



Wastewater Treatment Facility Feasibility Analysis

Public Survey Results

February 15, 2021



WRIGHT-PIERCE 
Engineering a Better Environment

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INTRODUCTION

- In January 2020, Citrus County contracted with Wright-Pierce to conduct the Citrus County Wastewater Feasibility Analysis, a study being done to identify cost-effective options to improve water quality throughout the County by remediation of existing septic systems.
- The Valerin Group, Inc. (Valerin) was included as a sub-consultant to Wright-Pierce to conduct public outreach during the study, including the development and facilitation of an independent and objective public survey of residents and businesses within Citrus County.
- The survey was administered from Monday, December 14, 2020 through Friday, January 15, 2021. The following document is the final report which outlines the survey process, implementation, and analysis of raw data.

DATA COLLECTION PROCESS

- The survey development process was a three-step process that helped Valerin gather information, determine the relevant audience, identify the survey methodology, and develop pertinent survey questions.

Step 1

Valerin worked with Wright-Pierce and Citrus County to clarify the goals and objectives of the survey, determine desired outcomes and priorities, define target audience and identify survey methods. A plan and project timeline was developed to guide the project team.

Step 2

Given the audience size, Valerin identified a digital survey as the best option for achieving project goals. The digital survey was accessible via a hyperlink and QR code, which were accessible on the project website.

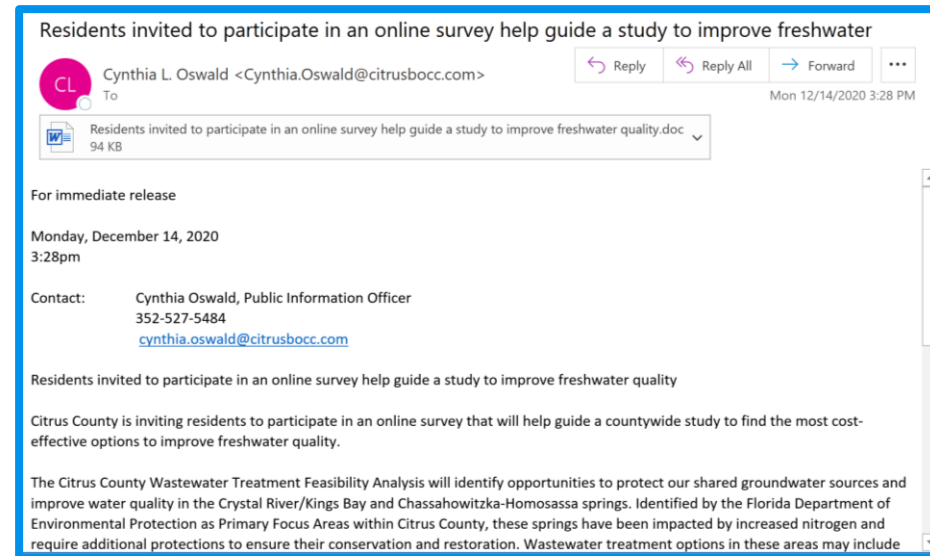
Step 3

Since County-wide residents and businesses were identified as the target group, Valerin worked with the County PIO to identify the most effective communications tools to get word out about the survey.

DISTRIBUTION METHODS

Constant Contact Email

- Citrus County maintains a Constant Contact Database of residents who have previously communicated with the County through email correspondence. The database contains 7,983 email addresses.
- An email was distributed on:
 - 12/21/20 with an open rate of 25 percent
 - 1/12/21 with an open rate of 22 percent



DISTRIBUTION METHODS

Traditional News Release

- A news release was distributed to 25 media partners including radio, television and newspapers, as well as senior County staff, County Commissioners and 20 involved citizens.
- The news release was distributed two times during the open survey period:

12/21/20

1/5/21



DISTRIBUTION METHODS

Social Media

- The Citrus County Facebook page was also used to reach out to citizens. Eleven posts we made during the open survey period.

○ DATE:	REACH:	CLICKS
12/16/20	580	11
12/21/20	431	11
12/24/20	1,154	40
12/28/20	600	17
12/29/20	857	33
1/1/21	700	12
1/4/21	751	13
1/5/21	592	12
1/9/21	713	9
1/14/21	686	17
1/15/21	781	8



- Post on social media garnered a 2.4% response rate.

SUMMARY OF FINDINGS

SECTION 1:

Demographic and Background Information

334 Respondents



Section 1 of the survey asks a series of demographic and background questions.

