

April 20, 2017

The Honorable Rob Bradley
State Senator, District No. 5
414 Senate Office Building
404 South Monroe Street
Tallahassee, FL 32399-1100

Subject: Appropriations Subcommittee on the Environment and Natural Resources

Dear Chairman Bradley:

Thank you and your committee for moving forward with the EAA Reservoir.

As a follow-up to my January presentation, I have updated my estimate of septic tank contribution to nitrogen loading to the St. Lucie Estuary based on revised water quality data. During 2016, it is estimated that septic tanks contributed 4 percent of the total nitrogen loading to the Estuary; this is slightly higher than the 2 percent estimate reported in January.

Source Basin	2016 Total Nitrogen Load, lbs
C-23 Canal Basin	596,848
C-24 Canal Basin	611,268
C-44 Canal Basin	833,155
Ten Mile Creek Basin	462,890
Lake Okeechobee	2,789,663
Tidal Basin (FWMD 2016)	669,537
Total Nitrogen Load to Estuary	5,963,361
No. of Martin and St. Lucie septic tanks that drain to the estuary (Ye and Sun 2013)	35,439
Estimate of TN load from septic tanks to the estuary (Ye and Sun 2013)	230,936
Estimate of % of total nitrogen load to St. Lucie Estuary from septic tanks	4%

SFWMD 2016. Draft Chapter 8C: St. Lucie and Caloosahatchee River Watershed Research and Water Quality Monitoring Results and Activities, South Florida Environmental Report, September 2016
Ye, Ming and Huaiwei Sun 2013. Estimation of Nitrogen Load from Removed Septic Systems to Surface Water Bodies in the City of Port St. Lucie, the City of Stuart, and Martin County. Prepared for the Florida Department of Environmental Protection. September 2013.
Total nitrogen loads estimated from data obtained from the SFWMD database, DBHYDRO.
Data and calculations are provisional and subject to revision.

Senator Bradley

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Thank you again for your diligence in pursuing measures to reduce the damaging Lake Okeechobee discharges to the estuaries.

Most sincerely,

A handwritten signature in blue ink that reads "GF Goforth". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Gary Goforth, P.E., Ph.D.

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cc: Senate President Negrón
Senator Book, Vice-chair
Senator Braynon
cc: Senator Hukill
Senator Hutson
Senator Mayfield
Senator Stewart