

St. Johns RIVERKEEPER is a 501 (c) 3, nonprofit advocacy organization. Our mission is to be an independent voice that defends, advocates, and activates others to protect and restore the St. Johns River. Responses to this survey will be made public to our members and supporters.



St. Johns RIVERKEEPER Candidate Survey November 2018

Responses to this survey will be posted on our website at www.stjohnsriverkeeper.org and shared with over 20,000 members, followers and supporters throughout the state of Florida.

Threats to the River's Health

The health of the St. Johns River is threatened by many activities and problems, including:

- Pollution from excessive nutrients that cause toxic algal blooms, including fertilizers, stormwater runoff, municipal wastewater, septic tanks, sewage sludge (aka biosolids), industrial discharges, and agriculture;
- Fecal bacteria pollution from failing septic tanks, leaking sewage pipes, sanitary sewer overflows (SSO's), and animal waste;
- Over-pumping from the aquifer and reduced spring flows;
- Sedimentation from construction-site runoff that degrades water quality and the health of creeks and tributaries;
- Sea level rise that increases saltwater intrusion, water levels, and storm surge, and projects like dredging that will exacerbate these problems without mitigation;
- Loss of wetlands, springsheds, aquifer recharge areas, and other environmentally-sensitive lands due to rapid growth and development and lack of funding appropriated for acquisition;
- Elimination or weakening of environmental rules and regulations and lack of enforcement by state agencies for wastewater discharge and other permit violations.

NOTE: I want to share with you some of my background so you may more fully understand my views on these questions. I'm a native Floridian, born and reared on a small barrier island on the southwest Gulf coast (Gasparilla Island a/k/a Boca Grande). My parents and maternal and paternal grandparents (all deceased) were mariners. They understood the waters along the southwest coast and, even in the 1950s when I was a pre-teen and teenager, I often heard my father, who worked for the railroad but also fished the waters of Charlotte Harbor, speak of the degradation that he witnessed to that body of water and its surrounding tributaries. Also, when I was growing up, we experienced "red tide" episodes and as I told a group of Democratic voters recently, if anyone of them has ever been around a "red tide" bloom, they would never forget the smell nor the accompanying coughing that it induced. My father's views were impactful on me and, although I left the island following graduation from high school in 1960, I've always treasured the "education" about the environment that I received from him and my mother.

I lived and worked in Jacksonville during the 1960s when the river was so polluted it was determined that if one swam across the river from shore to shore near one of the downtown bridges that they would be exposed to many serious diseases. As I recall, it took a major infrastructure effort and much money to get the pollution of the river stopped.

Since 1980, my husband and I have lived in DeBary which is what I call the "cradle of the St. Johns" because the river curves about 90 degrees from a westerly to a northerly

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flow along the southwest boundary of the city. Although I have not boated on the St. Johns in the nearly 40 years we have lived in DeBary, I view it frequently as I travel across one of the two St. Johns River bridges and along US 17/92 and Lake Monroe or SR 417 and Lake Jessup. I also visit Gemini and Blue springs. The Gemini Springs pool has been closed to swimming for some time and DeBary Bayou and the marsh to the south appear differently now than when we moved here in 1980.

I have a strong background in public service, a Bachelor's in Political Science from FTU/UCF and a Master's in Public Administration from FAU along with employment with Duval County/City of Jacksonville in the 1960s and Miami-Dade County (then Metropolitan Dade County) in the mid-to-late 1970s. When I was getting my master's degree at Florida Atlantic University in the 1970s, I studied under the late John M. DeGrove, the "father" of Florida's 1985 Growth Management Act. I later worked with Dr. DeGrove at the FIU-FAU Joint Center for Environmental and Urban Problems from early 1974 to mid-1976. My experience in being associated with Dr. DeGrove further cemented my appreciation for the environment.

From mid-1976 to mid-1980, I worked for Miami-Dade County and for two of those four years with the County, I was one of their 4 representatives to the State Legislature. Although it was not my most favorite job of all time, I realize that the experience was invaluable, particularly, if I am elected in the August 28 Democratic primary and in the November 6 general election to represent District 27 in the Florida House of Representatives.

After moving to DeBary in 1980, among other things that I engaged in, such as earning a living in real estate, because of my acquaintance with the late Volusia County Manager, Dr. Tom Kelly, I had the privilege of serving on two Volusia County Charter Review commissions (1985-86) and (1995-96). During the 1985-86 Charter Review Commission, I chaired the committee that created the Volusia Growth Management Commission (VGMC). In the 1980s Broward County, where I had lived and worked during the 1970s, had created a growth management program to address its growth issues. It was felt that in the face of the State's 1985 Growth Management Act crafted by Dr. DeGrove that Volusia County would be well-served to have a local program wherein representatives of the cities, the County and other stakeholders would review and work out any controversies among/between the various jurisdictions' comprehensive plans before approving and sending them to the Department of Community Affairs for review and certification.