The information gathered from the demographic questions help the project team to gauge public opinion based on different groups of people within Citrus County. This information will be used as the project progresses only to help create communications and outreach activities, as well as project specific messaging, that will resonate with each audience. The information also allows the project team to compare the demographics of survey participants with the demographics of the County as a whole.

The information gathered from the background questions help the project team understand the general knowledge of respondent on the overall health of the springs and the actions taken by the state of Florida to limit degradation in the future, as well as knowledge of this project.

Generally, the finding indicate respondent demographics are comparable to the overall demographics of Citrus County. The majority of respondents are concerned with the health and water quality of the springs and understand that protecting the health and quality of the springs protects drinking water supply and the environment. However, they do not understand the level of degradation to the springs, which may indicate more education is needed. The majority of respondent were not aware of this project but are in favor of the County initiating programs to preserve the health of the springs.

SUMMARY OF FINDINGS

SECTION 2:

Septic System Knowledge

- Section 2 of the survey asks a series of questions related to septic systems. These questions provide the project team a better understanding of the knowledge people have in regard to their septic system.

The question were related to the age of their system, the type of system (traditional or advanced), if and how often their system is serviced and whether or not their system has been pumped out or replace.

SUMMARY OF FINDINGS

SECTION 3:

Knowledge of Environmental Impacts

- Section 3 of the survey asks a series of questions that provide the project team a better understanding of respondent's knowledge of environmental impacts to Citrus County's spring due to the use of septic systems, as well as their acceptability to upgrading their current system or switching to sewer knowing the impacts.

SUMMARY OF FINDINGS

SECTION 4:

Septic to Sewer Conversion Acceptability

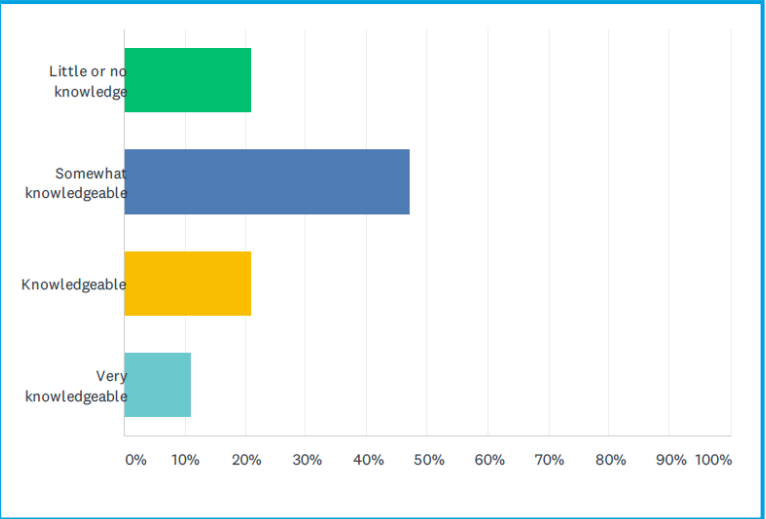
- Section 4 of the survey asks a series of questions related to the general acceptability of septic to sewer conversion within Citrus County.

PUBLIC SURVEY RESULTS

QUESTION 10:

How much do you know about the health and water quality of Citrus County springs?

More than 79 percent of respondents were somewhat knowledgeable, knowledgeable or very knowledgeable of the health and water quality of Citrus County’s springs. About 20 percent of respondents have little or no knowledge.



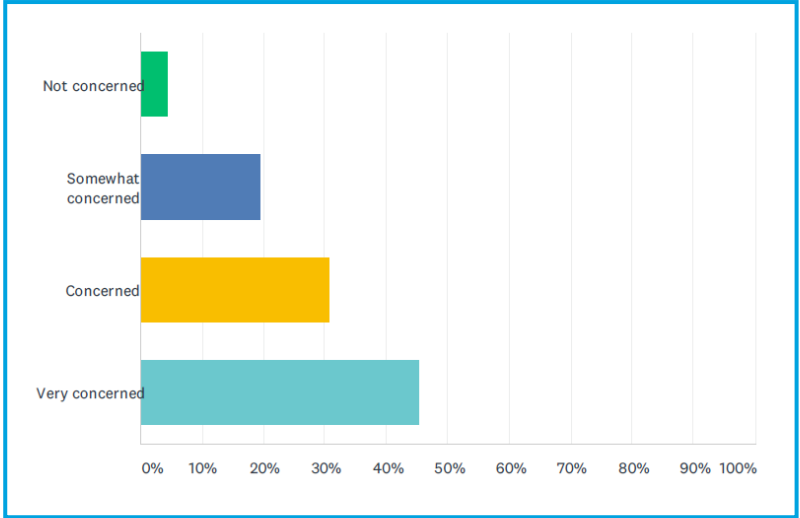
ANSWER CHOICES	RESPONSES	
Little or no knowledge	20.96%	70
Somewhat knowledgeable	47.01%	157
Knowledgeable	20.96%	70
Very knowledgeable	11.08%	37
TOTAL		334

