



FLORIDA ASSOCIATION OF COUNTIES

2019 INNOVATION & POLICY CONFERENCE

LOCALS *first*

Water Policy

2019 INNOVATION & POLICY CONFERENCE



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Water Policy Committee Policy Book

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WATER POLICY COMMITTEE **PROPOSED GUIDING PRINCIPLES**

Increased demands on Florida's water supply are forcing many diverse interests to work with county government to plan the future of water policy in Florida. In an effort to achieve the best possible result, county government should continue to expand partnerships with the agricultural community, urban water users, regional government agencies, and environmental organizations to encourage water conservation, water resource, and water supply development projects. The primary goal of such water resource planning efforts should be ensuring resource availability for all reasonable beneficial uses, consistent with the protection of water and related natural resources.

1. The Florida Association of Counties supports the allocation of matching funds to county governments to restore impaired springs, estuaries, lagoons and other waterbodies in accordance with state policy and local needs.
2. The Florida Association of Counties supports state funding for water quality improvement projects designed to reduce nutrient pollution in Florida's impaired waterbodies, recognizing that multiple sources contribute to nutrient loading, including, but not limited to, wastewater and septic systems, industrial, agricultural, and residential water use.
3. The Florida Association of Counties supports efforts of the Water Management Districts to facilitate regional partnerships and prescribe regional resolutions to address the need of finding alternative water sources to accommodate the state's growing population; additionally, support state policies allowing for local governments to establish local Water Planning Organizations.
4. The Florida Association of Counties supports policies that enhance regional and local financial capacity to address water supply development with allocation flexibility in all available funding sources.
5. The Florida Association of Counties supports the funding of the Water Protection and Sustainability Program within the Department of Environmental Protection for the development of alternative water supplies, water quality improvement projects, and comprehensive water infrastructure needs.
6. The Florida Association of Counties supports the "Florida Green Industries Best Management Practices" as a basic level of water quality protection, with more stringent protections authorized to address water bodies in need.



7. The Florida Association of Counties supports the establishment of legislative and budget policies that better recognize the return on investment in Green Infrastructure funding projects in response to nuisance flooding, water quality degradation, extreme weather, sea level rise, and climate change.
8. The Florida Association of Counties supports the economically, technically and environmentally feasible use of reclaimed water and support state legislation authorizing local utilities to develop reclaimed water sources.
9. The Florida Association of Counties supports state legislation to prohibit new well stimulation activities, including hydraulic fracturing (fracking).
10. The Florida Association of Counties opposes efforts to increase offshore drilling activities.
11. The Florida Association of Counties supports state funding to end the ocean outfalls in south Florida by the legislature's deadline of 2025.
12. The Florida Association of Counties supports prioritizing the reduction of the land application of human wastewater biosolids; and supports establishing a pilot project program for funding new state of the art wastewater technologies to improve recovery and afford more efficient use of human wastewater biosolids.
13. The Florida Association of Counties supports continued funding for research and mitigation for harmful algal blooms (HABs), including blue green algae, and red tide.



WATER POLICY COMMITTEE
2019-20 PROPOSED POLICIES

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WPC-PP-1: Water Infrastructure Assessment and Long-Term Funding

FAC Staff Recommendation: Adopt

Proposed Policy: SUPPORT legislation intended to assess and regularly report the financial need to address Florida's water infrastructure relating to water supply including conservation, the protection of water quality, stormwater, flood control and environmental resource protection and restoration. SUPPORT legislation that promotes the identification of potential sources of funding sufficient to address the documented need and establishes a predictable and consistent funding program. SUPPORT the development of priority and science-based grant programs for the implementation of projects identified by local governments, the water management districts and state agencies.

Background: The Florida Section of the American Society of Civil Engineers' 2016 Report Card for Florida's Infrastructure gave Florida low marks for water infrastructure. The assessment pointed to a U.S. Environmental Protection Agency report that estimated that Florida will need to spend about \$16.5 billion in drinking water infrastructure improvements over the next 20 years to ensure that drinking water systems in Florida continue to provide safe and reliable drinking water to the public. Concerns related to both drinking water and wastewater infrastructure focused on the significant needs posed by high population growth, aging infrastructure, and sensitive ecological environments. For wastewater, the report highlighted the number of impaired waterbodies and emphasized the importance of improving wastewater standards in addressing those impairments. The report did not directly address flood control, but for stormwater, the report stated the following: Florida's capital improvement needs for stormwater management are estimated to be \$1.1 billion through 2019, yet utility fees to upkeep the systems have declined since 2011 while needs will double over the decade. More than half of Florida's stormwater entities revealed an inability to address all capital improvement needs, and only in stormwater utilities stated that today's operation and maintenance capabilities were adequate only to meet the most urgent needs.

