FDEP Springs Funding
FY2022 Applications

October 21, 2020

FY2022 FDEP Springs Funding Application Materials Submitted to the Southwest Florida Water Management District									
Unit Number	**Applicant**	**Project**	**Nitrogen Reduction**	**Water Made Available**	**FDEP Request**	**WMD Request**	**Local Match**	**Other Funding**	**Total**
APP01	Bay Laurel CDD	On Top of the World North Advanced Wastewater Treatment Facility*	17,556	1.25 MGD	$ 7,175,000	$ -	$ 5,830,000	$ -	**$ 13,005,000**
APP02	FGUA	Rainbow River - Rio Vista Septic-to-Sewer Project	3,551		$ 10,802,608	$ -	$ -	$ -	**$ 10,802,608**
APP03	Hernando County	Hernando County Septic to Sewer District A, Phase 1*	3,703		$ 2,310,000	$ 495,000	$ 495,000	$ -	**$ 3,300,000**
APP04	City of Crystal River	Crystal River Wetland Recharge Park	TBD		$ 7,340,000	$ -	$ -	$ -	**$ 7,340,000**
APP05	City of Inverness	41 N Sewer Extension Project	1,202		$ 3,264,800	$ -	$ 816,200	$ -	**$ 4,081,000**
APP06	City of Inverness	South Highlands Septic to Sewer Project*	695		$ 2,613,600	$ -	$ 653,400	$ -	**$ 3,267,000**
APP07	Marion County	State Road 200 Septic to Sewer Program	543	.005 MGD	$ 178,232	$ 178,232	$ 356,465	$ -	**$ 712,929**
		*Multiyear Funding Request, only FY22 request listed							
	Application Count:	7	**26,707**	**TOTAL**	**$ 33,684,240**	**$ 673,232**	**$ 8,151,065**	**$ -**	**$ 42,508,537**
					Last Updated:	10/14/2019			

APP 01

Bay Laurel Center Community
Development District (BLCDD)

On Top of the World North Advanced
Wastewater Treatment Facility

FY2022 FDEP Springs Funding Application for Projects within the Southwest Florida Water Management District

This application should be completed and emailed with the appropriate calculations and map to Lisa.Laupert@swfwmd.state.fl.us by 5:00PM on October 2, 2020.

Applicant Information

Entity Name: Bay Laurel Center Community Development District (BLCCDD)

Is the Entity designated as an economically disadvantaged community? ○ Yes ◉ No

Project Manager Name: Bryan Schmalz, Utility Director

Project Manager Address: 8470 SW 79th Street Road, Suite 3, Ocala, Florida 34481

Project Manager Phone Number: 352-414-5454, ext 4105

Project Manager Email Address: bryan_schmalz@blccdd.com

Project General Information

Project Name: On Top of the World North Advanced Wastewater Treatment Facility

Project Type: Waste Water Collection & Treatment (Complete Form A)

Project Benefit

Quantity of Water Made Available (mgd): 1.25 mgd in 2027

Land Acquisition (acres): 37.09

Nitrogen Reduced (lbs/year): 17,556 in 2027 (see calcs)

Sediment Reduced (lbs/year): N/A

Please download the the FDEP Springs Funding guidance document. Benefit calculations should be provided demonstrating how the benefit calculation was derived. A Map should be included showing the area of the project and depict notable features.

Project Detail Information

Is this a multiyear project? (●) Yes ( ) No

Note: For multiyear funding request, please download the multiyear funding request spreadsheet, complete the form, and send in with this application.

Please provide a full description of the project. For multiyear funded projects, please provide a description of the complete project, beginning to end, and a description explaining what phase will be covered by this funding request application.

BLCCDD in a not-for-profit local unit of special purpose government of the State of Florida created by and in accordance with the Uniform Community Development District Act of 1980, Chapter 190, Florida Statutes, as amended, and by Marion County Ordinance No. 02-11, adopted by the Board of County Commissioners of Marion County, Florida on May 7, 2002 and amended by Marion County ordinance No. 04-10, adopted by the Board of County commissioners of Marion County, Florida on May 4, 2004.

This is a multi-year funded project for the design and construction of the following components:

1. A 2.5 MGD advanced domestic wastewater treatment facility (WWTF) to replace a 1.25 MGD conventional extended-aereation WWTF. Biosolids treatment and thickening is included - as a result biosolids will no longer be land applied on site and instead, be disposed of off site into a lined landfill outside the Rainbow Spring basin.

2. Wastewater transmission system improvements including: a) 1 triplex master lift station with odor control; and b) approximately 15,000 feet of 20-inch diameter force main.

3. Reclaim transmission system improvements including: a) one 5-million gallon ground storage tank (GST); b) one high-service reclaim pumping station; and c) approximately 7,700 feet of 24-inch transmission main, and approximately 300 feet of 16-inch transmission main with tie-in connections and fill valve at existing 2.5-million gallon GST. CFI funding will be requested for this portion of the project.

The following phasing schedule is anticipated:

Phase 1 - Engineering/Design	Start: January 2021	End: June 2022
Phase 2 - Bidding and Construction	Start: July 2022	End: September 2024

All of Phase 1 completed during FY 2021 and 2022 and all of Phase 2 will be covered by this funding request application.

What is the anticipated start and end date for the work that will be conducted under this funding request?

Start Date: January 2021 End Date: September 2024

Project Location Information (please submit a map with this application)

County Marion

Latitude (decimal degrees) 29.1075 N

Longitude (decimal degrees) 82.2975 W

What is the spring name that will receive the benefit? Rainbow Springs

Is this spring deemed impaired? Yes, with a BMAP or RAP

What is the distance from the project to the spring receiving the benefit ? 8.2 miles

Is this project in a springshed? If so, specify which one. Rainbow Springs

Is this project within a BMAP boundary? (●) Yes ( ) No

Is this project within a PFA boundary? ( ) Yes (●) No

Is this project listed in the BMAP project list? ( ) Yes ( ) No (●) No, but will be in an update

Is this project listed in a recovery strategy, prevention strategy, or regional water supply plan as benefiting an MFL? ( ) Yes (●) No

Please list any restoration plans, prevention plans, recovery plans, or long term local water quality or quantity strategy plans this project is part of.

In an effort to mitigate and offset groundwater water withdrawals from the Floridan Aquifer, BLCCDD's long term local water quantity strategy plan is to provide reclaimed water to golf courses, common areas, and commercial areas within the On Top of the World and Stone Creek developments.

Project Funding Information

Are you applying for CFI funding this fiscal year? (●) Yes ( ) No

Have you received springs funding or CFI funding for this project in the past? ( ) Yes (●) No

Enter the funding amount that has been received and/or is being requested:

	Previous	FY2022	Future	Total
FDEP Springs Funding	$ 0.00	$ 7,175,000.00	$ 18,925,000.00	$ 26,100,000.00
WMD CFI Funding	$ 0.00	$ 0.00	$ 0.00	$ 0.00
Local Funding	$ 1,345,000.00	$ 5,830,000.00	$ 18,925,000.00	$ 26,100,000.00
Other Funding	$ 0.00	$ 0.00	$ 0.00	$ 0.00
Total	$ 1,345,000.00	$ 13,005,000.00	$ 37,850,000.00	$ 52,200,000.00

In the event this project is not awarded CFI funding, please use the table below to reflect how the costs will be handled without CFI funding. If CFI funding was not applied for, please move to the next section.

	Previous	FY2022	Future	Total
FDEP Springs Funding	$ 0.00	$ 0.00	$ 0.00	$ 0.00
Local Funding	$ 1,345,000.00	$ 13,005,000.00	$ 37,850,000.00	$ 52,200,000.00
Other Funding	$ 0.00	$ 0.00	$ 0.00	$ 0.00
Total	$ 1,345,000.00	$ 13,005,000.00	$ 37,850,000.00	$ 52,200,000.00

Please download the the FDEP Springs Funding guidance document. Benefit calculations should be provided demonstrating how the benefit calculation was derived. A Map should be included showing the area of the project and depict notable features.

Provide any additional information below that is pertinent to the review of this application. Include information on any existing ordinances, capital improvement plans, or master plans.

WASTEWATER TREATMENT FACILITIES MASTER PLAN REPORT
Prepared for: Bay Laurel Center Community Development District, November 2016

Don't forget to submit

-Benefit Calculations
-Map
-Form A (Wastewater Collection and Treatment Projects)
-Form B (Water Quantity Projects & Reuse)
-Form C (Land Acquisition Projects)

Please contact Frank Gargano with any questions prior to submittal. Frank.Gargano@swfwmd.state.fl.us

Form A: Wastewater Collection & Treatment Projects Only

What is the name of the wastewater treatment facility where the project intends to send flows once connected to sewer:

On Top of the World North Advanced Wastewater Treatment Facility

What level of treatment is offered at the wastewater treatment facility?

Once constructed, Advanced Waste Treatment will be offered.

At the wastewater treatment facility, where is the final treated wastewater sent?

Reclaimed

What is the current capacity of the wastewater treatment facility (mgd)?

1.25 mgd current, 2.50 mgd

What is the annual average of flow received by the wastewater treatment facility (mgd)?

0.654 mgd (current)

What is the annual average of total nitrogen leaving the treatment facility (mg/L)?

9.4 now, 3.0 proposed

How much additional flow will be received by the treatment facility due to the project (mgd)?

N/A

Please describe any proposed costs for the resident/property owner for connection to sewer. Will connection and/or impact fees be charged? If so, how much are the fees? What will the fees cover?

To cover plant capacity charges, an Allowance for Funds Prudently Invested (AFPI) is collected by BLCCDD in the amount of $2,434/ERU.

Is any land acquisition necessary? If so, please describe below. (●) Yes ( ) No

BLCCDD will need to purchase 37.09 acres to construct the proposed Advanced WWTF. The cost is estimated at $12,000 per acre for a total cost of approximately $445,000.

What length of forcemain and pipe sizing is necessary? Please describe below.

Approximately 15,000 feet of 20-inch diameter forcemain.

Form A: Wastewater Collection & Treatment Projects Only

Septic to Sewer Conversion Projects Complete this Section:

How many septic tanks will be connected to sewer through this project?

N/A, entire development is on centralized sewer.

How many of the septic tanks in this project are commercial tanks?

N/A, entire development is on centralized sewer.

If commercial tanks are included in this project, provide type of commercial use and square footage of the associated buildings below.

N/A, entire development is on centralized sewer.

How many of the septic tanks service multi-family homes?

N/A

Is there a local ordinance in place that requires proper abandonment of a septic system and connection to an available sewerage system, as defined by in Section 381.0065(21), Florida Statutes (F.S.)?

○ Yes ◉ No

If there are more requirements to the local ordinance, such as limiting future installation of septic systems, please describe and reference the ordinance below.

N/A, entire development is on centralized sewer.

Package Plant Conversion Projects Complete this Section:

What is the annual average flow (actual, not permitted) from the package plant (mgd)?

N/A

What is the annual average concentration (actual, not permitted) of total nitrogen (mg/L)?

N/A

Form B: Water Quantity Projects

For Agricultural Projects associated with irrigation system efficiency improvements:

Proposed irrigation system efficiency (%):

Prior irrigation system efficiency (%):

Average metered water use for the past 5 years (mgd):

For Reclaimed Water Projects:

Note: Refer to Appendix D of the Springs Funding Guidance for how to calculate the following:

Projected Reuse Flow (mgd): 1.25 mgd in 2027

Percent Offset (%): 75%

Was Percent Offset determined by Table 1 of the Springs Funding Guidance?

(●) Yes ( ) No

Percent Recharge (%): 10%

Form C: Land Acquisition Projects Only

What is the current landuse? If mixed, please depict acreage for each land use.

Agriculture

What will be the landuse once purchased?

Wastewater Treatment Facility

What is the recharge potential (mgd)? None

Does a portion of the land to be acquired lie outside of the BMAP?

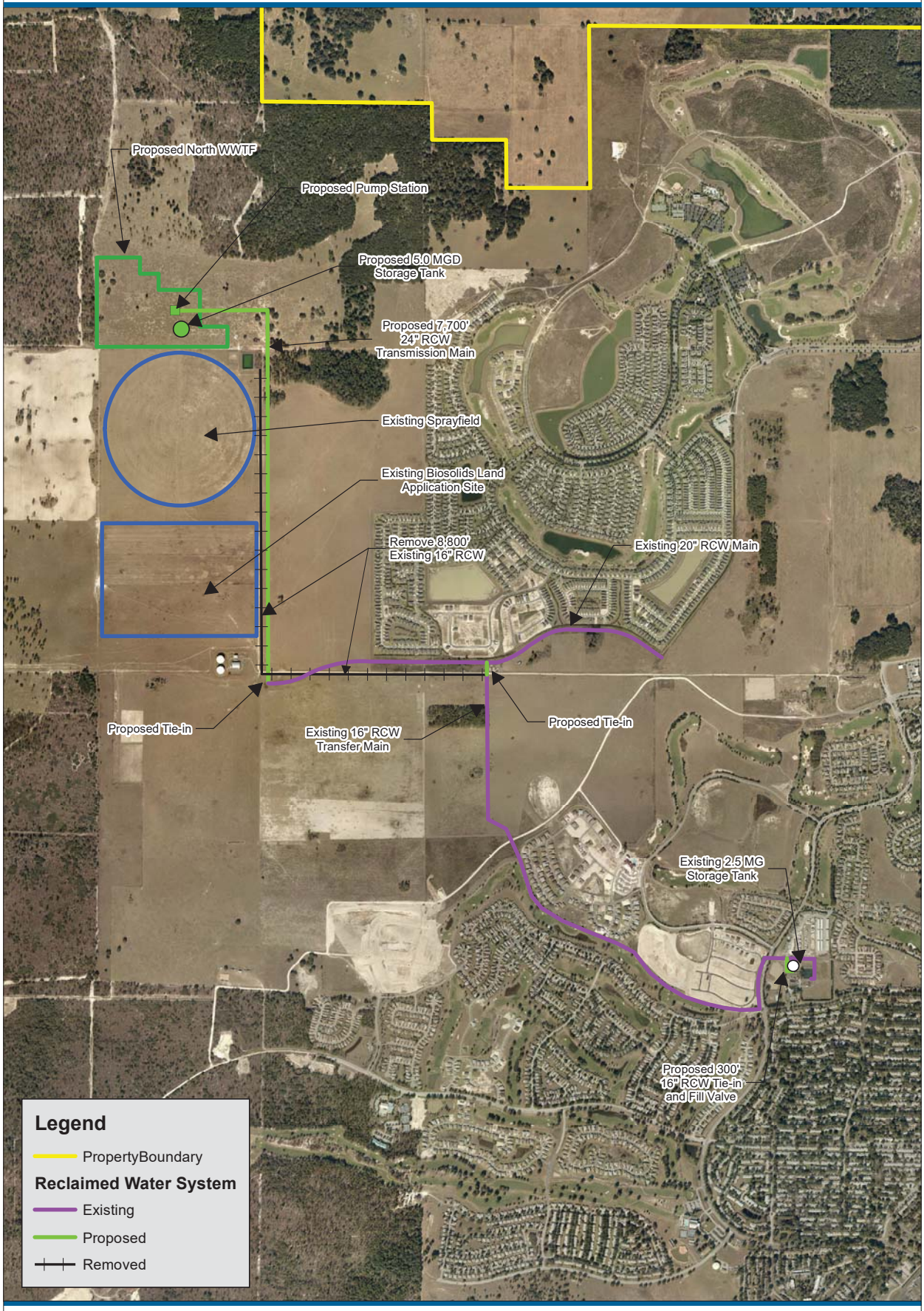
○ Yes ◉ No

Please note, the portion of land outside of a BMAP for a land acquisition project should not be included in reporting acreage preserved.

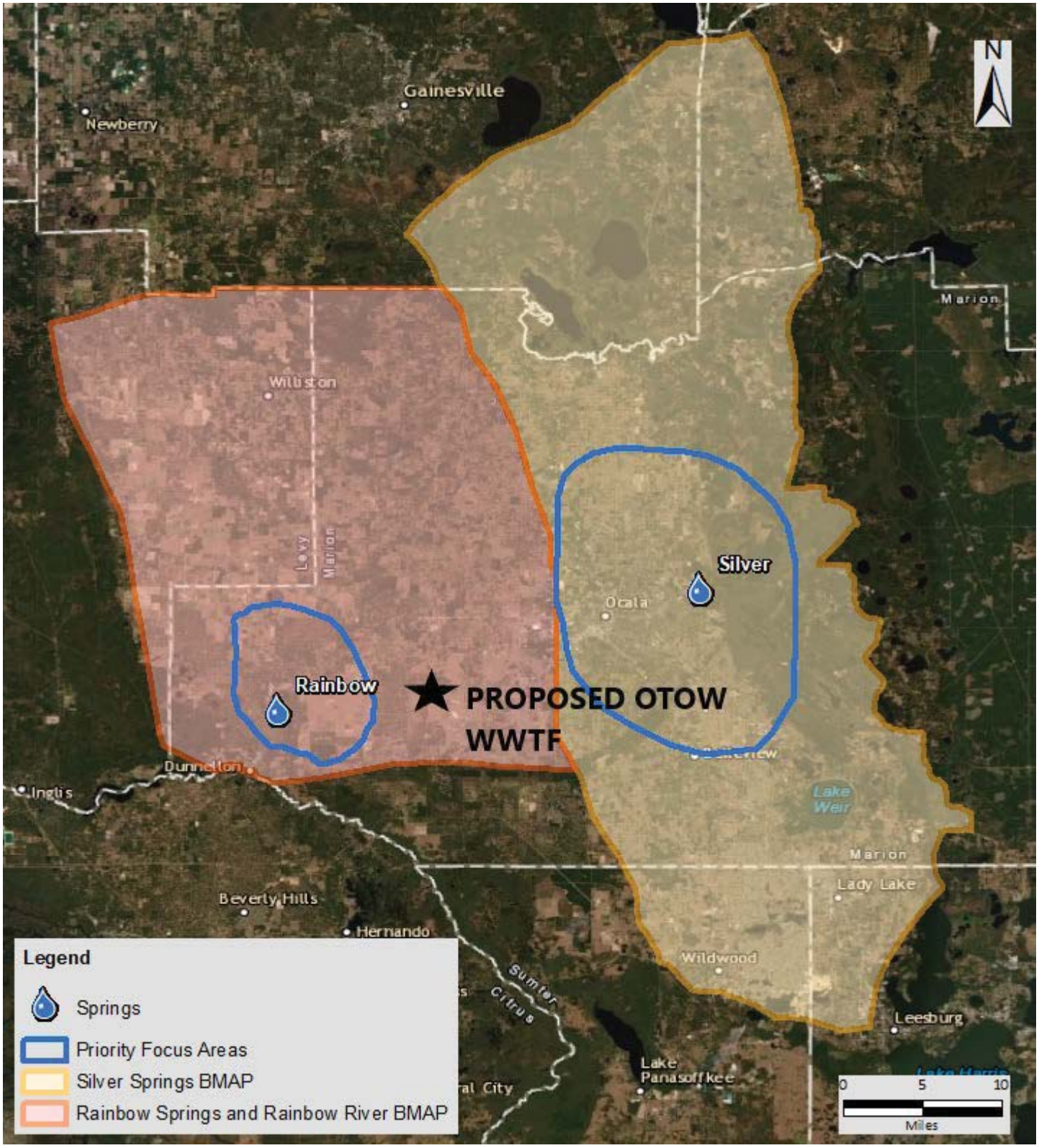
Figure 1

BLCCDD Proposed Reclaimed Water System Improvements

FY 2021 CFI Application



For Informational Purposes Only Y:\02450-Bay Laurel\Opportunities\95881-293-19 IWRMP\GIS\mxd\BLCCDD Improvements.mxd JReynolds 10/22/2019


