Date: July 29, 2025

To: Captain Rachel Bryant (Rachel.bryant@myfwc.com)
Major Bill Holcomb (William.holcomb@myfwc.com)
Rob Klepper (Robert.klepper@myfwc.com)

From: Linda L. Weseman

Subject: **Request to Create a Springs Protection Zone on the Lower Ichetucknee River**

Current recreational use by motorized vessels on the lower half of the Ichetucknee spring run is resulting in shoreline erosion and turbidity that is detrimental to the overall health of the spring run. These issues are primarily and predominantly caused by motorboats and personal watercrafts (PWCs). It is recommended that the Commission establish a Springs Protection Zone that creates a no wake zone on the Ichetucknee from the boundary of Ichetucknee Springs State Park to the confluence at the Santa Fe River, the "lower Ichetucknee". It is additionally recommended that personal watercrafts, PWCs, be restricted from operating on this section of the Ichetucknee spring run.

The purpose of establishing a no wake zone on the lower Ichetucknee is to reduce shoreline turbidity and erosion, stabilize the sediment on the river bottom and shoreline, and promote macrophyte photosynthesis to reestablish a healthy and diverse aquatic plant ecosystem. This action would provide remediation of a spring run suffering degradation due to motorboat and PWC disturbance and damage. It would also serve to reduce the risk of injuries to protected West Indian Manatees, turtles, including the imperiled Suwannee Cooter, fish, and other wildlife. Establishing a no wake zone will additionally decrease the risk of hazardous interactions between motorboats and tubers, paddle craft, snorkelers, and swimmers, including the risk of injury or death.

There is an urgent need for the restriction of PWCs on the bottom half of the spring run to provide for human safety, while minimizing the adverse effects of turbidity and erosion. Typical operation of PWCs at high speeds in the shallow, narrow run presents a significant threat to the safety of swimmers, tubers, and paddlers – the predominant users of the spring run in both the upper protected segment within Ichetucknee Springs State Park, and the lower unprotected segment. Furthermore, the operation of jet propulsion engines in shallow water, even at minimum speeds, creates shoreline turbidity and erosion. The dramatically increased weekend and holiday use of PWCs on the lower Ichetucknee in combination with wakes created by motorized vessels of all types, are the primary and predominant cause of shoreline turbidity and erosion negatively impacting the spring run ecosystem, denuding it submerged vegetation, and threatening its most prominent inhabitant, the manatee.

Background

The Ichetucknee River is a unique six mile spring run, internationally renowned for its clear water and natural beauty. It flows from the first magnitude headspring in Ichetucknee Springs State Park to the Santa Fe River. The lower Ichetucknee spring run is approximately three miles long, beginning at the southern boundary of Ichetucknee Springs State Park near the US 27 bridge. The spring run serves as the border between Suwannee and Columbia counties. A scenic rails-to-trails trail crosses over the river via a historic arched trestle, along the abandoned railbed of the Savannah & Western Railroad. Beneath the arch, still within the jurisdiction of the state park, the river runs over shallow rapids – a blind passage and potential zone of lethal collisions between high speed PWCs and kayakers and canoeists. Downstream, the riparian properties on the lower segment of the spring run are privately owned and are primarily residential in nature with the exception of a short stretch just below the US 27 bridge and railroad trestle on the Suwannee County side that is owned by Ichetucknee Springs State Park.

The Ichetucknee River provides habitat for a variety of wildlife, including the threatened West Indian Manatee, the iconic Longnose Gar (which preferentially spawns on spring run aquatic vegetation), otters, beavers, alligators, a variety of shore birds, and turtles and is believed to be a nursery for the imperiled Suwannee Cooter (Johnston). Wildlife watching and photography is a major activity engaged in by tens of thousands of tubing and paddling visitors annually. The flora and fauna of the overall spring run are threatened by unrestricted access and ecosystem degradation by motorized vessels on the lower, unprotected segment of the spring run. That vulnerable section is the shallow and narrow migratory corridor of the manatee in its daily movements up and down the spring run from within the state park down to the Santa Fe River confluence. Motorized vessels represent a significant threat to the manatee, especially high speed vessels capable of inflicting deep lacerations from props and broken ribs from high speed impacts. Motorized vessels are also the primary and predominant cause of shoreline turbidity which impacts macrophytes and benthic organisms and causes shoreline erosion.