In 2019, Senator Albritton introduced SB 628 and Representative Jacobs introduced HB 1199 which recognized the necessity of a long-term approach to our state's needs for ample supply and quality to meet our growing population. The bills would have required FDEP to conduct a comprehensive study on statewide needs and quantify appropriate funding amounts and sources. Both bills died in committee.

Analysis: Florida has a water infrastructure funding need for a myriad of issues from blue-green algae to red tide mitigation, septic-to-sewer conversions and stormwater management. The state requires a dedicated funding source and a plan for implementing water projects in order to benefit our fragile ecosystem and meet the needs of our waterways. County staffs need a consistent and predictable program as they prepare one-year and five-year forecasts for capital projects which may qualify for funding through the FDEP.

Fiscal Impact: Indeterminate.

Submitting County and Contact: Broward; Collier; Volusia; Polk; St. Lucie

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WPC-PP-2: Water Infrastructure Funding

FAC Staff Recommendation: Incorporate into Guiding Principles (see Water GP 13); remaining issues covered in Water Infrastructure proposal

Proposed Policy: Support continued funding for research and mitigation for harmful algal blooms (HABs), including blue green algae, and red tide.

Issue Summary: Support legislation intended to assess and regularly report the financial need to address Florida's water infrastructure relating to water supply including conservation, the protection of water quality, stormwater, wastewater, water reuse, flood control and environmental resource protection and restoration. Support legislation that promotes the identification of potential sources of sufficient funding to address the documented need, as well as, the development of priority and science-based grant programs for the implementation of projects, programs, and studies identified by local governments, the water management districts and state agencies. Support legislation requiring the assessment and evaluation of state agency efforts to address sea level rise and other weather impacts on the County. Support continued funding for research and mitigation for harmful algal blooms (HABs), including blue green algae, and red tide

Background: Historically, Florida has failed to address water issues effectively thus creating the current need for comprehensive water reform.

Analysis: Water quality issues directly impact public health, the environment, and local economies.

Fiscal Impact: Indeterminate

Submitting County and Contact: St. Lucie

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WPC-PP-3: Local Water Planning Organizations

FAC Staff Recommendation: Incorporate into Guiding Principles (see Water GP 3)

Issue Summary:

SUPPORT state policies allowing for local governments to establish local Water Planning Organizations (WPOs).

Background:

Local governments need a framework for improving coordination and prioritization of funding for local and regional water projects similar to the Metropolitan Planning Organization (MPO) coordinating framework that has proven successful for transportation planning. A more effective comprehensive framework for coordinating and prioritizing funding for local water projects to address challenges such as algal blooms, water conservation, minimum flows and levels, stormwater management, and climate change adaptation and resiliency.

The Metropolitan Planning Organization (MPO) transportation framework, successfully used for decades to coordinate local government efforts regarding transportation planning and funding, has been identified as a model that could be readily adopted for better coordinating similar inter-local government planning and funding for water issues (e.g. Water Planning Organization (WPO)). Because the MPO framework is federally established, the implementation of a similar “WPO” framework would be better suited to be established by state legislation.

Analysis:

Improve coordination of local water projects planning and funding. Proposed framework would supplement regional water management district and state water planning efforts

Fiscal Impact:

Staffing and facilities for meetings would be provided by host local governments.

Submitting County: Alachua

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WPC-PP-4: Upper Kissimmee Basin Water Storage Projects

FAC Staff Recommendation: Adopt

Proposed Policy: SUPPORT funding for studies and implementation of water storage projects within the Upper Kissimmee Basin to reduce harmful discharges, enhance central Florida water supply, and to mitigate negative economic impacts on communities surrounding Lake Okeechobee.

Background:

The Comprehensive Everglades Restoration Act that adopted measures recommended under the Comprehensive Everglades Restoration Plan (Plan) was authorized by Congress in Title VI as a part of the Water Resources Development Act of 2000. This approval included a clause which prohibited the plan from reducing current flood protection goals and projected a net load increase of pollutants but did not consider future flood protection from ever increasing storm intensities and rapid urbanization. Additionally, the plan did not contemplate the water supply need for the Upper Kissimmee Basin since a water supply plan hadn't been formalized for the Upper Kissimmee Basin at the time of the Plan's adoption. No projects were submitted as a part of the Plan which addressed storage and supply in the Upper Kissimmee Basin. This has proven to be a major flaw within the Plan as water supply needs for the Upper Kissimmee Basin are targeted to outstrip supply within the next 20 years (Central Florida Water Initiative Regional Water Supply Plan 2015) and flood intensity and occurrence has increased in the past 10 years resulting in increased harmful flows to the coastal estuaries.