My commitment to the environment is stronger than ever and I am particularly concerned about sea level rise (SLR). Every opportunity I have to talk about this phenomenon I do so. I realize that the general public likely isn't ready to hear about it and I've been asked by some people who are "schooled" in the threat why I, who am in my late 70s, am concerned. My response generally is, unless we take care of and heal the environment as much as we can, starting NOW, then the environment won't take care of us. Moreover, I respond, it has to do with leaving a legacy for future generations of humans and other species. I've remarked to some that I view SLR as the second Noah's Ark event and that we need to plan, not 1 year, 5 or 10 years from now

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for SLR, but NOW. We need to plan for what happens when the coastal areas, rivers (such as the St. Johns) and their tributaries are flooded, forcing residents to migrate to higher ground. For example, the agriculture industry (I talked with their representatives about SLR in June and sensed little (no?) awareness of the issue) needs to plan for how they will feed people in the next 50 and more years. And, the state and local governments need to address and plan for disruptions in transportation, communications, utilities and other critical systems. I further expect that these systems and housing will undergo a change that we cannot even imagine.

Recognizing that talking about SLR may cause some people to conclude that I've taken leave of my senses, treat it as a hoax, or just yawn, I have, nonetheless, made it my business to speak about SLR as much as possible. I do attempt to tailor my message to what I perceive to be the level of knowledge of the audience which, for the most part, is very elementary at this time.

1. *What do you consider to be the biggest threats to the health of the St. Johns River and its watershed and, if elected, what will you do to address these problems?*

Answer: At this time, I believe that uncontrolled nutrients are the biggest threat. We can talk all day about the solutions, but without the will of the Legislature and Governor to take action and provide funding we will not progress much beyond talking about solutions.

I am hopeful we will either have a more balanced House and Senate and a Democratic governor. As a House member, I will vote against tax cuts for corporations and well-to-do individuals and vote for more funding for critical state needs, such as cleaning up and protecting our water sources and resources. Defeat of Amendment 5 is essential to being able to provide more money for critical state programs.

A public awareness campaign also will be helpful. This can include a series of town hall meetings throughout the state to inform residents that it's in their best interest to take measures to conserve water. Such an awareness campaign may also include a series of public service radio and television announcements as well as competitions at all grade levels to raise awareness among the generation(s) that will be most affected in the coming years.

Pollution

Unfortunately, the St. Johns River and its tributaries are receiving too much nitrogen and phosphorous from failing septic tanks, stormwater runoff, fertilizers, wastewater treatment plants, industrial discharges, and sewage sludge.

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Excessive nutrients feed uncontrolled algal blooms that deplete oxygen in the water needed by fish, reduce light that is essential to submerged aquatic vegetation (SAVs), and threaten the health of both humans and aquatic life by emitting toxins. Toxic algal blooms and pollution also hurt businesses (marinas, kayak outfitters, fishing guides, realtors, boat dealers, restaurants, hotels, etc.), cost jobs, reduce property values and our tax base, and diminish recreational opportunities.

Potential policy solutions include: Increase awareness about proper use and application of fertilizers, increase funding to remove failing septic tanks, implement septic tank inspection program, increase enforcement actions on utilities for frequent sewage spills and permit violations, and prohibiting use of sewage sludge near waterbodies

2. What do you see as the most effective and necessary steps to protect the St. Johns from nutrient pollution and prevent algae blooms?

Answer: 1) I support increased funding to convert homes with wells and septic systems to public water, wastewater and sewer. DeBary, where I've lived for more than 38 years, is expected to convert some 1200 homes from wells and septic systems to public water, waste water and sewer. The cost of converting these many homes is estimated to be more than \$32M. It is my understanding that the City has or will apply for a grant from the St. Johns River Management District to help offset the cost to homeowners in the conversion district. Many of the homes within the conversion boundary are ones located in what are called the "Vista" streets. The elevation of the Vistas runs downward from the southern edge of the DeLand Ridge to Dirksen Boulevard and Gemini Springs. When a septic system serving a home at the top of one of the Vistas fails, it's not difficult to imagine that the wells of every home below that home has become contaminated. The pool at Gemini Springs has been closed to swimming for years because of the pollutants it contains.