N
Gainesville
Newberry
Marion
Williston
Levy
Marion
Silver
Ocala
Rainbow
PROPOSED OTOW WWTF
Dunnellon
Inglis
Lake Weir
Marion
Lady Lake
Beverly Hills
Hernando
Wildwood
Sumter
Citrus
Leesburg
Lake Panasoffkee
Legend
Springs
Priority Focus Areas
Silver Springs BMAP
Rainbow Springs and Rainbow River BMAP
0
5
10
Miles

ON TOP OF THE WORLD NORTH ADVANCED WASTEWATER TREATMENT FACILITY

BIOSOLIDS DATA AND PROJECTIONS

Year	Total Nitrogen (%)	Total Solids (%)	WW AADF (MGD)	Dry Tons Solids	TN Applied (lbs)
2020 (thru September)	6.25	1.46	0.654	136	17,020
2020 Projected	6.25	1.46	0.654	182	22,693
2027 Projected (Existing Plant Capacity)	6.25	1.46	1.250	347	43,374
2038 Projected (BMAP goals)	6.25	1.46	1.850	514	64,194
2048 Projected (New Plant Capacity)	6.25	1.46	2.500	694	86,748

EFFLUENT DATA AND PROJECTIONS

Year	Total Plant Flow (MGD)	PAR Flow (MGD)	Sprayfield Flow (MGD)	TN Conc. (mg/L)	% PAR	% Sprayfield/ Hayfield
2020 (thru August)	0.654	0.582	0.072	9.4	89%	11%
2027 Projected (Existing Plant Capacity)	1.250	1.112	0.138	9.4	89%	11%
2038 Projected (BMAP goals)	1.850	1.646	0.204	9.4	89%	11%
2048 Projected (New Plant Capacity)	2.500	2.225	0.275	9.4	89%	11%

Estimating Nitrogen Load Reductions from Springs Restoration Projects

Source Type	% Attenuated	% Leached	Multiplier to use
Wastewater sprayfield/Hayfield	60	40	0.40
Wastewater reuse	75	25	0.25
Wastewater Rapid Infiltration Basin (RIB)	25	75	0.75
Conventional septic system	50	50	0.50
Biosolids (Approximated)	70	30	0.30
Farm fertilizer	80	20	0.20
Lawn fertilizer	80	20	0.20
Livestock on pasture	90	10	0.10

Recharge Rate	Designation	% Recharged	Multiplier to use
>= 10 in/yr	High	90	0.90
3 to 10 in/yr	Medium	50	0.50
0 to 3 in/yr	Low	10	0.10
Discharge	Discharge	0	0.00

LOAD REDUCTION BY CHANGING APPLICATION METHODS

	Current	Anticipated
Annual Average Daily Flow (MGD)	0.654	
TN to PAR/Hayfield (mg/L)	9.4	3.0
% flow to PAR	89%	89%
% flow to Hayfield	11%	11%
TN to Reuse (mg/L)	9.4	3.0
% Biosolids Applied to Site	100%	0%
TN Biosolids Applied to Site (lbs)	22,693	0

Inputs	Value	Unit	Note
Current annual TN input - PAR	4,165.91	lbs/yr	75% Attenuated
Recharge Factor	0.90	Multiplier	From Table
Current annual TN input - Hayfield	824.59	lbs/yr	60% Attenuated
Recharge Factor	0.90	Multiplier	From Table
Current annual TN input - Biosolilds	6,808.00	lbs/yr	70% Attenuated
Recharge Factor	0.90	Multiplier	Approximated
Anticipated annual TN input - PAR	1,329.55	lbs/yr	75% Attenuated
Recharge Factor	0.90	Multiplier	From Table
Anticipated annual TN input - Hayfield	263.17	lbs/yr	60% Attenuated
Recharge Factor	0.90	Multiplier	From Table
Anticipated annual TN input - Biosolids	-	lbs/yr	70% Attenuated
Recharge Factor	0.90	Multiplier	Approximated
WWTF Effluent Load Reduction (lbs/year)	3,058		
Biosolids Load Reduction (lbs/year)	6,127		
Total Load Reduction (lbs/year)	9,185		

Estimating Nitrogen Load Reductions from Springs Restoration Projects

Source Type	% Attenuated	% Leached	Multiplier to use
Wastewater sprayfield/Hayfield	60	40	0.40
Wastewater reuse	75	25	0.25
Wastewater Rapid Infiltration Basin (RIB)	25	75	0.75
Conventional septic system	50	50	0.50
Biosolids (Approximated)	70	30	0.30
Farm fertilizer	80	20	0.20
Lawn fertilizer	80	20	0.20
Livestock on pasture	90	10	0.10

Recharge Rate	Designation	% Recharged	Multiplier to use
>= 10 in/yr	High	90	0.90
3 to 10 in/yr	Medium	50	0.50
0 to 3 in/yr	Low	10	0.10
Discharge	Discharge	0	0.00

LOAD REDUCTION BY CHANGING APPLICATION METHODS

	Projected	Anticipated
Annual Average Daily Flow (MGD)	1.250	
TN to PAR/Hayfield (mg/L)	9.4	3.0
% flow to PAR	89%	89%
% flow to Hayfield	11%	11%
TN to Reuse (mg/L)	9.4	3.0
% Biosolids Applied to Site	100%	0%
TN Biosolids Applied to Site (lbs)	43,374	0

Inputs	Value	Unit	Note
Projected annual TN input - PAR	7,962.37	lbs/yr	75% Attenuated
Recharge Factor	0.90	Multiplier	From Table
Projected annual TN input - Hayfield	1,576.06	lbs/yr	60% Attenuated
Recharge Factor	0.90	Multiplier	From Table
Projected annual TN input - Biosolilds	13,012.23	lbs/yr	70% Attenuated
Recharge Factor	0.90	Multiplier	From Table
Anticipated annual TN input - PAR	2,541.18	lbs/yr	75% Attenuated
Recharge Factor	0.90	Multiplier	From Table
Anticipated annual TN input - Hayfield	503.00	lbs/yr	60% Attenuated
Recharge Factor	0.90	Multiplier	From Table
Anticipated annual TN input - Biosolids	-	lbs/yr	70% Attenuated
Recharge Factor	0.90	Multiplier	From Table
WWTF Effluent Load Reduction (lbs/year)	5,845		
Biosolids Load Reduction (lbs/year)	11,711		
Total Load Reduction (lbs/year)	17,556		

Estimating Nitrogen Load Reductions from Springs Restoration Projects

Source Type	% Attenuated	% Leached	Multiplier to use
Wastewater sprayfield/Hayfield	60	40	0.40
Wastewater reuse	75	25	0.25
Wastewater Rapid Infiltration Basin (RIB)	25	75	0.75
Conventional septic system	50	50	0.50
Biosolids (Approximated)	70	30	0.30
Farm fertilizer	80	20	0.20
Lawn fertilizer	80	20	0.20
Livestock on pasture	90	10	0.10

Recharge Rate	Designation	% Recharged	Multiplier to use
>= 10 in/yr	High	90	0.90
3 to 10 in/yr	Medium	50	0.50
0 to 3 in/yr	Low	10	0.10
Discharge	Discharge	0	0.00

LOAD REDUCTION BY CHANGING APPLICATION METHODS

	Projected	Anticipated
Annual Average Daily Flow (MGD)	1.850	
TN to PAR/Hayfield (mg/L)	9.4	3.0
% flow to PAR	89%	89%
% flow to Hayfield	11%	11%
TN to Reuse (mg/L)	9.4	3.0
% Biosolids Applied to Site	100%	0%
TN Biosolids Applied to Site (lbs)	64,194	0

Inputs	Value	Unit	Note
Projected annual TN input - PAR	11,784.31	lbs/yr	75% Attenuated
Recharge Factor	0.90	Multiplier	From Table
Projected annual TN input - Hayfield	2,332.56	lbs/yr	60% Attenuated
Recharge Factor	0.90	Multiplier	From Table
Projected annual TN input - Biosolilds	19,258.10	lbs/yr	70% Attenuated
Recharge Factor	0.90	Multiplier	From Table
Anticipated annual TN input - PAR	3,760.95	lbs/yr	75% Attenuated
Recharge Factor	0.90	Multiplier	From Table
Anticipated annual TN input - Hayfield	744.44	lbs/yr	60% Attenuated
Recharge Factor	0.90	Multiplier	From Table
Anticipated annual TN input - Biosolids	-	lbs/yr	70% Attenuated
Recharge Factor	0.90	Multiplier	From Table
WWTF Effluent Load Reduction (lbs/year)	8,650		
Biosolids Load Reduction (lbs/year)	17,332		
Total Load Reduction (lbs/year)	25,983		

Estimating Nitrogen Load Reductions from Springs Restoration Projects

Source Type	% Attenuated	% Leached	Multiplier to use
Wastewater sprayfield/Hayfield	60	40	0.40
Wastewater reuse	75	25	0.25
Wastewater Rapid Infiltration Basin (RIB)	25	75	0.75
Conventional septic system	50	50	0.50
Biosolids (Approximated)	70	30	0.30
Farm fertilizer	80	20	0.20
Lawn fertilizer	80	20	0.20
Livestock on pasture	90	10	0.10

Recharge Rate	Designation	% Recharged	Multiplier to use
>= 10 in/yr	High	90	0.90
3 to 10 in/yr	Medium	50	0.50
0 to 3 in/yr	Low	10	0.10
Discharge	Discharge	0	0.00

LOAD REDUCTION BY CHANGING APPLICATION METHODS

	Projected	Anticipated
Annual Average Daily Flow (MGD)	2.500	
TN to PAR/Hayfield (mg/L)	9.4	3.0
% flow to PAR	89%	89%
% flow to Hayfield	11%	11%
TN to Reuse (mg/L)	9.4	3.0
% Biosolids Applied to Site	100%	0%
TN Biosolids Applied to Site (lbs)	86,748	0

Inputs	Value	Unit	Note
Projected annual TN input - PAR	15,924.74	lbs/yr	75% Attenuated
Recharge Factor	0.90	Multiplier	From Table
Projected annual TN input - Hayfield	3,152.11	lbs/yr	60% Attenuated
Recharge Factor	0.90	Multiplier	From Table
Projected annual TN input - Biosolilds	26,024.46	lbs/yr	70% Attenuated
Recharge Factor	0.90	Multiplier	From Table
Anticipated annual TN input - PAR	5,082.36	lbs/yr	75% Attenuated
Recharge Factor	0.90	Multiplier	From Table
Anticipated annual TN input - Hayfield	1,005.99	lbs/yr	60% Attenuated
Recharge Factor	0.90	Multiplier	From Table
Anticipated annual TN input - Biosolids	-	lbs/yr	70% Attenuated
Recharge Factor	0.90	Multiplier	From Table
WWTF Effluent Load Reduction (lbs/year)	11,690		
Biosolids Load Reduction (lbs/year)	23,422		
Total Load Reduction (lbs/year)	35,112		

Year	Total Plant Flow (MGD)	WWTF Effluent Load Reduction (lbs/year)	Biosolids Load Reduction (lbs/year)	Total Load Reduction (lbs/year)
2020 (thru August)	0.654	3,058	6,127	9,185
2027 Projected (Existing Plant Capacity)	1.250	5,845	11,711	17,556
2038 Projected (BMAP goals)	1.850	8,650	17,332	25,983
2048 Projected (New Plant Capacity)	2.500	11,690	23,422	35,112

	I. TOTAL PROJECT COST					II. Year 1 - Project Funding Breakout (FY 2021)										
Count	DEP/State Funding Amount	Local Match Amount	WMD Match Amount	Third Party Match	TOTAL Project Cost	DEP/State Funding Amount	Local Match - Cash	Local Match - In-kind Efforts	Local Match - Companion Projects	Local Match - Other	WMD Match - Cash	WMD Match - In-kind Efforts	WMD Match - Companion Projects	WMD Match - Other	Third Party Funding	TOTAL Year 1 Funding
1	$ 26,100,000	$ 26,100,000	$ -	$ -	$ 52,200,000	$ -	$ 1,345,000				$ -					
2	$ -	$ -	$ -	$ -	$ -											
3	$ -	$ -	$ -	$ -	$ -											
4	$ -	$ -	$ -	$ -	$ -											
5	$ -	$ -	$ -	$ -	$ -											

	II. Year 2 - Project Funding Breakout (FY 2022)											III. Year 3 - Project Funding Breakout (FY 2023)					III. Year 4 - Project Funding Breakout (FY 2024)				
Count	DEP/State Funding Amount	Local Match - Cash	Local Match - In-kind Efforts	Local Match - Companion Projects	Local Match - Other	WMD Match - Cash	WMD Match - In-kind Efforts	WMD Match - Companion Projects	WMD Match - Other	Third Party Funding	TOTAL Year 2 Funding	DEP/State Funding Amount	Local Match Amount	WMD Match Amount	Third Party Funding	TOTAL Year 3 Funding	DEP/State Funding Amount	Local Match Amount	WMD Match Amount	Third Party Funding	TOTAL Year 4 Funding
1	$ 7,175,000	$ 5,830,000				$ -						$12,495,000	$ 12,495,000	$ -			$ 6,430,000	$ 6,430,000	$ -		
2																					
3																					
4																					
5																					

BLCCDD FY 2021 Springs Funding Application

	FY 2021				FY 2022				FY 2023			
Project	**Engineering (Design)**	**Engineering (SDCs)**	**Land**	**Totals**	**Engineering (Design)**	**Engineering (SDCs)**	**Construction**	**Totals**	**Engineering (Design)**	**Engineering (SDCs)**	**Construction**	**Totals**
OTOW North 2.50 MGD AWT WWTF	$ 500,000			$ 500,000	$ 250,000	$ 300,000	$ 10,000,000	$ 10,550,000		$ 600,000	$ 20,000,000	$ 20,600,000
Wastewater Transmission System Improvements	$ 150,000			$ 150,000	$ 50,000	$ 30,000	$ 525,000	$ 605,000		$ 90,000	$ 1,200,000	$ 1,290,000
- Force Main ($1.875M)												
- Master LS ($450K)												
Reclaim Transmission System Improvements	$ 250,000			$ 250,000	$ 250,000	$ 100,000	$ 1,500,000	$ 1,850,000		$ 100,000	$ 3,000,000	$ 3,100,000
- 5 MG GST ($3.8M)												
- HSP ($600K)												
- 7,700' of 24" RCL Main ($1.078M)												
- 8,800' of 16" Main Removal/Disposal ($352M)												
- 2.5 MG Tank Tie-in (300' of 16") and Fill Valve ($500K)												
Land			$ 445,000	$ 445,000				$ -				$ -
Totals	$ 900,000	$ -	$ 445,000	$ 1,345,000	$ 550,000	$ 430,000	$ 12,025,000	$ 13,005,000	$ -	$ 790,000	$ 24,200,000	$ 24,990,000
BLCCDD Local Match Amount	$ 900,000		$ 445,000	$ 1,345,000	$ 275,000	$ 215,000	$ 5,340,000	$ 5,830,000	$ -	$ 395,000	$ 12,100,000	$ 12,495,000
DEP/State Funding Amount	$ -			$ -	$ 275,000	$ 215,000	$ 6,685,000	$ 7,175,000	$ -	$ 395,000	$ 12,100,000	$ 12,495,000
WMD/CFI Match Amount	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -

Notes

1. One half of the $445,000 land acquisition by BLCCDD in FY 2021 is credited by DEP in FY 2022 under the Construction column.

FY 2024				FY 2025				Totals				Totals Distributed		
Engineering (Design)	Engineering (SDCs)	Construction	Totals	Engineering (Design)	Engineering (SDCs)	Construction	Totals	Engineering (Design)	Engineering (SDCs)	Construction	Grand Total	BLCCDD	FDEP	CFI
	$ 300,000	$ 10,000,000	$ 10,300,000				$ -	$ 750,000	$ 1,200,000	$ 40,000,000	$ 41,950,000	$ 20,975,000	$ 20,975,000	
	$ 30,000	$ 600,000	$ 630,000				$ -	$ 200,000	$ 150,000	$ 2,325,000	$ 2,675,000	$ 1,337,500	$ 1,337,500	
	$ 100,000	$ 1,830,000	$ 1,930,000				$ -	$ 500,000	$ 300,000	$ 6,330,000	$ 7,130,000	$ 3,565,000	$ 3,565,000	
			$ -				$ -	$ -	$ -	$ 445,000	$ 445,000	$ 222,500	$ 222,500	
$ -	$ 430,000	$ 12,430,000	$ 12,860,000	$ -	$ -	$ -	$ -	$ 1,450,000	$ 1,650,000	$ 49,100,000	$ 52,200,000	$ 26,100,000	$ 26,100,000	$ -
$ -	$ 215,000	$ 6,215,000	$ 6,430,000	$ -	$ -	$ -	$ -	$ 1,175,000	$ 825,000	$ 24,100,000	$ 26,100,000	$ 26,100,000		
$ -	$ 215,000	$ 6,215,000	$ 6,430,000	$ -	$ -	$ -	$ -	$ 275,000	$ 825,000	$ 25,000,000	$ 26,100,000		$ 26,100,000	
$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -

APP 02

FGUA

Rainbow River - Rio Vista Septic to Sewer

FY2022 FDEP Springs Funding Application for Projects within the Southwest Florida Water Management District

This application should be completed and emailed with the appropriate calculations and map to Lisa.Laupert@swfwmd.state.fl.us by 5:00PM on October 2, 2020.