No Wake Zone

The lower Ichetucknee is currently accessible to all motorized vessels traveling at safe speeds and is not a no wake zone, though most residents in the area believe it to be so and do maintain a minimum wake. The vessels traversing the lower Ichetucknee on plane or at higher speeds result in shoreline turbidity and erosion and pose a danger to other recreational users, including paddle craft, tubers, and swimmers. No wake zones have been determined to effectively reduce the impact of boats on aquatic plants (Asplund and Cook 1999).

Personal Watercrafts

PWC use on the lower Ichetucknee primarily consists of individuals visiting the area with many vessels launching at either Ellie Ray's or Sandy Point marinas in Branford, Florida and a small portion

of vessels being based on the Ichetucknee and Santa Fe rivers. Many of these PWCs are engaged in organized group rides which can include anywhere from 20 to several hundred vessels. An organized ride in April, 2025 brought over 100 PWCs up the lower Ichetucknee on a single day, including a single group of over 20 vessels. Many of these riders seek the adrenaline rush of "running the bridge", accelerating rapidly to traverse the railroad and US 27 bridges (See video - 04212025 Shoreline and Wake: https://youtu.be/HXkvQfBwiAE). The thrill is enhanced by running it blind with an obstructed view of oncoming traffic.

PWCs have the unique ability to navigate most areas of the Ichetucknee spring run, including the shoreline, often at higher speeds, and are observed to do so on a regular basis (See video - 06242025 Jetski Donut.mp4: https://youtu.be/W32g9ehHVPo) . This observed behavior by PWCs contradicts the Boat U.S. Foundation's advice that users operating PWCs should keep clear of shallow water. Because PWCs can be operated in shallow water at high speeds and in areas not usually frequented by boats, disturbance to wildlife may be more of a concern than with other types of motorized watercraft. The turbulence produced by the jet propulsion system is known to disturb plant growth and sediments, especially during acceleration and turns when the thrust is downward (Asplund). It is common for PWCs to traverse the entire length of the lower Ichetucknee to "run the bridge", accessing the lower section of Ichetucknee Springs State Park and often traveling as far up as the Last Takeout for the tube run (See Figure 1). As the vessels "run the bridge", significant acceleration is required to overcome the swift current, destroying the submerged aquatic vegetation, SAV, in the very shallow region immediately below the bridge, including an established field of eelgrass, and in the sections above the bridge. When this occurs, rafts of SAV, primarily eelgrass, can be observed floating downstream (See Figure 2 and see video - Jetski with Eelgrass: https://youtu.be/Qa8_2ibETek) In addition to damaging the river, these activities pose a grave danger for paddlers, tubers, and swimmers floating downstream under the bridge. Of note, the concessionaire in the state park has recently added a shuttle for guests choosing to paddle the full length of the Ichetucknee, continuing down the Santa Fe River to the pickup location at the US 129 bridge. These unsuspecting guests have limited ability to avoid a collision should a PWC choose to blindly accelerate under the bridge headed upstream as they float down.

The jet propulsion design of PWCs creates excessive turbidity under virtually all conditions, more so in shallow streams such as the lower Ichetucknee than in deep water. While most, not all, PWCs maintain low speeds until approaching the bridge, the design of these devices creates significant wakes (See Figure 3) in addition to disrupting the stream bed by the intake and jet output of the vessel (See video - 04172025 High Wake Approaching Kayak: https://youtu.be/wlrhhkrTsQQ and the associated shoreline turbidity - 04172025 Disturbed Shoreline: https://youtu.be/gIIASogs-MA) . Observations indicate that PWCs create far greater turbidity on the lower Ichetucknee on a case by case basis than motorboats. Organized group outings multiply these effects many times over (See Figure 4). The wakes result in shoreline erosion, turbidity along the river bed and shoreline (See video - 07022024 Turbidity: https://youtu.be/UC3JOrxQP_Y), and disrupt turtle basking (See Figure

5). Turtle basking is the primary mechanism used by many freshwater turtles to maintain their body temperature in a range that maximizes physiological performance. Reduction in metabolic rate decreases the rate of energy assimilation which could translate into reduced growth and reproductive output (Jain-Schlaepfer). In the 6 hours following disturbance of basking behavior by a motorboat wake, basking was 43.8% less than before the disturbance (Bulte).

