

Chassahowitzka River 2023 Annual Survey Report



This report represents data collected
November 16 – December 8, 2023

Submitted by

Sara Fay
Project Lead

Robin Grantham
SWFWMD Research Manager

taproot

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Executive Summary

Introduction & Background

The Southwest Florida Water Management District (District) launched a campaign in 2022 that educated visitors of the Chassahowitzka River (target audience) about the recreational best management practices that would help protect the river and reduce ecological impacts. Due to the success of a similar campaign regarding the challenges facing the Weeki Wachee River, the District is optimistic that distributed messaging will result in positive change in behaviors while on the river.

Messages included in the educational campaign were:

1. Stay in the vessel when possible.
2. If you have to leave the vessel, tie off in shallow water.
3. Avoid docking on riverbanks.
4. Don't trample vegetation or kick up silt.
5. Avoid climbing on banks.
6. Don't climb trees or use rope swings.
7. Don't throw out litter or leave anything behind.
8. Trim boat motors to prevent propeller scarring.

Prior to the launch of the campaign, the District collaborated with The Taproot Agency in January 2022 to gather initial data regarding visitor behaviors at the river. Following the campaign, a post-survey was conducted via social media in September 2022 to determine whether behaviors have changed because of the campaign.

This report provides data gathered during an annual follow-up survey conducted via social media in November/December 2023 to determine if behavior change is continuing in a positive trajectory based on the campaign and continued education.

Methods of Data Collection and Analysis

The Taproot Agency deployed a social media survey using the ads function of the Facebook platform. The ad was active November 16 – December 8, 2023, and gathered 469 total responses.

Parameters were set for the Facebook ad to run in the geographic area of the following Florida counties: Citrus, Hernando, Hillsborough, Pasco, Pinellas, Polk, Marion, Levy and Sumter. Respondents were excluded based on whether or not they had visited the Chassahowitzka River. If their response was "more than five years ago," "don't know" or "never visited," they were terminated from the survey. The sample resulted in a theoretical margin of error of approximately +/-5% at the 95% confidence level.

Post-Survey Insights

The following insights were gleaned from the annual survey data represented in this report as it was compared to responses in the previous surveys.

- There was a decrease in the number of recent visitors in the last six months (-19% points), with corresponding increases in all other options except “don’t know.”
- Additional options were provided in the 2023 annual survey for respondents regarding how they planned for their trip(s). In previous surveys, many respondents wrote in that they were either local residents or had previously visited the area.
 - Responses for these two additional options in the 2023 survey were:
 - I’m a local resident – 43%
 - Visited previously – 40%
 - Drops in some responses to this question (social media, search engines and word of mouth) may have resulted due to the inclusion of these new options.
 - As anticipated, respondents selecting the “Other” write-in option dropped from 45% (2022 post-survey) to 7% (2023).
- As in previous surveys, boating, kayak/canoe, observing wildlife and fishing were the top activities engaged in while on the river.
 - Recorded change in these activities are noted:
 - Boat (motorized vehicle) – down 15% points
 - Kayak or canoe – up 7% points (continued upward direction)
 - Observing wildlife – up 4% points
 - Fishing – down 3% points
- Regarding exiting vessels on the river, behavior change was recorded:
 - 34% of respondents reported not exiting their vessel, which is up 4% points from the previous survey.
 - A positive change was again reported in the number of respondents who reported tying off their vessel in shallow waters (up 3% points).
 - Using anchors remained a common response recorded in the “other” text box.
- Positive changes in opinion were recorded with a 4%-point increase in those who strongly agree that climbing on banks damages the river.
- In past surveys, more respondents agreed or strongly agreed that the river is too crowded with visitors. A shift is emerging to a more neutral stance on this issue.
- The top three recorded challenges the river is facing include:

- Motorized boats traveling too fast (57%, up 13% points), too much trash in the river (40%, no change) and trampled or scarred vegetation (38%, up 7% points).
- The rise in recognition that trampling vegetation negatively impacts the health of the river is an encouraging trend to be noted, as it aligns directly with campaign messaging.
- As in previous surveys, the majority of respondents indicated that they were “very likely” to take the listed actions knowing it would protect the river. Actions that recorded a decrease in those “very likely” to take the action were:
 - Tie off in shallow waters (-6% points)
 - Avoid docking on riverbanks (-3% points)
 - Avoid climbing on banks (-7% points)
 - Trim boat motors to prevent propellor scarring (-2% points)
- Social media (41%) remains one of the most memorable channels selected by respondents, though 41% also recorded not having seen or heard campaign messaging (+4% points from 2022 post-survey).
 - Of note, the SWFWMD website was included for the first time in the 2023 annual survey, and 13% of respondents indicated seeing messaging via that channel. This was the third highest channel behind social media and the internet.

