

Board of County Commissioners

Agenda Request

Date of Meeting: January 25, 2010

Date Submitted: January 12, 2010

To: Honorable Chairman and Members of the Board

From: Lynn Artz, County Commissioner, District 5

Subject: Nitrogen-Reducing Onsite Wastewater Treatment Systems

Statement of Issue:

This agenda item requests Board approval to schedule a workshop in February or March for an interim report on the effectiveness of nitrogen-reducing onsite wastewater treatment systems in Wakulla County.

Background/Description:

In 2006, Wakulla County passed a Karst Protection Ordinance (Ordinance 2006-58) requiring the installation of Performance Based Treatment Systems (PBTS) for new construction and to replace failing septic systems. PBTS are onsite wastewater treatment systems that the Department of Health has rated as able to attain nitrogen levels of 10 mg/L or less in the treated effluent. The installation costs of PBTS are considerably higher than conventional septic systems.

Researchers at FSU and DEP have been collecting data and evaluating the effectiveness of both conventional septic systems and PBTS in removing total nitrogen from wastewater. Final results are available for conventional septic systems and interim results are now available for PBTS.

While selecting PBTS in Wakulla County for the study, the researchers encountered numerous issues of concern regarding the installation, operation, and maintenance of many systems. Of 59 PBTS inspected, 23 (39%) were not operating as designed because they had been turned off by the homeowners, they had no electrical service, or they had not been properly constructed so that effluent could be inspected or sampled. Only 27 systems were operating and could be sampled.

In addition, the treatment effectiveness of PBTS may not be as great as county officials expected. PBTS installed in Wakulla County reduce nitrogen by 56% on average when properly installed and operating. While this represents a substantial reduction in nitrogen, none of the systems are consistently achieving levels of 10 mg/L or less (as many expected).

Analysis:

Inviting the study team to explain their interim report (attached) would allow county officials to better understand the study findings and have an opportunity to ask questions and seek suggestions.

Options:

1. Schedule a workshop on the effectiveness of nitrogen-reducing onsite wastewater treatment systems in Wakulla County.
2. Do not schedule a workshop on the effectiveness of nitrogen-reducing onsite wastewater treatment systems in Wakulla County.
3. Board direction.

Recommendation:

Option #1

Attachment(s):

1. Wakulla County Septic Tank Study: Interim Report on Performance Based Treatment Systems