PWCs are designed to be extremely maneuverable (See video - 04262025 Maneuvers: https://youtu.be/_cLZL15pQms). Many of the PWCs will circle midstream waiting for their group to assemble, resulting in increased turbidity and a virtual brown out of the otherwise crystal clear river (See video – Shriners Convention: https://youtu.be/7FbT3z2dMQY). They are built for quick, sharp turns, low radius circling, and rapid acceleration. PWCs are only maneuverable with the throttle engaged. To maintain steerage, throttle must be applied (Boat U.S. Foundation). This design feature poses an inherent risk on the lower Ichetucknee where tubers, paddle craft, and swimmers share a narrow channel with motorized vessels, including PWCs (See Figure 6). The design of PWCs in which the vessel must accelerate on a narrow, often crowded river to maneuver around tubers is exceedingly dangerous.

PWCs impact macrophytes both directly through contact with the boat hull or jet intake and indirectly through turbidity and wave damage. Whole plants can be uprooted by operation in shallow water. Beaching PWCs, a practice commonly observed on the lower Ichetucknee, can crush or damage macrophytes and cause damage to the shoreline (See Figure 7 and see video - 04262025 Beaching in macrophytes: https://youtu.be/DCp7SBDCYmA). Boat U.S. Foundation urges PWC users to avoid beaching where macrophytes are located, educating users that these plants are essential to the ecosystem because they control erosion and provide a nursery ground for animals vital to the food chain, such as crustaceans, mollusks, and small fish. In spite of this urging from within the industry, PWCs commonly beach on the lower Ichetucknee, causing damage to this fragile ecosystem.

Due to the vessel design and observed operator's behavior, PWCs are prohibited in units of the National Park System except in certain designated areas (Federal Register). Likewise, the Monterey Bay National Marine Sanctuary has restricted the use of PWCs within the sanctuary because they pose a unique and significant threat to sanctuary habitats and wildlife. Frequently observed PWC behavior on the Ichetucknee warrants restricting PWCs from this fragile spring run for the same reasons (See video - Jet Ski Crashes into Dock: https://youtu.be/ZIjTmGkgZ44). It is significant that when environmental concerns were raised following a group sponsored ride on the lower Ichetucknee that involved over 100 PWCs, Jet Rider Nation Florida, members responded with laughing emojis and shrugs (See Figure 8), evidence that the PWC community is unwilling to police itself.

As presented above, it is requested that the FWC Commission establish a no wake zone on the lower Ichetucknee spring run and restrict PWCs from operating on the lower Ichetucknee spring run to prevent further harm and encourage recovery of the fragile ecosystem.

Citations

Asplund, T.R., 2000. The effects of motorized watercraft on aquatic ecosystems. PUBL-SS-948-00.

Asplund, T.R. and Cook, C.M. 1999. Can no-wake zones effectively protect littoral zone habitat from boating disturbance? Lakeline, 19(1): 16-18+.

Boat U.S. Foundation. 2025. Boat US Foundation for boating safety and clean water. Boatus.org.

Bulte, G; Leveillee, MB; Blouin-Demers, G; et al. 2020. Observations on the short-term effects of motorboat disturbance on the use of basking sites by female northern map turtles. Chelonian Conservation and Biology: Celebrating 25 Years as the World's Turtle and Tortoise Journal 19(2), 302-304.

EPA 841F21007D, July 2021. Factsheet on water quality parameters. Turbidity.

Federal Register. 40 CFR Part 9.

Hilton, J. and Phillips, G L. The effect of boat activity on turbidity in a shallow broadland river. J. Appl. Ecol. 19:143-150.

Jain-Schlaepfer S.M.R; Blouin-Demers, G;Cooke, S.J; Bulte, G. 2016. Do boating and basking mix? The effect of basking disturbances by motorboats on the body temperature and energy budget of the northern map turtle. Aquatic Conservation: Marine and Freshwater Ecosystems 27(2): 547-558.