PUBLIC SURVEY RESULTS

QUESTION 11:

How concerned are you about the quality of the water in Citrus County’s springs.

More than 76 percent of respondents are either concerned or very concerned about the quality of the water in Citrus County’s springs. Just under 20 percent are somewhat concerned with just under 5 percent not concerned.



ANSWER CHOICES	RESPONSES	
Not concerned	4.48%	15
Somewhat concerned	19.40%	65
Concerned	30.75%	103
Very concerned	45.37%	152
TOTAL		335

PUBLIC SURVEY RESULTS

QUESTION 12:

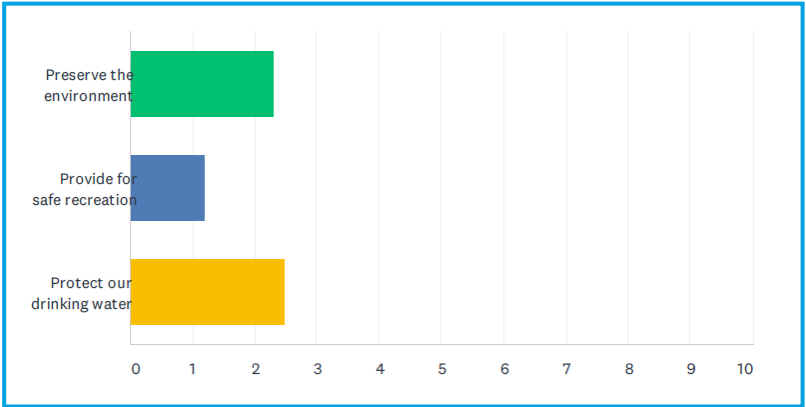
Please rank the options below in order of the priority or importance to you to complete the following statement:
Protecting water quality of our Citrus County springs is important to:

Preserve the environment

Provide for safe recreation

Protect our drinking water

- 58 percent of respondents ranked “Protect Our Drinking Water” first
53 percent of respondents ranked “Preserve the Environment” second
83 percent of respondents ranked “Provide for Safe Recreation” third
- This indicates a priority of the residents is to protect drinking water supply and preserve the environment.



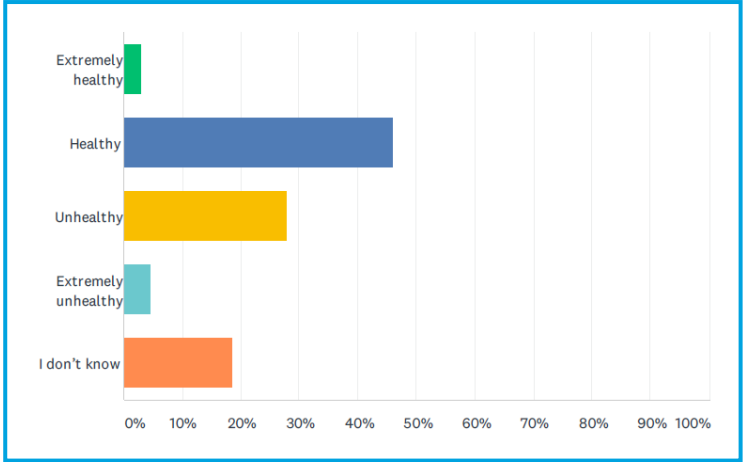
	1	2	3	TOTAL	SCORE
Preserve the environment	38.13% 122	53.44% 171	8.44% 27	320	2.30
Provide for safe recreation	4.02% 13	12.38% 40	83.59% 270	323	1.20
Protect our drinking water	57.83% 192	34.04% 113	8.13% 27	332	2.50

PUBLIC SURVEY RESULTS

QUESTION 13:

How would you rate the quality of the water in Citrus County springs?