2) Fertilizers, and I would add pesticides to that concern. My husband and I live in a gated DeBary community where the lawns are maintained by a contract lawn care service. It has disturbed me for years to see what I call the frequent application of fertilizers and pesticides. It seems that my homeowners' association boards of directors (there are 2 HOAs) either are unaware that these products eventually end up in the water supply or simply don't care. They also, apparently, don't understand the impact that toxic pesticides have on pollinators: bees, birds, wasps, etc.

There are more environmentally friendly fertilizers and pesticides that can be used and I believe the use of such products could be incentivized in some way although I don't yet know what would be a desirable incentive or protection program.

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Septic Tanks

Thirty percent of the people in Florida rely on an estimated 2.6 million septic tanks for their wastewater disposal.

Thousands of these septic tanks are failing or malfunctioning, allowing bacteria, nitrogen, and other contaminants (pharmaceuticals, hormones, etc.) to leach into our waterways. While the 2017 Water Bill did provide programs and funding to remove some failing and poorly located septic tanks, more funding is needed and little is being done to curb the high volume of new septic tanks permits that are issued every day by county health departments. Developers of new subdivisions and single family homes are often not required or provided incentives to connect to existing water lines, or develop in areas where wastewater infrastructure already exists.

- 3. *Would you support more funding for septic tank remediation and/or policies that protect waterways and sensitive lands by placing more stringent permit requirements on new septic tanks?***

Answer: Yes. Also, where not currently used, impact fees should be examined as a means to require developers to connect to existing water and sewer lines. Seminole County currently is faced with development pushing into the eastern rural areas.

- 4. *Would you support a septic tank inspection program and requirements to properly maintain and repair septic tanks, when necessary? If not, please explain your answer.***

Answer: Yes.

Wetlands

Since the early 1900's, Florida has lost nearly 44% of its original wetlands. Yet, thousands of acres of wetlands continue to be destroyed each year throughout the state. Wetlands are critical for water quality, fish and wildlife habitat, groundwater recharge, storm and flood protection, and filters for our waterways. A 2015 University of North Florida economic study of the Lower St. Johns River found that "wetlands result in in almost \$3 billion dollars in savings for flood prevention or \$15,000 for each residence within the flood zone, and the wetlands provide an economic value for nutrient removal that exceeds \$400 million/year for Nitrogen and \$5.3 million /year for Phosphorous."

- 5. *Which statement best describes your perceptions of our current wetland protections?***
- Current rules and regulations are sufficient to adequately protect wetlands.***
 - Current rules and regulations are not sufficient to adequately protect wetlands and need to be strengthened or improved.***
 - Current rules and regulations are excessive and need to be curtailed.***
 - Current rules and regulations are sufficient but are burdensome to businesses and need to be curtailed in order to stimulate job growth.***

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Answer: B.

If you're not aware of the Canadian province of Prince Edward Island's Manure Management program, you may want to look into it. My husband and I stopped at PEI a number of years ago while on a cruise and took a land tour. PEI is one of the smallest of the Canadian provinces and is largely rural/agricultural. Our tour guide pointed out the program the province has to manage manure and to keep animal wastes from contaminating, as much as possible, the province's water bodies. The 58-page manual can be found on-line at agrienvarchive.ca/bioenergy

Water Conservation and Supply

The State of Florida is already reaching the sustainable limits of its predominant source of water, the Floridan Aquifer. Current water supply plans are looking to draw on surface water from our rivers and lakes in order to meet future demand. The St. Johns River Water Management District has developed plans to withdraw up to 160 million gallons of surface water a day from the St. Johns River. Removing millions of gallons a day from the flow of the river or its tributaries, such as Black Creek and the Ocklawaha River, will worsen existing pollution problems, increase salinity levels, and adversely impact the fisheries, wildlife, and submerged vegetation in and along the St. Johns. We are committed to preventing withdrawals and advocating for more sensible solutions, such as water conservation and the reuse of reclaimed water. Some of the proven conservation strategies include, tiered utility rates, incentives for the purchase of water-efficient plumbing fixtures and appliances, incentives for water-efficient landscaping and building practices, water audits, mobile irrigation labs, Consumptive Use Permit fees based on the quantity of water used, and building codes that require water-efficient fixtures and irrigation systems.

6. *What will you do to demonstrate leadership on water conservation to ensure that proven reuse and conservation strategies are implemented and water is conserved and more efficiently utilized in Florida?*

Answer: Education is one key. People's thinking about water use needs to be changed and children have the capacity to change their parents' thinking in a number of ways. Most parents and, particularly, grandparents are happy to see their offspring developing into thinking individuals. Children, therefore, can be great role models for their parents and other members of their household. A statewide program wherein elementary-school children, especially, are taught, whether in science or another class, the value of water and the necessity for conserving it. Spelling bees are popular as are various science projects at most grade levels wherein the "winners" are celebrated. It may not take much money to develop such a program and have the state's 67 school districts implement it into their schools' curricula. Such a program should be on-going. Students should be encouraged to report on their home's conservation efforts and recognition for their participation will be an important component of the program.

