

Volusia County Water Quality Plan, January 2015 Updated May 2017

Goal	Objective	Action	Lead Organization/Stakeholders	Timing			Funded?	Cost Estimate	Funding Source(s)	2017 Update
				2015	2016-2017	2018+				
1. Improve Stormwater Treatment	Update Basin Studies, to include evaluating cost effectiveness of increased level of service for maintenance, and feasibility of recommended CIP's	Update Mosquito Lagoon/Indian River Lagoon Stormwater Management Master Plan (SWMP) - Underway	Stormwater Utilities	Complete Action			Yes	75000 , \$33,590	Stormwater Utility	Complete
		Update Halifax River SWMP	Stormwater Utilities	Complete Action			Yes	75000 , \$88,050	Stormwater Utility	Complete
		Update Tomoka River SWMP	Stormwater Utilities		Complete Action	Complete Action FY 19	Yes	\$75,000	Stormwater Utility	Study Funded in FY 18/19
		Update Spruce Creek SWMP	Stormwater Utilities		Complete Action	Complete Action FY 22	Yes	\$75,000	Stormwater Utility	Study Funded in FY 21/22
		Conduct a St. John's River Basin Study with partners	Stormwater Utilities/City partner(s)		Complete Action		No Yes	300000 , \$183,600	Stormwater Utility/City-Partners	Complete
		Identify joint projects with partners	Stormwater Utilities, Environmental Management, Water Resources and Utilities/City Partners	Ongoing			Yes			
	Capital Projects	Rio Way Regional Retention Pond	Stormwater Utilities	Pursue Grant Funding			Partial	400000 , \$166,134 Design & \$1,300,000 Construction	\$200,000 Stormwater Utility, \$200,000 Grant, \$816,134 Stormwater Utility, \$650,000 Grant	Design Complete, Grant Requests Underway
		North Peninsula Stormwater System Improvements - underway, on-going	Stormwater Utilities	On-going			Yes	\$300,000 - \$400,000 annually	Stormwater Utility	Underway
		Gemini Springs - Evaluate Stormwater outfalls to Gemini Springs to recommend treatment alternatives	Stormwater Utilities/City partner(s)	Complete Action			Yes	\$50000 , \$30,055	Stormwater Utility	Complete
		Gemini Springs - Install Stormwater Treatment Boxes at two stormwater outfalls into Gemini Springs	Stormwater Utilities		Pursue Grant Funding		Partial	\$88,867 Design & \$380,000 Construction	\$278,867 Stormwater Utility, \$190,000 Grant	Design Complete, Grant Requests Underway
		Wilbur-by-the-Sea - Install Exfiltration System and Stormwater Treatment Box for Marcelle Drainage Basin	Stormwater Utilities	Pursue Grant Funding	Complete Action		Partial Yes	640000 \$366,728	\$320,000 Stormwater Utility, \$320,000 Grant \$286,728 Stormwater Utility, \$80,000 IRL Grant	Complete
		Elizabeth Stormwater Pond - Construct Stormwater treatment pond for the Gabordy Canal in Edgewater	Stormwater Utilities/City partner(s)	Pursue Grant Funding			No Partial	1200000 \$100,000 Design & \$1,600,000 Construction	\$600,000 Stormwater Utility, \$600,000 Grant \$900,000 Stormwater Utility, \$800,000 Grant	Design Funded for FY 17/18