More respondents rated the quality of the springs at healthy or extremely healthy (49 percent) than they did unhealth or extremely unhealthy (33 percent). 18 percent of respondents said they didn't know.



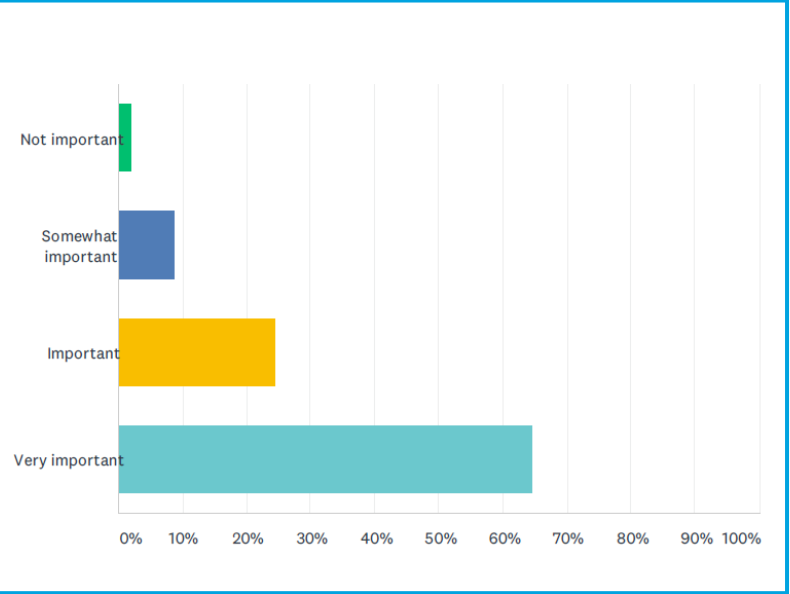
ANSWER CHOICES	RESPONSES	
Extremely healthy	3.00%	10
Healthy	45.95%	153
Unhealthy	27.93%	93
Extremely unhealthy	4.50%	15
I don't know	18.62%	62
TOTAL		333

PUBLIC SURVEY RESULTS

QUESTION 14:

How important is it to you for Citrus County to implement programs that will continue to preserve the health of the springs?

More than 90 percent of respondents feel it is important or very important for Citrus County to implement programs that will continue to preserve the health of the springs. Only 2 percent of respondents feel it is not important.



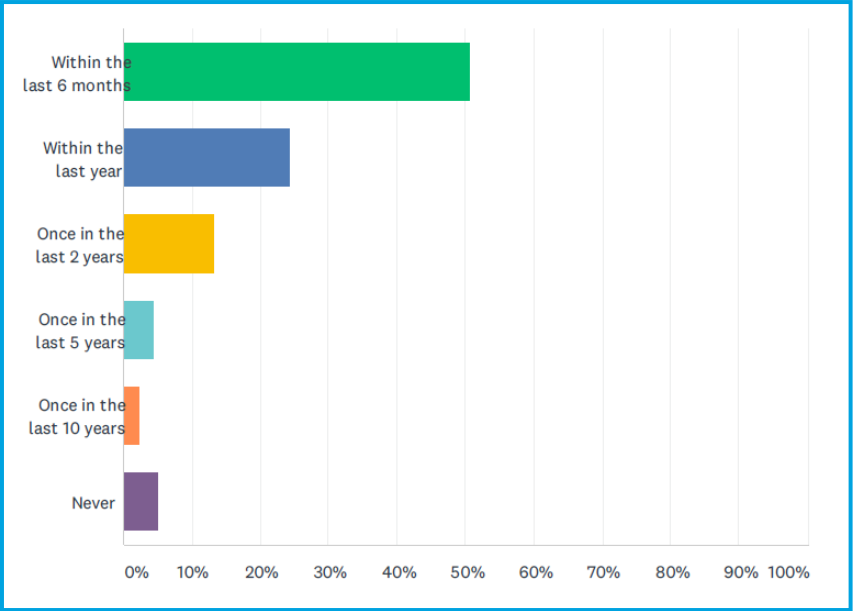
ANSWER CHOICES	RESPONSES	
Not important	2.10%	7
Somewhat important	8.68%	29
Important	24.55%	82
Very important	64.67%	216
TOTAL		334

PUBLIC SURVEY RESULTS

QUESTION 15:

When was the last time you visited one of Citrus County's springs?

