

February 17, 2012

Mr. Herschel Vinyard, Secretary  
Department of Environmental Protection  
3900 Commonwealth Blvd. MS 10  
Tallahassee, FL 32399

Subject: SCUBA diving at Wakulla Spring

Dear Secretary Vinyard,

I am writing to express my concern and objection to the proposal to open access for SCUBA diving at Wakulla Spring. I am a diving instructor, a cave diver, and a member of the Woodville Karst Plain Project (WKPP), through which I have had the opportunity to dive at Wakulla periodically for the past 15 years. I am also a hydrogeologist and have been working in the Wakulla Spring basin for the same period to map the sources of Wakulla's water. At present, my team, which includes your Department, Florida State University, and the University of West Florida, have installed and maintain nine hydraulic meters in the Wakulla-Leon Sinks cave system making it the most heavily instrumented underwater cave in the world, an effort that has required an investment of well over \$150,000 and \$30,000 or more per year to maintain. We've also instrumented the cave with numerous sampling tubes, some of which are regularly used by your Department and the Northwest Florida Water Management District, and those of which that are accessible from locations outside of Park control, are periodically vandalized.

My concerns therefore stem from my long experience with the diving industry and community, as a researcher and professional, and as a concerned citizen hoping to preserve Wakulla Spring in as natural of a state as possible.

As a diver and an instructor, I have seen first-hand how unfettered access, and particularly access for diving instruction, can lead to significant environmental damage. John Pennekamp State Park is unfortunately one example. Its popularity as a diving destination, both for recreational divers and classes, has resulted in substantial destruction of the coral reefs. In more similar environments, Ginnie Spring, Little River, and Peacock Springs State Park are often referred to as "sacrificial caves" that, because of their popularity, have endured substantial destruction including broken and stolen cave features, scarred walls, and graffiti. Simply stated, there are very little to no mechanisms in place within the diving community to protect the environment from harm caused by divers. I believe that open access will lead to a similar fate for Wakulla, which is truly unique unto the world as a natural feature, due both to its physical features and the numerous ancient bones and artifacts that litter the basin and cave floor.

My most pressing concern is, however, that open access will inevitably lead to fatalities. The statistics in diving and cave diving are clear: the deeper the water and the more challenging the conditions, the higher the fatality rate. Wakulla is one of the deepest cave dives in the world at an average depth of 280 feet (more than double the industry-accepted limit for recreational diving). The only way to dive at such depths is with advanced technologies that are deadly if not exactly and vigilantly managed. I have unfortunately lost two friends to technological mistakes that occurred because they became complacent and careless. It is also likely that we lost Wes Skiles, arguably one of the world's best and most experienced cave divers and champion of north Florida springs protection, to a technology-related accident in shallow water off the Florida coast. Many more, less experienced divers have been lost in more challenging waters around the world, particularly deep Florida caves.

Again, there are statistics on the use of advanced technologies in the diving community, and they clearly show that the fatality rate is significantly lower amongst users that operate within the framework of organized teams that have and enforce established operational and safety standards. Open access at

Wakulla will, in my opinion, be an open invitation to the opposite demographic, individuals diving alone or essentially alone outside of the control of any organized team. The statistics in the diving community clearly show that we should therefore expect the worst.

I'm a little embarrassed to say that my concern about increased fatalities is not entirely humanitarian but rather stems from my work as a researcher and hydrogeologist. Groundwater is the most significant reservoir from which Florida draws water and managing that reservoir is becoming an increasingly challenging problem. I strongly believe that the most significant challenge to adequate management is understanding the effect of caves (karst) on the patterns and rates of groundwater flow to Florida's springs and wells. To that end, cave divers can provide unique and valuable data and insights to the professional community. There has, however, been somewhat of an institutional barrier between the two communities, which, I believe is a perception of professionalism. Simply put, I have found that many professional people regard cave diving as a fool-hearty activity, as evidenced by the high number of associated fatalities, and therefore undertaken by individuals with questionable judgment. That perception has begun to change due in part to the safety record and professionalism of the organized diving teams in Florida including the WKPP and Karst Underwater Research (KUR) that is exploring the Weekie Wachee cave system.

