Northwest Florida Water Management District

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Brett J. Cyphers
Executive Director

June 28, 2021

Mr. Ryan Smart, Executive Director
Florida Springs Council
PO Box 358191
Gainesville, FL 32635
smart@floridaspringscouncil.org

Dear Mr. Smart:

Thank you for your and the Florida Springs Council's interest in the restoration and protection of our Outstanding Florida Springs in northwest Florida. The restoration and long-term preservation of our springs is a goal our Board and its staff share with you and take very seriously. It is unfortunate your organization did not reach out to us prior to publishing your Springs Funding Report because, if you had, the District would have helped you avoid foundational errors in your analysis.

The Florida Springs Council report describes (incompletely) a single year of proposed projects and represents these as the entirety of the cooperative spring restoration strategy developed by the District in partnership with local governments, utilities, agricultural producers, landowners, and the Florida Department of Environmental Protection. Notably, the incomplete set of fiscal year 2021-22 proposed projects described in the report does not include multiphase projects that are anticipated to continue through 2022 and the following years. Further, the Florida Springs Council report does not recognize the complete array of projects funded since 2014, which address multiple sources of current and prospective nitrogen contributions including septic tanks, agricultural operations, etc. (details attached).

Perhaps if the Council had been aware of the ongoing and multiyear efforts, the report could have avoided overlooking the substantial effort being made by agricultural producers to implement cost-share projects that significantly improve water use and nutrient application efficiency and thereby reduce pollutant loading to Jackson Blue Spring (details attached).

Also, the report does not correctly depict current pollutant loads or the load reductions required to meet water quality goals, as reflected in the current Basin Management Action Plans (BMAPs). Remarkably, the report overlooks current water quality and flow data and trends within affected spring systems, and it misstates the relative nitrogen loading contributions by source. Given the inaccurate representations of projects funded, progress to date, and pollutant loading, the report misrepresents the overall progress made toward achieving the established water quality goals within the deadlines provided in Florida Statutes.

In the attachments, we have provided the correct data related to Wakulla Spring and Jackson Blue Spring, assuming you will want to correct the errors in this year's report. More broadly, the Northwest Florida Water Management District is ready to assist the Florida Springs Council in its effort to accurately report on spring restoration progress in the future. In fact, as we approach BMAP success, we will be expanding our monitoring and modeling activities even further to better understand the complexity and improvement of these systems. We are, of course, happy to share that data with you as well.

Thank you again for your commitment to our shared goal of spring restoration and protection. Please do not hesitate to reach out if I can be of service.

Respectfully,

Brett J. Cyphers
Executive Director

cc: Ms. Kellie Ralston, Governing Board, Northwest Florida Water Management District
Ms. Anna Upton, Governing Board, Northwest Florida Water Management District
Dr. Robert Deyle, Chair, Wakulla Springs Alliance

Attachments

Summary of Progress and Supporting Information: Wakulla Spring and Jackson Blue Spring

The following are descriptions of progress and supporting information relating to Wakulla Spring and Jackson Blue Spring. It should be noted that the majority of the wastewater and stormwater projects compiled and submitted to the Florida Department of Environmental Protection for state funding consideration do not originate with the Northwest Florida Water Management District. Instead, they are proposed and, when funded, are implemented by local governments and utilities.