○ Almost 75 percent of respondents have visited one of Citrus County's springs within the last six months of the last year and 13 percent have once in the last 2 years. A combined 12 percent have only visited once in the last 5 years, 10 years or never.



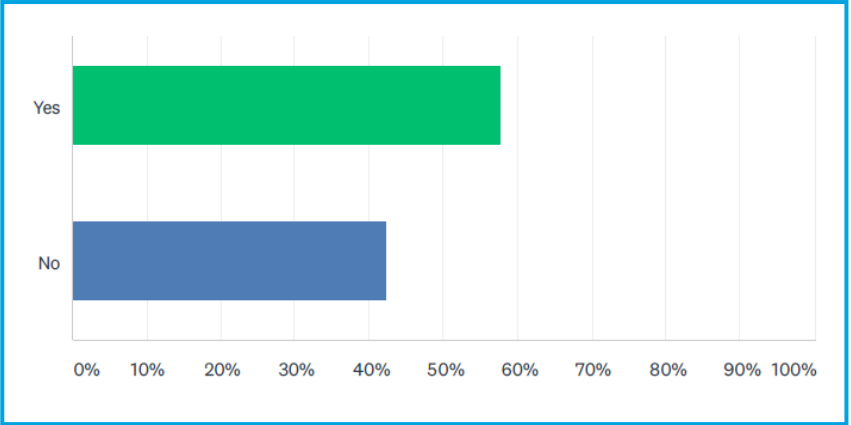
ANSWER CHOICES	RESPONSES	
Within the last 6 months	50.60%	169
Within the last year	24.25%	81
Once in the last 2 years	13.17%	44
Once in the last 5 years	4.49%	15
Once in the last 10 years	2.40%	8
Never	5.09%	17
TOTAL		334

PUBLIC SURVEY RESULTS

QUESTION 16:

In 2016, the Florida Legislature established the “Outstanding Springs Act,” which identified springs that are impacted by increased nitrogen and require additional protections to ensure their conservation and restoration for future generations. These protections are included in state-mandated water quality restoration plans, known as Basin Management Action Plans (BMAPs). Are you aware Citrus County is under two state mandated BMAPs, which require the County to implement strategies to restore and maintain the health of the springs?

○ Almost 58 percent of respondents are aware Citrus County is under two state mandated BMAPs, which require the County to implement strategies to restore and maintain the health of the spring. Just over 42 percent are unaware.



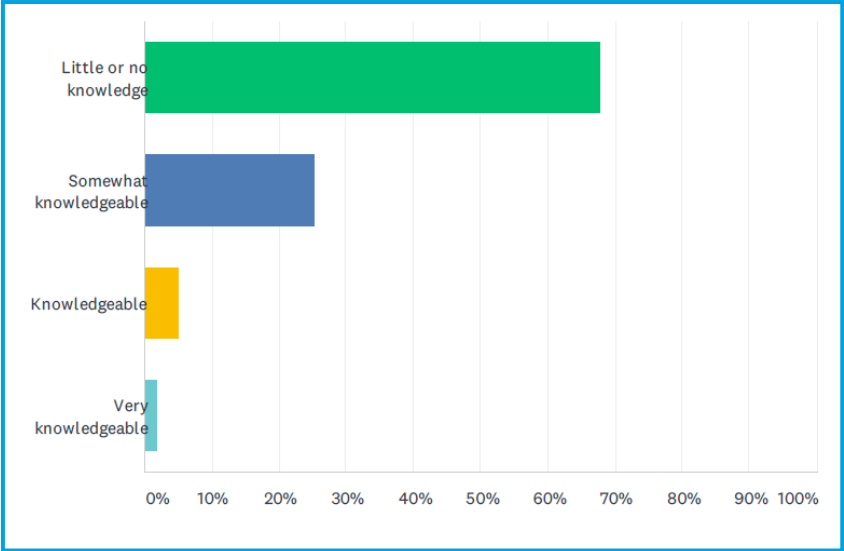
ANSWER CHOICES	RESPONSES	
Yes	57.78%	193
No	42.22%	141
TOTAL		334

PUBLIC SURVEY RESULTS

QUESTION 18:

How knowledgeable are you about the Citrus County Wastewater Feasibility Study?

More than 67 percent of respondents had little or no knowledge of the Citrus County Wastewater Feasibility Study and only 25 percent were someone knowledgeable.



