STARS

Institute for Social and Behavioral Science (ISBS)

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Septic Tank Survey: 2018

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STARS
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Institute for Social and Behavioral Science

UNIVERSITY OF CENTRAL FLORIDA

Indian River Lagoon (U.S. Fish and Wildlife Service)

Septic Tank Survey: 2018
Presented to Marine Resources Council

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Methods Summary

Between May 2018 and September 2018, the Institute for Social and Behavioral Sciences (ISBS) at the University of Central Florida (UCF) surveyed residents of Brevard County, Florida to explore their behaviors and attitudes on a variety of septic tank related topics. Respondents were initially surveyed at various times throughout the day via the telephone using computer-assisted telephone interviews (CATI) and the online survey software, Qualtrics. A total of 34,731 calls were made to potential respondents (Table 1). Despite the many calls made, only 307 completed surveys were acquired through this methodology, for a response rate of 0.88%.

Table 1. Call Disposition Table for Calls Made to Brevard County Residents (N=34,731)

Call Type	n
Busy	999
Business	220
Call Back	735
Disconnected	2,588
Fax	222
No Answer	25,119
Number Changed	279
Not in Sampling Frame	717
Out of Area	86
Partial/Incomplete Survey	18
Refused to Participate	3,375
Completed Survey[a]	360
Call Back (Spanish)	8
Call Back (Other Language)	5

[a] The responses coded as "YES" are greater than 313 due to ISBS research assistants coding some surveys that may have passed the first three qualifying questions, but did not complete the survey (PAR) or those that did not pass the first three qualifying questions (ND, OA).

To increase the take rate of the surveys, ISBS was then supplied with a list of 56,000 addresses of residents in Brevard County with septic tanks on their property for which the telephone numbers needed to be reverse looked-up. Using peoplefinder.com, 3,510 telephone numbers were recovered for the addresses. From the phone numbers acquired, 755 phone calls were made, resulting in only six completed surveys (data included in the above table) for a total of 313 completed surveys overall. This kept the response rate at 0.88%.

In a final attempt at data collection, ISBS was supplied with GIS mapping data, identifying the names of subdivisions in Brevard County with at least 90% of the homes utilizing septic systems. The ISBS team completed the remaining data collection on 15 separate occasions, primarily on weekends, going door-to-door in Brevard County and surveying residents in person. The same survey software, Qualtrics, was used, but on iPads for easy portability while walking door-to-door. The team captured 91 completed surveys using this methodology, for a final sample size of 404 completed surveys.

Findings

After the first three screening questions to verify that the respondent qualified to complete our survey (that they are over 18 years old; they live in Brevard County; and their home uses a septic tank), the respondents were asked how many septic tanks were on their property. Most residents answered that they had only one tank on their property (71.3%). Several respondents indicated that they had two septic tanks on their property (26%). Three respondents reported having more than two septic tanks on their property and eight respondents were not sure the number of septic tanks that they had on the property.
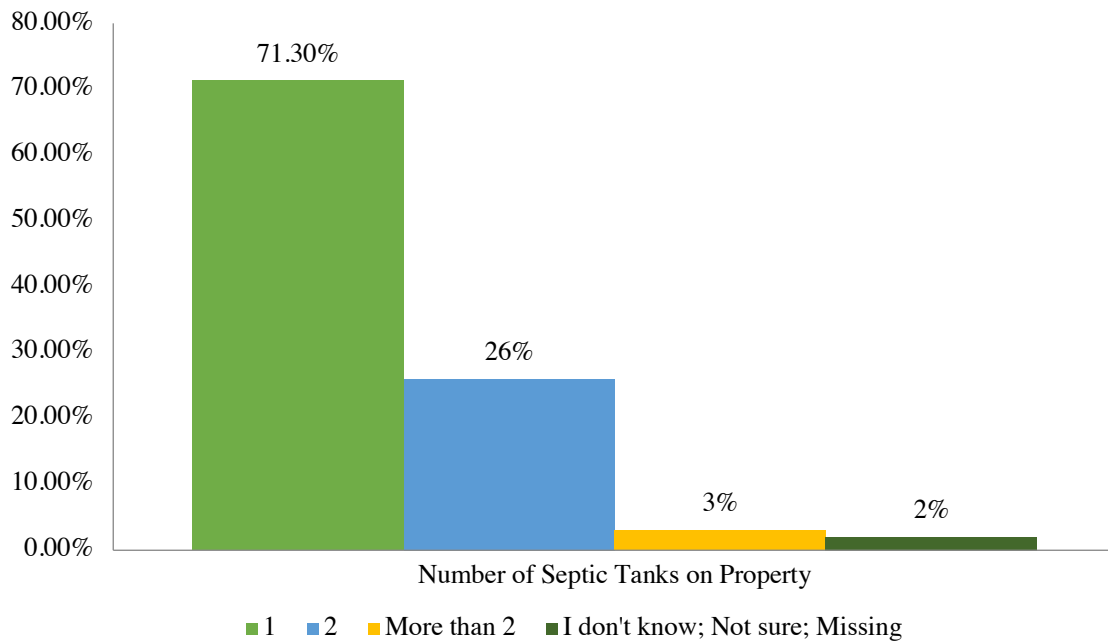

Figure 1. How many tanks do you have on your property? (n=404)

When asked, as far as they knew, if the septic system had ever failed in the home they currently lived in, most residents said that their septic system had not failed (85%). Only 11% of respondents (n=45) had answered that their septic system had failed. Most respondents reported that the septic tanks at their current homes have not failed.
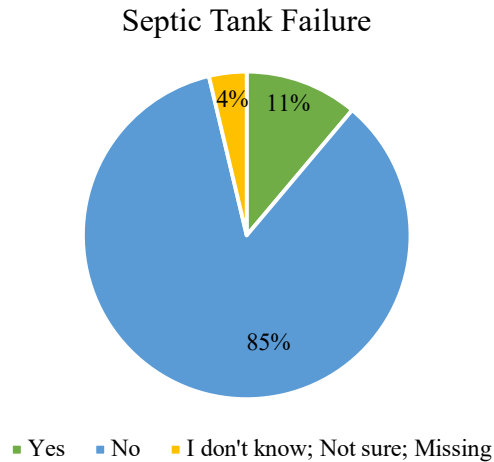
Septic Tank Failure

Figure 2. Has the septic tank for the home where you live ever failed? (n=404)