The Lake Okeechobee Basin Management Action Plan (BMAP) (2014), the document designed to guide reduction of pollutant loadings to meet allowable loading established in a Total Maximum Daily Load for Lake Okeechobee as required by the USEPA Clean Water Act (1972), characterized the Upper Kissimmee Basin as contributing 35% of all water and 17% of all Total Phosphorus entering Lake Okeechobee for water years 2001-2012. While Total Phosphorus as measured as milligrams per liter to Lake Okeechobee has decreased through the efforts outlined in the BMAP, total input of water has not and the total phosphorus load based on metric tonnes per year has not been reduced, resulting in ongoing harmful discharges to coastal estuaries to reduce flooding around Lake Okeechobee and/or potential overtopping or failure of the Herbert Hoover Dike around Lake Okeechobee.

Additionally, in comparison to developing solutions south of Lake Okeechobee, very little attention has been given to slowing the flow of water from the Orlando area to Lake Okeechobee over the past years. Cleaning the water prior to entering the Lake should be paramount on any agenda associated with reducing discharges to both coasts. By artificially lowering of the lake levels does not fix the overall problem. Water storage north of Okeechobee County will play a significant in resolving slowing the flow from the Kissimmee River and Shingle Creek basins. Establishing funding to develop solutions for storing water flowing from the Shingle Creek and Kissimmee River basins would assist in the revitalization of Lake Okeechobee and begin to assist in reducing discharges to both coasts.

Analysis:

Osceola County is facing acute water supply shortfalls within 20 years while excess water is flushed to tide via the Central and South Florida Flood Project due to a lack of regional water storage ability. This



lack of storage affects the entire Lake Okeechobee Basin as flood water is the largest phosphorus load contributor based on metric tonnes per year. The Lake Okeechobee Water Restoration Project will reduce these flows and levels but will not address all of the flows and will not assist in addressing Central Florida's near future water supply needs.

Additionally, the negative press coverage about Lake Okeechobee has significantly impacted the tourist trade in Okeechobee County as it relates to our out of state visitors. This issue not only affects Okeechobee County, but any County bordering Lake Okeechobee. Counties and cities (Okeechobee, Glades, Hendry, Belle Glade, Pahokee and South Bay) are designated as fiscally constrained by the State of Florida because of the small tax base. The communities rely on tourist trade for businesses to survive during the summer months.

Fiscal Impact:

The fiscal impact of additional storage projects is unknown as no scoping studies or projects have been considered.

Regarding the direct economic impact, when the Lake level was at the 11 foot level in 2008, the fishing and tourist industries estimated the loss of business was between 20% to 50%. By allocating a funding source to assist with the creation of water storage north of Okeechobee County, the lake level could be effectively managed and businesses would not susceptible to unusual swings in revenues.

Submitting County and Contact: Okeechobee; Osceola



WPC-PP-5: Green Infrastructure Investment Policies for Climate Change Resiliency

FAC Staff Recommendation: Incorporate into Guiding Principles (see Water GP 7)

Proposed Policy: Establish legislative and budget policies that better recognize the return on investment in Green Infrastructure funding projects in response to nuisance flooding, water quality degradation, extreme weather, sea level rise, and climate change.

Background:

Public and private investments in green infrastructure are cost effective strategies for improving water quality and increasing resiliency to nuisance flooding, extreme weather, and climate change. Compared to conventional gray infrastructure projects (e.g. pipes, pumps, and containment walls), green infrastructure projects tend to be more durable often having a useful life of more than 50 years. Because green infrastructure incorporates or mimics natural systems, over time these projects are more resilient to changes in hydrologic or climatic conditions.

At the local government and regional scale, green infrastructure is protecting or restoring patchworks of natural areas, such as wetlands, floodplains, and coastal mangroves to increase capacity to withstand the impacts of extreme weather, population growth, and climate change. At the land development site and neighborhood scale, green infrastructure is stormwater management systems that mimic nature by soaking up, storing, and treating polluted stormwater. Local governments need to establish a better comprehensive framework for coordinating on increasing local capacities to address local water challenges such as algal blooms, water conservation, minimum flows and levels, stormwater management, and climate resiliency and green infrastructure.

The Florida Legislature and Governor DeSantis have recently recognized the need to invest more in resilient water projects. Through the water management districts and Florida Department of Environmental Protection, the state is providing cost share opportunities for local governments.

Analysis:

Cost analysis indicates that Green infrastructure water projects are more cost effective, durable, lower maintenance compared to gray infrastructure alternatives. Green infrastructure projects typically have additional quality of life, fish and wildlife, and recreational benefits compare to gray infrastructure projects.

Fiscal Impact:

Because of their durability over a longer time period (50-100 years for green infrastructure compared to 20 years for gray infrastructure), a full cost accounting indicates that green infrastructure projects have a lower annual costs for initial capital and recurring operation and maintenance.

Submitting County: Alachua

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WPC-PP-6: Reclaimed Water Sources

FAC Staff Recommendation: Incorporate into Guiding Principles (see Water GP 8)

Policy Statement: SUPPORT state legislation authorizing local utilities to develop reclaimed water sources.

Background: Tampa Bay Water, the regional utility for three counties, has been studying this issue for two years. FAC should support establishing a state policy that gives authority to local utilities to develop reclaimed water sources.