Sample Demographics

When was the last time you visited the Chassahowitzka River?

	2022 Pre-Survey	2022 Post-Survey	2023 Annual Survey
Within the last six months	59%	62%	43%
6 months to one year ago	17%	15%	23%
More than one to five years ago	13%	12%	14%
More than five years ago*	5%	4%	9%
Don't know*	2%	2%	1%
Never visited*	4%	4%	10%

*Respondent was terminated as not qualified for this survey.

In which Florida county do you live?

	2022 Pre-Survey	2022 Post-Survey	2023 Annual Survey
Citrus	40%	31%	24%
Hernando	19%	19%	10%
Hillsborough	10%	9%	13%
Pasco	16%	18%	14%
Pinellas	5%	13%	14%
Polk	5%	5%	8%
Marion	-	-	6%
Levy	-	-	2%
Sumter	-	-	2%
Other*	4%	2%	8%
I don't live in FL	2%	<1%	1%

Note: The annual survey was targeted in Citrus, Hernando, Hillsborough, Pasco, Pinellas, Polk, Marion, Levy, and Sumter counties. Marion, Levy, and Sumter counties were added as options in the 2023 Annual Survey.

* Other responses: Alachua, Brevard, Charlotte, Dixie, Lake, Sarasota, Volusia.

The following table provides a breakdown by timeframe of when residents last visited the river.

Responses for each category are listed left to right as follows: 2022 Pre/ 2022 Post/ 2023 Annual.

2022 Pre/ 2022 Post/ 2023 Annual Recorded as %	Within the last six months			6 months to one year ago			One to five years ago		
Citrus	80	79	66	15	12	28	6	9	6
Hernando	58	68	70	21	19	15	21	13	15
Hillsborough	58	65	37	24	18	44	18	18	19
Pasco	65	64	68	17	20	21	18	16	11
Pinellas	56	72	39	24	18	43	20	10	18
Polk	48	45	50	35	20	31	17	35	19
Marion	-	-	23	-	-	36	-	-	41
Levy	-	-	40	-	-	20	-	-	40
Sumter	-	-	75	-	-	13	-	-	13
Other	47	71	58	24	29	19	29	0	23
I don't live in FL	57	0	33	14	100	0	29	0	67

Note: The annual survey was targeted in Citrus, Hernando, Hillsborough, Pasco, Pinellas, Polk, Marion, Levy, and Sumter counties. Marion, Levy and Sumter counties were added as options in the 2023 Annual Survey.

River Behaviors & Opinions

Which of the following resources do you use when planning a trip to the Chassahowitzka River? Select all that apply.

	2022 Pre-Survey	2022 Post-Survey	2023 Annual Survey
YouTube videos	5%	6%	4%
Social media pages (Facebook, Twitter)	14%	17%	12%
Search engines (Google, Bing)	13%	17%	15%
Travel Websites	1%	2%	2%
ChassahowitzkaFlorida.com	7%	6%	4%
Visitors Bureau	1%	1%	1%
Word of Mouth	37%	40%	18%
I'm a local resident**	-	-	43%
Visited previously**	-	-	40%
Other*	41%	45%	7%

* Other responses (separated by semicolons): Camping options, asking locals, on line reviews; Check with locals including websites; fishing guide; Florida Paddling Trails Association and DEP's Office of Greenways & Trails; FWC; Meetup groups & Sierra Club outings; Weather; Websites related to camping and river/boat access; Wind finder , ride chart.

** Choice only included beginning with the 2023 Annual Survey due to the high rate of write-in responses of this nature on past surveys.

Please select up to three recreation activities you engage in while on the Chassahowitzka River.

	2022 Pre-Survey	2022 Post-Survey	2023 Annual Survey
Boat (motorized vehicle)	52%	49%	34%
Kayak or Canoe	45%	55%	62%
Paddleboard	6%	14%	9%
Tubing	1%	1%	<1%
Swim or snorkel	31%	37%	33%
Rope Swing	4%	6%	3%
Observe wildlife (manatees, birds, etc.)	36%	36%	40%
Camp	15%	13%	15%
Hike	4%	2%	7%
Picnic	4%	4%	4%
Fishing	N/A	43%	40%
Other*	19%	4%*	5%

* Other responses (separated by semicolons): All of the above except hike and tube; Birdwatching; Cave Diving; Crabbing; Duck hunting; Gigging mullet; Horseback riding . Own horse; Relax; Skiing.