Johnston, G.R; Mitchell, J.C.; Suarez, E.; et al, 2016. The Santa Fe River in northern Florida: Effect of habitat heterogeneity on turtle populations. Bulletin of Florida Museum of Natural History 54(5):69-103.

Figure 1. PWCs “running the bridge” upstream and entering Ichetucknee Springs State Park.

Figure 2. Example of eelgrass uprooted by PWCs “running the bridge”

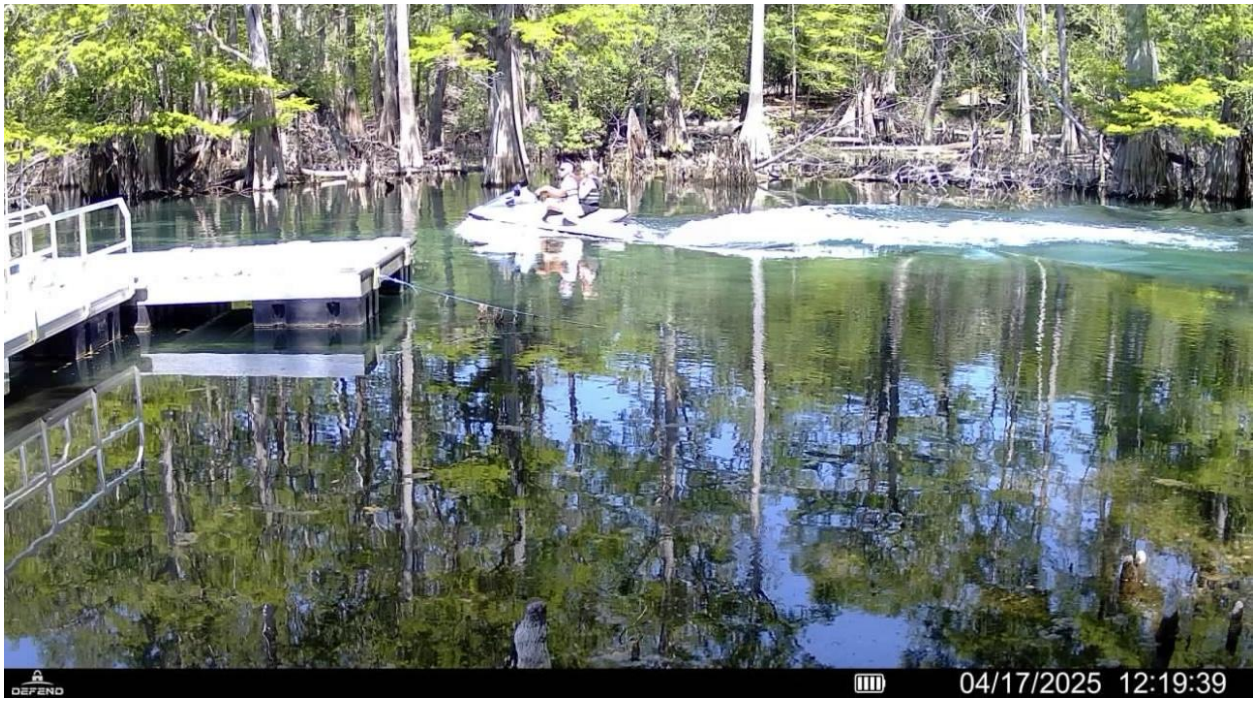

Figure 3: PWC wakes at low speed

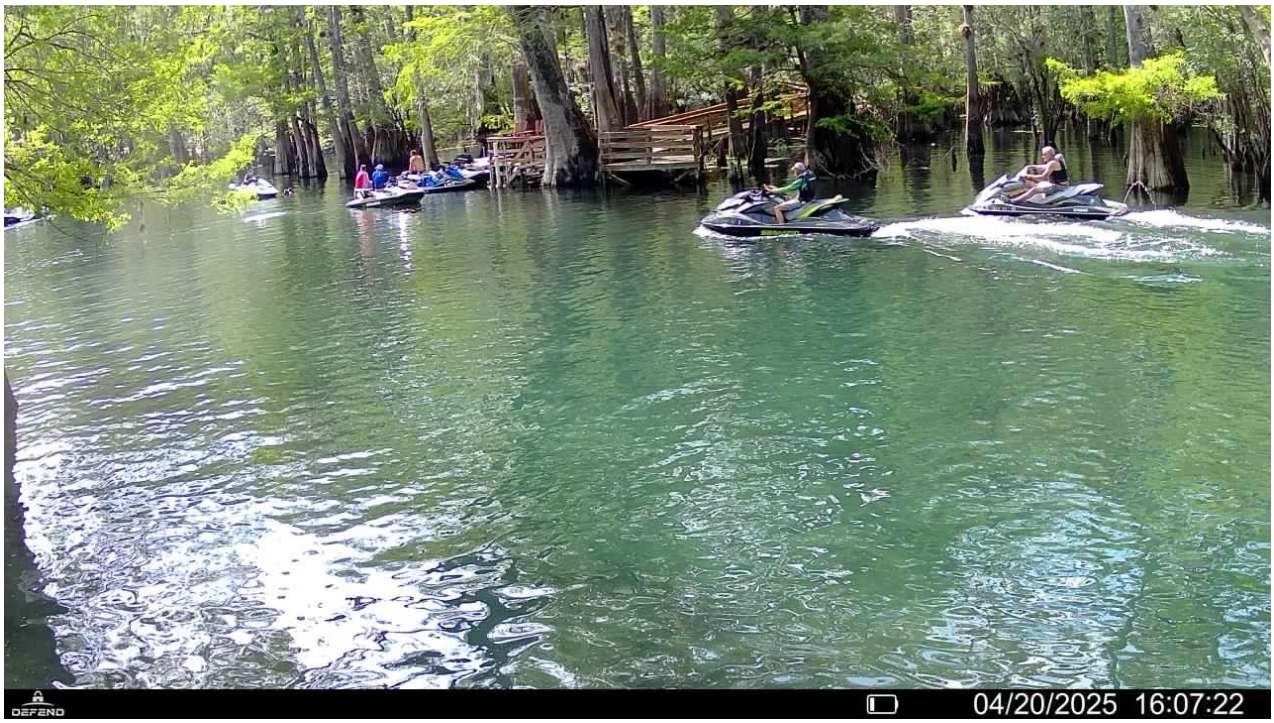

Figure 4: PWC group outing

Figure 5: Basking imperiled Suwannee Cooters