Wakulla Spring

- Since 2014, 24 projects and/or project phases have been funded for $71,017,363, $27,550,200 of which consists of local match. For fiscal year 2021-22, 12 projects within the Wakulla Spring BMAP area are proposed for funding in the amount of $48,185,718. Of this, $7,116,000 consists of local match.
- The projects funded to date have resulted in an estimated reduction in total nitrogen loading of 13,456 pounds per year, 4,328 of which have already been realized. For fiscal year 2021-22, the 12 proposed projects have an estimated reduction in total nitrogen loading of 8,311 pounds per year.
- The current BMAP (2018) reflects the relative contribution of nitrogen loading as 34% from onsite sewage treatment and disposal systems (OSTDS), 27% atmospheric deposition, 12% urban and sports turfgrass fertilizer, 24% agriculture, and 3% wastewater treatment facilities.
- Based on direct measurements, the average nitrate concentration in 2020 at Wakulla Spring was approximately 0.37 mg/L. With flows averaging 739 cubic feet per second in 2020, the nitrate load was approximately 537,240 pounds per year. This is 164,171 pounds per year less than the estimated load at the time of BMAP establishment.
- Based on updated loading estimates, the projects funded to date together with those proposed for FY 2021-22 and future planned projects are expected to reach the TMDL of 0.35 mg/L by 2029 (nine years prior to the statutory deadline for Outstanding Florida Springs – 2038 for Wakulla Spring).

Jackson Blue Spring

- Since 2013, 19 projects and/or project phases have been funded for $29,690,196, $4,688,635 of which consists of local match. For fiscal year 2021-22, three projects within the Jackson Blue Spring BMAP area are proposed for funding in the amount of $7,518,794. Of this, $3,544,000 consists of match funding from local or other sources.
- The projects funded to date are expected to result in an estimated reduction in agricultural nitrogen applications of 984,439 pounds per year, together with a reduction of pollutant loading from septic systems of 2,556 pounds per year. To date, a reduction of approximately 386,212 pounds per year has been realized. For fiscal year 2021-22, the three proposed projects have an estimated reduction in total nitrogen loading of 1,563 pounds per year.
- The current BMAP (2018) reflects the relative contribution of nitrogen loading as 85% farm fertilizer, 7% livestock waste, 5% atmospheric deposition, 3% OSTDS, and <1% urban and sports turfgrass fertilizer.

- The District's agricultural programs include a cost-share program for implementation of precision agriculture practices and an innovative grass-based crop rotation program, pioneered by the University of Florida's Institute of Food and Agricultural Sciences. Within the Jackson Blue Spring contribution area, an estimated 89% of all irrigated acres have participated in the District's agricultural programs. To date, nearly 8 million gallons per day of water are estimated as being saved in Jackson County due to these efforts (21% savings).
- Projects focused on reducing nutrient loading from agriculture have been funded every year since 2014 at a total investment of $14,210,308, of which $4,119,576 consists of cost-share match provided by agricultural producers. The District's proposed 2021-22 fiscal year budget includes $6,597,950 for agricultural cost-share programs in Jackson County.
- An important aspect of the effort to reduce pollutant loading and restore water quality at Jackson Blue Spring is that it is a community-wide effort. To this end, Jackson County and its residents have accepted a shared responsibility for stewardship of the spring. To accomplish this, the County has sponsored septic-to sewer and stormwater retrofit projects in the Jackson Blue Spring and Merritts Mill Pond basin. Similarly, the Town of Malone has taken the initiative to connect to central sewer a school and residences that have historically been served by septic systems. This type of community-based approach will provide future infrastructure to help ensure future development is managed in a way that sustains water quality.
- The District is in the process of conducting additional data collection and analysis to better understand progress toward nutrient reduction within the Jackson Blue Spring basin.