If respondents answered that their septic tank had previously failed, they were asked when that failure occurred. The response with the greatest frequency was "Within the past 12 months" (43.2%), followed by "Within the past 2-4 years" (20.5%), "5-10 years ago" (18.2%), "More than 10 years ago" (15.9%), and one respondent who answered that it has happened more than once.
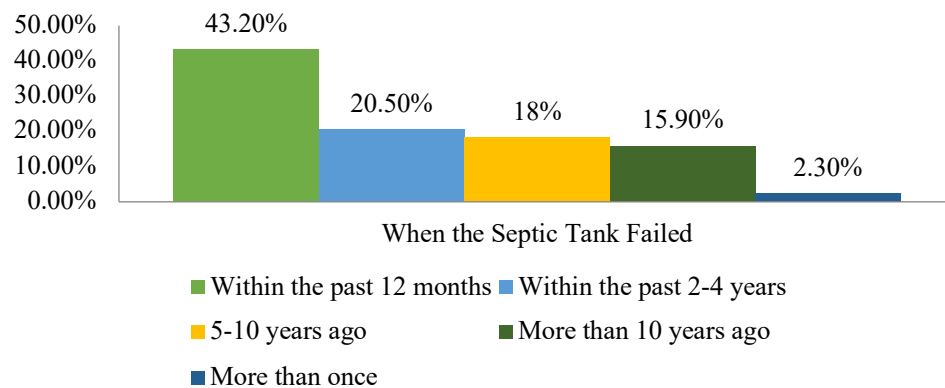

Figure 3. When did the septic tank fail? (n=44)

Respondents were then asked when that failure occurred, how much it cost to have the septic tank repaired or replaced. The central tendencies of these amounts are shown in the table below (Table 2).

Table 2. Central Tendencies of Septic Tank Repair/Replacement Costs

Mean	Median	Mode	Range	N
$4,037.35	$1,800	$200.00	$14,900	24

Residents were asked if they have had their septic tanks pumped out at their current home. Most respondents answered yes (70%) and nearly a fourth of respondents answered no (28%). Ten residents were not sure if they have had their septic tanks pumped out in the past.

Septic Tank Pumped Out
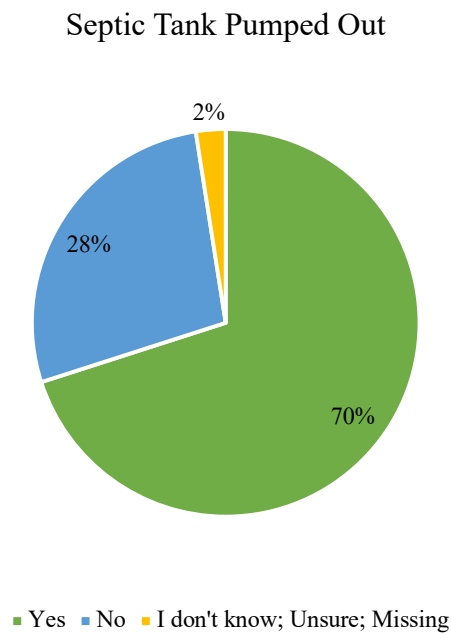

■ Yes ■ No ■ I don't know; Unsure; Missing

Figure 4. Have you had the septic tank pumped where you live now? (n=404)

Of the residents that answered they have had their septic tanks pumped out, they were then asked when the last time they it was pumped. The answer with the highest frequency was "Within the past 2-4 years" (39.1%), followed by "Within the past 12 months" (38%). "5-10 years ago" (14.5%) and "More than 10 years ago" (8.3%) were the least frequent answers. These responses show that residents are getting their septic tanks pumped out on a regular basis, with most people stating they have had their septic tank pumped within the last four years.
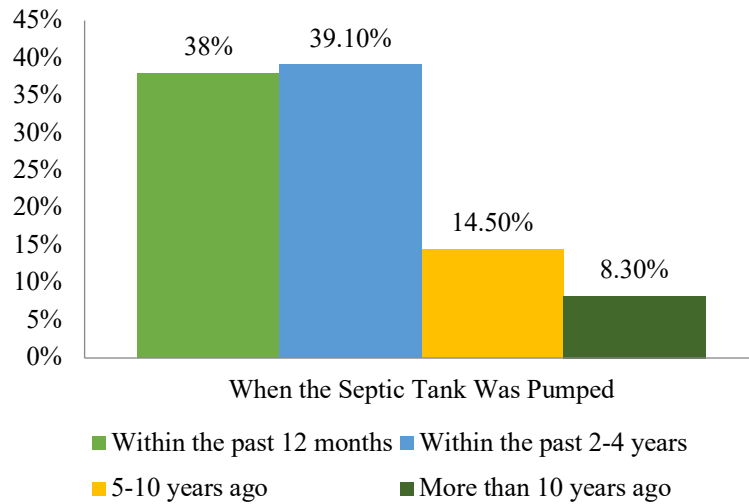

Figure 5. When was your septic tank last pumped? (n=276)

Participants who had had their septic tanks pumped were then asked the cost of this procedure. The central tendencies of the results are shown in the table below (Table 3).

Table 3. Central Tendencies of Pump Costs

Mean	Median	Mode	Range	N
$295.42	$222.50	$200.00	$6,000	196

Residents were asked how frequently they think their septic tanks should be pumped out and the answers provided varied. The answer selected the most by respondents was "Every five years" (22.5%), followed by "Every 2-3 years" (22%); however, the next commonly selected answers were that residents did not know how frequently they thought their septic tanks should

be pumped out (20%) followed by "As needed" (19.1%). Every ten years (7.7%), once a year (4.7%), more than once a year (2.7%), and when it fails (1.2%) were the less frequently selected answer options.
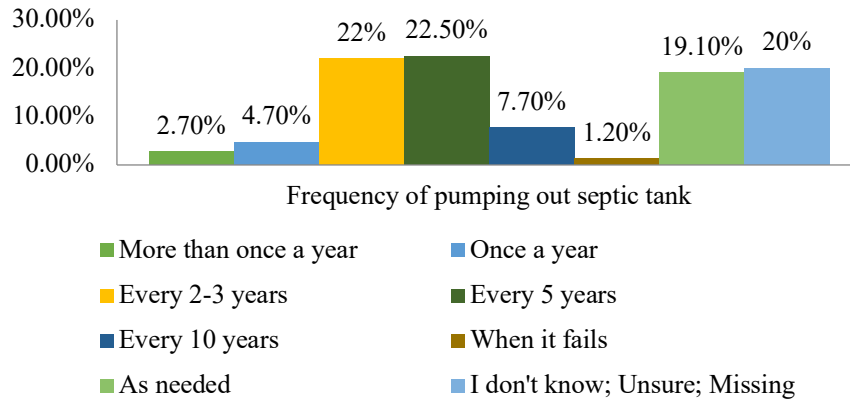
Figure 6. How frequently do you think your septic tank should be pumped out? (n=404)