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2. Develop a Reasonable Assurance Plan (RAP) for Mosquito Lagoon	FDEP to Hire Consultant to facilitate RAP preparation	Establish Task Team with Cities and Stakeholders	DEP/Stormwater Utilities, Environmental Management, Oak Hill, New Smyrna Beach, Edgewater, SJRWMD				Yes		DEP	Consultant Hired/Project Underway
	Partners to Hire Engineering Consultant to prepare RAP	A Reasonable Assurance Plan (RAP) will provide more local control of prevention and restoration activities in the Mosquito Lagoon. The RAP will increase some funding opportunities for projects that implement NEP goals.	Stormwater Utilities, Environmental Management/Oak Hill, New Smyrna Beach, Edgewater, SJRWMD, DEP	Plan Development and Allocations		Project Engineering and Construction	No Yes	400000-\$398,000	Volusia County Stormwater Utility, Edgewater, New Smyrna Beach, Oak Hill, FDOT	Consultant Hired/Project Underway
3. Expand sanitary sewer system and reduce number of septic systems	Identify priority areas for conversion	Prepare preliminary engineering and construction cost analysis plan for the removal of septic tank/drainfield systems specifically near: (1) Mosquito/Indian River Lagoon (2) Blue Spring Basin (3) Halifax River Watershed (4) Gemini Springs Basin	Water Resources and Utilities (WRU)	Complete Action			Yes	Existing Staff		Staff Analysis Completed 2015
		Annually select specific areas to invest in development of planning and engineering and construction plans.	Water Resources and Utilities/Utility Providers	On-going			Yes Partial \$200,000 yr	Existing staff Varies based on project scope and cooperative funding	(1) WRU Operating Rev (2) Local funding match (3) State & SJRWMD Grants	(1) Joint wastewater planning w/Orange City (Blue Spring - \$194k) (2) Wastewater planning (Mosquito Lagoon-\$200k)
	Implement Conversions	Funding and construction of sanitary sewer collection systems.	Leadership		Seek Funding	Construction-Seek Funding	No	\$353,430,000	(1) Local match sources (TBD) (2) Special Assessment (3) State & SJRWMD Grants	Program lacks long-term and committed funding sources at state and local levels
	Require connections where service is available	Remove the 6 lots or fewer sanitary sewer exemption from the Comprehensive Plan.	Planning and Development Services, Environmental Management, Water Resources and Utilities	Complete Action		Complete Action	Yes	Existing Staff		Not completed
		Adopt an Environmental Minimum Standard to require homes and businesses connect to sewer if available.	Environmental Management			Complete Action	Yes	Existing staff		Not completed
4. Reduce Nutrient Concentration of Treated Wastewater Discharge	Improve WWTPs to Advanced Wastewater Treatment standards	Upgrade waste water facilities to advanced wastewater treatment (AWT) and expand capacity for septic tank conversions in Southwest Volusia.	Water Resources and Utilities (WRU)	Secured \$5.5 million DEP and SJRWMD cost share funding	Obtained addl \$2.0 million state funding; commenced construction (AWT)	Complete Construction FY 18	No-Yes	\$650,000 for Engineering and Design, \$5,850,000-\$12,100,000 for Construction	WRU \$5.2 million FDEP \$5.5 million SJRWMD \$2.0 million	Nutrient reduction project for the protection of Volusia Blue Spring (on schedule)
		Engineering and Design and Construction for expansion of .6 MGD to 1.2 MGD WWTP and conversion to AWT in Southeast Volusia.				Pursue Grant Funding and SRF	No	\$900,000 \$1,200,000 for Engineering and Design, \$7,300,000-\$7,800,000 for Construction	(1) WRU Operating rev/ debt issuance (2) State & SJRWMD Grants	Nutrient reduction strategy pending completion of RAP for Mosquito Lagoon