Wakulla Spring Nutrient Reduction Project Implementation
Funded Projects

FY	Project	Cooperator	State Funding	Match	Total	PFA	Project Type	Completed Connections	Future Connections	Nitrogen Removal (lbs/yr TN) - Completed	Effective Nitrogen Removal (lbs/yr TN) - Completed Project Multiplier (PFA 1 = 100%, PFA 2 = 25%)	Nitrogen Removal (lbs/yr TN) - In progress	Effective Nitrogen Removal (lbs/yr TN) - In-progress Project Multiplier (PFA 1 = 100%, PFA 2 = 25%)	Total Nitrogen Reduction (lbs/yr TN) Expected	Effective Total Nitrogen Reduction (lbs/yr TN) - Expected Project Multiplier (PFA 1 = 100%, PFA 2 = 25%)
14-15 15-16 18-19	Wakulla County Wastewater Improvements - Magnolia Gardens Phases I, II, & III	Wakulla County	$7,051,811	$3,856,600	$10,908,411	PFA 2	Septic to sewer connection	251	122	2,768	692	1,346	337	4,114	1,029
14-15 15-16 17-18 18-19 19-20 20-21	Wakulla County Wastewater Improvements - Wakulla Gardens Phases I, II, III, IVA	Wakulla County	$17,202,415	$3,856,600	$21,059,015	PFA 2	Septic to sewer connection	275	308	3,033	758	3,396	849	6,429	1,607
14-15 15-16	Leon County Wastewater Improvements - Woodside Heights Phase I & II	Leon County	$2,450,000	$2,450,000	$4,900,000	PFA 1	Septic to sewer connection	170	0	1,794	1,794	0	0	1,794	1,794
16-17 18-19	Septic Connection to Existing Sewer in the Wakulla BMAP	City of Tallahassee	$1,081,000	$2,937,000	$4,018,000	PFA 1	Septic to sewer connection	40	140	401	401	1,403	1,403	1,804	1,804
16-17 19-20	Woodville Sewer System Project Design & Permitting, Phase 1A Construction	Leon County	$5,250,000	$5,250,000	$10,500,000	PFA 1	Septic to sewer connection	0	185	0	0	1,855	1,855	1,855	1,855
16-17 19-20 20-21	Advanced Septic Systems Pilot Project (Septic System Upgrades)	Leon County	$250,000	$1,000,000	$1,250,000	PFA 1	Advanced septic treatment	7	208	32	32	946	946	978	978
17-18	Belair/Annawood Sewer System Project	Leon County	$1,750,000	$1,750,000	$3,500,000	PFA 1	Septic to sewer connection	0	113	0	0	1,133	1,133	1,133	1,133
17-18	Northeast Lake Munson Sewer System Project	Leon County	$2,750,000	$2,750,000	$5,500,000	PFA 1	Septic to sewer connection	0	260	0	0	2,606	2,606	2,606	2,606
17-18	Wakulla Springs Land Acquisition	NWFWMD	$2,400,000	$0	$2,400,000	PFA 1 PFA 2	Land acquisition	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
18-19	Capital Cascades Segment 3D Stormwater Pond	Blueprint Intergovernmental Agency	$500,000	$3,700,000	$4,200,000	PFA 1	Stormwater	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
18-19 19-20	Septic Upgrade Incentive Program	DEP	$2,781,937	$0	$2,781,937	PFA 1 PFA 2	Advanced septic treatment	281	TBD	1,375	650	TBD	TBD	1,013	650
	Total		**$ 43,467,163**	**$ 27,550,200**	**$ 71,017,363**			**1,024**	**1,336**	**9,403**	**4,328**	**12,685**	**9,129**	**21,726**	**13,456**

Wakulla Spring Nutrient Reduction Project Implementation
Proposed FY 2021 - 2022 Projects