Analysis: Growth has been substantial in the Tampa Bay area and the area will not be able to continue to supply water in the future unless reclaimed sources are developed.

Fiscal Impact: Unknown

Submitting County: Hillsborough

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WPC-PP-7: Septic-to-Sewer: Areas Vulnerable to Flooding

FAC Staff Recommendation: Adopt; combine into comprehensive septic-to-sewer proposal

Issue Summary: SUPPORT state funding for septic-to-sewer conversions in areas vulnerable to flooding.

Background:

As a low-elevation state, Florida has many cities and counties vulnerable to flooding. One of the more latent but nevertheless significant risks posed by flooding is the risk that septic tanks in flooded areas pose to public health and the environment.

As a wastewater system, septic tanks are less preferred than centralized systems for a number of reasons, but septic tanks are certainly present throughout Florida, including in areas vulnerable to flooding. Septic tanks function properly only if the septic tank drain field is located in unsaturated soil that is adequately above the groundwater table. In areas prone to flooding, however, groundwater levels are more likely to rise. In some areas, groundwater levels can rise so much during times of flooding that the groundwater gets too close to septic tank drain field or even saturates the drain field. Once the groundwater table gets too close to a septic tank drain field, the soil and associated bacteria needed to break down sewage no longer function properly leading to sewage pollution of the groundwater and soil. Failing septic systems pose a serious public health and environmental risk to both groundwater and surface waters.

Analysis:

To protect public health and the environment, it is critical to extend centralized sewer services to areas in Florida that are vulnerable to flooding so that septic system usage can be discontinued. While a number of financial tools can be utilized to work toward this goal, the costs of doing so will be significant for both public entities and the private parties who would undertake septic-to-sewer conversions.

One potentially helpful financial tool would be a State of Florida grant program available to counties and cities vulnerable to flooding. Indeed, a number of federal agencies have grant programs designed to mitigate septic-system risks, including the U.S. Environmental Protection Agency, the U.S. Department of Agriculture, and the U.S. Department of Housing and Urban Development.

Fiscal Impact:

\$10 million recommended for a statewide small grants program to help residents and water utilities in the transition from septic tanks to central sewer.

Submitting County: Miami-Dade

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WPC-PP-8: Septic-to-Sewer: Lake Okeechobee

FAC Staff Recommendation: Adopt; combine into comprehensive septic-to-sewer proposal

Proposed Policy: SUPPORT state funding for development of wastewater infrastructure in counties and cities surrounding Lake Okeechobee.

Background:

Counties and cities around Lake Okeechobee have a significant number of septic tank systems bordering tributaries feeding directly into Lake Okeechobee. Given these counties and cities have been designated as fiscally constrained by the State of Florida, they have limited resources to be allocated for the development of waste water infrastructure without assistance from the State. This proposal is to develop a grant fund managed by DEP to assist in the development of waste water infrastructure in counties and cities surrounding Lake Okeechobee.

Every year individual counties and cities develop legislative appropriation proposals to address their respective issues associated with septic tank removal. However, very little dollars are allocated to these counties for this purpose. By creating a grant fund for fiscally constrained counties around Lake Okeechobee would be helpful in promoting not only economic growth, but clean water entering into Lake Okeechobee.

Analysis:

By not having enough grant dollars allocated to this purpose for fiscally constrained counties/cities surrounding Lake Okeechobee, relative economic growth due will continue to slow down to the lack of infrastructure to accommodate industrial or commercial growth.

Fiscal Impact:

In 2008 when the Lake level was at the 11 foot level, the fishing and tourist industries estimated the loss of business between 20% to 50%. By allocating a funding source to assist with the creation of water storage north of Okeechobee County, the lake level could be effectively managed and businesses would not susceptible to unusual swings in revenues.

Submitting County: Okeechobee

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WPC-PP-9: Septic-to-Sewer: New Development

FAC Staff Recommendation: Adopt; combine into comprehensive septic-to-sewer proposal

Proposed Policy: Support requirements that new development be connected to sewer or an enhanced septic system.

Background:

The awareness of nitrogen as one of the biggest contributors to alga blooms, which are catastrophic to Florida's economy and environment, is clear.

Significant scientific research by the state has been completed on nitrogen loading in our springs, which is quantified in the Basin Management Action Plans. In fact, these loading factors apply to all standard septic tanks throughout Florida. Evidence that septic tanks are a large contributor to nitrogen loading is well documented and the state is currently investing significant funds to replace standard septic tanks with enhanced septic tanks.

The ecological service that open lands has long provided in filtering and removing nutrients is being overwhelmed by the increasing volume of nutrients emanating from our growing population and will soon overwhelm the ability of our water systems to recover. Should Florida move from a water-based recreation destination, our tourist and sales tax-based economy may fail, leaving us forced to consider income taxes to fund government services.