If you exit your vessel, where do you leave it while on the river?

	2022 Pre-Survey	2022 Post-Survey	2023 Annual Survey
I don't leave my vessel while I'm on the river	43%	30%	34%
Park on riverbanks	16%	15%	13%
Tie off in shallow waters	31%	34%	37%
Let it float freely	3%	8%	7%
I did not bring a vessel**	-	-	1%
Other*	7%	12%	8%

* Other responses (separated by semicolon): Anchor (**multiple responses**); At the Chaz ramp area; Dock (owned); House in river; I get out and someone is holding it all the time; I have power poles or auto anchors; Jump off in shallow area, hold onto kayak; Live on the Canal. Second home; Power pole near shore; Shallow water anchor poles; We only exit at established beaches . No where else.

** Choice only included beginning with the 2023 Annual Survey due to the high rate of write-in responses of this nature on past surveys.

How much do you agree or disagree with the following statements?

Responses for each category are listed left to right as follows: 2022 Pre/ 2022 Post/ 2023 Annual.

ALL RESPONDENTS 2022 Pre/ 2022 Post/ 2023 Annual Recorded as %	Strongly Agree			Agree			Neither Agree nor Disagree			Disagree			Strongly Disagree		
People should stay in their vessels on the river.	18	18	15	13	15	14	27	23	22	24	29	34	19	15	15
Climbing on banks damages the river.	28	31	35	26	32	29	22	18	21	15	13	10	9	6	6
Climbing trees and rope swings damages trees.	28	32	31	22	25	28	22	20	19	17	16	14	10	7	8
The number of vessels should be limited on the river.	21	22	17	20	21	19	21	21	24	21	25	26	17	12	14
Vessels should only be allowed to park in designated spots on the river.	21	20	24	21	22	27	17	21	17	23	23	19	18	13	14
The river is too crowded with visitors.	34	28	17	23	21	27	21	30	35	17	15	15	5	5	6

Note: what follows is a breakdown of the agreement statements by county of residence (includes the “other” and “I don’t live in FL” as well). Highest percentage for each is noted in bold, red text.

Note: A breakdown of each statement with all counties responses appears as Appendix II in this report.

Responses for each category are listed left to right as follows: 2022 Pre/ 2022 Post/ 2023 Annual.

CITRUS COUNTY 2022 Pre/ 2022 Post/ 2023 Annual Recorded as %	Strongly Agree			Agree			Neither Agree nor Disagree			Disagree			Strongly Disagree		
People should stay in their vessels on the river.	20	19	22	13	13	19	25	18	22	23	29	22	19	14	15
Climbing on banks damages the river.	34	30	38	23	29	27	24	16	26	12	13	6	8	5	3
Climbing trees and rope swings damages trees.	35	31	32	20	22	34	23	17	21	14	17	8	8	7	6
The number of vessels should be limited on the river.	27	22	16	21	19	23	12	23	19	20	21	27	20	8	14
Vessels should only be allowed to park in designated spots on the river.	24	18	25	18	16	34	13	23	18	22	24	12	23	13	11
The river is too crowded with visitors.	46	36	16	23	19	27	13	23	41	14	13	12	5	3	3

Responses for each category are listed left to right as follows: 2022 Pre/ 2022 Post/ 2023 Annual.

HERNANDO COUNTY 2022 Pre/ 2022 Post/ 2023 Annual Recorded as %	Strongly Agree			Agree			Neither Agree nor Disagree			Disagree			Strongly Disagree		
People should stay in their vessels on the river.	19	22	29	16	12	7	28	24	26	22	22	23	15	16	16
Climbing on banks damages the river.	27	28	52	34	29	19	16	19	26	15	10	3	8	9	0
Climbing trees and rope swings damages trees.	28	32	36	28	24	32	16	18	13	20	15	16	8	7	3
The number of vessels should be limited on the river.	12	18	23	24	19	23	31	18	13	14	29	29	19	12	13
Vessels should only be allowed to park in designated spots on the river.	16	16	32	28	24	23	20	16	10	23	24	23	13	16	13
The river is too crowded with visitors.	29	22	19	26	24	36	23	35	29	17	6	13	5	9	3

Responses for each category are listed left to right as follows: 2022 Pre/ 2022 Post/ 2023 Annual.