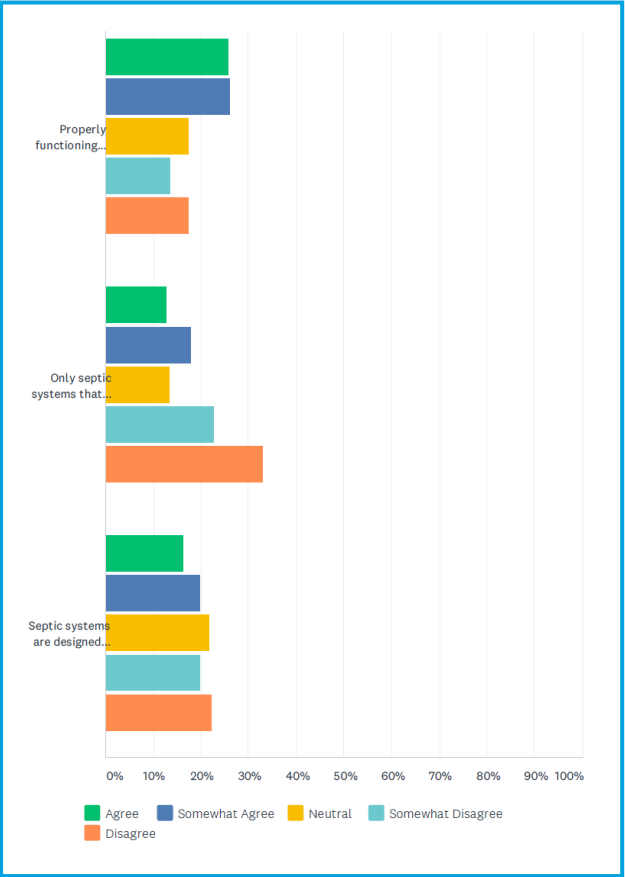
ANSWER CHOICES	RESPONSES	
Little or no knowledge	67.87%	226
Somewhat knowledgeable	25.23%	84
Knowledgeable	5.11%	17
Very knowledgeable	1.80%	6
TOTAL		333

PUBLIC SURVEY RESULTS

QUESTION 26:

Please rate your level of agreement with the following statements regarding septic system impacts on water quality?

- Almost 52 percent of respondents agree or somewhat agree the properly functioning septic systems contribute to groundwater pollution.
- Almost 56 percent of respondents somewhat disagree or disagree that only septic systems that are not working correctly pollute groundwater.
- Almost 36 percent of respondent agree or somewhat agree septic systems are designed so they don't pollute groundwater while just under 42 percent somewhat disagree or disagree.



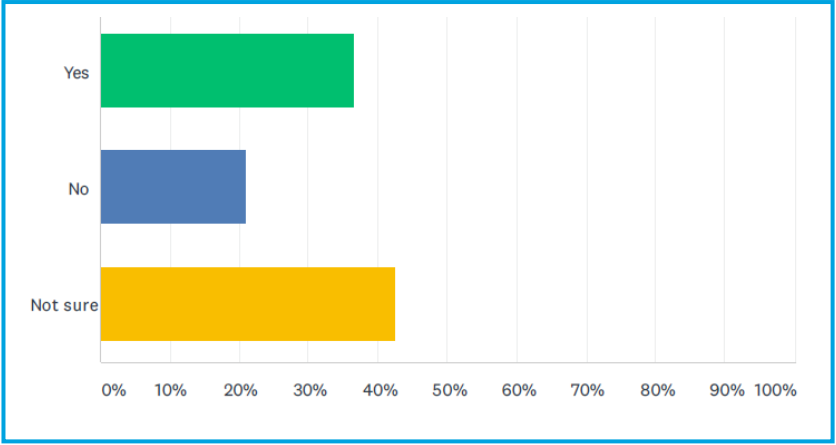
	AGREE	SOMEWHAT AGREE	NEUTRAL	SOMEWHAT DISAGREE	DISAGREE	TOTAL	WEIGHTED AVERAGE
Properly functioning septic systems contribute to groundwater pollution.	25.79% 82	26.10% 83	17.30% 55	13.52% 43	17.30% 55	318	2.70
Only septic systems that are not working correctly pollute groundwater.	12.70% 40	18.10% 57	13.33% 42	22.86% 72	33.02% 104	315	3.45
Septic systems are designed so that they do not pollute groundwater.	16.40% 52	19.87% 63	21.77% 69	19.87% 63	22.08% 70	317	3.11

PUBLIC SURVEY RESULTS

QUESTION 29:

Would you upgrade your traditional septic system if it were shown that they are more effective in treating wastewater and will help to improve water quality in Citrus County springs?