The adage "if you find yourself in a hole, stop digging" certainly applies here. It is estimated that 300-400 thousand people move to Florida yearly. Given the housing needs for this increase, we need a state-wide policy that requires all new development be placed on enhanced septic tanks or connected to sewer. Several counties have made this move, the rest of the state needs to step up and follow their lead.

Analysis:

This is statewide problem, and while there may be resistance to this proposal from more rural counties, we must all work together to protect our waters and economies to ensure that we are all part of the solution. Every pound of nitrogen added to ground water must be considered. In rural areas on confined soils much of the nitrogen is taken up by the plants as the ground water moves laterally, but as more and more septic systems are added the ability of the plants to remove the nitrogen is reduced. A standard septic tank transfers approximately 10 pounds of nitrogen to the ground water for every individual living on the system. As the number of people contributing increases, the amount of nitrogen making its way into local drainage systems, whether ditch, stream or river, increases.

Heard often is the comment that failing septic tanks are the problem; while these tanks are important to address as a public health issue, this is not the issue with nutrient pollution. A septic tank that works perfectly still contributes about 10 pounds per person of nitrogen to the ground water. Septic tanks were developed to handle public health problems created by exposure to human waste, and they still work adequately for that, but standard septic tanks were never designed to remove nutrients from the outflow as the enhanced septic systems do now.



As Florida developed, we have created a backlog infrastructure needs that must be addressed to clean up or even simply maintain the current status of our waters. It is estimated that 30% of Florida homes are on septic tanks, meaning close to 2.5 million septic tanks that need to be upgraded to clean up our waters. We have created quite a large hole and must stop digging, by requiring enhanced septic systems or sewer connection for all new development.

Fiscal Impact:

While there is no direct cost to the state or counties by implementing this proposal, the cost to clean up after the fact is enormous. Considering the estimated influx of new residents, if distributed randomly across the state, approximately 30% or a 100,000 may be on standard septic tanks. To reduce their contribution to the nitrogen loading at a future date will cost between 400 million to 800 million dollars. We need to step up to ensure that this future infrastructure debt is not a can we kick down the road.

Submitting County: Wakulla



WPC-PP-10: Address Landscape Irrigation Inefficiencies

FAC Staff Recommendation: Defer to Committee

Issue Summary:

Support improving the efficiency of landscape irrigation by 1) requiring state irrigation licensing and 2) adding irrigation standards to the Florida Building Code, 3) limiting the installation of new landscape irrigation wells, and 4) reducing overuse of reclaimed water on landscapes would be pivotal in reaching water conservation and springs protection goals.

Background:

Landscape irrigation is one of the largest uses of water in the state. However, the irrigation industry is currently not regulated by the state. The Florida Irrigation Society has encouraged state licensing, in part due to the challenge of complying with regulations of various local governments that are adopting local regulations in the absence of state regulation. The Florida Senate published a Review Regulation of Irrigation Contractors in October 2011 at the request of the irrigation industry and concluded that the industry should start a voluntary licensing program. The resulting voluntary state license program has experienced limited success, as there is no incentive for irrigation professionals to pursue the license. Requiring a state irrigation license will raise the professionalism of the industry and will lead to more efficient irrigation systems, especially if combined with adding Irrigation standards to the State Building Code.

Currently, irrigation is addressed in the State Building Code through a voluntary appendix (F) of the Plumbing Code. Adopting this appendix, or a version of it, into the Plumbing Code would add efficiency and design standards for new irrigation systems. If this was in place, it is likely that local design codes would no longer be needed and local Building Departments would inspect irrigation as they inspect the other components of new construction, as dictated by the Building Code.

Additionally, legislation is needed to prohibit the installation of new landscape irrigation wells when potable water is available. This becomes increasingly important when water rates are increased, as high-water users will install an irrigation well to offset water costs. Tiered water rates have been a very successful strategy for utilities, but the risk of customers switching to irrigation wells limits their use. High water users that convert to irrigation wells, no longer have the price pressure of utility bills to keep water use low. Also, there is the wide spread belief that well users are exempt from state irrigation restrictions. Finally, water use from Irrigation wells is not accounted for in water use projections used by federal, state, and local agencies. There is growing concern that recent decreases in per capita water use, are actually a result of an increasing number of people switching to a water source that is no longer accounted for in water use projections. To improve water use accounting, water management districts should require metering and reporting of water use from landscape irrigation wells.

The final prong is to reduce wasteful use of reclaimed water resources. Reclaimed water is becoming a more valued water source and there are higher uses than unlimited landscape irrigation, such as industrial re-use and aquifer recharge. State Irrigation restrictions currently do not apply to reclaimed



water, which leads to overuse of this water resource. Phasing in the application of irrigation restrictions to include reclaimed water will limit waste and create alternative uses of this valuable water resource.