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Water saving appliances/fixtures are another key. Many Americans bathe too much. Unless one works outside or gets dirty and sweaty, it seldom is necessary to shower or take a tub-bath daily. Although mandating water-saving devices such as toilets that use less water isn't popular, it may (emphasis on "may") become necessary to change building codes to have all new residences and hotels/motels install toilets with bidet fixtures. The prices for such fixtures generally are less than \$500 and conversion kits for even less are generally available.

7. Currently, Consumptive Use Permits (CUPs) do not include a fee based on the quantity of water used by the applicant. Would you support a fee on water withdrawn from the aquifer?

Answer: From my reading, I would say "yes" because it appears little has changed with regard to CUPs since the passage of the soon-to-be 50-year old Florida Water Resources Act of 1972. Florida's population in 1972 was approximately 7 million people and the Disney attraction had opened less than a year before, so most of Florida, particularly central Florida, was then relatively unaffected by withdrawals from the aquifer. Now, not only has central Florida witnessed an almost unimaginable (no pun intended) expansion of Disney, but the arrival of other attractions such as Sea World, Universal, Legoland, and more have added to the strain on the aquifer. The overall growth of the state and its various regions has seen the state's estimated permanent population grow to more than 20 million residents. That is about 3 times the approximate 1972 population. The Orlando Sentinel on May 10, 2018 reported a record number of tourists...an astounding 72 million...visited Orlando in 2017! Most probably stay an average of 1 week, and if my calculation is correct, that number adds an average of almost 1.4 million people a week to the central Florida scene. Think of the amount of water it takes to support all those toilet flushes, showers, daily linen changes/laundry, restaurant food preparation and dishwashing just for the tourist population!

Springs Protection

Florida's springs are unique and iconic natural treasures of our state, with a greater concentration of springs in Florida than in any other region of the world. More than 100 springs are located within the St. Johns River watershed providing approximately 30% of the flow. Unfortunately, many of our springs are in serious decline due to encroaching development, agricultural and urban runoff, groundwater pollution, failing septic tanks, and the reduction in levels of our underground aquifers.

As a result, many springs have experienced significant decreases in flow, water clarity, and fish biomass with alarming increases in nitrate levels and algal blooms. Silver Springs, a National Natural Landmark, is a perfect example of the tragic situation that is taking place. Discharge rates have

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declined from a historic average of about 824 cubic feet per second (cfs) to 465 cfs in 2017, which is a 43% reduction in flow since 1955. Fish biomass has decreased by 92%. Nitrates have increased from an average background level of less than 0.05 milligrams per liter (mg/l) to an average above 1 mg/l which represents about a 20- fold increase.

One of the major contributors to a decline in the health of Silver Springs is the existence of the Kirkpatrick Dam or Rodman Pool on the Ocklawaha River. The Dam has flooded more than 7,500 acres of forested wetlands, 16 miles of river and at least 20 springs. It also blocks passageway for migratory fish and manatees that historically wintered at Silver Springs.

8. What kinds of measures would you support to protect our springs and springsheds?

Answer: Start with non-polluting fertilizers. We had to quit using phosphate-based laundry and dishwasher soaps, so we should be able to use more environmentally friendly fertilizers. Acquire more lands near springs and spring sheds through Florida Forever. Manage and maintain the lands that already are state-owned. Encourage and incentivize water conservation programs for domestic and commercial users.

9. Would you support breaching the Kirkpatrick Dam and restoring natural flow to the St. Johns, Ocklawaha, and Silver rivers? Why or why not?

Answer: I need to study this matter more before I can say whether I would support or not a breach of the dam. It appears an “industry” (sports fishing & boating) has been established on the Rodman Pool and getting these industry-members to accept the need to empty the Pool and re-direct the flow to the St. Johns and Ocklawaha rivers will require educating these individuals/groups of the necessity for restoring these treasures.

Resiliency

It is estimated that 28% of Florida's total assets are located within the 100-year floodplain, or \$714 billion. Climate scientists are predicting slower, wetter and more intense storms, further increasing the risk to low-lying communities in the state. When widespread flooding occurs, water can infiltrate pipes causing sewer systems to back up and sewage to be discharged into nearby streets and waterways. Over 28 million gallons of wastewater spilled across Florida in the wake of Hurricane Irma. For septic tank users, rising groundwater levels prevent proper drainage, causing them to back up and overflow. Blooms that can be toxic to fish, wildlife, and humans can grow. Flood waters also often flush chemicals and contaminants from roads, parking lots and industrial and hazardous waste sites into surrounding neighborhoods and our river, creating additional health hazards.

