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Executive Director's Office

Mr. Rich McWilliams
Northwest Florida Water Management District
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Havanna, Florida 32333

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Dear Mr. McWilliams:

I am writing to express my concerns about the current status of the Wakulla River. I believe it is suffering from significant eutrophication that, if left unchecked, could eventually destroy the rich spring run ecosystem with its submerged grasses and high biological diversity and productivity. I hope the river can be included on the SWIM priority list being prepared by your agency.

About 15 months ago I took a class of FSU students to the river to dive and observe the river ecosystem. When we arrived at a site about one half mile below the upper bridge, the water was extremely turbid with a heavy load of suspended particulate materials. The river was in that state at all points between the bridges due to heavy boat traffic (it was a Saturday). It looked more like the Apalachicola than a spring run river. Immediately adjacent to the fence above the upper bridge, the water was clear but when we swam into it, our movements immediately stirred the heavy load of particulate material on the bottom, creating a silt storm comparable to what we had seen in the areas with boat traffic.

I returned to the river six times subsequently on weekdays to check turbidity when boat traffic was lower. While the massive turbidity was less, the water was consistently green in color with visibility only six to eight feet, suggesting heavy plankton loads. The river is consistently much greener and more turbid than other spring run systems such as the Wacissa, the Ichetucknee and the Weeki Wachi Rivers that I have examined. The algae growing on the eelgrass appears to be far denser than in a healthy spring run system especially in the vicinity of the Mysterious Waters subdivision. Conversations with long term boat operator employees at the spring indicated that flowering of the eel grass at the spring has declined in recent years. This past summer it appeared to be

flowering at less than 30% of the normal level, based on my own observations. I do not think this situation is due simply to intermittent turbidity associated with high rainfall, but is due rather to nutrient enrichment in the system.

A field study to better ascertain the status of the river as compared to other spring run systems is urgently needed. Stations above and below the fence and at the spring would ascertain whether the problem originates with local development and overuse of the river or whether it is coming out of the spring itself. The Wakulla flow, according to Dr. Bruce Means of the Coastal Plains Institute, is derived from the Lake Munson/Munson Slough/Leon sink areas. The Tallahassee sewage plant is adjacent to the area and its spraying fields could conceivably be the source of the enrichment.

Long term records are available at Wakulla Springs concerning days of operation of the glass bottom boats. Checking these might rapidly and inexpensively indicate any long term trends towards increasing turbidity at the spring, exclusive of short term response to high rainfall and surface runoff. Wakulla Springs is one of the two largest springs in the world and as such is of international as well as state and regional significance. It is an Outstanding Florida Water as well. The river bed supports one of the biologically richest and most beautiful ecosystems in Florida. To allow this system to be seriously degraded or even lost would be tragic. The recent acquisition of the spring as a state park makes addressing the situation all the more urgent.

I hope you will be able to assign staff to consider this problem and I would be happy to cooperate in any way to see these problems documented and then solved.

Sincerely,

Anne Rudloe, Ph.D.
Director

AR/mec
cc:Dale Twachtman,DER
Dick Miller,Wakulla Springs
State Park
Tom Gardener,DNR