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5. Provide Education and Outreach	Develop a Water Education Task Team	Create a curriculum catalog identifying all water related education option and any existing gaps in offerings. (Complete)	Environmental Management	Complete			Yes	Existing staff		Complete
		Develop multi-media educational materials to engage citizens and residents in water quality issues (Stetson student 10 hours/week).	Environmental Management	Complete 10 products	Complete 10 products		No	\$10,000	General Fund	Developed Prezi presentations and web pages, not fully funded
		Develop a Volunteer Naturalist program to extend the reach of our professional educators and double the number of residents we reach with educational programs.	Environmental Management	Recruit Naturalists	On-going education		Yes	Existing staff		Complete and on-going
	Create a media campaign for fertilizer restrictions	Create and maintain a website listing certified and trained fertilizer applicators. Includes initial training class to applicators and certification materials (1/3 FTE)	Environmental Management/UF IFAS	Create Program	On-going education		No	\$17,000/annually	Federal/State IRL NEP grant	Training through IFAS, on-line database not completed, not fully funded
		Create fertilizer education program for retailers, includes site visits, creation of materials for display at retail locations (1/3 FTE)	Environmental Management/UF IFAS, local NGO's	Create Program	On-going education		No Partial	\$27,000/annually, \$18,500 in GF	General Fund, Federal/State IRL NEP grant	Complete and on-going in partnership with Marine Resources Council, \$53,000 grant from IRL Council
		Fertilizer education program for institutional applicators and homeowners. Includes site visits to institutional uses, HOA meetings, community and civic groups, creation of materials, advertising, informational webpage (1 FTE)	Environmental Management/UF IFAS, local NGO's	Create Program	On-going education		No Partial	\$150,000/annually \$18,500 in GF	General Fund, Federal/State IRL NEP grant, direct state appropriation	In progress, PT worker meeting with HOA's, webpage at BeFloridianNow.org, not fully funded
		Develop feedback mechanisms to determine the success of marketing strategies.	Environmental Management	Complete Action			No	Included above		
		Develop the expanded uses of social media for raising awareness of water quality, including creating a new website and facebook page.	Environmental Management	Complete Action			No	Included above		Utilize county facebookpage, volusia.org/waterquality, volusia.org/fertilizer
		Establish program parameters and partners. Includes regular coordination and staff time for in-kind grant matches (1/4 FTE)and materials	Environmental Management/Marine Discovery Center, Bethune Cookman, Stetson, Daytona State College, UCF, Audubon, Blue Spring Alliance, League of Women Voters, Marine Resources Council, UF IFAS	Complete Action			No Yes	\$33,000/annually	General Fund, existing staff time, IRL Council grant	Complete with \$41,000 grant from IRL Council to Marine Discovery Center
		Ongoing commitment (1/4 FTE)	Same as above		Long-term Commitment		No Partial	\$33,000/annually	Foundation grants, existing staff time	On-going with existing staff, not fully funded

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6. Improve/Increase Monitoring and Research	Establish a University Consortium for Analysis and Research	Establish program parameters and partners. Includes regular coordination and staff time (1/8 FTE).	Environmental Management	Complete Action			Yes	\$7,000/annually	General Fund	Included with Project H2O program, complete and on-going
		Act as liaison between Universities to track research projects and make use of findings.	Environmental Management	Long-term commitment			Yes	Existing Staff	General Fund	On-going
	Identify Additional Monitoring Needs	Identify gaps in sampling and work among departments to determine additional sampling parameters.	Environmental Management, Stormwater Utilities, Water Resources and Utilities	Complete Action			Yes	Existing Staff	General Fund, Stormwater Utilities	Complete and on-going
		Identify gaps in sampling and work among departments to determine additional sampling sites.	Environmental Management, Stormwater Utilities, Water Resources and Utilities	Complete Action			Yes	Existing Staff	General Fund, Stormwater Utilities	Partner with SJRWMD to add up to 12 monitoring sites
	Acquire Continuous Data Loggers in Mosquito Lagoon	Initiate contact with the St. Johns Water Management District and DEP regarding funding alternatives (completed).	Environmental Management	Complete Action			Yes	Existing staff	General Fund	Project has not moved forward due to technical issues with existing continuous monitors in other locations and lack of sustained funding
		Work with District and DEP on locations and installation.	Environmental Management	Complete Action			No	\$300,000	DEP	
		Hire additional water quality monitoring staff to maintain the data loggers and analyze data (1/2 FTE).	Environmental Management	Long-term commitment			No	\$30,000/annually	General Fund	
	Pre/post stormwater capital projects sampling	Work with Universities and agencies to identify project needs and resources.	Environmental Management, Stormwater Utilities, Universities	Complete Action, Ongoing			No	Unknown	General Fund, University resources	On-going, working with UCF on Williamson Blvd. project
	Seek Expansion of the IRL Designation north to the county line	Engage the Environmental Protection Agency on boundary expansion	Environmental Management, Stormwater Utilities, Water Resources and Utilities/IRL NEP, lobbyist	Complete Action			Yes	Existing Staff		Complete - IRL Council submitted to EPA in November 2016