10. What policies or programs would you support that aim to protect our communities from rising waters?

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Answer: I'm not sure the coastal communities can be "protected" from sea level rise (SLR). What is needed is an awareness and acknowledgment by elected officials (Legislators, Governor, mayors, municipal and county councils and commissions) throughout Florida that SLR will affect the state in significant ways in the next 50 or so years. There needs to be a plan to address possible (probable?) relocation of coastal residents inland, infrastructure, utilities, communication and transportation systems, agriculture and more to support the "new reality" brought about by SLR.

Growth Management

Growth management policies and programs that influence new development in order to promote sustainable communities and protect our environment have been cut or weakened in the last eight years. Incentives and requirements for redevelopment, green infrastructure, and low impact development are often not strong enough or do not exist in many communities. Unsustainable growth and the development of environmentally-sensitive regions of our state impacts water quality through wetland loss and stormwater runoff, makes us more vulnerable to storms and flooding, fragments wildlife corridors and destroys habitat, and requires costly new roads, infrastructure and services that some municipalities may not be able to adequately provide for its residents.

11. Do you support growth management policies that promote, encourage, or require sustainable development practices? YES. If so, please describe the type of policies that you think are necessary to better manage growth in our state and more effectively protect our waterways and natural resources.

Answer: Government is the ultimate arbiter of competing interests. Therefore, in order to balance the interests of proponents and opponents of growth, it will, in my opinion, be necessary to resurrect the Florida Department of Community Affairs or establish a similar agency to review local governments' comprehensive plans for consistency and tasked to address the present-and-future day challenges of climate change and sea level rise. Allowing growth to encroach into rural, environmentally sensitive lands should be unacceptable. To prevent such encroachments, programs such as Transfer of Development Rights (TDRs) may be appropriate in some locales, changing zoning laws at the local level to allow higher density in already-developed areas, full funding of Florida Forever to purchase, manage and maintain fee-ownership of rural or environmentally sensitive lands or, where desirable, acquire conservation easements on farm or ranch lands while allowing the lands to remain in production. Acquiring conservation easements may come with a requirement that the user (farmer or rancher) commit to environmentally sound production methods, i.e., use of non-polluting fertilizers, management of animal wastes as is done on Prince Edward Island. Also, cease using the Sadowski Trust Fund revenues to fund non-housing related programs and, instead, use the funds to incentivize local governments and/or developers to provide for more dense housing in already developed areas, and for redevelopment.

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Considering the number of competing interests on change of any kind, none of these policies/actions will be easily accomplished nor will they occur quickly. It will be important, however, to begin the process.

Conservation Land

A huge majority – over 75 percent – of Florida voters approved the Water and Land Conservation Amendment to the Florida Constitution in November 2014. The title was clear: “Dedicates funds to acquire and restore Florida conservation and recreation lands.” The amendment requires that 33 percent of the proceeds from the already existing real estate documentary-stamp taxes go for land acquisition. A judge ruled in June 2018 that the state legislature to date has failed to appropriately allocate these funds based on the voter intent and the language of the State Constitution.

12. Do you think the Florida Legislature has properly and sufficiently allocated funds from the real estate documentary-stamp tax for land acquisition? NO. What expenses do you think are appropriate for the use of these dedicated funds and what type of land conservation projects do you think should be prioritized by the state?

Answer: I partially addressed this matter in the preceding question and believe that full funding of Florida Forever should occur annually with the money going to acquire, manage and maintain state-owned lands and conservation easements. With conservation easements, where feasible, the lands should remain in productive use pursuant to certain guidelines, e.g., use of non-polluting fertilizers, proper animal waste management and treatment, occupant assistance in managing and maintaining the lands, etc.

Early in my campaign, I had an interview with members of the Florida Agriculture Coalition during which they opined that much of the state-owned lands are not being properly managed/maintained. For lands already under state ownership or held as conservation easements, an assessment may be in order to determine whether such lands are currently being managed and maintained according to acceptable land management standards, if such standards exist. The scope of such an assessment is well beyond my ability to articulate, but there surely are individuals/organizations that are more than capable of carrying out such a task. Where it is found that state lands are not being properly managed, partnering with other stakeholders, e.g., environmental groups, scientists, the appropriate state agencies, agricultural interests, adjacent land owners (particularly corporate land owners), and concerned citizens can develop plans to manage and maintain the lands.