in terms of the number of OSTDS and/or the mass of nutrient loads, all on an annual basis. This could enable the state to understand if the conversion rate is leading toward water quality restoration, holding water quality steady, or simply slowing the rate of water quality degradation.
 - iii. Factors to consider in prioritizing funding and conversion efforts.
 - 1. Suggested the state should focus first on failing systems near vulnerable resources.
 - 2. Density, perhaps in a 2x2 threat matrix of *Density x Vulnerability*.
 - 3. Climate change, especially the compound flooding expected in coastal settings.
 - iv. Vulnerable areas to prioritize.
 - 1. Suggested that these could be failing systems near coasts, springs or other wetlands and waterbodies, including drinking-water reservoirs, in BMAPs or otherwise near impaired waters.
 - b. Enhancement of OSTDS inspections.
 - i. Suggested making inspections mandatory and regularly scheduled, including randomized schedule based on region. Inspections should be stratified by geography, type and age, and particular attention should be on high-priority areas. Inspections should consider both function (e.g., basic operation) and performance (e.g., load reduction).
 - c. OSTDS TAC recommendation to increase the availability of nutrient-reducing OSTDS technology in the marketplace, along with moving forward more quickly with some of the advanced technologies.
 - i. Suggested the state move forward more quickly with adoption of enhanced nutrient-reducing OSTDS technology, be it end-of-the-pipe technologies that can be adopted to existing or new OSTDS technologies altogether.

- ii. Suggested testing the results of enhanced nutrient-reducing OSTDS technologies, and potential additional testing within the state to verify out-of-state testing results.
 - 1. Most of these have been tested outside the state, so it was suggested the state adopt these testing results to start but still verify these testing results.
- d. Setback distances for OSTDS.
 - i. Setbacks were clearly established to be protective of human health, not environmental health. The two are not equivalent. Suggested the state undertake a study to determine the appropriate setbacks protective of environmental health. Such a study might be stratified by geography, OSTDS type and age to the extent possible. Such a study might show that setback distances could be made regional, though that perhaps might be better implemented at the county level.
 - ii. Suggested that setback variances could require the use of more advanced OSTDS technologies.
- 9. The second public comment period included the following topics:
 - a. OSTDS TAC conversations on setback distances, nutrient-reducing OSTDS technologies, and inspections.
 - b. The potential use of created marshes to filter fertilized agricultural land and livestock effluent prior to discharge to surface waters.
 - c. Hydrogeology of Florida as it relates to drainfields.
 - d. Breach of lift stations in an Orlando neighborhood.
 - e. Determining effective BMAP efforts to meet TMDLs.
 - f. Importance of OSTDS inspections and upkeep.
 - g. Effectiveness/ineffectiveness of nitrogen-reducing systems.
 - h. Limiting fertilizer use and promoting use of native vegetation.
- 10. Dr. Rains provided closing remarks.