When residents were asked how frequently they thought their septic tanks should be inspected, the most popular answer (29.3%) was "as needed".
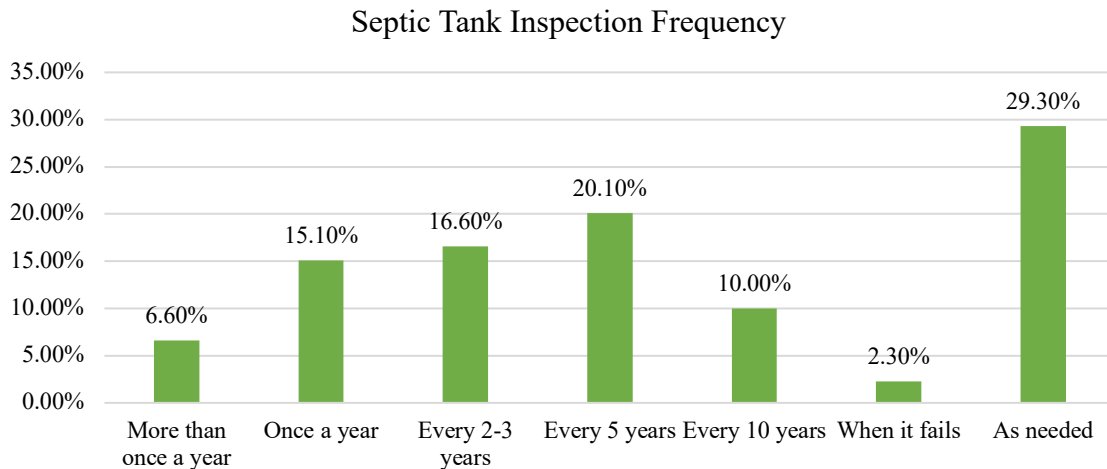

Figure 7. How frequently do you think your septic tank should be inspected? (n=259)

When asked whether residents have had the septic tank inspected in the house they currently live in, most respondents (51%) answered yes, although many (42%) answered that they have not had their septic tanks at their homes inspected or (7%) that they were not sure if their septic tanks have been inspected.

Have you had the septic tank
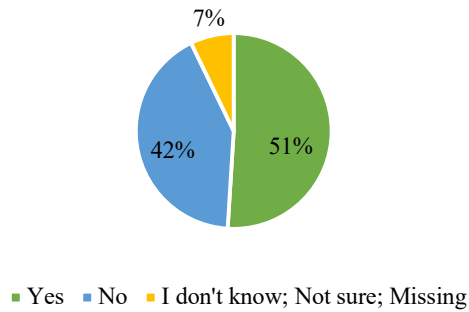inspected in your home?

- Yes - No - I don't know; Not sure; Missing

Figure 8. Have you had the septic tank inspected in the house where you live now? (n=404)

If respondents answered "Yes" to the previous question, indicating that they have had their septic tank inspected at their current home, they were then asked when they last had it inspected. The response with the greatest frequency was within the past 12 months (41.8%) followed by with the past 2-4 years (37.2%). Data show that most people who answered this question have had their septic tanks inspected at least within the last 4 years (79%). More than 10 years ago (11.2%) and 5-10 years ago (9.2%) were less frequently answered responses. One resident answered that they get their septic tank inspected regularly.

When the septic tank was last inspected

- Within the past 12 monts - Within the past 2-4 years - 5-10 years ago
- More than 10 years ago - Get regularly inspected

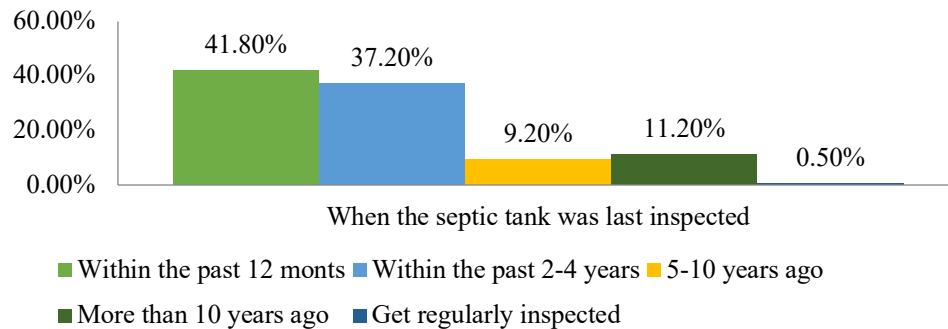Figure 9. When was the last time the septic tank was inspected? (n=404)

Residents were then asked to answer how much it cost them to have their septic tank inspected, the central tendencies of which are shown in the table below (Table 4). The range of the cost of inspection was $1,175, showing great variability in the amount of money residents have paid to have their septic tanks inspected in Brevard County, Florida.

Table 4. Central Tendencies of Septic Tank Inspection Costs

Mean	Median	Mode	Range	N
$245.00	$200.00	$200.00	$1,175.00	89

Residents were asked if they received information regarding the home's septic tank when they moved into their current homes. Most residents (53%) did not receive any information regarding the home's septic system when they moved into the home. 32% of those surveyed stated that they did receive information regarding the home's septic tank when they moved in. 15% of people interviewed stated that they do not remember if they receive septic tank information at that time.

Did you receive information about your septic tank before moving into the house?

