



Save the Manatee® Club

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January 24, 2017

Submitted electronically to: Tiffany Busby: tlbubby@wildwoodconsulting.net
Brett Cunningham: bcunningham@jonesedmunds.com

Re: Mosquito Lagoon Reasonable Assurance Plan Watershed Development Report- January 2017

Dear Tiffany & Brett,

My apologies for not being able to get these thoughts to you by last Tuesday- today was the first opportunity I had to review the Watershed Development Report. After my review, I would like to pose the following questions:

- Is an Executive Summary appropriate for this type of report? There is great public interest in the Mosquito Lagoon and the Report itself is very technical. If there is a way to convey the main points in an Executive Summary, that might help facilitate the public's understanding of this RAP development process.
- Is there a ground truthing element to this modeling work to assess whether it is simulating real world conditions with acceptable levels of accuracy and precision?
- Table 2.2 contains an "Aquifer Recharge" column in which every value is zero. Is that column necessary?
- Within the discussion of wastewater treatment plant discharges, New Smyrna is mentioned. My understanding is that this city does not routinely discharge to tide. Is that the case? If so, should that fact be included?
- The Report states that flow rates throughout the watershed were assumed to be 100 gallons per day per capita. Is this the same as consumption? If so, estimates I have seen for Florida are typically greater than 100 gpd, closer to 150 gpd. Is that applicable here?
- Discussion of septic contribution included the following statement, "The lower concentrations were for septic tanks in excess of approximately 1,000 feet from the Mosquito Lagoon or a ditch/canal that is cut deeply enough to likely intercept the groundwater table." How much confidence is there in the hydrology/geology of the watershed to support this statement? Working in the springs region, septic tanks anywhere within the miles-wide springshed are targeted, so the 1,000 foot cutoff for low impact seemed like too small a distance.
- Also in the septic discussion, "We used a failure rate of 8 percent based on data from a previous study in Sarasota County in an area with similar conditions." Can you expound upon these conditions? Same soil types; age of homes; density of homes? In western Volusia, septic tanks account for more than 50% of the nitrate in Blue Spring. It would be helpful to explain why the failure rate is thought to be so low along the lagoon. Definition of how the word "failing" is being applied would also be informative.
- Is it accurate that ENR 3 has no septic contribution?

Thank you for considering these questions as you move forward with the RAP.

Sincerely,

Katie Tripp, Ph.D.
Director of Science and Conservation