Analysis:

Landscape irrigation accounts for almost 60% of residential water use. The Water 2070 report (a joint project of 1,000 Friends of Florida, the University of Florida, and the Florida Department of Agriculture and Consumer Services) concluded that, “The single most effective strategy to reduce water demand in Florida is to significantly reduce the amount of water used for landscape irrigation.” Reducing this discretionary water use locally and statewide will reduce groundwater pumping and protect springs, rivers, lakes, and wetlands.

Fiscal Impact:

The fiscal impacts of this pronged approach would be minimal. Adding irrigation systems to the State Building Code would have a minor fiscal impact on local Building Officials, as they would have to add irrigation inspections to their current workloads. The cost of installing new irrigation systems would have an increase in up-front costs, but would quickly be offset by water savings to the homeowners. Prohibiting irrigation wells would not have a fiscal impact and metering of existing irrigation wells would have a minimal fiscal impact. Applying irrigation systems to reclaimed water, would require utilities to invest in alternative “disposal” methods of this resource.

Submitting County: Alachua



WPC-PP-11: Biosolids

FAC Staff Recommendation: Defer to Committee

Issue Summary: SUPPORT prohibiting any application of phosphorus unless soil testing shows a significant phosphorus deficiency, and then only the minimum amount of phosphorus needed for crop production.

Background:

Currently DEP is in rule making for new rules for biosolid applications. The proposed rules would still allow the application of phosphorus even when the soils are saturated with phosphorus and there is a high likelihood of phosphorus leaching into the groundwater.

The last legislative session failed to pass a comprehensive water quality bill and the current DEP rule making process seems skewed to continue to allow phosphorus application even if the soil is phosphorus saturated. There is a huge load of legacy phosphorus which is still negatively impacting our water bodies and contributing to toxic algae outbreaks and red tide. The idea that we would still allow phosphorus applications is ludicrous.

Analysis:

Excess nutrients are having a negative impact statewide, from the gulf coastal counties, down the west coast, Florida Bay, and up the east coast and inland including spring's areas. While many counties and municipalities have adopted "no phosphorus" fertilizer ordinances, we continue to allow application of phosphorus on Ag and cattle lands. We will never reduce the legacy load of phosphorus if we continue to add more new phosphorus.

Fiscal Impact:

There will probably be additional cost to those counties that currently land apply their biosolids, but the general axiom has always been "it's cheaper to prevent a pound of nutrients from getting into our water as compared to removing a pound of nutrients once it's in the water."

Submitting County: Indian River

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WPC-PP-12: Biosolids

FAC Staff Recommendation: Pursue through Guiding Principles

Proposed Policy: Support the efforts of the state and local governments to prioritize the reduction and eventual elimination of the land application, and most importantly the composting of Class B and AA Biosolids. This includes efforts to immediately establish standard protocols and funding for the identification, tracking and monitoring of Biosolids, to include class AA Biosolids, application. Fund and promote emerging and innovative wastewater treatment technologies to improve Biosolids resource, recovery and management options.

Background: Currently, F.S. 373.4595 the Northern Everglades and Estuaries Protection Program, provides Florida Department of Environmental Protection the authority to deny the land application of domestic wastewater Biosolids within the St. Lucie River and Caloosahatchee Watershed, however the department is not given the authority on the composting to create class AA and/or land application of class AA Biosolids. Unfortunately, those areas located within the St. Johns Upper and Lower Basins do not have any regulation as it relates to composting, land application and disposal of class B or AA. The last legislative session failed to pass a comprehensive water quality bill and the current DEP rule making process seems unlikely to prevent additional nutrient loading to the water resources of the state. There is demonstrated legacy phosphorus which continues to negatively impact our water bodies and drives harmful algal blooms (HABs), to include toxic algae outbreaks and red tide. The continuance of phosphorus application in areas that are saturated is contrary to the goals of protecting the water resources of the local and state governments.

Analysis: Both Class B and AA Biosolids contain high amounts of nitrogen and phosphorus. Biosolids provide an inefficient form of fertilization, as only a fraction of nutrients are plant available. This results in over fertilization, which runs off into surface waters or migrates into groundwater, leading to negative outcomes that affect surface and other water resources.

Fiscal Impact: Indeterminate

Submitting County and Contact: St. Lucie

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WPC-PP-13: BMAP Activities

FAC Staff Recommendation: Defer to Committee

Proposed Policy: Support the efforts in crediting new activities and simplifying the process for existing activities to obtain nutrient removal credits towards a Basin Management Action Plans (BMAP).