■ Yes ■ No ■ Don't remember; Maybe; Missing
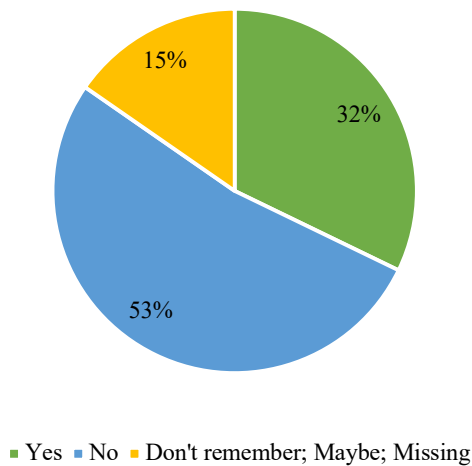
Figure 10. Did you receive information about your septic tank before moving into the house? (n=404)

The table below (Table 5) represents the behaviors and attitudes of residents in Brevard County regarding their septic systems. 55.8% strongly agreed with the statement "I restrict what I flush in toilets to prevent damage". The participants strongly agree (44.8%) and agree (42.8%) with the statement "I avoid pouring chemicals and solvents down the sink", meaning that

pouring chemicals and solvents down the sink is a behavior that most of our sample (87.6%) typically refrains from. Most of the residents surveyed agreed (31.9%) or strongly agreed (19.8%) with the statement "I use septic tank maintenance products on a regular schedule". The disparity was not as significant between those that agree and those who disagree as it was in previous statements, with 39.6% of the sample either disagreeing or strongly disagreeing that they use septic tank maintenance products on a regular schedule.

The residents of Brevard County surveyed agree (49.9%) or strongly agree (33.1%) that it is easy to find a professional to repair or pump out their septic systems. Most of the sample (62.6%) either strongly disagree or disagree with the statement "It's hard to tell if my septic system is working properly,". Many residents gave specific examples of instances when they knew their septic system was not working properly, such as waste "bubbling up" or "backing up" through their shower or toilet. Thirty-two percent of sample agree they rarely think about the condition of their septic tank, while 28% disagree with that statement; suggesting the condition of their septic system is something they regularly think about. Most of the sample either agree (43.3%) or strongly agree (19.2%) that they plan for septic tank maintenance along with other home maintenance costs.

Most residents surveyed either disagree or strongly disagree (80.6%) with the statement, "I fear that my septic tank will fail and flood my home or yard with sewage". This suggests that our sample overall has a considerable amount of faith that their septic system will continue operating as intended and lacks concern over the possibility of a septic system failure. Nearly the entire sample (93.6%) either disagree or strongly disagree with the statement, "I typically pour fats and grease down the sink". The respondents disagreed the most strongly with this statement than with all the other statements in the table.

Expressing more variability with this statement, 32.2% of respondents disagreed that they do not receive enough information about septic system maintenance, suggesting they believe they receive an adequate amount of septic system maintenance. The next most selected answer option was agree (29.1%), suggesting they perhaps would like to receive more information regarding septic system maintenance. The final statement in the table, "My septic system has nothing to do with water quality in the nearest pond, canal, creek, river, lagoon, or ocean," was agreed with in 29.4% of the sample. The next most selected answer option for this statement is

disagree (28.2%). Considering how these two values are very similar, the data suggest that the Brevard County residents are split as to whether their septic systems affect the nearest body of water.

Table 5. Septic Tank Attitudes and Behaviors

	n	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I restrict what I flush in toilets to prevent damage	403	1.2	5.5	2.2	35.2	**55.8**
I avoid pouring chemicals and solvents down the sink	404	1.7	7.4	3.2	42.8	**44.8**
I use septic tank maintenance products on a regular schedule	404	13.4	26.2	8.7	**31.9**	19.8
It is easy to find a professional to repair or pump out my septic system	399	2.0	4.3	10.8	**49.9**	33.1
It's hard to tell if my septic system is working properly	398	20.4	**42.2**	10.8	21.4	5.3
I rarely think about the condition of my septic tank	403	9.2	28.0	13.6	**32.0**	17.1
I plan for septic tank maintenance along with along home maintenance costs	402	8.0	21.4	8.2	**43.3**	19.2
I fear that my septic tank will fail and flood my home or yard with sewage	403	27.3	**53.3**	4.2	9.4	5.7
I typically pour fats and grease down the sink	403	**50.4**	43.2	1.5	3.7	1.2

I do not receive enough information about septic system maintenance	398	9.8	**32.2**	17.3	29.1	11.6
My septic system has nothing to do with water quality in the nearest pond, canal, creek, river, lagoon, or ocean	401	17.5	28.2	14.0	**29.4**	11.0

The next set of questions focused specifically on the drain field component of the septic system. Brevard County residents were asked if they knew of the location of their drain field. The majority (87%) of the sample did know where the drain field was located.

Do you know where the
drain field is located?

- Yes ■ No ■ I don't know; Unsure; Missing
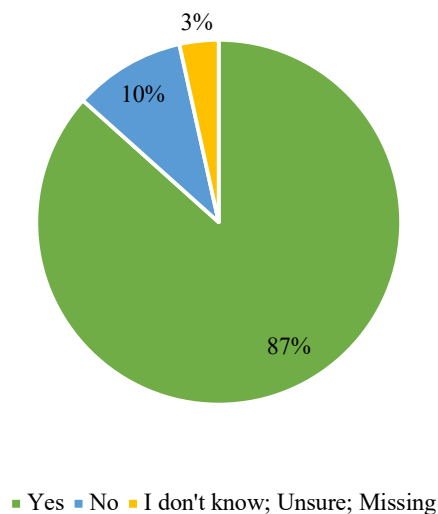
Figure 11. Did you receive information about your septic tank before moving into the house? (n=404)

The next part concerned the participant's drain field and related behaviors (Table 7). First, participants were asked if they avoided parking any vehicles on their drain field. The clear majority either agreed (30%) or strongly agreed (54.2%). Participants were then asked if they

keep this area (their drain field) free of trees. Similarly, the clear majority selected agree (38.1%) or strongly agree (41.1%).

Next, participants were asked if they avoided planting bushes on their drain fields. Most agreed (39.4%) or strongly agreed (39.6%). Lastly, participants were asked if they directed roof drains, sump pumps, pool water overflows, and rainwater drainage away from their drain field. The most popular answer was agree (43.8%), followed by strongly agree (28.7%).

Table 7. Drain Field Behaviors

	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I avoid parking any vehicles on the drain field.	350	0	1.5	1	30	**54.2**
I keep this area free of trees.	349	1.2	3.2	2.7	38.1	**41.1**
I avoid planting bushes in this area.	349	1	4.7	1.7	39.4	**39.6**
I direct roof drains, sump pumps, pool water overflows, and rainwater drainage away from the drain field.	350	1.2	4.5	8.4	**43.8**	28.7

Participants were then asked if their drain field had ever failed. Most participants, 77.5%, reported that it had not.

