

Literature Review of Nitrogen Reduction by Soils and Shallow Groundwater 10-09

<http://www.alachuacounty.us/Depts/EPD/EPAC/Final%20Draft%20OSTDS%20Wakulla%20Report%2006-30-2011.pdf>

pg 2-6

“Similarly, Yates concludes in her study of OSTDS distribution in various watersheds in the United States that the most important factor in limiting OSTDS impacts is restricting system density (Yates, 1985)”.

pg 4-2

“Therefore, reduction of nitrate contamination may be most efficiently approached in the design and installation processes when considering OSTDS as a treatment alternative. Appropriate land planning and density of OSTDS in new developments is a first step. OSTDS should be placed within protective distance of downgradient groundwater and surface water resources. Additionally, recognizing the importance of dilution for nitrate concentration reductions, appropriate lot size should be in the design to allow adequate dilution from recharge water. Within the design of OSTDS, appropriate loading rates and an understanding of OSTDS effluent can achieve lower levels of nitrogen entering the subsurface. Lastly, the review indicates the performance value of appropriate treatment units can improve effluent quality by reducing nitrogen prior to infiltration”

Note: How does alachua county DoH or EPD, landuse ordinance/regulation match up with above criteria?

Final Draft OSTDS Wakulla Report 06-30-2011

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“There are about 10,200 septic systems in Wakulla County”.

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About 20% or 2000 systems were estimated to be

“failing and discharging Coliform, nutrients, pharmaceuticals and other pollutants”

Note: Is that failure rate about comparable to Alachua county can it differ? If so based on what factors (age of system, type etc?)

Pg 45 if for Wakulla

“85% of OSTDS are in high, medium vulnerability areas based on layers”

Note: What is number in Alachua County?

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about \$300 for inspection

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“In September 2006, Wakulla County adopted a “water quality ordinance” that addressed future changes regarding septic systems. In summary, all new developments will be required to install PBTS and new repairs will require replacement with a new PBTS”.

Note: if consensus is that in Alachua county we can't retroactively pass/create

fee/ordinances/regulations for existing systems what about for those to be installed...?

If not performance based systems (per recent Memo from county attorney) what about layout, location, siting, density of installations etc? Or future inspections etc?

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"In 2010, the Wakulla County Commission adopted a new ordinance related to water quality protection. It was named the 'Wetlands Protection Ordinance' 25"

Note: Or how about a survey partnered with UF or some other agency/organization to get citizen perspective/

Note: Appendix F seems to be basically what we would need to provide to County Commission but with Alachua County specific data/EPAC suggestions...