Background: A Basin Management Action Plans (BMAP) is the "blueprint" for restoring impaired waters by reducing pollutant loadings to meet the allowable loadings established in a Total Maximum Daily Load (TMDL). It represents a comprehensive set of strategies: permit limits on wastewater facilities; urban and agricultural best management practices; conservation programs; financial assistance and revenue generating activities, etc. designed to implement the pollutant reductions established by the TMDL. These broad-based plans are developed with local stakeholders: they rely on local input and local commitment and are adopted by Secretarial Order to be enforceable. The FDEP credits structural and non-structural best management practices (BMPs) for nutrient removal credits. Some structural examples are wet detention, dry retention, and baffle boxes. These projects require land, engineering design, and substantial capital to construct. Critical maintenance activities such as vegetation removal from a wet pond and roadway swale material removal do not receive credit, even though they remove biomass (and nutrients) from the BMPs as well as aid in flood prevention. FDEP does not credit retrofit projects for floodplain restoration (natural land storage projects) even though the projects retain water, similar to a wet pond. FDEP has not provided clarity on dispersed water storage credits.

Muck removal and restoration calculations are complex and require much after-the-fact monitoring for credits. Consider to allow the following activities to be as reducing pollutant loadings to meet the allowable loadings (TMDLs) in a BMAP. 1. Aquatic Vegetation Removal 2. Grassed Swale Material Removal 3. Dispersed Water Storage 4. Natural Land Storage

Analysis: FDEP has substantially increased the required reduction goals for stakeholders within the St. Lucie Estuary BMAP. These increases will force the County to seek alternative projects that provide for efficient nutrient reduction. By including these additional activities to the approved list for consideration, the FDEP will better assist Counties and Municipalities to meet the required reductions.

Fiscal Impact: Indeterminate

Submitting County: St. Lucie

2019 INNOVATION & POLICY CONFERENCE



WPC-PP-14: Fertilizer

FAC Staff Recommendation: Defer to Committee

Proposed Policy: Repeal or modify the preemption on local fertilizer ordinances in sec. 576.181, F.S.

Issue Summary:

The science unquestionably proves nutrient pollution affects surface and ground waters in our state. Many counties have successfully adopted fertilizer restrictions to protect water quality, but no longer have the authority to require retailers to remove non-compliant fertilizer from their shelves. In addition, local governments spend taxpayer dollars to educate our residents about the deleterious affect fertilizer can have when misapplied either by formula, amount, or time of year applied; yet consumers still purchase these products at will. The year-round ability to sell fertilizer, especially those containing nitrogen, significantly hinders local governments to reduce nutrients entering water bodies.

Background:

In 2011, the legislature approved changes to Florida Statute 576.181 which preempted the sale of fertilizer adopted by local ordinances. Repeal or modification is required to allow local jurisdictions to pursue common sense means to address this state-wide problem.

Analysis:

Florida is the home to over 30,000 lakes, over 100 first and second magnitude springs, dozens of rivers, untold creeks, is bordered by the Atlantic Ocean, the Straits of Florida, and the Gulf of Mexico; cleaner water is vital to our health, ability to maintain a vigorous tourist economy, and provide recreational opportunities to our residents. Algal blooms are no stranger to bodies of water, but the science indicates the application of fertilizers enhances the algal bloom cycles we have encountered in the past 10 years. For example, the Department of Environmental Protection estimates urban fertilizers are responsible as much as 46% of the nitrogen seeping into Gemini Springs; one of three Outstanding Florida Springs in Volusia County.

Fiscal Impact:

Please note state and local communities must potentially fund tens of millions of dollars in sanitary sewer extensions and retrofits to reduce nitrogen in our springs and surface waters. Eliminating the sale of nitrogen fertilizers to the manufacturers will cost zero dollars as new nitrogen free fertilizers have already been introduced in the marketplace as an ordinance-compliant alternatives. Any decrease in sales tax revenue would be negligible in nature.

Submitting County: Volusia

2019 INNOVATION & POLICY CONFERENCE



WPC-PP-15: Estuary Programs

FAC Staff Recommendation: Adopt

Proposed Policy: SUPPORT developing strategies and prioritizing funding for regional efforts to protect Florida Estuaries.

Background:

Conservation and protection of Florida's natural resources is critical to managing growth, promoting economic development, and maintaining a healthy environment to ensure a high quality of life for Floridians. Northwest Florida is lush with unique ecosystems including springs and coastal dune lakes.

Northwest Florida Estuaries and their associated natural resources provide boating, fishing, tourism, and other outdoor recreational and economic opportunities for citizens and visitors of Florida. Mismanagement of Northwest Florida Estuaries may exacerbate flooding and property loss, negatively impact water quality and estuarine habitat, negatively affect the local economy and tourism, and threaten the health, safety and welfare of Florida's citizens and visitors.

In 2015, the prospective counties supported the efforts to establish Estuary Programs among the Estuaries and their waters throughout Northwest Florida for the comprehensive management, restoration, and protection of these valuable ecosystems. It is the goal of these programs to comprehensively manage and improve water quality, habitat, natural resources, and economic benefits throughout the region.