HILLSBOROUGH COUNTY 2022 Pre/ 2022 Post/ 2023 Annual Recorded as %	Strongly Agree			Agree			Neither Agree nor Disagree			Disagree			Strongly Disagree		
People should stay in their vessels on the river.	9	12	8	13	9	17	36	15	17	24	41	42	18	15	17
Climbing on banks damages the river.	22	24	25	24	41	28	20	9	17	20	15	22	13	3	8
Climbing trees and rope swings damages trees.	18	21	33	22	21	22	22	35	22	22	12	17	16	3	6
The number of vessels should be limited on the river.	18	9	14	16	18	14	18	24	31	31	27	28	18	15	14
Vessels should only be allowed to park in designated spots on the river.	11	15	19	22	24	22	24	18	11	27	18	31	16	18	17
The river is too crowded with visitors.	31	18	14	18	21	22	24	18	39	20	27	17	7	9	8

Responses for each category are listed left to right as follows: 2022 Pre/ 2022 Post/ 2023 Annual.

PASCO COUNTY 2022 Pre/ 2022 Post/ 2023 Annual Recorded as %	Strongly Agree			Agree			Neither Agree nor Disagree			Disagree			Strongly Disagree		
People should stay in their vessels on the river.	18	20	16	13	13	11	20	20	16	30	26	32	20	12	24
Climbing on banks damages the river.	20	32	41	25	29	30	23	15	14	23	12	11	10	4	5
Climbing trees and rope swings damages trees.	21	35	32	20	22	22	27	17	19	20	12	19	13	6	8
The number of vessels should be limited on the river.	16	17	27	16	20	13	25	19	24	31	23	14	13	12	22
Vessels should only be allowed to park in designated spots on the river.	20	23	30	20	26	19	20	10	27	27	20	8	14	12	16
The river is too crowded with visitors.	21	22	24	23	23	32	34	25	24	18	19	11	4	3	8

Responses for each category are listed left to right as follows: 2022 Pre/ 2022 Post/ 2023 Annual.

PINELLAS COUNTY 2022 Pre/ 2022 Post/ 2023 Annual Recorded as %	Strongly Agree			Agree			Neither Agree nor Disagree			Disagree			Strongly Disagree		
People should stay in their vessels on the river.	12	10	9	8	20	22	44	28	13	20	28	51	16	6	4
Climbing on banks damages the river.	32	32	38	28	36	40	24	16	11	16	4	11	0	4	0
Climbing trees and rope swings damages trees.	32	28	36	28	34	38	24	16	13	12	12	11	4	2	2
The number of vessels should be limited on the river.	28	38	20	8	16	20	28	18	27	28	20	27	8	0	7
Vessels should only be allowed to park in designated spots on the river.	32	26	29	16	24	40	12	26	4	24	14	20	16	2	7
The river is too crowded with visitors.	28	26	13	32	16	33	16	34	29	24	16	20	0	0	4

Responses for each category are listed left to right as follows: 2022 Pre/ 2022 Post/ 2023 Annual.

POLK COUNTY 2022 Pre/ 2022 Post/ 2023 Annual Recorded ass %	Strongly Agree			Agree			Neither Agree nor Disagree			Disagree			Strongly Disagree		
People should stay in their vessels on the river.	22	5	4	4	10	9	17	40	17	22	10	44	35	35	26
Climbing on banks damages the river.	22	15	17	17	20	22	30	30	22	13	25	22	17	10	17
Climbing trees and rope swings damages trees.	13	15	17	17	10	13	30	35	17	13	25	26	26	15	26
The number of vessels should be limited on the river.	22	25	9	30	10	13	17	20	17	9	15	39	22	30	22
Vessels should only be allowed to park in designated spots on the river.	35	5	4	9	20	13	13	25	22	22	25	35	22	25	26
The river is too crowded with visitors.	30	30	17	13	10	13	26	45	35	30	5	22	0	10	13

County data was first recorded in 2023 Annual Survey.

MARION 2023 Annual	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
People should stay in their vessels on the river.	14%	5%	46%	36%	0%
Climbing on banks damages the river.	32%	36%	23%	0%	9%
Climbing trees and rope swings damages trees.	32%	18%	27%	14%	9%
The number of vessels should be limited on the river.	14%	32%	27%	18%	9%
Vessels should only be allowed to park in designated spots on the river.	14%	41%	27%	9%	9%
The river is too crowded with visitors.	23%	23%	36%	14%	5%

County data was first recorded in 2023 Annual Survey.