Drain Field Ever Failed

■ Yes   ■ No   ■ Don't Know/Not Sure
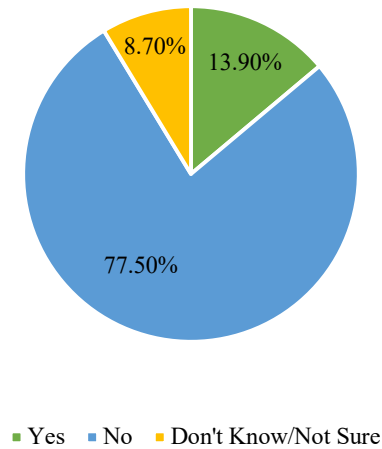
Figure 12. Has the drain field for the home where you live now ever failed? (n=404)

Participants who had answered that their drain field had failed were then asked when it had failed. The most popular response was "More than 10 years ago," selected by 31.5% of participants. 27.8% of participants said, "within the past 12 months." 22.2% responded "within the past 2-4 years"; 16.7% said "5-10 years ago"; and 1.9% reported that it had failed more than once.

When Drain Field Failed

Figure 13. When did the drain field fail? (n=54)

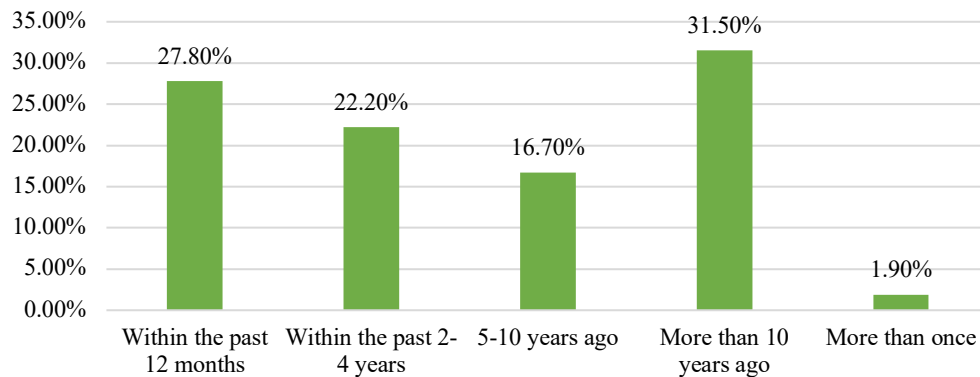The same group of participants who had reported a drain field failure were then asked how much it cost them to have it repaired or replaced. The most common cost, $0.00, was reported by 19.4% of respondents. Costs ranged from $0.00 to $10,000.

Table 8. Central Tendencies of Drain Field Replacement or Repair Costs

Mean	Median	Mode	Range	N
$2,805.00	$1,500.00	$0.00	$10,000.00	31

The next set of questions concerned participants' opinions of the cost of switching to sewer service. First, residents were asked if they would be willing to pay the monthly fee for sewer service. The most popular answer was "Definitely not," given by 35% of respondents. The next most popular answer was "Definitely," chosen by 19.6% of respondents. 16.6% respondents said they would maybe pay monthly; 15.1% said "Probably," and 13.6% said "Not likely."
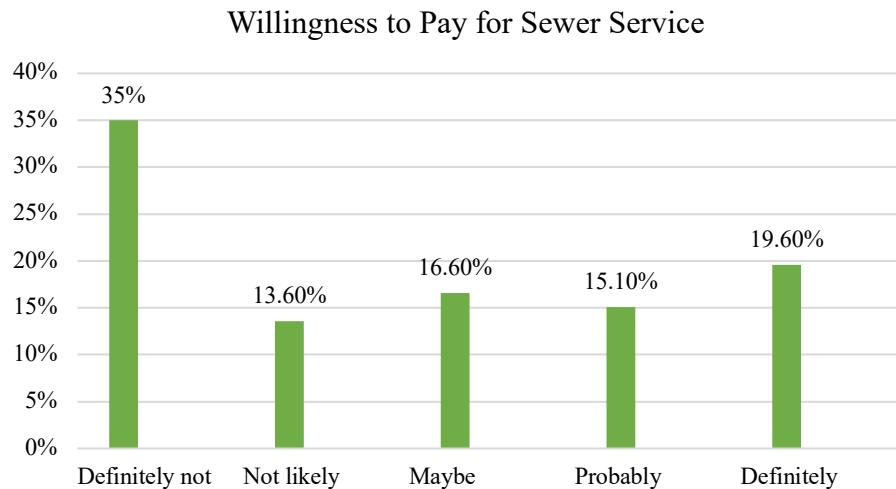

Figure 14. Is this an amount you would be willing to pay for sewer service? (n=397)

Next, participants were then told the initial costs of hooking up their homes to sewer service to replace their septic tanks. They were asked how much of these initial costs they would be willing to pay. The overwhelmingly most popular answer (63.9%) was "0%".

Willingness to Pay Percentage of Initial Costs
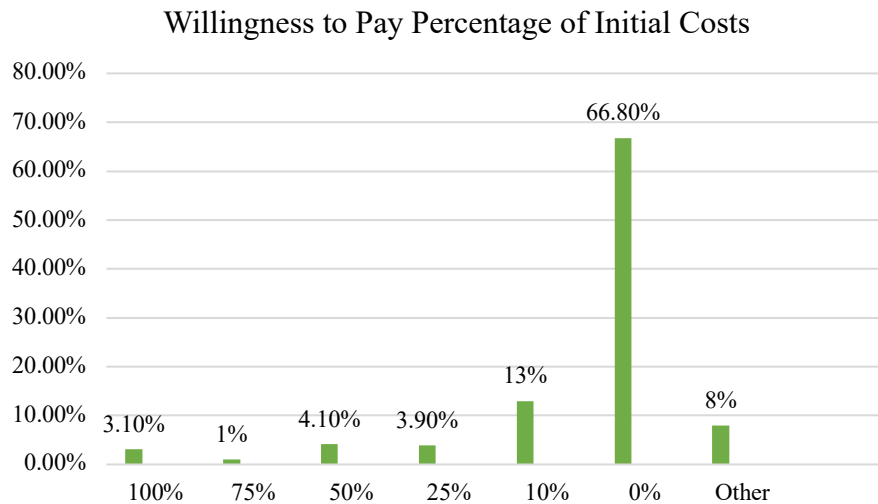
Figure 15. How much of this would you be able to pay to hook your home up to sanitary sewer? (n=386)

Given that the next most popular answers were "10%" and "Other," the idea of citizens shouldering part or all of the cost of switching to sanitary sewer was not popular. If a participant chose "Other," they were given the opportunity to name their own percentage or leave a comment. All those who named their own percentages chose numbers under 30%. Comments left are shown below.