The proposed Estuary Programs within the Northwest Florida will mimic the National Estuary Program by creating a non-regulatory place-based program to protect and restore the water quality and ecological integrity of estuaries. The Northwest Florida Estuary programs will develop and implement Comprehensive Conservation and Management Plans, which are long-term plans that contain actions to address water quality and living resource challenges and priorities. The Programs will also have Management Conferences that consists of diverse stakeholders and uses a collaborative, consensus-building approach to implement the comprehensive conservation and management plan. The Management Conference ensures that the comprehensive conservation and management plan is tailored to the local environmental conditions and is based on local input, thereby supporting local priorities.

The proposed project will develop comprehensive conservation and management plans for each of the Northwest Florida Estuaries (Peridido/Pensacola, Choctawhatchee, St. Andrew/St. Joe). These plans will be the basis for establishing projects that will meet the individual estuary goals for conservation and management and improve water quality throughout the Northwest Florida region.

Analysis:

Estuary Programs are currently being developed in the three (3) areas in Northwest Florida. Each Estuary program is at a different stage of development; however, the goal of these programs is to develop a Comprehensive Conservation Management Plan to guide the restoration and conservation efforts within



the Pensacola/Peridido Bays, Choctawhatchee Bay, and the St. Andrew/St. Joe Bays. Initial funding sources have been obtained for each of these programs including Gulf Restoration funds, Local RESTORE Act funds, and Not-for-Profits (The Nature Conservancy). Dedicated state funding will help implement projects and ensure dedicated efforts to protecting the estuaries in the Northwest Florida Panhandle.

Fiscal Impact:

In most recent years, Northwest Florida has several areas including Walton County, Bay County, Okaloosa County, and Escambia who all have ranked within the Top 20 of Florida Counties in the amount of Tourist Development Tax collected. For example, the economic impact of the Choctawhatchee Bay has \$1.6 billion spent by tourist, \$2.9 billion in local sales annually, and over 36,000 jobs are created. Investing in Florida's Estuaries may bring a net positive impact on Florida's tourism industry due to improved water quality and land conservation improvements, improving recreation and quality of life improvements.

Chapter 373, F.S. incorporates a funding mechanism for restoration projects associated with the Florida Everglades called the Everglades Trust Fund. The State of Florida should create a Trust Fund dedicated to restoring and protecting Florida's Estuaries.

Submitting County: Walton



WPC-PP-16: Estuary Designation

FAC Staff Recommendation: Incorporate into Guiding Principles OR pursue through the Estuary Programs proposal.

Proposed Policy: Support development of special state designation (similar to the Outstanding Florida Water or Aquatic Preserves) that could assist Estuaries and their watersheds in getting funding for water quality and resiliency projects.

Background:

Much of Florida's distinctive character lies in the beauty of its coastline. The best of our coastal landscapes have been set aside for protection as aquatic preserves. Florida's natural beauty has been a major attraction for both tourists and residents. Ironically, the very features that draw people to Florida are potential endangered by the increase population pressures. Aquatic preserves protect Florida's living water to ensure they will always be home for bird rookeries and fish nurseries, freshwater springs and salt marshes, and seagrass meadows and mangrove forests. Florida enacted the Aquatic Preserve Act in 1975. There are currently 41 aquatic preserves in the State of Florida, encompassing 2.2 million acres. These areas are dedicated through legislative action.

The Outstanding Florida Water designation is a water designation worthy of special protection because of its natural attributes. This special designation is applied to certain waters and is intended to protect existing good water quality. This designation goes through a public process for designation. Estuaries and their surrounding wetlands are bodies of water usually found where rivers meet the sea connecting freshwater and saltwater. They are home to unique plant and animal communities that adapted to brackish water. They are among the most productive ecosystems in the world. Many animals rely on estuaries for food, places to bred, and migration stopovers. Estuaries are delicate ecosystems.

Analysis:

Congress created the National Estuarine Research Reserve System to protect more than one million acres of estuarine land and water. These estuarine reserves provide essential habitat for wildlife, offer educational opportunities for students, and serve as living laboratories for scientists.

The State of Florida should develop a specialist designation similar to the Outstanding Florida Waters and Aquatic Preserve. The designation should include special protection measures as well valued ecosystem for restoration and preservation efforts.

Fiscal Impact:

Florida Estuaries are popular to both locals and tourist of Florida. It is important to keep these valuable ecosystems healthy for generations to come. The process of the designation should not have a negative fiscal impact to the State of Florida. However, by providing these areas an added designation, the efforts to restore and preserve estuaries will increase the value of Florida's economy as a whole. For example, Northwest Florida has several areas including Walton County, Bay County, Okaloosa County, and Escambia who all have ranked within the Top 20 of Florida Counties in the amount of Tourist Development Tax collected. The economic impact of the Choctawhatchee Bay has \$1.6 billion spent by tourist, \$2.9 billion in local sales annually, and over 36,000 jobs are created. Investing in Florida's





Estuaries may bring a net positive impact on Florida's tourism industry due to improved water quality and land conservation improvements, improving recreation and quality of life improvements.


Submitting County: Walton

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