That change and the relationships that it has sparked have been of profound benefit to the people of Florida by improving our understanding of the source and pattern of groundwater flow to Florida's springs. Were it not for the WKPP, we would have no knowledge of the 46+ miles of underwater cave passages beneath Wakulla County ferrying water at **100's of feet per day** to Wakulla, St. Marks, and Spring Creek Springs. We wouldn't have been able to identify the source of nitrate contamination to Wakulla, nor would we have the network of meters currently in place in Wakulla and Spring Creek that allow us to measure the health of the aquifer. I believe opening access to Wakulla will increase fatalities and diminish the public trust that we have worked so hard over the past 15 years to establish.

And to what gain?

The proponents claim that they have no access yet they do and always have. The WKPP's access was granted by the State as a special use permit simply because the team leaders some 15 years ago developed a proposal and a set of standards to demonstrate a productive objective and a plan to insure the highest possible level of safety in the execution of the dives. There is nothing to prevent any other team from proposing their own plan and objectives, and in fact others have including the two exploration projects and at least one archeological project sponsored by National Geographic. The proponents of open access have simply not done the work necessary to obtain one.

More generally, the WKPP is an open organization. Anyone can join and dive with the team at Wakulla provided that they meet the publically stated standards, which include specific training designed to prepare divers for the specific challenges of deep diving at Wakulla and adherence to simple equipment standards designed to ensure that any diver can provide assistance to any other. The return has been a very nearly perfect safety record spanning hundreds of individual dives for 15 years by over three hundred people. That record is more a product of their strict standards and organization than individual prowess, a point to which I believe the directors and most members would agree.

The WKPP conducts approximately 7 team dives per year at Wakulla depending on conditions. Any one of those dives includes men and women from literally all over the world. The proponents of open access present themselves as somehow disenfranchised despite the fact that there exists a clear path for any diver in the world to participate if only they agree to standards and procedures designed to ensure safety. The fact that they have not even sought membership implies to me that they are of the exact demographic that should be denied access to a site with as much public visibility and interest as Wakulla.

Another argument has been increased revenue, which I believe to be so baseless as to border on a lie. The only way to generate significant revenue is to attract and maintain large numbers of divers, which runs directly contrary to safety and any form of environmental conservation. On the contrary, most of what appear to be the considered proposals all include small daily caps on access, which in and of itself, reduces any potential revenue to nearly irrelevant. For example, Manatee Springs State Park limits access to 12 people at a time. More broadly, these were the same arguments that were used to open

access to the Wakulla cave system through Emerald Sink. That access has been in place for a few years now yet there has been no demonstration of added revenue nor even substantial increase in attendance.

In summary, my position is that open access will increase diving-related fatalities at Wakulla that, in turn, will diminish a growing and productive relationship between the organized cave-diving community and groundwater resource managers that need their data and insights. It will also foster the degradation of the cave and the spring basin, as well as place its unique cultural and paleontological features at risk. Wakulla is one of Florida's best preserved natural environments and holds some of its most unique and therefore valuable natural and cultural treasure. It deserves more protection than what can be afforded to a simple diving tourist attraction. Finally, open access is not necessary because there are already clear paths for anyone to dive at Wakulla and there is already access to the same cave system and exactly the same kind of diving through Emerald Sink.

For these reasons, it is my hope that the State will deny these open access proposals and continue to restrict access to only those groups that can demonstrate a clear productive objective and a reasoned plan to ensure safety.

Sincerely,

A handwritten signature in black ink, appearing to read "Todd R. Kincaid". The signature is fluid and cursive, with the first name "Todd" being the most prominent.

Todd R Kincaid, Ph.D.  
Managing Member

CC: R. Piasecki  
C. McKinlay  
B. Fugate