"He'd be willing to pay the whole thing, just not at one time."

"Low income, unable to pay."

"Would not be willing to switch at all if it did not include city water. Septic is working fine but thinks it should be a municipal effort and offer everything as a city effort."

The next section of the survey asked respondents who they considered to be a reliable source of information about septic system maintenance. The most popular answers were "Septic tank inspector" and "Septic tank maintenance" at 49% and 54% respectively. "Internet" was chosen by 36.4%; "Government agency" by 23%; "Family member" by 18.3%; "Neighbor" and "Other" both by 13.9%; and finally, "Realtor" at 8.2%.

Reliable Source of Septic System Maintenance Information
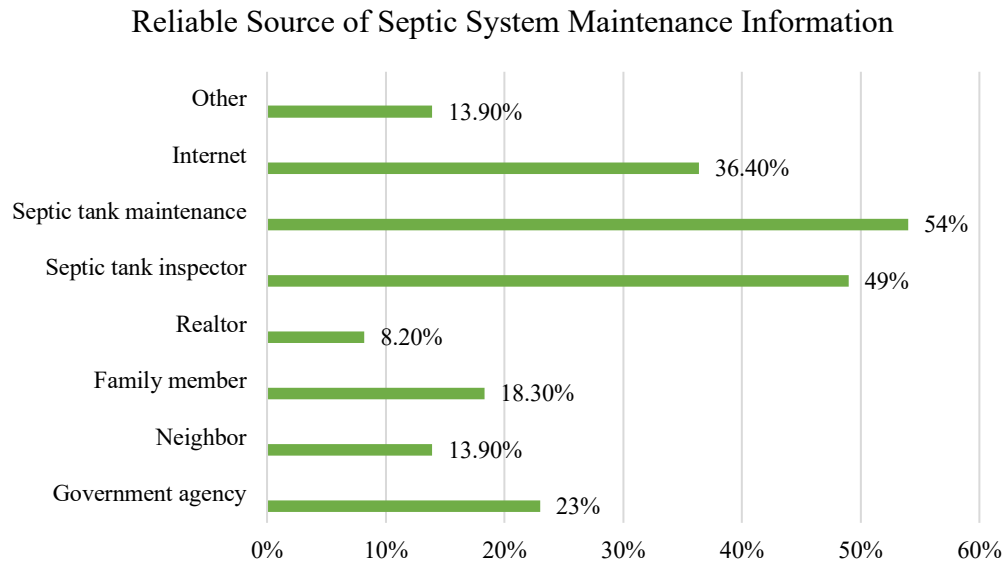
Figure 16. Who do you consider to be a reliable source of information about septic system maintenance? (n=404)

Popular answers given when the participant chose "Other" included "Friend" (N=7); "Self" (N=9); and "Plumber" and "Sewage/Septic Tank Company" (N=3).

Home Demographics

Most participants lived in single-family detached homes (94%). The average home was 32.09 years old, and participants had lived in their homes for an average 15.01 years. Most residents (93.4%) owned their homes and lived in them year-round (98.2%). Of those residents who did not live in their homes year-round (1.8%), they were there an average of 7.57 months out of the year.

Table 9. Type of Homes Lived In

	N	%
Single-family detached home	375	94
Mobile/manufactured home	20	5
Duplex	1	0.3
Triplex/quadra-plex	1	0.3
Multi-family structure	2	0.5

Table 10. Central Tendencies of Home Ages

Mean	Median	Mode	Range	N
32.09 years	30 years	32 years	83 years	369

Table 11. Central Tendencies of Time Lived in Home

Mean	Median	Mode	Range	N
15.01 years	13 years	2 years	58 years	395

Table 12. Rent or Own

	N	%
Rent	22	5.6
Own	370	93.4
Other Arrangement	4	1

Table 13. Live in Home Year-Round

	N	%
Year-Round	387	98.2
Not Year-Round	7	1.8

Table 14. Central Tendencies of Months Spent in Home

Mean	Median	Mode	Range	N
7.57 months	8 months	8 and 10 months	6 months	7

Participant Demographics

The average household was made up of 2.19 adults and 0.65 children. Participants skewed older, with the average age being 58.06 years. 78.2% of participants identified as white. The most common educational attainment levels were bachelor's degree (28.4%); some college, no degree (21.6%); and high school graduate, no college (21.1%). Participant sex was nearly split evenly, with 47.4% being female and 52.6% being male.

Table 15. Central Tendencies of Adults in Household

Mean	Median	Mode	Range	N
2.19	2	2	10	392

Table 16. Central Tendencies of Children in Household

Mean	Median	Mode	Range	N
0.65	0	0	10	393

Table 17. Central Tendencies of Participant Age

Mean	Median	Mode	Range	N
58.06 years	60 years	55 years	76 years	374

Table 18. Participant Race/Ethnicity

	N	%
White	297	78.2
Black/African-American	23	6.1
Hispanic/Latino	18	4.7
Asian/Pacific Islander	1	0.3
Native American	4	1.1
Multi-Racial/Ethnic	29	7.6
Other	8	2.1

Table 19. Level of Educational Attainment

	N	%
High school graduate or less	81	21.1
Some college, no degree	83	21.6
Associate degree	45	11.7
Bachelor's degree	109	28.4
Graduate/professional degree	66	17.2

Table 20. Participant Sex

	N	%
Female	189	47.4
Male	210	52.6

Appendix

Q45 ISBS Surveyor Number:

_____

- -

Q47 Telephone Number:

_____

- -

Q1
Hi, my name is (your name). I'm a researcher at UCF and we're doing a survey with Brevard County residents. I am not selling anything! The survey only takes about 5-7 minutes.

[INTERVIEWER: Add as necessary to assure respondent: Let me stress that your participation in this survey is completely voluntary and confidential. The survey is being sponsored by Marine Resources Council. Do you have any questions you want to ask about the survey?