Applicant Information

Entity Name: Florida Governmental Utility Authority

Is the Entity designated as an economically disadvantaged community? ○ Yes ◉ No

Project Manager Name: Will Fontaine & Rob Dickson

Project Manager Address: 280 Wekiva Springs Rd. Ste. 2070 Longwood Fl. 32779

Project Manager Phone Number: (352) 409-6520 & (407) 629-6900

Project Manager Email Address: Wfontaine@govmserv.com & Rdickson@govmserv.com

Project General Information

Project Name: Rainbow River - Rio Vista Septic-to-Sewer Project

Project Type: Waste Water Collection & Treatment (Complete Form A)

Project Benefit

Quantity of Water Made Available (mgd): N/A

Land Acquisition (acres): N/A

Nitrogen Reduced (lbs/year): 3551

Sediment Reduced (lbs/year): N/A

Please download the the FDEP Springs Funding guidance document. Benefit calculations should be provided demonstrating how the benefit calculation was derived. A Map should be included showing the area of the project and depict notable features.

Project Detail Information

Is this a multiyear project? ○ Yes ◉ No

Note: For multiyear funding request, please download the multiyear funding request spreadsheet, complete the form, and send in with this application.

Please provide a full description of the project. For multiyear funded projects, please provide a description of the complete project, beginning to end, and a description explaining what phase will be covered by this funding request application.

FGUA (Applicant) Recognizes the vital ecological and economic importance that Rainbow Springs and the Rainbow River has in the community. These bodies of water are listed as Outstanding Florida Waters and are classified as high priorities in the Surface Water Improvement and Management Plan (SWIM). A basin management action plan has been updated. These bodies of water are impaired under FAC 62-303(d) by total nitrogen (TN) as identified in the adopted Total Maximum Daily Load (TMDL).With this in mind, the APPLICANT has identified the Rainbow River and Rio Vista Septic to Sewer Project (PROJECT) to help improve the water quality of these impaired water bodies. The primary objective of the PROJECT is to design and construct a sanitary sewer system which will remove from service approximately 333 septic tanks from the associated single family residential lots. The septic tanks contribute to the total nitrogen (TN) impairment of Rainbow Springs and the Rainbow River. The removal of the septic tanks will result in a measurable reduction in the identified pollutant sources. This is quantified in the Total Nutrient Reduction section. .

What is the anticipated start and end date for the work that will be conducted under this funding request?

Start Date: Nov. 2022 End Date: Nov. 2023

Project Location Information (please submit a map with this application)

County Marion

Latitude (decimal degrees) 29.073

Longitude (decimal degrees) -82.439

What is the spring name that will receive the benefit? Rainbow Springs

Is this spring deemed impaired? Yes, with a BMAP or RAP

What is the distance from the project to the spring receiving the benefit ? 2.0 miles

Is this project in a springshed? If so, specify which one.

Is this project within a BMAP boundary? (●) Yes ( ) No

Is this project within a PFA boundary? (●) Yes ( ) No

Is this project listed in the BMAP project list? (●) Yes ( ) No ( ) No, but will be in an update

Is this project listed in a recovery strategy, prevention strategy, or regional water supply plan as benefiting an MFL? ( ) Yes (●) No

Please list any restoration plans, prevention plans, recovery plans, or long term local water quality or quantity strategy plans this project is part of.

This PROJECT is part of the SWIM and BMAP program and will remove approximately 333 septic tanks from service within the Rainbow Springs BMAP area. It is estimated that each single family residence produces 23.7 lbs. of TN per year an and each septic tank is able to remove approximately 50% of the TN. This results in a total of approximately 3551 lbs. TN / year flowing to the Rainbow Springs watershed from the 333 single family lots and associated septic tanks.

Project Funding Information

Are you applying for CFI funding this fiscal year? ○ Yes ◉ No

Have you received springs funding or CFI funding for this project in the past? ○ Yes ◉ No

Enter the funding amount that has been received and/or is being requested:

	Previous	FY2022	Future	Total
FDEP Springs Funding	$ 0.00	$ 10,802,608.00	$ 0.00	$ 10,802,608.00
WMD CFI Funding	$ 0.00	$ 0.00	$ 0.00	$ 0.00
Local Funding	$ 0.00	$ 0.00	$ 0.00	$ 0.00
Other Funding	$ 0.00	$ 0.00	$ 0.00	$ 0.00
Total	$ 0.00	$ 10,802,608.00	$ 0.00	$ 10,802,608.00

In the event this project is not awarded CFI funding, please use the table below to reflect how the costs will be handled without CFI funding. If CFI funding was not applied for, please move to the next section.

	Previous	FY2022	Future	Total
FDEP Springs Funding	$ 0.00	$ 0.00	$ 0.00	$ 0.00
Local Funding	$ 0.00	$ 0.00	$ 0.00	$ 0.00
Other Funding	$ 0.00	$ 0.00	$ 0.00	$ 0.00
Total	$ 0.00	$ 0.00	$ 0.00	$ 0.00

Please download the the FDEP Springs Funding guidance document. Benefit calculations should be provided demonstrating how the benefit calculation was derived. A Map should be included showing the area of the project and depict notable features.

Provide any additional information below that is pertinent to the review of this application. Include information on any existing ordinances, capital improvement plans, or master plans.

The City of Dunnellon Comprehensive Plan calls for environmental protection of the Rainbow River and support of SWFWMD plans in both their Aquifer Protection Element and the Conservation Element.

The City of Dunnellon developed a Water and Wastewater Master Plan with the support of Kimley- Horn Engineering in 2015. This plan supports the improvement and expansion of the Dunnellon Water and Wastewater system. This plan included a long range development of a regional wastewater plant which would service the area in 20 years and would have the capacity to accept the wastewater from these septic tanks as well as the larger community as it grows. Marion County's Comprehensive Plan also calls for the protection of its Springs in its Comprehensive Plan.

FDEP BMAP and SWFWMD SWIM plans both call for restoration of the Rainbow Springs and River area through improved wastewater systems. BMAP Project B053 specifically address this project.

Don't forget to submit

-Benefit Calculations
-Map
-Form A (Wastewater Collection and Treatment Projects)
-Form B (Water Quantity Projects & Reuse)
-Form C (Land Acquisition Projects)

Please contact Frank Gargano with any questions prior to submittal. Frank.Gargano@swfwmd.state.fl.us

Form A: Wastewater Collection & Treatment Projects Only

What is the name of the wastewater treatment facility where the project intends to send flows once connected to sewer:

FGUA Dunnellon Wastewater Plant

What level of treatment is offered at the wastewater treatment facility?

Secondary

At the wastewater treatment facility, where is the final treated wastewater sent?

Sprayfield

What is the current capacity of the wastewater treatment facility (mgd)?

.490 mgd

What is the annual average of flow received by the wastewater treatment facility (mgd)?

.208 mgd

What is the annual average of total nitrogen leaving the treatment facility (mg/L)?

2.7 mg/L

How much additional flow will be received by the treatment facility due to the project (mgd)?

.067 mgd

Please describe any proposed costs for the resident/property owner for connection to sewer. Will connection and/or impact fees be charged? If so, how much are the fees? What will the fees cover?

The Grant will include grinder stations and gravity sewer lines from the residences. There will be no connection impact fees planned for the current residences.

Is any land acquisition necessary? If so, please describe below. ○ Yes ◉ No

N/A

What length of forcemain and pipe sizing is necessary? Please describe below.

150 Grinder Stations
5,000 LF of FORCE MAIN 10"pvc
25,000 LF of GRAVITY SEWER 8" PVC
20,000 LF of LOW PRESSURE FORCE MAIN 2", 4", & 6" PVC

Form A: Wastewater Collection & Treatment Projects Only

Septic to Sewer Conversion Projects Complete this Section:

How many septic tanks will be connected to sewer through this project?

333

How many of the septic tanks in this project are commercial tanks?

0

If commercial tanks are included in this project, provide type of commercial use and square footage of the associated buildings below.

n/a

How many of the septic tanks service multi-family homes?

0

Is there a local ordinance in place that requires proper abandonment of a septic system and connection to an available sewerage system, as defined by in Section 381.0065(21), Florida Statutes (F.S.)?

(●) Yes ( ) No

If there are more requirements to the local ordinance, such as limiting future installation of septic systems, please describe and reference the ordinance below.

Florida Governmental Utility Authority
Wastewater System Mandatory Connection Policies

Section 64E-6.011, Florida Administrative Code

Package Plant Conversion Projects Complete this Section:

What is the annual average flow (actual, not permitted) from the package plant (mgd)?

N/A

What is the annual average concentration (actual, not permitted) of total nitrogen (mg/L)?

N/A

Form B: Water Quantity Projects

For Agricultural Projects associated with irrigation system efficiency improvements:

Proposed irrigation system efficiency (%): N/A

Prior irrigation system efficiency (%): N/A

Average metered water use for the past 5 years (mgd): N/A

For Reclaimed Water Projects:

Note: Refer to Appendix D of the Springs Funding Guidance for how to calculate the following:

Projected Reuse Flow (mgd): N/A

Percent Offset (%): N/A

Was Percent Offset determined by Table 1 of the Springs Funding Guidance?

○ Yes ◉ No

Percent Recharge (%): N/A

Form C: Land Acquisition Projects Only

What is the current landuse? If mixed, please depict acreage for each land use.

N/A

What will be the landuse once purchased?

N/A

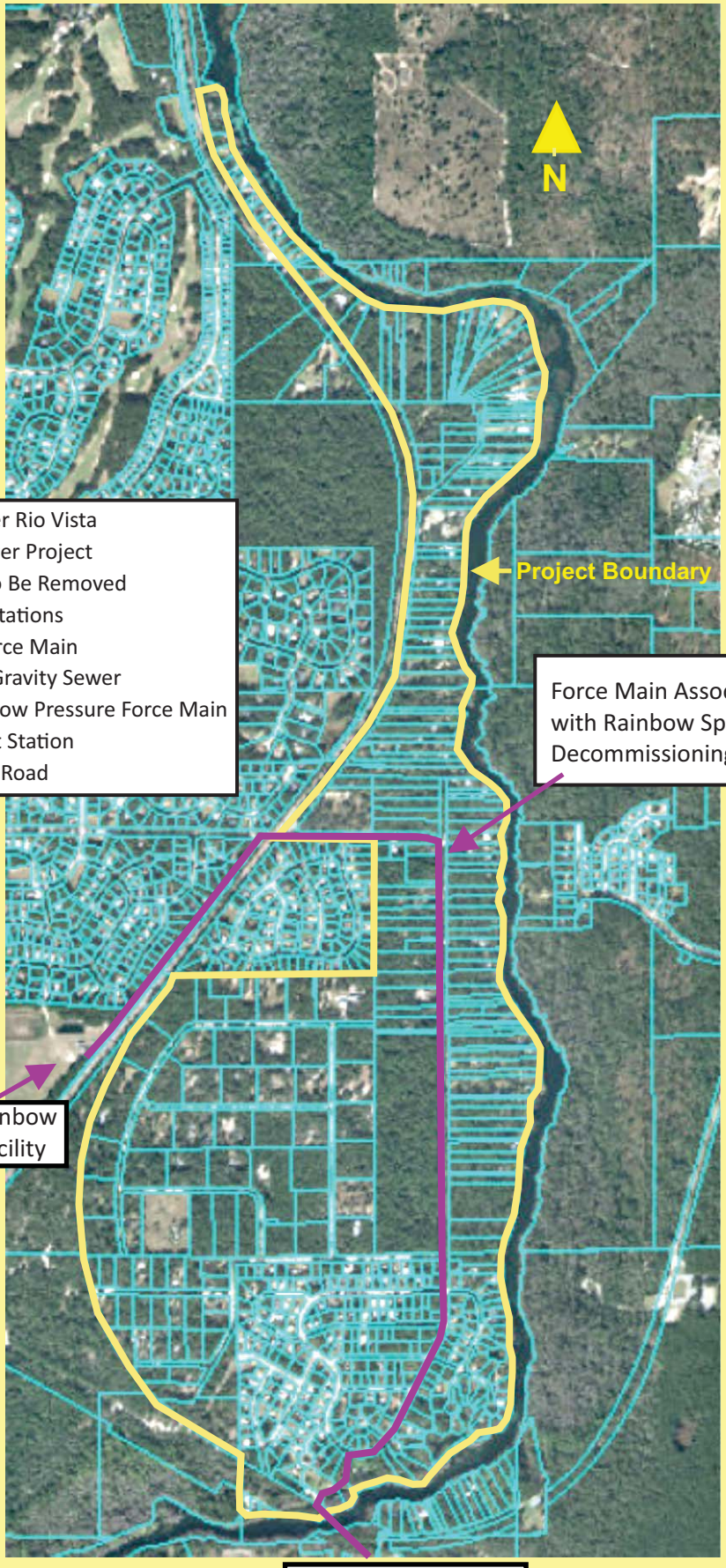
What is the recharge potential (mgd)? N/A

Does a portion of the land to be acquired lie outside of the BMAP?

○ Yes ◉ No

Please note, the portion of land outside of a BMAP for a land acquisition project should not be included in reporting acreage preserved.

Rainbow River Rio Vista Septic To Sewer Project



Rainbow River Rio Vista
Septic to Sewer Project
333 OSTDs To Be Removed

- 154 Grinder Stations
- 5000 LF of Force Main
- 25,000 LF of Gravity Sewer
- 20,000 LF of Low Pressure Force Main
- 1 Regional Lift Station
- 9.47 miles of Road

0.1 mgd or greater WWTP locations | Reclaimed water lines and facilites within SWFWMD | http://www21.swfwmd.state.fl.us/maps/pages/viewer_rw.html

Septic to Sewer Projects

Calculate Base Load	
Number of Septic Tanks	333
Typical septic TN input to environment (lb/yr)	23.7
Typical Septic Attenuation	0.5
Recharge Factor (0.9, 0.5, 0.1, or 0)	0.9
Septic System Load to Groundwater	3551

Calculate New Load	Traditional	AWT
Number of Septic Tanks	333	
Input from Septic Systems to be Connected	23.7	
% TN Remaining After Treatment (18% remaining going from 45 mg/l to 8 mg/l OR 7% remaining going from 45mg/l to 3mg/l)	0.18	0.07
Attenuation Factor for Wastewater Application (RIB .75, Reuse .25, Sprayfield .40)	0.4	
Recharge Factor (0.9, 0.5, 0.1, or 0)	0.9	
Load to Groundwater After Treatment	511	199
Reduction in Load to Springshed lb/yr	3040	3353

Cost Effectiveness Calculation for 30 Year Period	Traditional	AWT
Project Cost	$10,802,608	
cost/lb TN	$3,553.45	$3,222.19
Cost/lb TN / 30 years	$118.45	$107.41

COST ESTIMATE FOR GRANT APPLICATION
CITY OF DUNNELLON
RAINBOW RIVER AND RIO VISTA SEPTIC TO SEWER PROJECT

ITEM	DESCRIPTION	QUANTITY		UNIT PRICE	AMOUNT
1	RESIDENT SEPTIC TANK ABANDONMENT, GRINDER STATIONS, AND CONNECTION TO SEWER	150	EA	$ 17,000	2,550,000
2	IMPACT AND CONNECTION FEES	333	EA	$ 2,616	871,128
3	RESIDENT SEPTIC TANK ABANDONMENT AND CONNECTION TO SEWER	183	EA	$ 5,500	1,006,500
4	GRAVITY SEWER SYSTEM	25,000	LF	$ 120	3,000,000
5	LOW PRESSURE FORCE MAIN	20,000	LF	$ 50	1,000,000
6	REGIONAL LIFT STATION	1	LS	$ 650,000	650,000
7	FORCE MAIN	5,000	LF	$ 75	375,000
8	ROADWAY MILLING AND RESURFACING	50,000	LF	$ 27	1,350,000
				TOTAL	**10,802,628**

APP 03

Hernando County

Septic to Sewer District A, Phase 1

FY2022 FDEP Springs Funding Application for Projects within the Southwest Florida Water Management District

This application should be completed and emailed with the appropriate calculations and map to Lisa.Laupert@swfwmd.state.fl.us by 5:00PM on October 2, 2020.

Applicant Information

Entity Name: Hernando County Utilities Department

Is the Entity designated as an economically disadvantaged community? ○ Yes ◉ No

Project Manager Name: Richard C. Kirby IV

Project Manager Address: 15365 Cortez Blvd, Brooksville Florida 34613

Project Manager Phone Number: 352-754-4769

Project Manager Email Address: Rkirby@Hernandocounty.us

Project General Information

Project Name: Hernando County Septic to Sewer District A, Phase 1

Project Type: Waste Water Collection & Treatment (Complete Form A)

Project Benefit

Quantity of Water Made Available (mgd): NA

Land Acquisition (acres): NA

Nitrogen Reduced (lbs/year): 3702.8

Sediment Reduced (lbs/year): NA

Please download the the FDEP Springs Funding guidance document. Benefit calculations should be provided demonstrating how the benefit calculation was derived. A Map should be included showing the area of the project and depict notable features.

Project Detail Information

Is this a multiyear project? (●) Yes ( ) No

Note: For multiyear funding request, please download the multiyear funding request spreadsheet, complete the form, and send in with this application.

Please provide a full description of the project. For multiyear funded projects, please provide a description of the complete project, beginning to end, and a description explaining what phase will be covered by this funding request application.

Over the past hundred years, the Weeki Wachee River has experienced significant ecological shifts. FDEP determined that nitrogen is a contributing factor for an ecological imbalance (excessive growth of algae) in Weeki Wachee Spring and Weeki Wachee River and established a total maximum daily load (TMDL) for nitrate nitrogen in the system. Weeki Wachee Spring (WWS) is fed from a large shallow aquifer under approximately 260 square miles of urbanized areas, agricultural lands and forested uplands. The WWS aquifer underlies portions of Hernando and Pasco counties. Nitrogen enrichment, particularly in the inorganic form nitrate, is an issue because nitrate is mobile and conservative once it reaches the groundwater. Nitrate concentrations have been increasing in the water discharging from the WWS from 0.1 mg/L or less historically (SWFWMD 2017, see below) to 0.9 mg/L in 2015. The Hernando County Septic to Sewer Conversion Program is an effort to provide sewer to as many as 30,000 lots that use septic tanks for on site treatment and disposal of wastewater. The overall program has divided this large 30,000 lot area into 19 districts, A to S. In accordance with the overall program, District A will be the first area where the septic to sewer conversion will take place. District A, Phase 1 includes approximately 441 lots. Approximately 363 lots have existing structures, and 74 were undeveloped as of 2017. This project will remove the existing septic tanks and provide sewer to all of the lots in the area. The location of the project is in southeast Hernando County adjacent to the city of Weeki Wachee.

What is the anticipated start and end date for the work that will be conducted under this funding request?