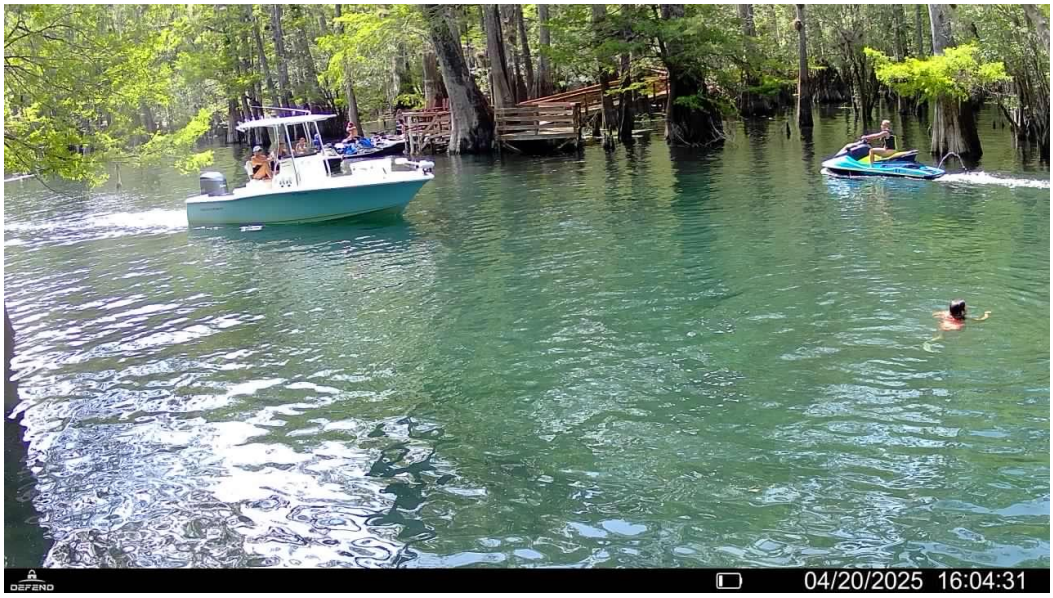

Figure 6: Motorized vessel sharing the channel with young swimmer

Figure 7: PWCs beaching on Ichetucknee Springs State Park shoreline

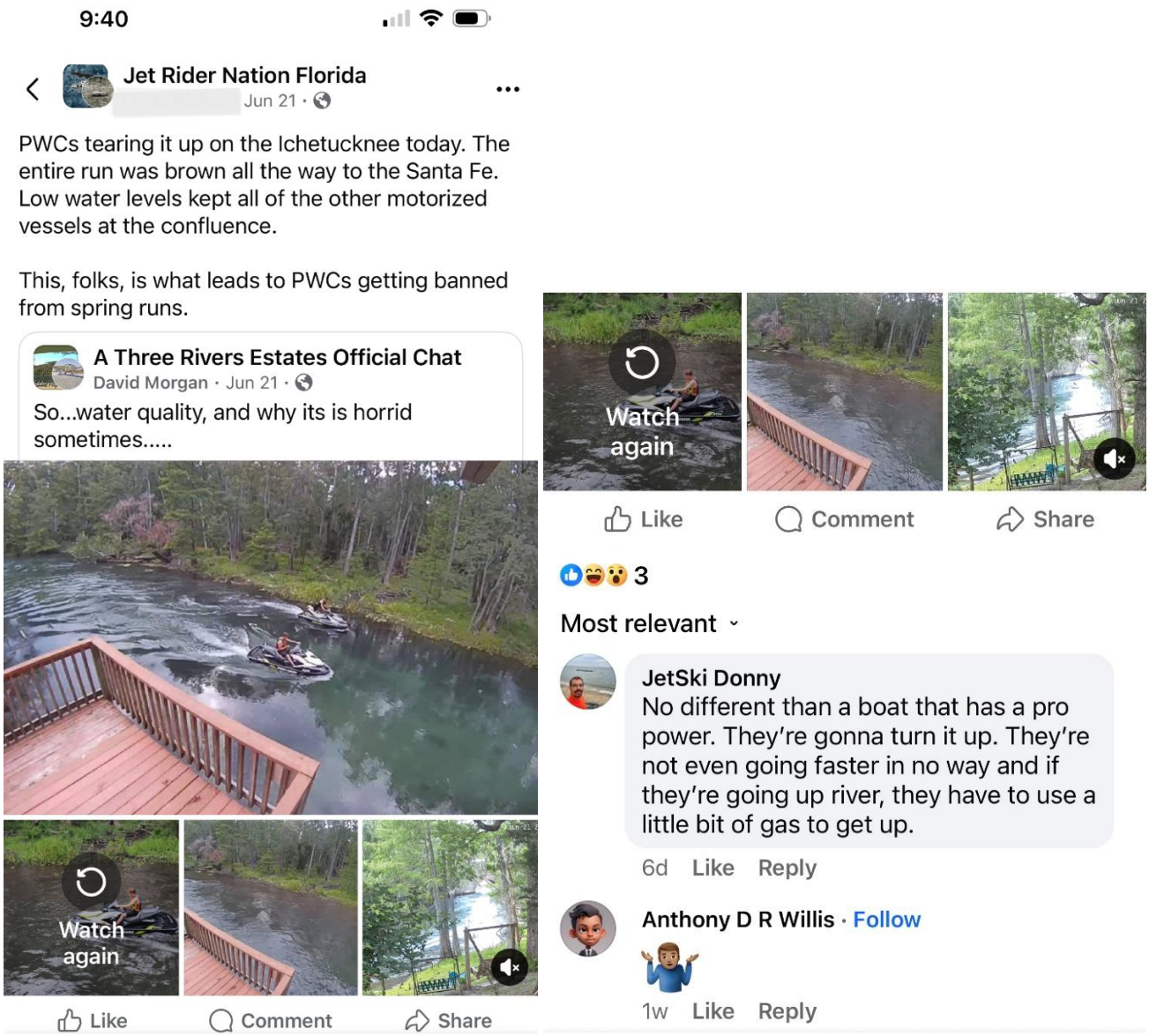

Figure 8: Jet Rider Nation feedback