Just over 36 percent of respondents would upgrade their traditional septic system if it were shown that they are more effective in treating wastewater and will help improve water quality in Citrus County’s springs. Almost 21 percent of respondents would not, while more than 42 percent were unsure.



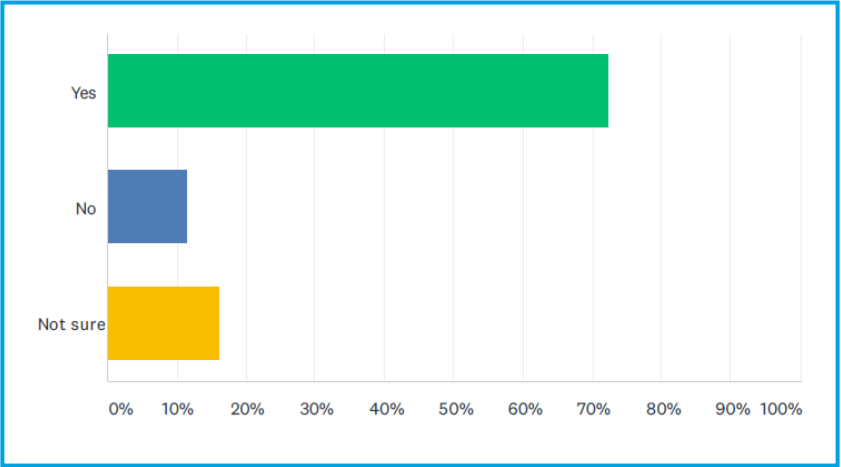
ANSWER CHOICES	RESPONSES	
Yes	36.61%	82
No	20.98%	47
Not sure	42.41%	95
TOTAL		224

PUBLIC SURVEY RESULTS

QUESTION 30:

Would you be in favor of Citrus County implementing projects that would upgrade traditional septic systems or eliminate septic systems if those projects would help to improve water quality in Citrus County springs?

More than 72 percent of respondents would be in favor of Citrus County implementing projects that would upgrade traditional septic systems if those projects would help improve water quality in Citrus County’s springs. Just over 11 percent would not be in favor, while more than 16 percent were unsure.



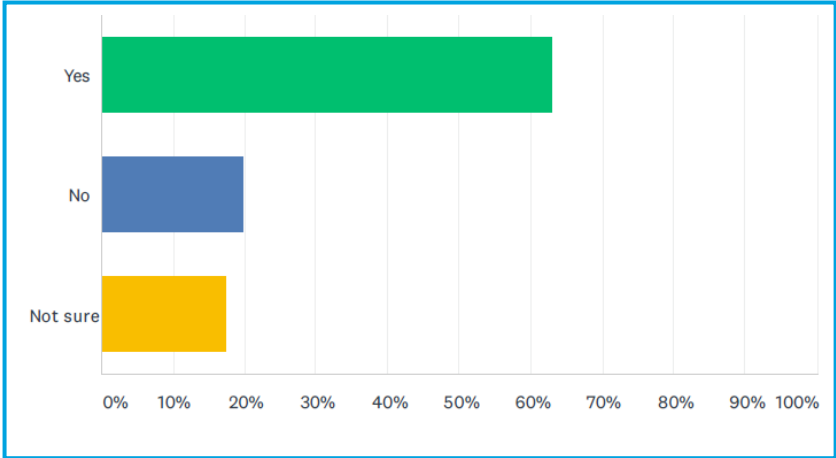
ANSWER CHOICES	RESPONSES	
Yes	72.45%	234
No	11.46%	37
Not sure	16.10%	52
TOTAL		323

PUBLIC SURVEY RESULTS

QUESTION 31:

Would you consider switching from your septic system to sewer service provided by Citrus County if it improved water quality in Citrus County's springs?

○ Almost 63 percent of respondents would consider switching from a septic system to sewer service provided by Citrus County if it improved water quality to Citrus County's springs. Almost 20 percent of respondents wouldn't consider it, which just over 17 percent were not sure.