Start Date: 10/01/2021 End Date: 12/30/2027

Project Location Information (please submit a map with this application)

County Hernando

Latitude (decimal degrees) 28.515810

Longitude (decimal degrees) -82.562502

What is the spring name that will receive the benefit? Weeki Wachee

Is this spring deemed impaired? Yes, with a BMAP or RAP

What is the distance from the project to the spring receiving the benefit ? 1.14 mile

Is this project in a springshed? If so, specify which one. Yes. Weeki Wachee

Is this project within a BMAP boundary? (●) Yes ( ) No

Is this project within a PFA boundary? (●) Yes ( ) No

Is this project listed in the BMAP project list? (●) Yes ( ) No ( ) No, but will be in an update

Is this project listed in a recovery strategy, prevention strategy, or regional water supply plan as benefiting an MFL? ( ) Yes (●) No

Please list any restoration plans, prevention plans, recovery plans, or long term local water quality or quantity strategy plans this project is part of.

Weeki Wachee BMAP.
Hernando County Utilities Department's (HCUD) draft Wastewater Master Plan (WWMP) includes septic to sewer projects District A, B, and E in the 20 year Capital Improvement Program (CIP), provided adequate funding is available. Districts were defined in HCUD's 2016 "Septic to Sewer Conversion Study".The WWMP was done in conjunction with Hernando County's FDEP funded "OSTDS Remediation Feasibility Analysis Report". This report was finalized and submitted to FDEP in June 2020.

Project Funding Information

Are you applying for CFI funding this fiscal year? (●) Yes ( ) No

Have you received springs funding or CFI funding for this project in the past? ( ) Yes (●) No

Enter the funding amount that has been received and/or is being requested:

	Previous	FY2022	Future	Total
FDEP Springs Funding	$ 0.00	$ 2,310,000.00	$ 9,240,000.00	$ 11,550,000.00
WMD CFI Funding	$ 0.00	$ 495,000.00	$ 1,980,000.00	$ 2,475,000.00
Local Funding	$ 0.00	$ 495,000.00	$ 1,980,000.00	$ 2,475,000.00
Other Funding	$ 0.00	$ 0.00	$ 0.00	$ 0.00
Total	$ 0.00	$ 3,300,000.00	$ 13,200,000.00	$ 16,500,000.00

In the event this project is not awarded CFI funding, please use the table below to reflect how the costs will be handled without CFI funding. If CFI funding was not applied for, please move to the next section.

	Previous	FY2022	Future	Total
FDEP Springs Funding	$ 0.00	$ 0.00	$ 11,550,000.00	$ 11,550,000.00
Local Funding	$ 0.00	$ 0.00	$ 2,475,000.00	$ 2,475,000.00
Other Funding	$ 0.00	$ 0.00	$ 2,475,000.00	$ 2,475,000.00
Total	$ 0.00	$ 0.00	$ 16,500,000.00	$ 16,500,000.00

Please download the the FDEP Springs Funding guidance document. Benefit calculations should be provided demonstrating how the benefit calculation was derived. A Map should be included showing the area of the project and depict notable features.

Provide any additional information below that is pertinent to the review of this application. Include information on any existing ordinances, capital improvement plans, or master plans.

Hernando County Utilities Department's (HCUD) draft Wastewater Master Plan (WWMP) includes septic to sewer projects District A, B, and E in the 20 year Capital Improvement Program (CIP), provided adequate funding is available. Districts were defined in HCUD's 2016 "Septic to Sewer Conversion Study".The WWMP was done in conjunction with Hernando County's FDEP funded "OSTDS Remediation Feasibility Analysis Report". This report was finalized and submitted to FDEP in June 2020.

Don't forget to submit

-Benefit Calculations
-Map
-Form A (Wastewater Collection and Treatment Projects)
-Form B (Water Quantity Projects & Reuse)
-Form C (Land Acquisition Projects)

Please contact Frank Gargano with any questions prior to submittal. Frank.Gargano@swfwmd.state.fl.us

Form A: Wastewater Collection & Treatment Projects Only

What is the name of the wastewater treatment facility where the project intends to send flows once connected to sewer:

Glen Subregional Water Reclamation Facility

What level of treatment is offered at the wastewater treatment facility?

3 mg/l TN, high level disinfection during public access reuse, and secondary BC

At the wastewater treatment facility, where is the final treated wastewater sent?

Reclaimed

What is the current capacity of the wastewater treatment facility (mgd)?

3 MGD

What is the annual average of flow received by the wastewater treatment facility (mgd)?

1.032 MGD

What is the annual average of total nitrogen leaving the treatment facility (mg/L)?

3.7 mg/l

How much additional flow will be received by the treatment facility due to the project (mgd)?

80,000 gpd

Please describe any proposed costs for the resident/property owner for connection to sewer. Will connection and/or impact fees be charged? If so, how much are the fees? What will the fees cover?

The total cost is estimated to be $30,000 per connection. It is anticipated each property owner will be accessed 10%, or $3,000. The $30,000 estimate includes sewer connection fees.

Is any land acquisition necessary? If so, please describe below. ○ Yes ◉ No

Purchasing land is not anticipated. It is possible that purchase of one or more small lots may be required for sewage pumping station sites.

What length of forcemain and pipe sizing is necessary? Please describe below.

~ 22,000 feet 8" gravity main, ~3400 feet 8" force main, ~6200 feet 6" forcemain, ~425 feet 4" forcemain. These numbers could change if final design changes from conceptual design.

Form A: Wastewater Collection & Treatment Projects Only

Septic to Sewer Conversion Projects Complete this Section:

How many septic tanks will be connected to sewer through this project?

Estimated 363 exisiting. ~78 lots will be served in the future

How many of the septic tanks in this project are commercial tanks?

6 are anticipated for this project.

If commercial tanks are included in this project, provide type of commercial use and square footage of the associated buildings below.

Ten Professional Buildings with 47,945 square feet.(6111 & 6117 Deltona-3040 sf, 61

How many of the septic tanks service multi-family homes?

0

Is there a local ordinance in place that requires proper abandonment of a septic system and connection to an available sewerage system, as defined by in Section 381.0065(21), Florida Statutes (F.S.)?

○ Yes ◉ No

If there are more requirements to the local ordinance, such as limiting future installation of septic systems, please describe and reference the ordinance below.

Modifications to the county's ordinance too include the above requirement are in development now.

Section 28-238(e) 3 states: Mandatory connection. Connection to district water or sewer lines shall be mandatory for any parcel of land within a district or unit created and authorized by action of the board of county commissioners in which parcel owners are assessed for the cost of constructing such lines by non-ad

Package Plant Conversion Projects Complete this Section:

What is the annual average flow (actual, not permitted) from the package plant (mgd)?

NA

What is the annual average concentration (actual, not permitted) of total nitrogen (mg/L)?

NA

Form B: Water Quantity Projects

For Agricultural Projects associated with irrigation system efficiency improvements:

Proposed irrigation system efficiency (%):

Prior irrigation system efficiency (%):

Average metered water use for the past 5 years (mgd):

For Reclaimed Water Projects:

Note: Refer to Appendix D of the Springs Funding Guidance for how to calculate the following:

Projected Reuse Flow (mgd):

Percent Offset (%):

Was Percent Offset determined by Table 1 of the Springs Funding Guidance?

○ Yes ◉ No

Percent Recharge (%):

Form C: Land Acquisition Projects Only

What is the current landuse? If mixed, please depict acreage for each land use.

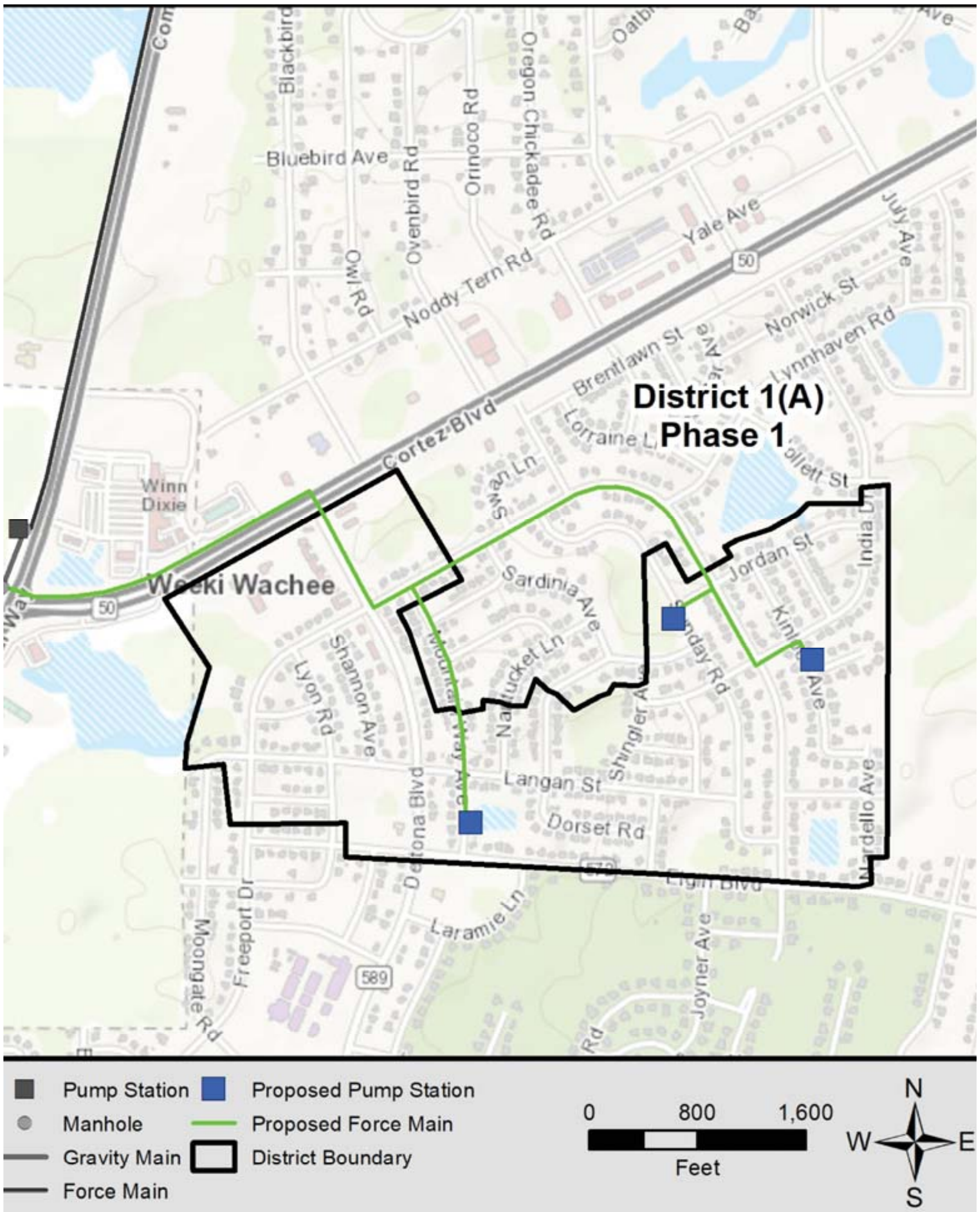
What will be the landuse once purchased?

What is the recharge potential (mgd)?

Does a portion of the land to be acquired lie outside of the BMAP?

○ Yes ◉ No

Please note, the portion of land outside of a BMAP for a land acquisition project should not be included in reporting acreage preserved.


District 1(A)
Phase 1
Weeki Wachee
Cortez Blvd
Bluebird Ave
Ovenbird Rd
Orinoco Rd
Oregon Chickadee Rd
Owl Rd
Noddy Tern Rd
Yale Ave
July Ave
Norwick St
Lynnhaven Rd
Brentlawn St
Swan Ln
Sardinia Ave
Jordan St
Nantucket Ln
Shannon Ave
Lyon Rd
Langan St
Dorset Rd
Deltona Blvd
Laramie Ln
Freeport Dr
Moongate Rd
Joyner Ave
Nardello Ave
Winn Dixie
50
589
Pump Station
Manhole
Gravity Main
Force Main
Proposed Pump Station
Proposed Force Main
District Boundary
0
800
1,600
Feet
N
W
E
S

Septic Tank Load to Ground Water

352	Septic Tanks
23.7	lbs of TN/year/septic tank
0.5	Attenuation Multiplier
0.9	Recharge Factor
3754	lbs of TN / Year to ground water

Commercial Septic Tank Load to Ground Water

64346	Building Square Footage
15	gpd/100 SF - Sewage Generated from Commericial applications - 64E6.008
9651.9	gpd from commercial site
250	gpd per ERU
38.6076	Equivalent ERUs
23.7	lbs of TN per ERU per year
0.5	Attenuation Multiplier
0.9	Recharge Factor
411.750054	lbs of TN per year to ground water

Package Plant Load to Groundwater

Original Annual TN Input Calc

0	mg/l of nitrogen -measured discharge
0	gpd - Reported ADF
0	lbs/yr TN - Discharge from Package Plant
0.75	Effluent Treatment Application Method Attuneation Factor
0.9	Effluent Application Area Recharge Factor
0	**lbs of TN / year - Original Annual TN Input**

4165.750054 lbs of TN/year from tanks and package plants

City's WWTP Plant efficency

8.44	mg/l of nitrogen - discharge concentration
70400	gpd flow from single family septic tanks
80,052	gpd total flow
0.25	Attenuation Multiplier
0.9	Recharge Factor
463	lbs of TN/yr to ground water

Load Reduction from Septic to Sewer Project

3702.750054 lbs of TN / YR

TN Reduced Cost Metric

$16,500,000 Total Project Cost

$148.54 per lb TN over 30 years

Quantity of Water Made Avaliable

0.063 MGD

Water Saved Cost

$0.14 per gal per year

FY2020 FDEP Springs Funding Multi Year Funding Application Spreadsheet

	I. TOTAL PROJECT COST					II. Year 1 - Project Funding Breakout										II. Year 2 - Pr				
Count	DEP/State Funding Amount	Local Match Amount	WMD Match Amount	Third Party Match	TOTAL Project Cost	DEP/State Funding Amount	Local Match - Cash	Local Match - In-kind Efforts	Local Match - Companion Projects	Local Match - Other	WMD Match - Cash	WMD Match - In-kind Efforts	WMD Match - Companion Projects	WMD Match - Other	Third Party Funding	TOTAL Year 1 Funding	DEP/State Funding Amount	Local Match - Cash	Local Match - In-kind Efforts	Local Match - Companion Projects	Local Match - Other
1	$ 11,550,000	$ 2,475,000	$ 2,475,000	$ -	$ 16,500,000	$ 2,310,000	$ 495,000				$ 495,000					$ 3,300,000	$ 2,310,000	$ 495,000			
2	$ -	$ -	$ -	$ -	$ -																
3	$ -	$ -	$ -	$ -	$ -																
4	$ -	$ -	$ -	$ -	$ -																
5	$ -	$ -	$ -	$ -	$ -																

FY2020 FDEP Springs Funding Multi Year Funding Application Spreadsheet

	roject Funding Breakout						III. Year 3 - Project Funding Breakout					III. Year 4 - Project Funding Breakout					III. Year 5 - Project Funding Breakout				
Count	WMD Match - Cash	WMD Match - In-kind Efforts	WMD Match - Companion Projects	WMD Match - Other	Third Party Funding	TOTAL Year 2 Funding	DEP/State Funding Amount	Local Match Amount	WMD Match Amount	Third Party Funding	TOTAL Year 3 Funding	DEP/State Funding Amount	Local Match Amount	WMD Match Amount	Third Party Funding	TOTAL Year 4 Funding	DEP/State Funding Amount	Local Match Amount	WMD Match Amount	Third Party Funding	TOTAL Year 5 Funding
1	$ 495,000					$ 3,300,000	$2,310,000	$ 495,000	$ 495,000		$ 3,300,000	$2,310,000	$ 495,000	$ 495,000		$3,300,000	$ 2,310,000	$ 495,000	$ 495,000		$ 3,300,000
2																					
3																					
4																					
5																					

APP 04

City of Crystal River

Wetland Recharge Park

FY2022 FDEP Springs Funding Application for Projects within the Southwest Florida Water Management District

This application should be completed and emailed with the appropriate calculations and map to Lisa.Laupert@swfwmd.state.fl.us by 5:00PM on October 2, 2020.

Applicant Information

Entity Name: City of Crystal River

Is the Entity designated as an economically disadvantaged community? ○ Yes ◉ No

Project Manager Name: Beau Keene, P.E.

Project Manager Address: 123 NW HWY 19, Crystal River, FL, 34428

Project Manager Phone Number: 352-795-4216

Project Manager Email Address: bkeene@crystalriverfl.org

Project General Information

Project Name: Crystal River Wetland Recharge Park

Project Type: Other Water Quality

Project Benefit

Quantity of Water Made Available (mgd): N/A

Land Acquisition (acres): N/A

Nitrogen Reduced (lbs/year): See paragraph 3 on next page

Sediment Reduced (lbs/year): N/A

Please download the the FDEP Springs Funding guidance document. Benefit calculations should be provided demonstrating how the benefit calculation was derived. A Map should be included showing the area of the project and depict notable features.

Project Detail Information

Is this a multiyear project? ○ Yes ◉ No

Note: For multiyear funding request, please download the multiyear funding request spreadsheet, complete the form, and send in with this application.

Please provide a full description of the project. For multiyear funded projects, please provide a description of the complete project, beginning to end, and a description explaining what phase will be covered by this funding request application.

The Wetland Park is located south of N Turkey Oak Drive and east of N Citrus Avenue. Currently, the property is used by the City as nature trails for public recreation. The project area is 55+ acres owned by the City of Crystal River and is comprised of six parcels. The proposed project would convert the existing property into a wetland park that would provide enhanced treatment above what treatment occurs on-site currently and provide an educational site to teach the public about the benefits of wetlands and how to protect them.

Six major basins contribute runoff to the existing property. These basins total approximately 265 acres in size, and are generally defined by existing roadways. The land uses are primarily wooded swamp lands and the topography of the area is generally flat ranging from 1.0 to 10.0 feet, although most of the area is 4.0 feet. (NAVD88).
The proposed park would provide improved water quality, increased stormwater retention, and serve as a platform for public education. These improvements would be provided by means of additional wet detention ponds, wetland treatment areas, and multi-use trails.

The measurable benefit provided to Kings Bay would include reduced TN and TP annual mass loadings and helping to educate the residents while providing an ecotourist activity for a City centered on ecotourism. However, it is not practicable at this time to estimate the amount of nutrient reduction for this project. The main reason for this is that there isn't a nutrient reduction calculation methodology for this type of project in the FDEP guidance document. The City would like to work with the district to establish an agreed upon method and assumptions for the nutrient calculation during the application process in order to determine the nutrient reduction.