LEVY 2023 Annual	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
People should stay in their vessels on the river.	20%	20%	20%	20%	20%
Climbing on banks damages the river.	20%	20%	20%	20%	20%
Climbing trees and rope swings damages trees.	20%	20%	20%	20%	20%
The number of vessels should be limited on the river.	0%	0%	20%	60%	20%
Vessels should only be allowed to park in designated spots on the river.	40%	0%	0%	40%	20%
The river is too crowded with visitors.	40%	0%	40%	20%	0%

Note: No data points highlighted for Levy county due to flat responses.

County data was first recorded in 2023 Annual Survey.

SUMTER 2023 Annual	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
People should stay in their vessels on the river.	14%	0%	57%	14%	14%
Climbing on banks damages the river.	29%	29%	29%	0%	14%
Climbing trees and rope swings damages trees.	14%	29%	29%	14%	14%
The number of vessels should be limited on the river.	14%	29%	14%	29%	14%
Vessels should only be allowed to park in designated spots on the river.	29%	14%	43%	0%	14%
The river is too crowded with visitors.	14%	43%	29%	0%	14%

Responses for each category are listed left to right as follows: 2022 Pre/ 2022 Post/ 2023 Annual.

OTHER 2022 Pre/ 2022 Post/ 2023 Annual Recorded as %	Strongly Agree			Agree			Neither Agree nor Disagree			Disagree			Strongly Disagree		
People should stay in their vessels on the river.	6	0	8	6	0	8	35	14	17	29	57	42	24	29	25
Climbing on banks damages the river.	29	29	21	18	14	29	24	29	29	18	14	13	12	14	8
Climbing trees and rope swings damages trees.	24	14	25	18	29	25	18	0	25	29	29	17	12	29	8
The number of vessels should be limited on the river.	18	14	13	18	14	13	35	14	38	18	43	17	12	14	21
Vessels should only be allowed to park in designated spots on the river.	12	14	17	29	0	17	24	43	21	18	29	25	18	14	21
The river is too crowded with visitors.	18	14	13	24	14	17	35	29	42	12	29	21	12	14	8

Responses for each category are listed left to right as follows: 2022 Pre/ 2022 Post/ 2023 Annual.

I DON'T LIVE IN FL 2022 Pre/ 2022 Post/ 2023 Annual Recorded as %	Strongly Agree			Agree			Neither Agree nor Disagree			Disagree			Strongly Disagree		
People should stay in their vessels on the river.	29	100	0	14	0	50	43	0	50	14	0	0	0	0	0
Climbing on banks damages the river.	14	100	100	57	0	0	29	0	0	0	0	0	0	0	0
Climbing trees and rope swings damages trees.	14	100	50	43	0	50	14	0	0	29	0	0	0	0	0
The number of vessels should be limited on the river.	0	50	0	29	50	0	57	0	50	14	0	50	0	0	0
Vessels should only be allowed to park in designated spots on the river.	29	100	50	57	0	50	0	0	0	14	0	0	0	0	0
The river is too crowded with visitors.	14	100	0	29	0	0	14	0	100	43	0	0	0	0	0

Based on what you know or have heard, what challenges does the Chassahowitzka River face?

	2022 Pre-Survey	2022 Post-Survey	2023 Annual Survey
No challenges at the moment	7%	9%	11%
Too many kayakers	41%	40%	24%
Trampled or scarred vegetation	26%	31%	38%
Too many people recreating on the river at one time	32%	34%	30%
Worn down or eroded shorelines	26%	30%	33%
Climbing and rope swinging from trees	23%	29%	30%
Too much trash in the river	39%	40%	40%
Too many motorized boats	21%	23%	36%
Motorized boats traveling too fast	33%	44%	57%
Other*	15%	15%	9%

* Other responses are recorded in Appendix III.

Note: what follows is a breakdown by county showing the percentage of respondents identifying challenges the river faces.

Responses for each category are listed left to right as follows: 2022 Pre/ 2022 Post/ 2023 Annual.