FY	Project	Cooperator	State Funding	Match	Total	Spring	PFA	County	Project Type	Homes Connected - Planned	Total Nitrogen Reduction (lbs/yr TN) - Planned	Effective Total Nitrogen Reduction (lbs/yr TN) - Expected Project Multiplier (PFA 1 = 100%, PFA 2 = 25%)
21-22	Wakulla County Wastewater Improvements - Wakulla Gardens Phase IVB, V, VI, and VII	Wakulla County	$16,206,828	$0	$16,206,828	Wakulla Springs	PFA 2	Wakulla	Septic to sewer connection	307	3,386	847
21-22	Wakulla County Wastewater Improvements - Magnolia Gardens Phases IV	Wakulla County	$2,944,922	$0	$2,944,922	Wakulla Springs	PFA 2	Wakulla	Septic to sewer connection	35	386	97
21-22	Wakulla County PFA-1 Sewer Phase 1 and 2	Wakulla County	$6,565,144	$0	$6,565,144	Wakulla Springs	PFA 1	Wakulla	Septic to sewer connection	125	1,378	1,378
21-22	Wakulla County Crawfordville East Sewer Phase V and VI	Wakulla County	$8,236,824	$0	$8,236,824	Wakulla Springs	PFA 2	Wakulla	Septic to sewer connection	169	1,864	466
21-22	Woodville Sewer System Project - Construction Phase 1B	Leon County	$5,300,000	$5,300,000	$10,600,000	Wakulla Springs	PFA 1	Leon	Septic to sewer connection	322	3,228	3,228
21-22	Advanced Septic Systems Pilot Project (Septic System Upgrades)	Leon County	$500,000	$500,000	$1,000,000	Wakulla Springs	PFA 1	Leon	Advanced septic treatment	65	296	296
21-22	City of Tallahassee - WWTP Upgrades (Phase 1 of 2)	City of Tallahassee	$1,316,000	$1,316,000	$2,632,000	Wakulla Springs	PFA 1	Leon	WWTP Upgrades	N/A	2,000	2,000
		Total	**$ 41,069,718**	**$ 7,116,000**	**$ 48,185,718**					**1,023**	**12,538**	**8,311**

Wakulla Spring Nutrient Reduction Project Implementation
Planned Future Projects

FY	Project	Cooperator	State Funding	Match	Total	Spring	PFA	County	Status	Project Type	Homes Connected - Planned	Total Nitrogen Reduction (lbs/yr TN) - Planned	Effective Total Nitrogen Reduction (lbs/yr TN) - Expected Project Multiplier (PFA 1 = 100%, PFA 2 = 25%)
23-24	Wakulla County Wastewater Improvements - Wakulla Gardens Phases VIII	Wakulla County	$14,702,923	$0	$14,702,923	Wakulla Springs	PFA 2	Wakulla	Long-Term Funding Schedule	Septic to sewer connection	122	1,346	337
22-23	Wakulla County Crawfordville East Sewer Phases I, II, III, IV, VII, VIII, and IX	Wakulla County	$18,057,255	$0	$18,057,255	Wakulla Springs	PFA 2	Wakulla	Long-Term Funding Schedule	Septic to sewer connection	357	3,937	984
22-23	Wakulla County Crawfordville West Sewer Phases I, II, & III	Wakulla County	$11,892,818	$0	$11,892,818	Wakulla Springs	PFA 2	Wakulla	Long-Term Funding Schedule	Septic to sewer connection	206	2,272	568
23-24	Wakulla County Wakulla River Sewer Phase I	Wakulla County	$7,109,063	$0	$7,109,063	Wakulla Springs	PFA 2	Wakulla	Long-Term Funding Schedule	Septic to sewer connection	80	882	221
22-23 23-24	Woodville Sewer System Project - Construction Phases 1C-1 & 1C-2	Leon County	$8,175,000	$8,175,000	$16,350,000	Wakulla Springs	PFA 1	Leon	Long-Term Funding Schedule	Septic to sewer connection	501	5,022	5,022
22-23 23-24 24-25	Advanced Septic Systems Pilot Project (Septic System Upgrades)	Leon County	$1,500,000	$1,500,000	$3,000,000	Wakulla Springs	PFA 1	Leon	Long-Term Funding Schedule	Septic to sewer connection	195	886	886
22-23	City of Tallahassee - WWTP Upgrades (Phase 2 of 2)	City of Tallahassee	$2,684,000	$2,684,000	$5,368,000	Wakulla Springs	PFA 1	Leon	Long-Term Funding Schedule	WWTP Upgrades	N/A	2,500	2,500
		Total	**$ 64,121,059**	**$ 12,359,000**	**$ 76,480,059**						**1,461**	**16,845**	**10,517**