The estimated cost associated with constructing the wetland park and the installation of three culverts is $7,340,000.00. This estimate includes design, permitting, inspection and construction. Construction would include the installation of the three culverts and two headwalls at the intersection of N Turkey Oak Drive and & CR-495, two headwalls, swale grading to facilitate Stormwater flow, excavation of the designed wet detention ponds, creation of nutrient removal wetlands and littoral zones, as well as the construction of boardwalk and educational facilities.

What is the anticipated start and end date for the work that will be conducted under this funding request?

Start Date: April 2022 End Date: April 2024

Project Location Information (please submit a map with this application)

County Citrus

Latitude (decimal degrees) 28.91024 N

Longitude (decimal degrees) 82.59062 W

What is the spring name that will receive the benefit? Kings Bay (Three Sisters Springs , Hunter Springs)

Is this spring deemed impaired? Yes, with a BMAP or RAP

What is the distance from the project to the spring receiving the benefit ? 0.75 miles

Is this project in a springshed? If so, specify which one. Yes, Kings Bay

Is this project within a BMAP boundary? (●) Yes ( ) No

Is this project within a PFA boundary? (●) Yes ( ) No

Is this project listed in the BMAP project list? ( ) Yes ( ) No (●) No, but will be in an update

Is this project listed in a recovery strategy, prevention strategy, or regional water supply plan as benefiting an MFL? ( ) Yes (●) No

Please list any restoration plans, prevention plans, recovery plans, or long term local water quality or quantity strategy plans this project is part of.

This project is a part of the City of Crystal River's Best Management Practices Plan which was previously completed in 2017 and was also a grant funded effort.

Project Funding Information

Are you applying for CFI funding this fiscal year? ○ Yes ◉ No

Have you received springs funding or CFI funding for this project in the past? ○ Yes ◉ No

Enter the funding amount that has been received and/or is being requested:

	Previous	FY2022	Future	Total
FDEP Springs Funding	$ 0.00	$ 7,340,000.00	$ 0.00	$ 7,340,000.00
WMD CFI Funding	$ 0.00	$ 0.00	$ 0.00	$ 0.00
Local Funding	$ 0.00	$ 0.00	$ 0.00	$ 0.00
Other Funding	$ 0.00	$ 0.00	$ 0.00	$ 0.00
Total	$ 0.00	$ 7,340,000.00	$ 0.00	$ 7,340,000.00

In the event this project is not awarded CFI funding, please use the table below to reflect how the costs will be handled without CFI funding. If CFI funding was not applied for, please move to the next section.

	Previous	FY2022	Future	Total
FDEP Springs Funding	$ 0.00	$ 7,340,000.00	$ 0.00	$ 7,340,000.00
Local Funding	$ 0.00	$ 0.00	$ 0.00	$ 0.00
Other Funding	$ 0.00	$ 0.00	$ 0.00	$ 0.00
Total	$ 0.00	$ 7,340,000.00	$ 0.00	$ 7,340,000.00

Please download the the FDEP Springs Funding guidance document. Benefit calculations should be provided demonstrating how the benefit calculation was derived. A Map should be included showing the area of the project and depict notable features.

Provide any additional information below that is pertinent to the review of this application. Include information on any existing ordinances, capital improvement plans, or master plans.

Please see the previously completed BMP Feasibility Study approved by SWFWMD in 2017.

Don't forget to submit

-Benefit Calculations
-Map
-Form A (Wastewater Collection and Treatment Projects)
-Form B (Water Quantity Projects & Reuse)
-Form C (Land Acquisition Projects)

Please contact Frank Gargano with any questions prior to submittal. Frank.Gargano@swfwmd.state.fl.us

Form A: Wastewater Collection & Treatment Projects Only

What is the name of the wastewater treatment facility where the project intends to send flows once connected to sewer:

N/A

What level of treatment is offered at the wastewater treatment facility?

N/A

At the wastewater treatment facility, where is the final treated wastewater sent?

Make a Selection

What is the current capacity of the wastewater treatment facility (mgd)?

N/A

What is the annual average of flow received by the wastewater treatment facility (mgd)?

N/A

What is the annual average of total nitrogen leaving the treatment facility (mg/L)?

N/A

How much additional flow will be received by the treatment facility due to the project (mgd)?

N/A

Please describe any proposed costs for the resident/property owner for connection to sewer. Will connection and/or impact fees be charged? If so, how much are the fees? What will the fees cover?

N/A

Is any land acquisition necessary? If so, please describe below. ○ Yes ◉ No

N/A

What length of forcemain and pipe sizing is necessary? Please describe below.

N/A

Form A: Wastewater Collection & Treatment Projects Only

Septic to Sewer Conversion Projects Complete this Section:

How many septic tanks will be connected to sewer through this project?

N/A

How many of the septic tanks in this project are commercial tanks?

N/A

If commercial tanks are included in this project, provide type of commercial use and square footage of the associated buildings below.

N/A

How many of the septic tanks service multi-family homes?

N/A

Is there a local ordinance in place that requires proper abandonment of a septic system and connection to an available sewerage system, as defined by in Section 381.0065(21), Florida Statutes (F.S.)?

○ Yes ◉ No

If there are more requirements to the local ordinance, such as limiting future installation of septic systems, please describe and reference the ordinance below.

N/A

Package Plant Conversion Projects Complete this Section:

What is the annual average flow (actual, not permitted) from the package plant (mgd)?

N/A

What is the annual average concentration (actual, not permitted) of total nitrogen (mg/L)?

N/A

N/A

Form B: Water Quantity Projects

For Agricultural Projects associated with irrigation system efficiency improvements:

Proposed irrigation system efficiency (%): N/A

Prior irrigation system efficiency (%): N/A

Average metered water use for the past 5 years (mgd): N/A

For Reclaimed Water Projects:

Note: Refer to Appendix D of the Springs Funding Guidance for how to calculate the following:

Projected Reuse Flow (mgd): N/A

Percent Offset (%): N/A

Was Percent Offset determined by Table 1 of the Springs Funding Guidance?

○ Yes ◉ No

Percent Recharge (%): N/A

Form C: Land Acquisition Projects Only

What is the current landuse? If mixed, please depict acreage for each land use.

N/A

What will be the landuse once purchased?

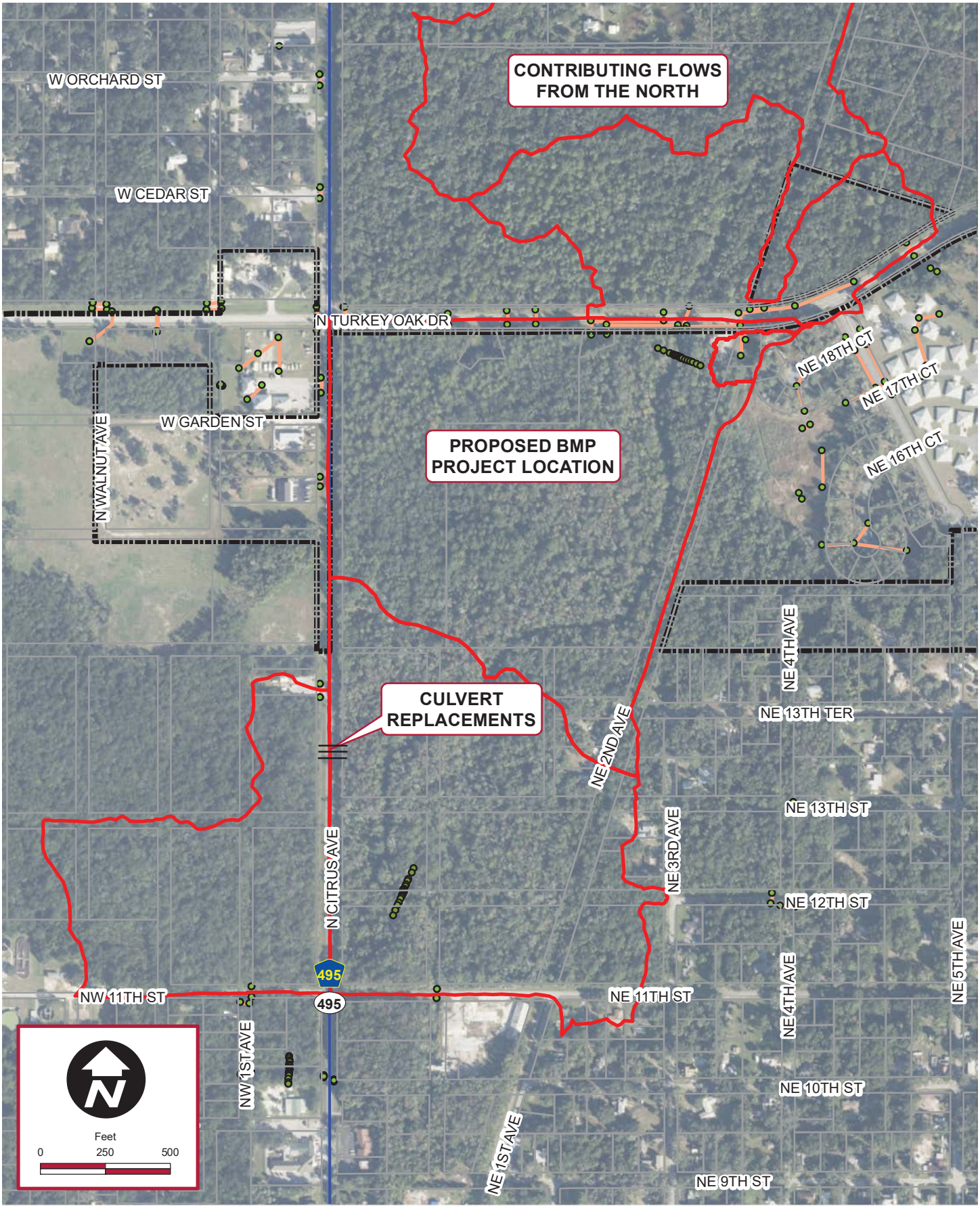
N/A

What is the recharge potential (mgd)? N/A

Does a portion of the land to be acquired lie outside of the BMAP?

○ Yes ◉ No

Please note, the portion of land outside of a BMAP for a land acquisition project should not be included in reporting acreage preserved.



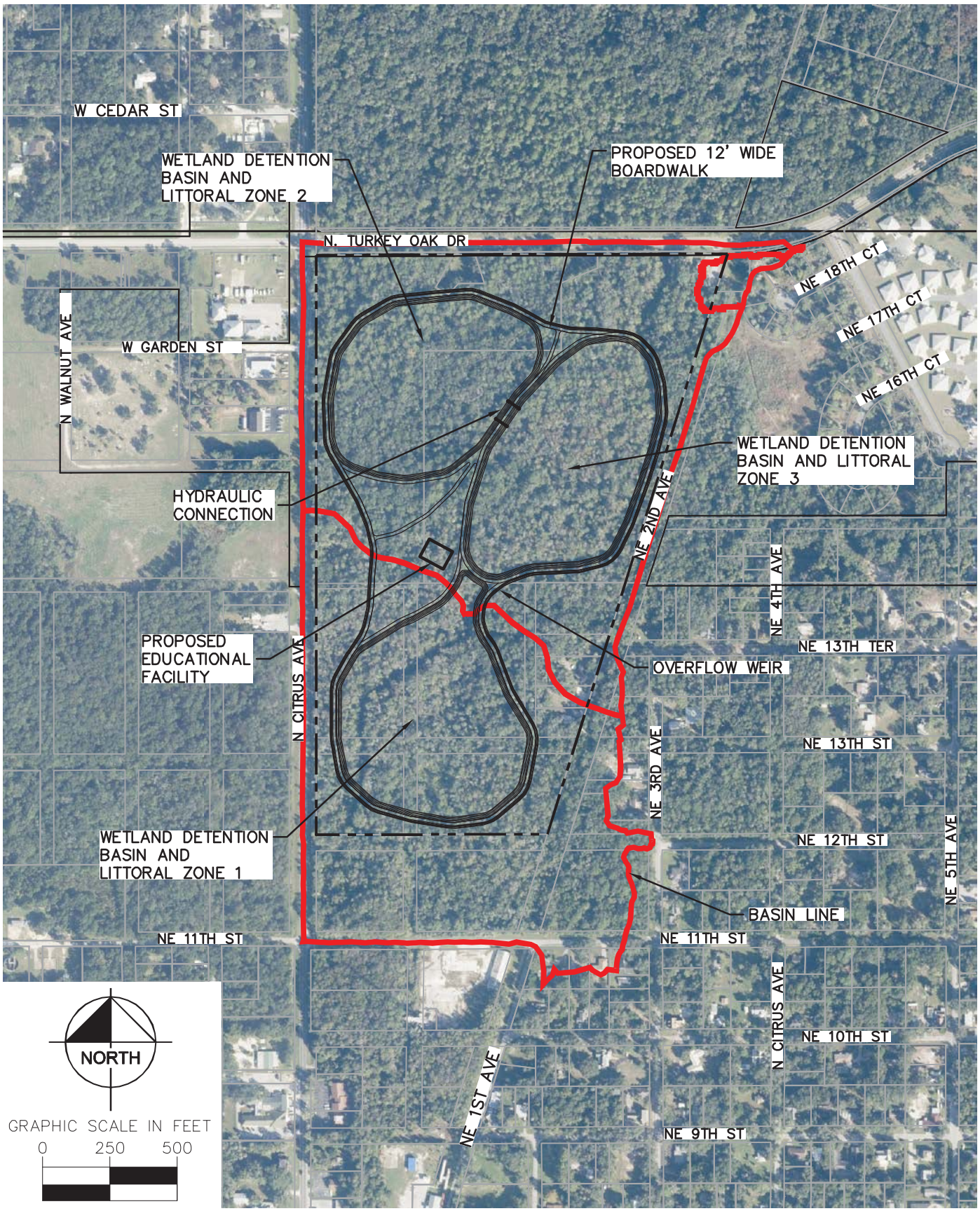
Kimley»Horn

101 East Silver Springs Blvd, Suite 400, Ocala FL 34470
Phone: (352) 438-3000
www.kimley-horn.com CA 00000696

BMP EXHIBIT

BMP FEASIBILITY STUDY
WETLAND PARK
CITY OF CRYSTAL RIVER, FLORIDA

Scale: As Noted	Project No.: 142004003	November 2017	Figure 3



K:\OCA_Civil\142004003 - Crystal River BMP Feasibility Study\CAD\Exhibit\Wetland Park4.dwg, Layout:Figure 1 Oct 18, 2017 Ryan.P.Clark
XREFS: x-Base

Kimley»Horn
© 2017 KIMLEY-HORN AND ASSOCIATES, INC.
101 EAST SILVER SPRINGS BLVD, SUITE 400, OCALA, FL 34470
PHONE: 352-438-3000
WWW.KIMLEY-HORN.COM CA 00000698

BMP EXHIBIT

BMP FEASIBILITY STUDY
WETLAND PARK
CITY OF CRYSTAL RIVER

Scale: As Noted	Project No. 142004003	October 2017	Figure 4

Prepared by:
Kimley»Horn

PROJECT COST ESTIMATE
FOR
WETLAND PARK / CITY OF CRYSTAL RIVER BMP FEASIBILITY STUDY

ITEM #	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
GENERAL					
1	MOBILIZATION/DEMOBILIZATION	LS	1	$ 325,000.00	**$ 325,000.00**
2	SURVEY/CONSTRUCTION STAKEOUT	LS	1	$ 67,000.00	**$ 67,000.00**
3	TRAFFIC CONTROL/MAINTENANCE OF TRAFFIC	LS	1	$ 32,000.00	**$ 32,000.00**
4	18" RCP	LF	300	$ 35.00	**$ 10,500.00**
5	HEADWALLS	EA	2	$ 8,000.00	**$ 16,000.00**
6	OPEN CUT ROADWAY REPAIR	LS	1	$ 15,000.00	**$ 15,000.00**
				CATEGORY I SUBTOTAL	**$ 465,500.00**
CLEARING, GRUBBING AND EARTHWORK					
1	SWPPP	LS	1	$ 15,000.00	**$ 15,000.00**
2	SILT FENCE	LF	3500	$ 2.00	**$ 7,000.00**
3	SEED AND MULCH	SY	50000	$ 0.50	**$ 25,000.00**
4	CLEARING AND GRUBBING	LS	1	$ 650,000.00	**$ 650,000.00**
5	STABILIZED CONSTRUCTION ENTRANCE	EA	3	$ 2,000.00	**$ 6,000.00**
6	WETLAND ENHANCEMENT / LITTORAL ZONE	AC	6.00	$ 250,000.00	**$ 1,500,000.00**
7	PROJECT GRADING	CY	45000	$ 15.00	**$ 675,000.00**
8	FINE GRADING	LS	1	$ 5,000.00	**$ 5,000.00**
9	12' WIDE BOARDWALK	LF	2500	$ 500.00	**$ 1,250,000.00**
10	8' WIDE CRUSHED SHELL TRAIL PATH	SY	1000	$ 30.00	**$ 30,000.00**
11	DEWATERING	LS	1	$ 502,000.00	**$ 502,000.00**
12	SOD	SY	1000	$ 3.00	**$ 3,000.00**
				CATEGORY II SUBTOTAL	**$ 4,668,000.00**
MISCELLANEIOUS					
1	AS-BUILTS	EA	1	$ 46,500.00	**$ 46,500.00**
2	GEOTECHNICAL TESTING	EA	1	$ 62,000.00	**$ 62,000.00**
3	DESIGN, PERMITTING, AND CONSTRUCTION INSPECTION	EA	1.0	$ 630,000.00	**$ 630,000.00**
4	CONTINGENCY	LS	25.0%	$ 1,468,000.00	**$ 1,468,000.00**
				CATEGORY III SUBTOTAL	**$ 2,206,500.00**
				GRAND TOTAL	$ 7,340,000.00

The Engineer has no control over the cost of labor, materials, equipment, or over the Contractor's methods of determining prices or over competitive bidding or market conditions. Opinions of probable costs provided herein are based on the information known to Engineer at this time and represent only the Engineer's judgment as a design professional familiar with the construction industry. The Engineer cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from its opinions of probable costs.

APP 05

City of Inverness

41 N Sewer Extension

This application should be completed and emailed with the appropriate calculations and map to Lisa.Laupert@swfwmd.state.fl.us by 5:00PM on October 2, 2020.

Applicant Information

Entity Name: City of Inverness

Is the Entity designated as an economically disadvantaged community? ○ Yes ◉ No

Project Manager Name: Scott McCulloch

Project Manager Address: 212 West Main Street

Project Manager Phone Number: 352-726-2611

Project Manager Email Address: smcculloch@inverness-fl.gov

Project General Information

Project Name: 41 N Sewer Extension Project

Project Type: Waste Water Collection & Treatment (Complete Form A)

Project Benefit

Quantity of Water Made Available (mgd): N/A

Land Acquisition (acres): N/A

Nitrogen Reduced (lbs/year): 1202

Sediment Reduced (lbs/year): N/A

Please download the the FDEP Springs Funding guidance document. Benefit calculations should be provided demonstrating how the benefit calculation was derived. A Map should be included showing the area of the project and depict notable features.

