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# Wakulla Springs Alliance

*"Protecting and restoring water quality, spring flow and ecological health of Wakulla Spring"*

October 8, 2016

Rep. Michelle Rehwinkel Vasilinda  
317 House Office Building  
402 South Monroe Street  
Tallahassee, FL 32399-130

Dear Senator Vasilinda:

Stormwater management basins that the Florida Department of Transportation plans to construct for a project to widen Crawfordville Highway between Crawfordville and the Leon County line will increase nitrogen entering the ground water that flows into Wakulla Springs. Alternative basin designs could significantly reduce those discharges, but FDOT District 3 Secretary James Barfield refuses to pay the price for the additional right-of-way required to do so.

In 2012 the State Department of Environmental Protection determined that the spring and upper Wakulla River are impaired waters because of excess levels of nitrate-nitrogen.

The City of Tallahassee has spent \$225 million to upgrade the Thomas P. Smith sewage treatment plant to significantly reduce nitrogen loadings to Wakulla Spring. The State of Florida is providing millions of dollars within the primary spring focus areas in Leon and Wakulla counties to help pay for connecting some homes and businesses which currently use septic tanks to sewers to reduce their nitrogen discharges to the ground water. In areas outside the Tallahassee urban services area, and in most parts of Wakulla County, new homes and businesses will soon be required to install more expensive septic tank systems that remove nitrogen (conventional systems do not do so). But District Secretary Barfield is not willing to pay FDOT's share of the cost of protecting the spring.

FDOT's proposed dry retention basins are designed to discharge collected stormwater as quickly as possible into the ground. They plan to locate the basins at least 300 feet from mapped ground water caverns that flow to the spring. However, all stormwater that soaks into the ground will reach the spring, and numerous smaller caverns and conduits exist that have not been mapped. Furthermore, geotechnical studies conducted by FDOT's consultants reveal gaps in the limestone

bedrock at a number of basin sites that will allow stormwater to enter the ground water very rapidly with minimal nitrogen removal.

A study completed for the State Department of Environmental Protection in 2007 concluded that dry retention systems operating in sandy Karst soils such as those in the Wakulla Spring primary focus areas do not remove nitrogen but instead convert it to nitrate which enters the ground water. Several studies have shown that alternative retention basin designs can reduce nitrate discharges to ground water by 40 to 70 percent.

FDOT has rebuffed multiple proposals by the Wakulla Springs Alliance over the past 18 months to consider using any of these alternative designs. What's more, the Northwest Florida Water Management District, which will issue the Environmental Resource Permit for the project, maintains that it cannot require FDOT to use an alternative design because the district's current rules do not require any specific level of nitrogen removal.

Protecting Wakulla Springs from the increased nitrogen pollution from this project appears to depend entirely on the good will of FDOT. The agency has used alternative retention basin designs to reduce nitrogen loadings to Silver Spring for a similar project on State Route 40 in Marion County and on a major project in the Wekiva River Basin.

We urge you to contact Secretary Barfield and demand that FDOT take responsibility for its pollution of Wakulla Spring too. Wakulla Spring is a world-class ecological treasure that deserves more than meeting only the minimum regulatory requirements.

Sincerely,

A handwritten signature in black ink, appearing to read 'Séan McGlynn', with a long horizontal flourish extending to the right.

Séan McGlynn, Chair