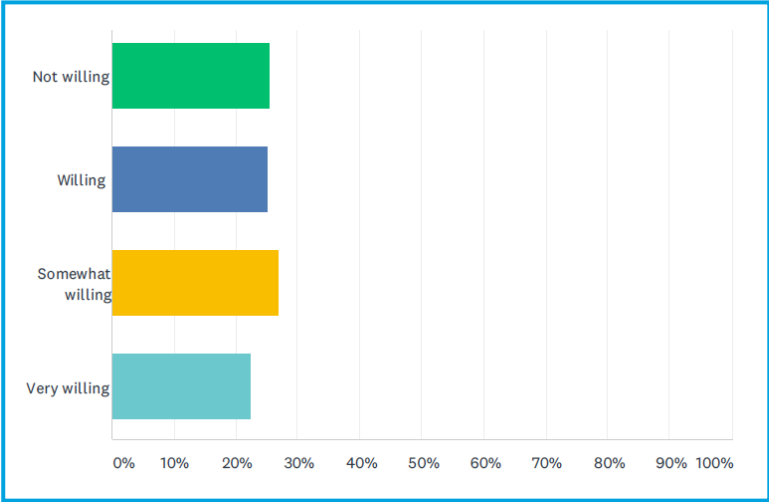
ANSWER CHOICES	RESPONSES	
Yes	62.87%	149
No	19.83%	47
Not sure	17.30%	41
TOTAL		237

PUBLIC SURVEY RESULTS

QUESTION 32:

How willing would you be to pay for sewer services provided by Citrus County if it improved water quality, including the quality of Citrus County’s springs?

○ Almost 75 percent of respondents are willing, somewhat willing or very willing to pay for sewer services provided by Citrus County if it improved water quality, including the quality of Citrus County’s springs. Just over 25 percent of respondents said they are not willing.



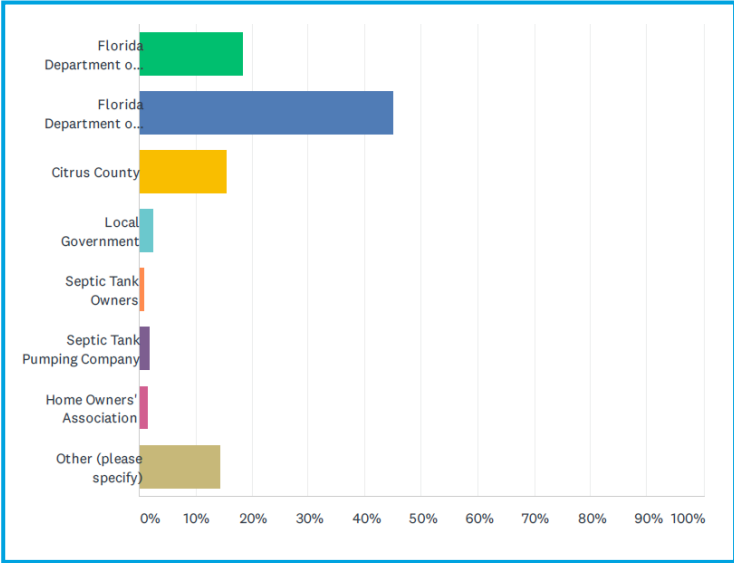
ANSWER CHOICES	RESPONSES	
Not willing	25.47%	68
Willing	25.09%	67
Somewhat willing	26.97%	72
Very willing	22.47%	60
TOTAL		267

PUBLIC SURVEY RESULTS

QUESTION 33:

Who would you trust the most to provide you information about sewage management in Citrus County?

○ Almost 45 percent of respondents trust the Florida Department of Environmental Protection to provide them information about sewage management in Citrus County, with almost 18 percent of respondent stating the Florida Department of Health. Citrus County was chosen by 15 percent of respondents.



ANSWER CHOICES	RESPONSES	
Florida Department of Health	18.46%	60
Florida Department of Environmental Protection	44.92%	146
Citrus County	15.38%	50
Local Government	2.46%	8
Septic Tank Owners	0.92%	3
Septic Tank Pumping Company	1.85%	6
Home Owners' Association	1.54%	5
Other (please specify)	14.46%	47
TOTAL		325

CONCLUSION

- The results of the survey will be used by the project team as the continue to move forward with the Citrus County Wastewater Feasibility Analysis. In order to continue to gain public input on this project a public meeting was hosted on Thursday, February 11, 2021. A second survey will be distributed before the end of February and a second public meeting will be hosted the end of March.

Questions or comments related to this project can be submitted via email at info@citruscountywastewatertfa.com or by calling the project hotline at (352) 269-6440.

Information can be found on the project website at www.citruscountywastewatertfa.com.