Project Detail Information

Is this a multiyear project? ○ Yes ◉ No

Note: For multiyear funding request, please download the multiyear funding request spreadsheet, complete the form, and send in with this application.

Please provide a full description of the project. For multiyear funded projects, please provide a description of the complete project, beginning to end, and a description explaining what phase will be covered by this funding request application.

The 41 North Sewer Expansion Project is located in the northern portion of the City of Inverness. The project area is located within the BMAP area for the Chassahowitzka-Homosassa springs shed and this spring shed will directly benefit from the removal of the septic tanks within the project area. The project area is located approximately 14.5 miles from the spring heads. The project area is depicted on the project map included with the application. The project consists of a total of 116 parcels of which 67 contain septic tanks. There are a total 33 commercial septic tanks and 34 residential septic tanks.

The removal of these septic tanks and connection of the residents to the City's sewer system would remove 1,202 lbs of TN / year from the Chassahowitzka-Homosassa spring shed. The total project also consists of approximately 1.5 miles of existing roadway and ROW, 7,500 LF of gravity sewer, 7,000 LF of FM, 3 local or regional lift stations, and 2 lots needed for the construction of the lift stations.

What is the anticipated start and end date for the work that will be conducted under this funding request?

Start Date: End Date:

Project Location Information (please submit a map with this application)

County Citrus

Latitude (decimal degrees) N 28.857782

Longitude (decimal degrees) W 82.348821

What is the spring name that will receive the benefit? Chassahowitzka-Homosassa Springs

Is this spring deemed impaired? Yes, with a BMAP or RAP

What is the distance from the project to the spring receiving the benefit ? 14.5 miles

Is this project in a springshed? If so, specify which one. Chassahowitzka-Homosassa Springs

Is this project within a BMAP boundary? (●) Yes ( ) No

Is this project within a PFA boundary? ( ) Yes (●) No

Is this project listed in the BMAP project list? ( ) Yes ( ) No (●) No, but will be in an update

Is this project listed in a recovery strategy, prevention strategy, or regional water supply plan as benefiting an MFL? ( ) Yes (●) No

Please list any restoration plans, prevention plans, recovery plans, or long term local water quality or quantity strategy plans this project is part of.

None at this time.

Project Funding Information

Are you applying for CFI funding this fiscal year? ○ Yes ◉ No

Have you received springs funding or CFI funding for this project in the past? ○ Yes ◉ No

Enter the funding amount that has been received and/or is being requested:

	Previous	FY2022	Future	Total
FDEP Springs Funding	$ 0.00	$ 3,264,800.00	$ 0.00	$ 3,264,800.00
WMD CFI Funding	$ 0.00	$ 0.00	$ 0.00	$ 0.00
Local Funding	$ 0.00	$ 816,200.00	$ 0.00	$ 816,200.00
Other Funding	$ 0.00	$ 0.00	$ 0.00	$ 0.00
Total	$ 0.00	$ 4,081,000.00	$ 0.00	$ 4,081,000.00

In the event this project is not awarded CFI funding, please use the table below to reflect how the costs will be handled without CFI funding. If CFI funding was not applied for, please move to the next section.

	Previous	FY2022	Future	Total
FDEP Springs Funding	$ 0.00	$ 0.00	$ 0.00	$ 0.00
Local Funding	$ 0.00	$ 0.00	$ 0.00	$ 0.00
Other Funding	$ 0.00	$ 0.00	$ 0.00	$ 0.00
Total	$ 0.00	$ 0.00	$ 0.00	$ 0.00

Please download the the FDEP Springs Funding guidance document. Benefit calculations should be provided demonstrating how the benefit calculation was derived. A Map should be included showing the area of the project and depict notable features.

Provide any additional information below that is pertinent to the review of this application. Include information on any existing ordinances, capital improvement plans, or master plans.

This project was part of a capitol improvement plan.

Don't forget to submit

-Benefit Calculations
-Map
-Form A (Wastewater Collection and Treatment Projects)
-Form B (Water Quantity Projects & Reuse)
-Form C (Land Acquisition Projects)

Please contact Frank Gargano with any questions prior to submittal. Frank.Gargano@swfwmd.state.fl.us

Form A: Wastewater Collection & Treatment Projects Only

What is the name of the wastewater treatment facility where the project intends to send flows once connected to sewer:

City of Inverness Wastewater Treatment Plant

What level of treatment is offered at the wastewater treatment facility?

Advanced Wastewater Treatment

At the wastewater treatment facility, where is the final treated wastewater sent?

Sprayfield

What is the current capacity of the wastewater treatment facility (mgd)?

1.5

What is the annual average of flow received by the wastewater treatment facility (mgd)?

0.5

What is the annual average of total nitrogen leaving the treatment facility (mg/L)?

3.5

How much additional flow will be received by the treatment facility due to the project (mgd)?

0.030

Please describe any proposed costs for the resident/property owner for connection to sewer. Will connection and/or impact fees be charged? If so, how much are the fees? What will the fees cover?

The City will charge the residents/property owners a onetime sewer capacity fee of $ 2,720. Additionally, the residents will be charged a monthly sewer fee based on the amount of water used.

These fees will cover the cost of the additional capacity to the system and the cost of processing the wastewater.

Is any land acquisition necessary? If so, please describe below. (●) Yes ( ) No

It will be necessary to acquire land for the lift station locations.

What length of forcemain and pipe sizing is necessary? Please describe below.

The project will consist of approximately 2,200 LF of force main piping that will range in size from 4 in to 6 in pipe.

Form A: Wastewater Collection & Treatment Projects Only

Septic to Sewer Conversion Projects Complete this Section:

How many septic tanks will be connected to sewer through this project?

67

How many of the septic tanks in this project are commercial tanks?

33

If commercial tanks are included in this project, provide type of commercial use and square footage of the associated buildings below.

The commercial land use ranges from commercial rural to commercial medium. There is a total of 142,262 SF of commercial buildings.

How many of the septic tanks service multi-family homes?

3

Is there a local ordinance in place that requires proper abandonment of a septic system and connection to an available sewerage system, as defined by in Section 381.0065(21), Florida Statutes (F.S.)?

(●) Yes ( ) No

If there are more requirements to the local ordinance, such as limiting future installation of septic systems, please describe and reference the ordinance below.

None

Package Plant Conversion Projects Complete this Section:

What is the annual average flow (actual, not permitted) from the package plant (mgd)?

N/A

What is the annual average concentration (actual, not permitted) of total nitrogen (mg/L)?

N/A

Form B: Water Quantity Projects

For Agricultural Projects associated with irrigation system efficiency improvements:

Proposed irrigation system efficiency (%): N/A

Prior irrigation system efficiency (%): N/A

Average metered water use for the past 5 years (mgd): N/A

For Reclaimed Water Projects:

Note: Refer to Appendix D of the Springs Funding Guidance for how to calculate the following:

Projected Reuse Flow (mgd): N/A

Percent Offset (%): N/A

Was Percent Offset determined by Table 1 of the Springs Funding Guidance?

○ Yes ◉ No

Percent Recharge (%): N/A

Form C: Land Acquisition Projects Only

What is the current landuse? If mixed, please depict acreage for each land use.

Single Family Residential or Commercial

What will be the landuse once purchased?

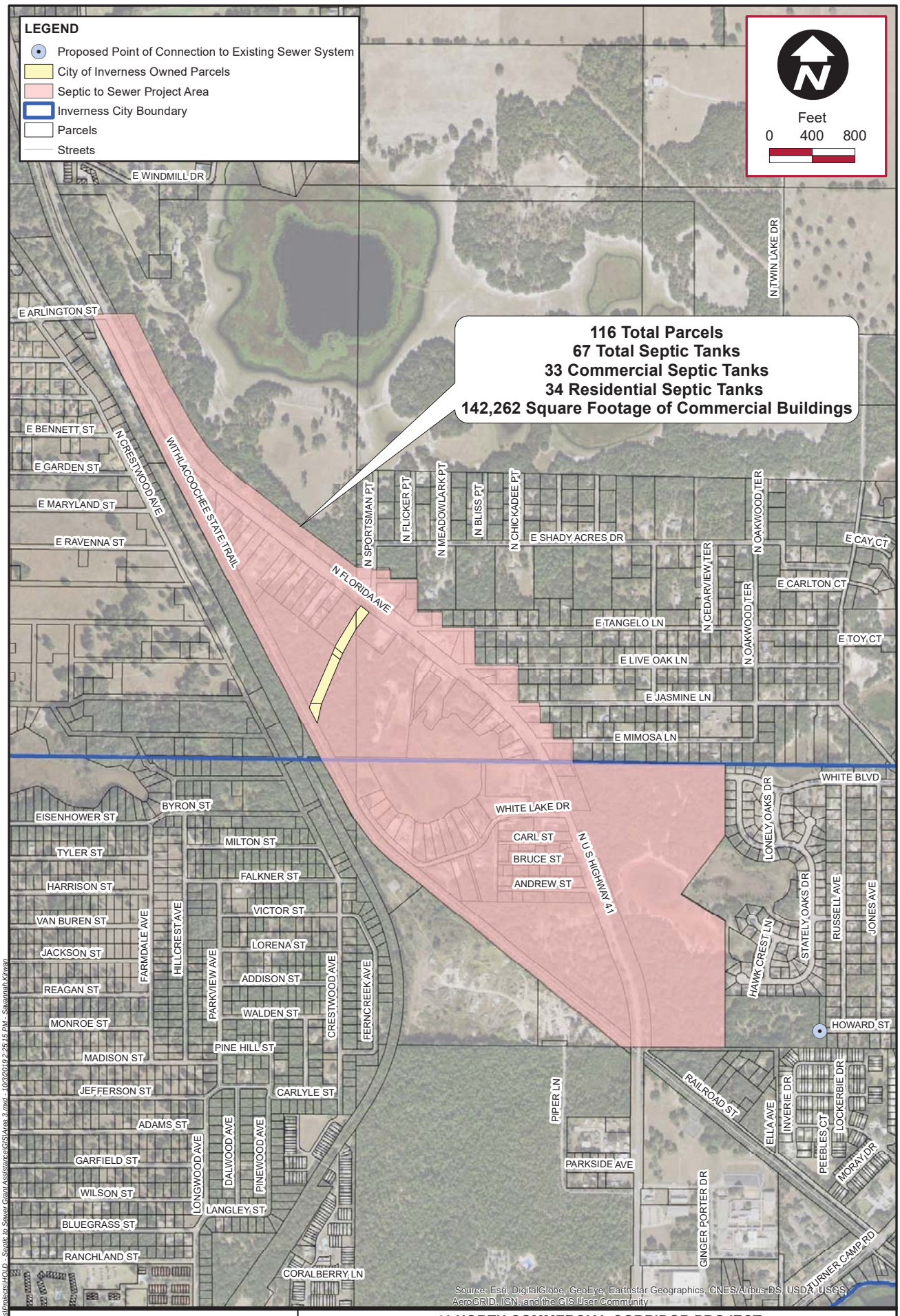
Municipal

What is the recharge potential (mgd)? None

Does a portion of the land to be acquired lie outside of the BMAP?

○ Yes ◉ No

Please note, the portion of land outside of a BMAP for a land acquisition project should not be included in reporting acreage preserved.



Kimley»Horn

41 NORTH COMMERCIAL CORRIDOR PROJECT

PROPOSED SEPTIC TO SEWER
INVERNESS, FL

October 2019	Project No.142240046	Figure 1

K:\OCA_Utilities\Inverness\Projects\HOLD - Septic to Sewer Grant Assistance\GIS\Area 3.mxd - 10/3/2019 2:25:15 PM - Savannah Kirwan

COST ESTIMATE FOR GRANT APPLICATION
CITY OF INVERNESS
41 N SEWER EXTENSION

ITEM	DESCRIPTION	QUANTITY		UNIT PRICE	AMOUNT
1	SEPTIC TANK ABANDONMENT AND CONNECTION TO SEWER	67	EA	$ 8,000	536,000.00
2	GRAVITY SEWER (INCLUDES ALL CONSTRUCTION RELATED COMPONENTS)	7,500	LF	$ 120	900,000.00
3	FORCE MAIN (INCLUDES ALL CONSTRUCTION RELATED COMPONENTS)	7,000	LF	$ 100	700,000.00
4	LIFT STATION	3	LS	$ 400,000	1,200,000.00
5	PROPERTY ACQUISITION	2	LOT	$ 35,000	70,000.00
6	ROADWAY	1.50	MI	$ 450,000	675,000.00
				TOTAL	**$ 4,081,000.00**

The Engineer has no control over the cost of labor, materials, equipment, or over the Contractor's methods of determining prices or over competitive bidding or market conditions. Opinions of probable costs provided herein are based on the information known to Engineer at this time and represent only the Engineer's judgment as a design professional familiar with the construction industry. The Engineer cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from its opinions of probable costs.

	PM to enter data
	= Output
	Do not change contents of cell

Reharge Factor	NSILT Recharge Factor GIS Viewer Link (2016)	https://www.arcgis.com/home/webmap/viewer.html?webmap=50f845b3ace54f48b56c6db877cf626d
0.1 mgd or greater WWTP locations	Reclaimed water lines and facilites within SWFWMD	http://www21.swfwmd.state.fl.us/maps/pages/viewer_rw.html

41 North Sewer Expansion Project

Calculate Base Load for Residential Septic Tanks	
Number of Septic Tanks	34
Typical septic TN input to environment (lb/yr)	23.7
Typical Septic Attenuation	0.5
Recharge Factor (0.9, 0.5, 0.1, or 0)	0.9
Septic System Load to Groundwater	363

Calculate Base Load for Commercial Septic Tanks	
Number of Commercial Septic Tanks	33
Building Square Footage	142,262
Sewage Generated from Commercial Applications (gpd/100 SF) -FAC 64E6.008	15
GPD Flow from Commercial Septic Tanks	21,339
GPD per ERU	250
Equivalent ERUs	85
Typical septic TN input to environment (lb/yr)	23.7
Typical Septic Attenuation	0.5
Recharge Factor (0.9, 0.5, 0.1, or 0)	0.9
Septic System Load to Groundwater	910

Calculate New Load	**Traditional**	**AWT**
Number of Residential Septic Tanks and Equivalent ERUs from Commercial Septic Tanks	119	
Input from Septic Systems to be Connected	23.7	
% TN Remaining After Treatment (18% remaining going from 45 mg/l to 8 mg/l OR 7% remaining going from 45mg/l to 3mg/l)	0.18	0.07
Attenuation Factor for Wastewater Application (RIB .75, Reuse .25, Sprayfield .40)	0.4	
Recharge Factor (0.9, 0.5, 0.1, or 0)	0.9	
Load to Groundwater After Treatment	183	71
Reduction in Load to Springshed lb/yr	1090	1202

Cost Effectiveness Calculation for 30 Year Period	**Traditional**	**AWT**
Project Cost	$4,081,000	
cost/lb TN	$3,745.27	$3,396.14
Cost/lb TN / 30 years	$124.84	$113.20

APP 06

City of Inverness

South Highlands Septic to Sewer

FY2022 FDEP Springs Funding Application for Projects within the Southwest Florida Water Management District

This application should be completed and emailed with the appropriate calculations and map to Lisa.Laupert@swfwmd.state.fl.us by 5:00PM on October 2, 2020.

Applicant Information

Entity Name: City of Inverness

Is the Entity designated as an economically disadvantaged community? (●) Yes ( ) No

Project Manager Name: Scott McCulloch

Project Manager Address: 212 West Main Street

Project Manager Phone Number: 352-726-2611

Project Manager Email Address: smcculloch@inverness-fl.gov

Project General Information

Project Name: South Highlands Septic to Sewer Project

Project Type: Waste Water Collection & Treatment (Complete Form A)

Project Benefit

Quantity of Water Made Available (mgd): N/A

Land Acquisition (acres): N/A

Nitrogen Reduced (lbs/year): 695 (Phase 1) 5,427 (Total Pr

Sediment Reduced (lbs/year): N/A

Please download the the FDEP Springs Funding guidance document. Benefit calculations should be provided demonstrating how the benefit calculation was derived. A Map should be included showing the area of the project and depict notable features.

Project Detail Information

Is this a multiyear project? (●) Yes ( ) No

Note: For multiyear funding request, please download the multiyear funding request spreadsheet, complete the form, and send in with this application.

Please provide a full description of the project. For multiyear funded projects, please provide a description of the complete project, beginning to end, and a description explaining what phase will be covered by this funding request application.

The South Highlands Septic to Sewer Project is located in the southeast portion of the City of Inverness. This project is a multi-year project that is broken into 5 phases. This application is for Phase 1 of the total project. The total project area is located within the BMAP area for the Chassahowitzka-Homosassa springs shed and this spring shed will directly benefit from the removal of the septic tanks within the project area. The project area is located 16 miles from the spring head. The total project area along with the project area for Phase 1 is depicted on the project map included with the application.

The total project area consists of 751 parcels of which 540 contain septic tanks. This is a residential area comprised of single family lots. The removal of these septic tanks and connection of the residents to the City's sewer system would remove 5,427 lbs of TN / year once the total project is complete. The total project also consists of approximately 9 miles of existing roadway and ROW, 46,500 LF of gravity sewer, 22,400 LF of FM, 14 local or regional lift stations, and 5 lots needed for the construction of the lift stations.

The Phase 1 project area consists of 114 parcels of which 69 contain septic tanks. The removal of these septic tanks and connection of the residents to the City's sewer system will remove 695 lbs of TN per year from the Chassahowitzka-Homosassa spring shed. Phase 1 consists of 1.4 miles of roadway and ROW, 7,250 LF of gravity sewer, 3,800 LF of force main, 2 lift stations, and 1 lot for lift station construction.

What is the anticipated start and end date for the work that will be conducted under this funding request?

Start Date: January 2022 End Date: January 2024

Project Location Information (please submit a map with this application)

County Citrus

Latitude (decimal degrees) N 28.827937

Longitude (decimal degrees) W 82.328362

What is the spring name that will receive the benefit? Chassahowitzka-Homosassa Springs

Is this spring deemed impaired? Yes, with a BMAP or RAP

What is the distance from the project to the spring receiving the benefit ? 16 miles

Is this project in a springshed? If so, specify which one. Chassahowitzka-Homosassa Springs

Is this project within a BMAP boundary? (●) Yes ( ) No

Is this project within a PFA boundary? ( ) Yes (●) No

Is this project listed in the BMAP project list? ( ) Yes ( ) No (●) No, but will be in an update

Is this project listed in a recovery strategy, prevention strategy, or regional water supply plan as benefiting an MFL? ( ) Yes (●) No

Please list any restoration plans, prevention plans, recovery plans, or long term local water quality or quantity strategy plans this project is part of.