Your number was chosen at random to participate in this survey. You will not be identified by name in any document we produce. We are interviewing approximately 400 people and your answers will be combined with everyone else's. You have the right to refuse to answer any question you want. You may also terminate the interview at any time.]

I can only interview people who are 18 years of age or older. Are you at least 18?

○ Yes (1)

○ No. May I please speak to anyone in the household who is at least 18? (2)

- -

Q2 Also, I can only interview people who are residents of Brevard County. Do you live in Brevard County?

○ Yes (1)

○ No-- Apologize for the interruption and terminate interview (2)

Skip To: End of Survey If Also, I can only interview people who are residents of Brevard County. Do you live in Brevard Cou... = No-- Apologize for the interruption and terminate interview

---

Q3 Lastly, do you own a septic tank or have a septic tank you are responsible for maintaining?

○ Yes (1)

○ No -- Apologize for the interruption and terminate interview (2)

○ Unsure, Don't Know -- Apologize for the interruption and terminate interview. (3)

Skip To: End of Survey If Lastly, do you own a septic tank or have a septic tank you are responsible for maintaining? = No -- Apologize for the interruption and terminate interview

Skip To: End of Survey If Lastly, do you own a septic tank or have a septic tank you are responsible for maintaining? = Unsure, Don't Know -- Apologize for the interruption and terminate interview.

X→

Q5 And how many tanks do you have on your property?

○ 1 (1)

○ 2 (2)

○ More than 2 (3)

○ I don't know; Not sure; All other missing (9)

X→

Q6 As far as you know, has the septic tank for the home where you live now ever failed?

○ Yes (1)

○ No (2)

○ I don't know; Not sure; All other missing (3)

Skip To: Q9 If As far as you know, has the septic tank for the home where you live now ever failed? = No

Skip To: Q9 If As far as you know, has the septic tank for the home where you live now ever failed? = I don't know; Not sure; All other missing

Q42 And when did the septic tank fail? [Do not read responses, recode appropriate category based on answer].

○ Within the past 12 months (1)

○ Within the past 2-4 years (2)

○ 5-10 years ago (3)

○ More that 10 years ago (4)

○ More than once (5)

○ I don't know; Not Sure; all other missing (volunteered) (6)

Q43
How much did it cost to have the septic tank repaired/replaced? <record numerical value>

INTERVIEWER: record value 99999 if respondent answers "I don't know; Not sure"

_____

X→

Q9 Have you had the septic tank pumped out at the house where you live now?

○ Yes (1)

○ No (0)

○ I don't know; Not sure; all other missing (9)

Skip To: Q12 If Have you had the septic tank pumped out at the house where you live now? = No

Skip To: Q12 If Have you had the septic tank pumped out at the house where you live now? = I don't know; Not sure; all other missing

X→

Q10 And when was that? [Do not read responses, recode appropriate category based on answer].

○ Within the past 12 months (1)

○ Within the past 2-4 years (2)

○ 5-10 years ago (3)

○ More than 10 years ago (4)

○ Get regularly pumped out (5)

○ I don't know; Not sure; all other missing (volunteered) (9)

Q11
And about how much did it cost to have the septic tank pumped out?

INTERVIEWER: record value 99999 if respondent answers "I don't know; Not sure"

_____

X→

Q12 How frequently do you think your septic tank should be pumped out? [Do not read responses, recode appropriate category based on answer].

○ More than once a year (1)

○ Once a year (2)

○ Every 2-3 years (3)

○ Every 5 years (4)

○ Every 10 years (5)

○ When it fails (6)

○ As needed (7)

○ I don't know; Not sure; all other missing (volunteered) (9)

X→

Q13 How frequently do you think your septic tank should be inspected? [Do not read responses, recode appropriate category based on answer].

○ More than once a year (1)

○ Once a year (2)

○ Every 2-3 years (3)

○ Every 5 years (4)

○ Every 10 years (5)

○ When it fails (6)

○ As needed (7)

○ I don't know; Not sure; all other missing (volunteered) (9)

X→

Q14 Have you had the septic tank inspected in the house where you live now?

○ Yes (1)

○ No (0)

○ I don't know; Not sure; all other missing (9)

Skip To: Q17 If Have you had the septic tank inspected in the house where you live now? = No
Skip To: Q17 If Have you had the septic tank inspected in the house where you live now? = I don't know; Not sure; all other missing

X→

Q15 And when was the last time you had the tank inspected? [Do not read responses, recode appropriate category based on answer].

○ Within the past 12 months (1)

○ Within the past 2-4 years (2)

○ 5-10 years ago (3)

○ More than 10 years ago (4)

○ Get regularly inspected (5)

○ I don't know; Not sure; all other missing (volunteered) (9)

Q16
About how much did it cost to have the septic tank inspected? <record numerical value>

INTERVIEWER: record value 99999 if respondent answers "I don't know; Not sure"

_____

X→

Q17 And did you receive information about the septic tank(s) when you moved into the house?

○ Yes (1)

○ No (0)

○ Don't remember; maybe; all other missing (9)

Q19 I'm going to read you some statements about behaviors related to septic tank maintenance. Please rate your level of agreement to each statement. Would you say you strongly disagree, disagree, agree, or strongly agree

	Stongly Disagree (1)	Disagree (2)	Neutral (volunteered) (3)	Agree (4)	Strongly Agree (5)
I restrict what I flush in toilets to prevent damage (1)	○	○	○	○	○
I avoid pouring chemicals and solvents down the sink (2)	○	○	○	○	○
I use septic tank maintenance products on a regular schedule (3)	○	○	○	○	○
It is easy to find a professional to repair or pump out my septic system (4)	○	○	○	○	○
It's hard to tell if my septic system is working properly (5)	○	○	○	○	○
I rarely think about the condition of my septic tank (6)	○	○	○	○	○

I plan for septic tank maintenance along with other home maintenance costs (7)	○	○	○	○	○
I fear that my septic tank will fail and flood my home or yard with sewage (8)	○	○	○	○	○
I typically pour fats and grease down the sink (9)	○	○	○	○	○
I do not receive enough information about septic system maintenance (10)	○	○	○	○	○
My septic system has nothing to do with water quality in the nearest pond, canal, creek, river, lagoon, or ocean (11)	○	○	○	○	○

X→

Q20 These next questions are specifically regarding your drain field. Do you know where the drain field for your septic tank is located?