Jackson Blue Spring Nutrient Reduction Project Implementation
Funded Projects

FY	Project	Cooperator	State Funding	Match	Total	Project Type	Completed Connections	Future Connections	Nitrogen Removal (lbs/yr TN) - Completed	Nitrogen Removal (lbs/yr TN) - In-progress	Total Nitrogen Reduction (lbs/yr TN) Expected
13-14 14-15 15-16 16-17 17-18 18-19 19-20	Jackson Blue Spring Precision Agriculture Cost-Share Grant Program	NWFWMD	$8,739,500	$3,292,428	$12,031,928	Precision Agricutlure	N/A	N/A	385,373	533,022	918,395
16-17 18-19	Sod-Based Crop Rotation	NWFWMD	$1,351,232	$827,148	$2,178,380	Precision Agriculture	N/A	N/A	0	66,044	66,044
15-16 17-18 18-19 19-20 20-21	Indian Springs Sewer Extension Phases 1, 2A, & 2B	Jackson County	$9,057,303	$500,000	$9,557,303	Septic to sewer connection	102	132	785	1,016	1,801
16-17 17-18	Blue Spring Road Sewer Phase I	Jackson County	$3,566,749	$0	$3,566,749	Septic to sewer connection	0	74	0	570	570
17-18	Malone High School Sanitary Sewer Connection Project	Town of Malone	$432,077	$47,059	$479,136	Septic to sewer connection	7	0	54	0	54
17-18	Jackson Blue Spring Recreation Area Stormwater Improvement Project	Jackson County	$729,200	$22,000	$751,200	Stormwater	NA	NA	N/A	N/A	N/A
20-21	Tara Estates Sewer Project	City of Marianna	$1,125,500	$0	$1,125,500	Septic to sewer connection	0	17	0	131	131
	Total		**$ 25,001,561**	**$4,688,635**	**$ 29,690,196**		**109**	**223**	**386,212**	**600,783**	**986,995**

Jackson Blue Spring Nutrient Reduction Project Implementation
Proposed FY 2021 - 2022 Projects

FY	Project	Cooperator	State Funding	Match	Total	Spring	County	Project Type	Homes Connected - Planned	Total Nitrogen Reduction (lbs/yr TN) - Planned
21-22	Indian Springs Sewer Phase 2C - Revised	Jackson County	$2,960,029	$0	$2,960,029	Jackson Blue Spring	Jackson	Septic to sewer connection	33	254
21-22	Malone Sewer System Expansion - Phase I	Town of Malone	$528,265	$3,534,000	$4,062,265	Jackson Blue Spring	Jackson	Septic to sewer connection	170	1,309
21-22	Jackson Blue Spring Recreation Area Stormwater - Phase II	Jackson County	$486,500	$10,000	$496,500	Jackson Blue Spring	Jackson	Stormwater	N/A	TBD
		Total	**$ 3,974,794**	**$ 3,544,000**	**$ 7,518,794**				**203**	**1,563**

Jackson Blue Spring Nutrient Reduction Project Implementation
Planned Future Projects

FY	Project	Cooperator	State Funding	Match	Total	Spring	County	Status	Project Type	Homes Connected - Planned	Total Nitrogen Reduction (lbs/yr TN) - Planned
22-23 23-24 24-25	Indian Springs Sewer Phase 2D, 2E, & 2F	Jackson County	$7,416,101	$0	$7,416,101	Jackson Blue Spring	Jackson	Long-Term Funding Schedule	Septic to sewer connection	48	370
25-26 26-27 27-28 28-29 29-30 30-31 31-32 32-33	Blue Spring Road Sewer Phase II - IX	Jackson County	$22,458,629	$0	$22,458,629	Jackson Blue Spring	Jackson	Long-Term Funding Schedule	Septic to sewer connection	218	1,678
22-23	Malone Sewer System Expansion - Phase II	Town of Malone	$1,467,735	$0	$1,467,735	Jackson Blue Spring	Jackson	FY22-23 Request	Septic to sewer connection	Included in Phase I	Included in Phase I
	Total		**$ 31,342,465**	**$ -**	**$ 31,342,465**					**266**	**2,048**