None at this time.

Project Funding Information

Are you applying for CFI funding this fiscal year? ○ Yes ◉ No

Have you received springs funding or CFI funding for this project in the past? ○ Yes ◉ No

Enter the funding amount that has been received and/or is being requested:

	Previous	FY2022	Future	Total
FDEP Springs Funding	$ 0.00	$ 2,613,600.00	$ 14,898,000.00	$ 17,511,600.00
WMD CFI Funding	$ 0.00	$ 0.00	$ 0.00	$ 0.00
Local Funding	$ 0.00	$ 653,400.00	$ 3,724,500.00	$ 4,377,900.00
Other Funding	$ 0.00	$ 0.00	$ 0.00	$ 0.00
Total	$ 0.00	$ 3,267,000.00	$ 18,622,500.00	$ 21,889,500.00

In the event this project is not awarded CFI funding, please use the table below to reflect how the costs will be handled without CFI funding. If CFI funding was not applied for, please move to the next section.

	Previous	FY2022	Future	Total
FDEP Springs Funding	$ 0.00	$ 2,613,600.00	$ 14,898,000.00	$ 17,511,600.00
Local Funding	$ 0.00	$ 653,400.00	$ 3,724,500.00	$ 4,377,900.00
Other Funding	$ 0.00	$ 0.00	$ 0.00	$ 0.00
Total	$ 0.00	$ 3,267,000.00	$ 18,622,500.00	$ 21,889,500.00

Please download the the FDEP Springs Funding guidance document. Benefit calculations should be provided demonstrating how the benefit calculation was derived. A Map should be included showing the area of the project and depict notable features.

Provide any additional information below that is pertinent to the review of this application. Include information on any existing ordinances, capital improvement plans, or master plans.

The project is part of a economically disadvantaged community as designated by the Department of Economic Opportunity.

Don't forget to submit

-Benefit Calculations
-Map
-Form A (Wastewater Collection and Treatment Projects)
-Form B (Water Quantity Projects & Reuse)
-Form C (Land Acquisition Projects)

Please contact Frank Gargano with any questions prior to submittal. Frank.Gargano@swfwmd.state.fl.us

Form A: Wastewater Collection & Treatment Projects Only

What is the name of the wastewater treatment facility where the project intends to send flows once connected to sewer:

City of Inverness Wastewater Treatment Plant

What level of treatment is offered at the wastewater treatment facility?

Advanced Wastewater Treatment

At the wastewater treatment facility, where is the final treated wastewater sent?

Sprayfield

What is the current capacity of the wastewater treatment facility (mgd)?

1.5

What is the annual average of flow received by the wastewater treatment facility (mgd)?

0.5

What is the annual average of total nitrogen leaving the treatment facility (mg/L)?

3.5

How much additional flow will be received by the treatment facility due to the project (mgd)?

0.0285 for Phase 1

Please describe any proposed costs for the resident/property owner for connection to sewer. Will connection and/or impact fees be charged? If so, how much are the fees? What will the fees cover?

The City will charge the residents/property owners a onetime sewer capacity fee of $ 2,720. Additionally, the residents will be charged a monthly sewer fee based on the amount of water used.

These fees will cover the cost of the additional capacity to the system and the cost of processing the wastewater.

Is any land acquisition necessary? If so, please describe below. (●) Yes ( ) No

It will be necessary to acquire land for the lift station locations.

What length of forcemain and pipe sizing is necessary? Please describe below.

Phase 1 will consist of approximately 3,800 LF of forcemain piping that will range in size from 6 in to 8 in pipe.

Form A: Wastewater Collection & Treatment Projects Only

Septic to Sewer Conversion Projects Complete this Section:

How many septic tanks will be connected to sewer through this project?

69 existing septic tanks for Phase 1 of the project. 539 for t

How many of the septic tanks in this project are commercial tanks?

None.

If commercial tanks are included in this project, provide type of commercial use and square footage of the associated buildings below.

N/A

How many of the septic tanks service multi-family homes?

N/A

Is there a local ordinance in place that requires proper abandonment of a septic system and connection to an available sewerage system, as defined by in Section 381.0065(21), Florida Statutes (F.S.)?

(●) Yes ( ) No

If there are more requirements to the local ordinance, such as limiting future installation of septic systems, please describe and reference the ordinance below.

None

Package Plant Conversion Projects Complete this Section:

What is the annual average flow (actual, not permitted) from the package plant (mgd)?

N/A

What is the annual average concentration (actual, not permitted) of total nitrogen (mg/L)?

N/A

Form B: Water Quantity Projects

For Agricultural Projects associated with irrigation system efficiency improvements:

Proposed irrigation system efficiency (%): N/A

Prior irrigation system efficiency (%): N/A

Average metered water use for the past 5 years (mgd): N/A

For Reclaimed Water Projects:

Note: Refer to Appendix D of the Springs Funding Guidance for how to calculate the following:

Projected Reuse Flow (mgd): N/A

Percent Offset (%): N/A

Was Percent Offset determined by Table 1 of the Springs Funding Guidance?

○ Yes ◉ No

Percent Recharge (%): N/A

Form C: Land Acquisition Projects Only

What is the current landuse? If mixed, please depict acreage for each land use.

Single Family Residential

What will be the landuse once purchased?

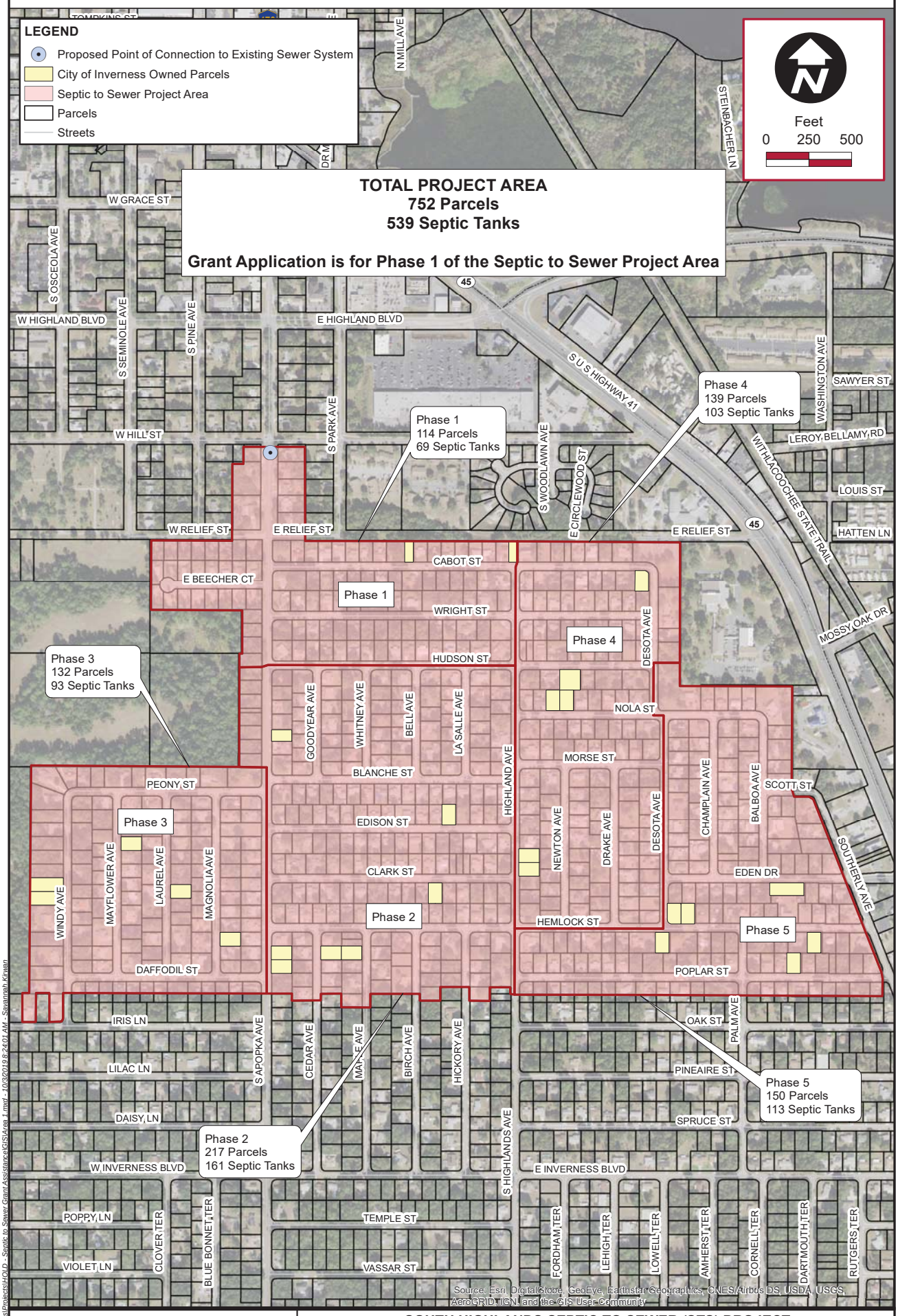
Municipal

What is the recharge potential (mgd)? None

Does a portion of the land to be acquired lie outside of the BMAP?

○ Yes ◉ No

Please note, the portion of land outside of a BMAP for a land acquisition project should not be included in reporting acreage preserved.



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Kimley»Horn

SOUTH HIGHLANDS SEPTIC TO SEWER (STS) PROJECT

PROPOSED SEPTIC TO SEWER
INVERNESS, FL

October 2019	Project No. 142240046	Figure 1

COST ESTIMATE FOR GRANT APPLICATION
CITY OF INVERNESS
SOUTH HIGHLANDS SEPTIC TO SEWER - PHASE 1

ITEM	DESCRIPTION	QUANTITY		UNIT PRICE	AMOUNT
1	RESIDENT SEPTIC TANK ABANDONMENT AND CONNECTION TO SEWER	69	EA	$ 8,000	552,000.00
2	GRAVITY SEWER (INCLUDES ALL CONSTRUCTION RELATED COMPONENTS)	7,250	LF	$ 120	870,000.00
3	FORCE MAIN (INCLUDES ALL CONSTRUCTION RELATED COMPONENTS)	3,800	LF	$ 100	380,000.00
4	LIFT STATION	2	LS	$ 400,000	800,000.00
5	PROPERTY ACQUISITION	1	LOT	$ 35,000	35,000.00
6	ROADWAY	1.40	MI	$ 450,000	630,000.00
				TOTAL	**$ 3,267,000.00**

The Engineer has no control over the cost of labor, materials, equipment, or over the Contractor's methods of determining prices or over competitive bidding or market conditions. Opinions of probable costs provided herein are based on the information known to Engineer at this time and represent only the Engineer's judgment as a design professional familiar with the construction industry. The Engineer cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from its opinions of probable costs.

	PM to enter data
	= Output
	Do not change contents of cell

Reharge Factor	NSILT Recharge Factor GIS Viewer Link (2016)	https://www.arcgis.com/home/webmap/viewer.html?webmap=50f845b3ace54f48b56c6db877cf626d
0.1 mgd or greater WWTP locations	Reclaimed water lines and facilites within SWFWMD	http://www21.swfwmd.state.fl.us/maps/pages/viewer_rw.html

SOUTH HIGHLANDS SEPTIC TO SEWER PROJECT - PHASE 1 - NUTRIENT CALCULATIONS

Calculate Base Load	
Number of Septic Tanks	69
Typical septic TN input to environment (lb/yr)	23.7
Typical Septic Attenuation	0.5
Recharge Factor (0.9, 0.5, 0.1, or 0)	0.9
Septic System Load to Groundwater	736

Number of Parcels 114

Calculate New Load	**Traditional**	**AWT**
Number of Septic Tanks	69	
Input from Septic Systems to be Connected	23.7	
% TN Remaining After Treatment (18% remaining going from 45 mg/l to 8 mg/l OR 7% remaining going from 45mg/l to 3mg/l)	0.18	0.07
Attenuation Factor for Wastewater Application (RIB .75, Reuse .25, Sprayfield .40)	0.4	
Recharge Factor (0.9, 0.5, 0.1, or 0)	0.9	
Load to Groundwater After Treatment	106	41
Reduction in Load to Springshed lb/yr	630	695

Cost Effectiveness Calculation for 30 Year Period	**Traditional**	**AWT**
Project Cost	$3,267,000	
cost/lb TN	$5,186.39	$4,702.92
Cost/lb TN / 30 years	$172.88	$156.76

COST ESTIMATE FOR GRANT APPLICATION
CITY OF INVERNESS
SOUTH HIGHLANDS SEPTIC TO SEWER - TOTAL PROJECT

ITEM	DESCRIPTION	QUANTITY		UNIT PRICE	AMOUNT
1	RESIDENT SEPTIC TANK ABANDONMENT AND CONNECTION TO SEWER	539	EA	$ 8,000	4,312,000.00
2	GRAVITY SEWER (INCLUDES ALL CONSTRUCTION RELATED COMPONENTS)	46,500	LF	$ 120	5,580,000.00
3	FORCE MAIN (INCLUDES ALL CONSTRUCTION RELATED COMPONENTS)	22,400	LF	$ 100	2,240,000.00
4	LIFT STATION	14	LS	$ 400,000	5,600,000.00
5	PROPERTY ACQUISITION	5	LOT	$ 35,000	175,000.00
6	ROADWAY	9	MI	$ 450,000	3,982,500.00
				TOTAL	**$ 21,889,500.00**

The Engineer has no control over the cost of labor, materials, equipment, or over the Contractor's methods of determining prices or over competitive bidding or market conditions. Opinions of probable costs provided herein are based on the information known to Engineer at this time and represent only the Engineer's judgment as a design professional familiar with the construction industry. The Engineer cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from its opinions of probable costs.

	PM to enter data
	= Output
	Do not change contents of cell

Reharge Factor	NSILT Recharge Factor GIS Viewer Link (2016)	https://www.arcgis.com/home/webmap/viewer.html?webmap=50f845b3ace54f48b56c6db877cf626d
0.1 mgd or greater WWTP locations	Reclaimed water lines and facilites within SWFWMD	http://www21.swfwmd.state.fl.us/maps/pages/viewer_rw.html

SOUTH HIGHLANDS SEPTIC TO SEWER PROJECT - TOTAL PROJECT - NUTRIENT CALCULATIONS

Calculate Base Load	
Number of Septic Tanks	539
Typical septic TN input to environment (lb/yr)	23.7
Typical Septic Attenuation	0.5
Recharge Factor (0.9, 0.5, 0.1, or 0)	0.9
Septic System Load to Groundwater	5748

Number of Parcels 751

Calculate New Load	**Traditional**	**AWT**
Number of Septic Tanks	539	
Input from Septic Systems to be Connected	23.7	
% TN Remaining After Treatment (18% remaining going from 45 mg/l to 8 mg/l OR 7% remaining going from 45mg/l to 3mg/l)	0.18	0.07
Attenuation Factor for Wastewater Application (RIB .75, Reuse .25, Sprayfield .40)	0.4	
Recharge Factor (0.9, 0.5, 0.1, or 0)	0.9	
Load to Groundwater After Treatment	828	322
Reduction in Load to Springshed lb/yr	4921	5427

Cost Effectiveness Calculation for 30 Year Period	**Traditional**	**AWT**
Project Cost	$21,889,500	
cost/lb TN	$4,448.49	$4,033.80
Cost/lb TN / 30 years	$148.28	$134.46

FY2020 FDEP Springs Funding Multi Year Funding Application Spreadsheet

	I. TOTAL PROJECT COST					II. Year 1 - Project Funding Breakout											II. Year 2 - Project Funding Breakout					
Count	DEP/State Funding Amount	Local Match Amount	WMD Match Amount	Third Party Match	TOTAL Project Cost	DEP/State Funding Amount	Local Match - Cash	Local Match - In-kind Efforts	Local Match - Companion Projects	Local Match - Other	WMD Match - Cash	WMD Match - In-kind Efforts	WMD Match - Companion Projects	WMD Match - Other	Third Party Funding	TOTAL Year 1 Funding	DEP/State Funding Amount	Local Match - Cash	Local Match - In-kind Efforts	Local Match - Companion Projects	Local Match - Other	WMD Match - Cash
1	$ 17,511,600	$ 4,377,900	$ -	$ -	$ 21,889,500	$ 2,613,600	$ 261,000	$ 392,400								$ 3,267,000	$ 5,108,400	$ 510,840	$ 766,260			
2	$ -	$ -	$ -	$ -	$ -																	
3	$ -	$ -	$ -	$ -	$ -																	
4	$ -	$ -	$ -	$ -	$ -																	
5	$ -	$ -	$ -	$ -	$ -																	

FY2020 FDEP Springs Funding Multi Year Funding Application Spreadsheet

						III. Year 3 - Project Funding Breakout					III. Year 4 - Project Funding Breakout					III. Year 5 - Project Funding Breakout				
Count	WMD Match - In-kind Efforts	WMD Match - Companion Projects	WMD Match - Other	Third Party Funding	TOTAL Year 2 Funding	DEP/State Funding Amount	Local Match Amount	WMD Match Amount	Third Party Funding	TOTAL Year 3 Funding	DEP/State Funding Amount	Local Match Amount	WMD Match Amount	Third Party Funding	TOTAL Year 4 Funding	DEP/State Funding Amount	Local Match Amount	WMD Match Amount	Third Party Funding	TOTAL Year 5 Funding
1					$6,385,500	$ 2,672,000	$668,000			$3,340,000	$ 4,128,800	$1,032,200			$5,161,000	$ 2,988,800	$747,200			$3,736,000
2																				
3																				
4																				
5																				

APP 07

Marion County

State Road 200 Septic To Sewer Project

FY2022 FDEP Springs Funding Application for Projects within the Southwest Florida Water Management District

This application should be completed and emailed with the appropriate calculations and map to Lisa.Laupert@swfwmd.state.fl.us by 5:00PM on October 2, 2020.

Applicant Information

Entity Name: Marion County Utilities

Is the Entity designated as an economically disadvantaged community? ○ Yes ◉ No

Project Manager Name: Adison Stroud

Project Manager Address: 11800 S US HWY 441 Belleview, FL 34420

Project Manager Phone Number: (352) 307-6170

Project Manager Email Address: adison.stroud@marioncountyfl.org

Project General Information

Project Name: State Road 200 Septic-to-Sewer Program

Project Type: Waste Water Collection & Treatment (Complete Form A)

Project Benefit

Quantity of Water Made Available (mgd): Approx. 0.00480

Land Acquisition (acres): N/A

Nitrogen Reduced (lbs/year): Approx. 543.14

Sediment Reduced (lbs/year): N/A

Please download the the FDEP Springs Funding guidance document. Benefit calculations should be provided demonstrating how the benefit calculation was derived. A Map should be included showing the area of the project and depict notable features.