○ Yes (1)

○ No (0)

○ I don't know; Not sure; all other missing (9)

Skip To: Q44 If These next questions are specifically regarding your drain field. Do you know where the drain fie... = No

Skip To: Q44 If These next questions are specifically regarding your drain field. Do you know where the drain fie... = I don't know; Not sure; all other missing

Q21 In regards to your drain field, I'm going to read you some statements. Please rate your level of agreement to each statement using the same scale we used earlier. Would you say you strongly disagree, disagree, agree, or strongly agree...

	Stongly Disagree (1)	Disagree (2)	Neutral (volunteered) (3)	Agree (4)	Strongly Agree (5)
I avoid parking any vehicles on the drain field (1)	○	○	○	○	○
I keep this area free of trees (2)	○	○	○	○	○
I avoid planting bushes in this area (3)	○	○	○	○	○
I direct roof drains, sump pumps, pool water overflows, and rainwater drainage away from the drain field (4)	○	○	○	○	○

Q44 As far as you know, has the drain field for the home where you live now ever failed?

○ Yes (1)

○ No (2)

○ I don't know; Not sure; all other missing (volunteered) (3)

Skip To: Q22 If As far as you know, has the drain field for the home where you live now ever failed? = No

Skip To: Q22 If As far as you know, has the drain field for the home where you live now ever failed? = I don't know; Not sure; all other missing (volunteered)

Q39 And when did the drain field fail? [Do not read responses, recode appropriate category based on answer].

○ Within the past 12 months (1)

○ Within the past 2-4 years (2)

○ 5-10 years ago (3)

○ More than 10 years ago (4)

○ More than once (5)

○ I don't know; Not Sure; all other missing (volunteered) (6)

Q8
About how much did it cost to have the drain field repaired/replaced <record numerical value>

INTERVIEWER: record value 99999 if respondent answers "I don't know; Not sure"

_____

X→

Q22 The average monthly cost of sanitary sewer service for a single family home in Brevard County is about $50.00 - $80.00. Is this an amount you would be willing to pay for sewer service?

○ Definitely (5)

○ Probably (4)

○ Maybe (3)

○ Not likely (2)

○ Definitely not (1)

Q23
The initial cost to hook up sewer service is $12,000 - $30,000.

How much of this would you be able to pay to hook your home up to sanitary sewer? (Don't read, but prompt if they don't provide an answer).

○ 100% (All of it) (1)

○ 75% (2)

○ 50% (3)

○ 25% (4)

○ 10% (5)

○ 0% (6)

○ Other (7) _____

Q24 And who do you consider to be a reliable source of information about septic system maintenance? [Read options and check all that apply]

- [ ] Government agency (1)

- [ ] Neighbor (2)

- [ ] Family member (3)

- [ ] Realtor (4)

- [ ] Septic tank inspector (5)

- [ ] Septic tank maintenance (6)

- [ ] Internet (7)

- [ ] Other (8) _____

Q25
Now just a few more questions for classification purposes and we'll be done.

What type of home do you live in?

○ A single family detached home (1)

○ a mobile or manufactured home (2)

○ duplex (3)

○ triplex or quadra-plex (4)

○ a multi-family structure containing five or more units (5)

Skip To: Q27 If Now just a few more questions for classification purposes and we'll be done. What type of home do... = A single family detached home

Skip To: Q27 If Now just a few more questions for classification purposes and we'll be done. What type of home do... = a mobile or manufactured home

Skip To: Q28 If Now just a few more questions for classification purposes and we'll be done. What type of home do... = duplex

Skip To: Q28 If Now just a few more questions for classification purposes and we'll be done. What type of home do... = triplex or quadra-plex

Q26 Is that a:

○ multi-unit apartment building (1)

○ town home (2)

○ condominium or co-op building (3)

○ single-room occupancy (SRO) building (4)

○ Something else [follow up as necessary and record response verbatim] (5)

Skip To: Q28 If Is that a: = multi-unit apartment building

Skip To: Q28 If Is that a: = town home

Skip To: Q28 If Is that a: = condominium or co-op building

Q27 What year was the house built?

○ Record year (1) _____

○ Don't know (2)

Q28 How long have you live in your current home? (6 months or less = 0; otherwise, round to the nearest year)

_____

Q29 Do you rent or own?

○ Rent (1)

○ Own (2)

○ Some other arrangement (VOLUNTEERED) (3)

X→

Q30 Do you live in your home year-round?

○ Yes (1)

○ No (0)

Skip To: Q32 If Do you live in your home year-round? = Yes

Q31
How many months do you live in your Brevard County home in a typical year?

(Enter months in whole number if possible, for ranges enter mid-point, i.e. 3-4 months, enter 3.5)

_____

Q32 Including yourself, how many adults live in your household?

_____

Q33 And how many children under age 18?

_____

X→

Q34 What do you consider as your racial or ethnic background?

○ White (1)

○ Black or African American (2)

○ Hispanic or Latino (3)

○ Asian/Pacific Islander (4)

○ Native American (5)

○ Multi-racial or multi-ethnic (6)

○ Other (7) _____

○ All missing (9)

Q35 In what year were you born? (all missing = 9999)

_____

X→

Q36 What is your level of educational attainment?

○ High school graduate or less (1)

○ Some college, no degree (2)

○ Associate's degree (3)

○ Bachelor's degree (4)

○ Graduate or professional degree (5)

○ Don't know/NA/refused (volunteered) (9)

Q37
Finally, to ensure that we represent residents throughout Brevard County in our survey, may I please confirm your address? We will not be releasing your address to anyone. We just use it to make sure that we are representing Brevard County residents accurately.

The address I have is (read address). Is this correct?

○ Yes (1)

○ No (2)

Skip To: Q39 If Finally, to ensure that we represent residents throughout Brevard County in our survey, may I ple... = Yes

Skip To: Q38 If Finally, to ensure that we represent residents throughout Brevard County in our survey, may I ple... = No

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Q38
Enter correct address:

[SURVEYOR- accurate and complete information is vital.]

○ Street address: (1) _____

○ Apt/Unit #: (2) _____

○ City: (3) _____

○ Zip Code: (4) _____

Q39 OK, that's all, you've been great! Thanks so much! [TERMINATE INTERVIEW] [Record R's gender. Ask gender only if unsure.]

○ Male (1)

○ Female (2)

End of Block: Default Question Block