Project Detail Information

Is this a multiyear project? ○ Yes ◉ No

Note: For multiyear funding request, please download the multiyear funding request spreadsheet, complete the form, and send in with this application.

Please provide a full description of the project. For multiyear funded projects, please provide a description of the complete project, beginning to end, and a description explaining what phase will be covered by this funding request application.

Marion County Utilities has recently completed construction of a 10,750 linear feet sanitary sewer force main along the SR 200 corridor in Ocala. Currently, there are 35 parcels that are developed and not connected to central sewer along this SR200 corridor. These parcels have one or more septic tanks on-site to handle their sewer flows. Currently, the county has acquired a verbal commitment, and are in the process of obtaining written commitment letters, from four of the parcels that would be willing to connect to the central sewer system. The project scope would be to install a private lift station (possibly a "grinder" station) on each site, construct a small force main to connect to the county's new 12" force main along SR200, and abandon the existing septic systems. All flows from the existing developments would be rerouted from septic tanks to the County's existing Oak Run WWTF.

What is the anticipated start and end date for the work that will be conducted under this funding request?

Start Date: 10/01/2021 End Date: 05/01/2023

Project Location Information (please submit a map with this application)

County Marion

Latitude (decimal degrees) 29.104057

Longitude (decimal degrees) -82.232379

What is the spring name that will receive the benefit? Rainbow

Is this spring deemed impaired? Yes, with a BMAP or RAP

What is the distance from the project to the spring receiving the benefit ? Approximately 12.38 miles

Is this project in a springshed? If so, specify which one. Rainbow

Is this project within a BMAP boundary? (●) Yes ( ) No

Is this project within a PFA boundary? ( ) Yes (●) No

Is this project listed in the BMAP project list? ( ) Yes (●) No ( ) No, but will be in an update

Is this project listed in a recovery strategy, prevention strategy, or regional water supply plan as benefiting an MFL? ( ) Yes (●) No

Please list any restoration plans, prevention plans, recovery plans, or long term local water quality or quantity strategy plans this project is part of.

N/A

Project Funding Information

Are you applying for CFI funding this fiscal year? (•) Yes ( ) No

Have you received springs funding or CFI funding for this project in the past? ( ) Yes (•) No

Enter the funding amount that has been received and/or is being requested:

	Previous	FY2022	Future	Total
FDEP Springs Funding	$ 0.00	$ 178,232.25	$ 0.00	$ 178,232.25
WMD CFI Funding	$ 0.00	$ 178,232.25	$ 0.00	$ 178,232.25
Local Funding	$ 0.00	$ 356,464.50		$ 356,464.50
Other Funding	$ 0.00	$ 0.00	$ 0.00	$ 0.00
Total	$ 0.00	$ 712,929.00	$ 0.00	$ 712,929.00

In the event this project is not awarded CFI funding, please use the table below to reflect how the costs will be handled without CFI funding. If CFI funding was not applied for, please move to the next section.

	Previous	FY2022	Future	Total
FDEP Springs Funding	$ 0.00	$ 356,464.50	$ 0.00	$ 356,464.50
Local Funding	$ 0.00	$ 356,464.50	$ 0.00	$ 356,464.50
Other Funding	$ 0.00	$ 0.00	$ 0.00	$ 0.00
Total	$ 0.00	$ 712,929.00	$ 0.00	$ 712,929.00

Please download the the FDEP Springs Funding guidance document. Benefit calculations should be provided demonstrating how the benefit calculation was derived. A Map should be included showing the area of the project and depict notable features.

Provide any additional information below that is pertinent to the review of this application. Include information on any existing ordinances, capital improvement plans, or master plans.

As part of the Northern Region, this project aims to uphold the District's Strategic Plan by implementing the Maintenance and Improvement Strategic Initiative for Water Quality with the removal of existing septic systems. According to FDEP Guidelines, a conventional septic system for a single home (or Equivalent Residential Connection, ERC) will release 23.7 pounds per year of total nitrogen into the environment. In Marion County, one ERC is equivalent to 200 gallons of wastewater per day. Using this flow and the FDEP estimated amount of nitrogen release per year, a conventional septic tank can treat nitrogen down to a concentration of approximately 38.9 mg/L. The majority of the septic systems along SR200 are for existing commercial or church use. These land uses generally result in an ERC value larger than one meaning that more than 200 gallons of wastewater are produced per day resulting in a larger amount of nitrogen released per year. For the nutrient calculations, the county has been in contact with the commercial properties to determine their ERC values. The flows from the septic systems, once connected to the County's central sewer system, will be directed to the Oak Run WWTF. Currently Oak Run can treat wastewater to an average concentration of 6.013 mg/L of total nitrogen. According to FDEP Guidelines, a conventional septic system can obtain a 30% removal of nitrogen which results in the 38.9 mg/L. Using this, Oak Run achieves an 89.2% nitrogen removal to result in the 6.013 mg/L concentration. By connecting the septic systems to the central sewer system, the wastewater will see a 60% increase in nitrogen removal. At the calculated value of ERCs for each developed parcel, the total amount of nitrogen released per year by conventional septic systems is approximately 1,327.11 pounds per year. With these flows going to Oak Run, this flow would result in approximately 205.13 pounds of

Don't forget to submit

-Benefit Calculations
-Map
-Form A (Wastewater Collection and Treatment Projects)
-Form B (Water Quantity Projects & Reuse)
-Form C (Land Acquisition Projects)

Please contact Frank Gargano with any questions prior to submittal. Frank.Gargano@swfwmd.state.fl.us

Form A: Wastewater Collection & Treatment Projects Only

What is the name of the wastewater treatment facility where the project intends to send flows once connected to sewer:

Oak Run WWTF

What level of treatment is offered at the wastewater treatment facility?

Treats to Public Access Reuse Standards

At the wastewater treatment facility, where is the final treated wastewater sent?

Reclaimed

What is the current capacity of the wastewater treatment facility (mgd)?

1.6

What is the annual average of flow received by the wastewater treatment facility (mgd)?

0.923

What is the annual average of total nitrogen leaving the treatment facility (mg/L)?

6.013

How much additional flow will be received by the treatment facility due to the project (mgd)?

0.0112

Please describe any proposed costs for the resident/property owner for connection to sewer. Will connection and/or impact fees be charged? If so, how much are the fees? What will the fees cover?

Costs to the owners for connection to sewer are expected to be 50% of the costs of construction and 50% of the Capacity Charges which totals the local match of $356,464.50. These fees intend to cover the capacity charges needed to connect to the system and the associated account setup and connection fees.
Capital Charges - 1 ERC, Equivalent Residential Connection is $3,844 / ERC
Base charge - varies on meter size. Ex. 1" meter $56.36/month
Sewer deposit $215

Is any land acquisition necessary? If so, please describe below. ○ Yes ◉ No

N/A

What length of forcemain and pipe sizing is necessary? Please describe below.

In 2020, Marion County completed construction of a 10,750 linear foot 12" sanitary force main along the State Road 200 corridor in Ocala. The only force main necessary would be the amount needed to connect the on-site private pump stations to the County's centralized force main. Approximate values for the required force main lengths are 800 LF of 2" force main and 900 LF of 4" force main.

Form A: Wastewater Collection & Treatment Projects Only

Septic to Sewer Conversion Projects Complete this Section:

How many septic tanks will be connected to sewer through this project?

5

How many of the septic tanks in this project are commercial tanks?

5

If commercial tanks are included in this project, provide type of commercial use and square footage of the associated buildings below.

All connecting parcels are for commercial use consisting of two churches, three office

How many of the septic tanks service multi-family homes?

0

Is there a local ordinance in place that requires proper abandonment of a septic system and connection to an available sewerage system, as defined by in Section 381.0065(21), Florida Statutes (F.S.)?

○ Yes ◉ No

If there are more requirements to the local ordinance, such as limiting future installation of septic systems, please describe and reference the ordinance below.

N/A

Package Plant Conversion Projects Complete this Section:

What is the annual average flow (actual, not permitted) from the package plant (mgd)?

N/A

What is the annual average concentration (actual, not permitted) of total nitrogen (mg/L)?

N/A

Form B: Water Quantity Projects

For Agricultural Projects associated with irrigation system efficiency improvements:

Proposed irrigation system efficiency (%): N/A

Prior irrigation system efficiency (%): N/A

Average metered water use for the past 5 years (mgd): N/A

For Reclaimed Water Projects:

Note: Refer to Appendix D of the Springs Funding Guidance for how to calculate the following:

Projected Reuse Flow (mgd): N/A

Percent Offset (%): N/A

Was Percent Offset determined by Table 1 of the Springs Funding Guidance?

○ Yes ◉ No

Percent Recharge (%): N/A

Form C: Land Acquisition Projects Only

What is the current landuse? If mixed, please depict acreage for each land use.

N/A

What will be the landuse once purchased?

N/A

What is the recharge potential (mgd)? N/A

Does a portion of the land to be acquired lie outside of the BMAP?

○ Yes ◉ No

Please note, the portion of land outside of a BMAP for a land acquisition project should not be included in reporting acreage preserved.

Legend

- Septic Tanks
- Force Mains
- Gravity Mains
- Selected_Parcels

Parcel 1

Parcel 2

Parcel 3

Parcel 4

Project Area

Mcintosh

Reddick

Ocala

Dunnellon

Belleview

Marion County Board of County Commissioners Utilities Department	User Name: Adison.Stroud Date: 10/14/2020 Reference Scale: Approved By:

SR 200 Septic-to-Sewer Program

N W E S

Document Path: \\mcbcc1.org\shared\Dept_Utilities_Engineering\Budget\Grant Funding\SWFWMD\FY2022\SR200 Septic to Sewer\GIS\Septic to Sewer Map.mxd

State Road 200 Septic to Sewer
Nutrient Calculations and Water Made Available Calculations

Number of Developed Parcels (ERCs) with Existing Septic Systems	WW Level of Service (gpd)	Nitrogen - Septic System (mg/L)	Nitrogen - Septic System (lb/gal)	Nitrogen - Septic System (lb/yr)	Receiving WWTF	WWTF Nitrogen (mg/L)	Nitrogen - Treated to Oak Run Levels (lb/gal)	Nitrogen - Treated to Oak Run Levels (lb/yr)	TN Reduction (lb/yr)
56.00	200	38.9	0.000325	1327.11	Oak Run	6.013	0.000050	205.13	**1,121.98**

IFAS

Calcuations are based upon the three parcels which have committed to connecting to the centralized sewer

FDEP Guidelines
Load Reduction from Septic-to-Sewer Project (lbs/yr-TN) =
(Input from septic systems to be connected X 0.50 X Recharge Factor for septic tank area) -
(Input from septic systems to be connected X %N remaining after treatment at the wastewater plant X Attenuation Factor of wastewater aplication method X Recharge Factor for wastewater treatment area)

Input from septic systems to be connected:	1327.11
Recharge Factor for septic tank area:	0.90
% N Remaining after treatment at Oak Run:	10.82%
Attenuation Factor of wastewater application method:	0.41832957
Recharge Factor for Oak Run:	0.90
Load Reduction from Septic-to-Sewer Project (lbs/yr-TN) =	**543.14**

70	38.9		
100	x		
	x =	55.57142857	mg/L of Nitrogen produced per 200 gpd
x	6.013		
100	55.57142857		
	x =	10.81981771	%N Remaining after treatment at Oak Run

Flows to go to Oak Run WWTF
FLA012697
Permitted Cap - 1.6 MGD - Annual Avg Daily Flow

FLOW	Total	Avg
Aug-20		0.908
Jul-20		0.918
Jun-20		0.926
May-20		0.894
Apr-20		0.901
Mar-20		0.934
Feb-20		0.935
Jan-20		0.924
Dec-19		0.922
Nov-19		0.939
Oct-19		0.934
Sep-19		0.940
	0.000	**0.923**

Max Conc Sample per Month
Permitted Max Conc - N/A
PARM Code 00600 A - Nitrogen, Total (as TN)

TN	mg/L	mg/L	mg/L	mg/L		
Aug-20	2.9	5.1	10.0	14.0		
Jul-20	4.0	2.0	4.2	3.6		
Jun-20	6.4	4.6	4.9	5.6	4.5	3.7
May-20	3.7	5.6	4.7	3.7	8.0	
Apr-20	13.0	7.1	4.2	5.1	5.6	5.0
Mar-20	9.6	6.6	8.8	9.3		
Feb-20	6.4	5.7	16.0	5.8		
Jan-20	6.8	7.0	2.6	6.0	4.8	
Dec-19	5.5	3.9	4.0	4.8		
Nov-19	6.7	7.1	7.7	3.3		
Oct-19	6.2	6.7	3.5	4.4	5.3	
Sep-19	5.8	7.2	6.3	5.7		
	330.700	**6.013**				
		Avg				

Avg

FLOW	Reuse	RIBs
Aug-20	0.419	0.429
Jul-20	0.363	0.484
Jun-20	0.594	0.325
May-20	0.638	0.202
Apr-20	0.579	0.211
Mar-20	0.743	0.149
Feb-20	0.315	0.552
Jan-20	0.449	0.423
Dec-19	0.328	0.529
Nov-19	0.572	0.297
Oct-19	0.585	0.267
Sep-19	0.737	0.202
	0.527	**0.339**

	Effluent Treatment Method	Percentage of Effluent per Treatment Method	Effluent Attenuation Factor	Recharge Designation	Recharge Factor
Oak Run WWTF	Reuse	57.1%	0.25	High	0.9
	RIBs	36.7%	0.75	High	0.9

Water Made Available =
Projected Reuse Flow X Percent Offset

Number of ERCs	Flow/ERC (gpd)	Total Flow (gpd)	Percent of Flow going to Reuse	Reuse Application Method	Percent Offset
56	200	11200	57.1%	Efficient Landscape Irrigation -	0.75

Project Reuse Flow:	6393 gpd
Percent Offset:	0.75
Water Made Available =	**0.00480 MGD**

State Road 200 Septic to Sewer Program - Cost Estimates

Project Part	Survey	Design, Permitting, Engineering	Construction	CAP Charges	5% Contingency	Total
Parcel 1	$ 3,000.00	$ 12,000.00	$ 91,800.00	$ 23,064.00	$ 6,493.20	$ 136,357.20
Parcel 2	$ 3,000.00	$ 14,000.00	$ 94,000.00	$ 19,136.00	$ 6,506.80	$ 136,642.80
Parcel 3	$ 5,000.00	$ 10,000.00	$ 120,000.00	$ 165,292.00	$ 15,014.60	$ 315,306.60
Parcel 4	$ 3,000.00	$ 14,000.00	$ 94,000.00	$ 7,688.00	$ 5,934.40	$ 124,622.40
Total	$ 14,000.00	$ 50,000.00	$ 399,800.00	$ 215,180.00	$ 33,949.00	$ 712,929.00
					Project Total:	**$ 712,929.00**

FDEP State Springs Funding:	**$ 178,232.25**
SWFWMD CFI Funding:	**$ 178,232.25**
(includes cost of design for forcemain and septic to sewer	**Local Match:** **$ 356,464.50**

Marion County
Board of County Commissioners

Office of Environmental Services

11800 SE U.S. Highway 441
Belleview, FL 34420
Phone: 352-307-6000
Fax: 352-307-6001

October 5, 2020

Dr. Hanimi Challa
Maverick RV & Boat Storage of Ocala, LLC
134 NW 88th Terrace
Gainesville, FL 32607

Subject: Maverick RV & Boat Storage of Ocala LLC (Parcel #'s 35694-001-00 & 3564-037-001)
Future Sewer Connection to Marion County Wastewater System
Letter of Commitment

Dear Dr. Challa,

Marion County Utilities ("MCU") recognizes your intent to connect to the MCU's recently constructed force main along SR 200 and abandon your onsite septic tanks. We previously received a verbal commitment from you to connect to the Marion County's Wastewater System subject to available grant funding. This letter of commitment outlines the terms and provides the County's intent to provide wastewater service to parcels 35694-001-00 & 3564-037-001. Marion County will apply for a septic to sewer grant with a 50% match to apply to the sewer connection projects. Maverick RV & Boat Storage of Ocala LLC will be responsible for the 50% match required for the grant. Marion County will manage the project and grant through design, permitting and construction.

Proposed Project

Maverick RV & Boat Storage of Ocala LLC is proposing to construct two new pump/lift stations which shall be designed and constructed to adequately serve each parcel. Maverick RV & Boat Storage of Ocala LLC will be required to design and install a new 4-inch force main to tie into the County's existing 20-inch PVC force main located on SR 200 for parcel 35694-001-00 and the County's existing 12-inch force main located on SR 200 for parcel 3564-037-001. The location of the new pump stations and route of the force mains is conceptual at this time, however, it is anticipated to be located adjacent to the existing onsite septic tanks. Maverick RV & Boat Storage of Ocala LLC will retain permanent ownership of the pump station and the 4-inch force main up to the property line and meter after which the county will take over ownership/maintenance of the force main within the public right-of-way.

Estimated project cost, including capital charges for the two parcels, is $260,000 with a 5% contingency amount of $13,000. The grant would cover 50% of that cost and the owner responsible for the remainder.

The anticipated scheduled for the project would begin on October 1, 2021 and within the first year, survey, design, and permitting will be completed. Construction would be scheduled to begin on October 1, 2022. Final completion and certification of the project would be anticipated to be complete by May 1, 2023.

Letter of Commitment Agreement

By signature below, this letter will serve as Maverick RV & Boat Storage of Ocala LLC's commitment to connect to Marion County's Wastewater System based on the terms negotiated above and contingent on award of the SWFWMD/FDEP Grant.

Maverick RV & Boat Storage of Ocala, LLC Representative:

By signature below, I, Dr. Challa agree to enter into this agreement to connect to Marion County Utilities as referenced upon notice of Grant award. I understand that I am responsible for the SWFWMD/FDEP grant match.

Dr. Hanimi Challa
Maverick RV & Boat Storage of Ocala, LLC
134 NW 88th Terrace
Gainesville, FL 32607

Should you have any questions of require additional information, please feel free to me at 352.307.4625 or Mr. Bob Titterington, P.E. at 352.307.6169.

Sincerely,

Jody C. Kirkman, PE,
Director, Office of Environmental Services

cc: Angel Roussel, PE, Assistant County Administrator, Public Works
Bob Titterington, P.E., Engineering Manager