2022 Pre/ 2022 Post/ 2023 Annual Recorded as %	Citrus			Hernando			Hillsborough			Pasco			Pinellas			Polk		
No challenges at the moment	8	8	8	2	9	10	11	6	8	16	7	6	0	12	9	13	10	26
Too many kayakers	55	48	21	58	46	57	36	24	25	37	30	25	20	22	9	35	40	26
Trampled vegetation	31	31	40	37	29	37	18	24	42	30	19	39	28	34	48	22	15	13
Too many people recreating on the river at one time	42	34	26	36	35	43	33	18	33	25	22	33	36	44	25	35	30	22
Worn down or eroded shorelines	32	32	38	26	27	30	33	24	33	28	22	33	36	30	38	17	20	22
Climbing and rope swinging from trees	37	29	37	24	34	40	18	21	28	14	20	33	28	32	34	13	15	13
Too much trash in the river	47	40	36	41	41	37	42	29	42	41	28	44	36	40	34	57	45	44
Too many motorized boats	16	13	37	24	21	20	27	32	33	31	23	50	44	34	39	22	15	22
Motorized boats traveling to fast	30	32	56	40	32	40	33	47	69	42	45	64	56	58	68	44	25	30

Note: Audiences in the “Other” or “I don’t live in FL” were excluded from this breakdown as they are not a primary target of the campaign. Marion, Levy, and Sumter county data is recorded on the following page as they were only added in the 2023 Annual Survey.

Note: Data points highlighted in bold, red text indicate the highest two or three identified in each county.

2023 Annual	Marion	Levy	Sumter
No challenges at the moment	15%	40%	0%
Too many kayakers	15%	40%	43%
Trampled vegetation	25%	60%	43%
Too many people recreating on the river at one time	40%	40%	43%
Worn down or eroded shorelines	20%	60%	43%
Climbing and rope swinging from trees	15%	40%	14%
Too much trash in the river	25%	60%	57%
Too many motorized boats	50%	20%	29%
Motorized boats traveling too fast	65%	40%	14%

Note: Audiences in the “Other” or “I don’t live in FL” were excluded from this breakdown as they are not a primary target of the campaign.

How likely are you to take the following actions knowing it would protect the Chassahowitzka River?

Responses for each category are listed left to right as follows: 2022 Pre/ 2022 Post/ 2023 Annual.

2022 Pre/ 2022 Post/ 2023 Annual Recorded as %	Very Likely			Somewhat Likely			Not at all Likely		
Stay in the vessel when possible.	55	54	59	24	23	27	21	24	15
If you have to leave the vessel, tie off in shallow waters.	75	79	73	19	16	21	7	5	6
Avoid docking on riverbanks.	60	64	61	24	27	26	16	9	13
Don't trample vegetation or kick up silt.	75	78	81	17	17	15	8	4	4
Avoid climbing on banks.	63	69	62	26	22	27	12	9	11
Don't climb trees or use rope swings.	69	68	75	13	15	13	19	17	12
Don't throw out litter or leave anything behind.	97	98	98	1	1	1	2	1	1
Trim boat motors to prevent propellor scarring.	86	91	89	9	5	6	5	4	5

In the past six months, where did you see or hear messages about protecting the Chassahowitzka River? Select all that apply.

	2022 Post-Survey	2023 Annual Survey
I have not seen or heard messages about protecting the Chassahowitzka River.	37%	41%
Radio	2%	2%
Internet	20%	20%
Social media	55%	41%
Billboard	1%	1%
Television	1%	3%
Newspaper	7%	7%
Campground	12%	7%
Vacation rental or hotel	3%	1%
Newsletter	4%	3%
Water Management District website*	-	13%

* This option was first included on the 2023 Annual Survey.

County Comparison 2022 Post/ 2023 Annual Recorded as %	Citrus		Hernando		Hills.		Pasco		Pinellas		Polk		Marion	Levy	Sumter
I have not seen or heard messages	23	33	22	24	47	42	2	47	48	49	35	50	50	0	50
Radio	2	3	3	0	0	0		3	0	0	0	0	0	20	17
Internet	23	21	15	17	3	15	15	22	14	19	15	23	11	40	33
Social media	53	50	59	55	27	30	41	31	26	37	30	32	39	100	17
Billboard	0	1	3	0	0	0	1	0	0	2	0	0	0	20	0
Television	0	3	2	0	3	3	1	8	2	2	0	0	0	20	0
Newspaper	10	17	3	0	0	9	3	3	6	5	5	0	0	20	0
Campground	10	7	13	7	21	6	6	17	4	2	0	9	0	20	17
Vacation rental or hotel	3	0	2	0	3	6	1	0	2	0	0	0	0	20	17
Newsletter	4	1	3	3	3	6	0	6	2	2	0	0	0	20	0
Water Management District website*	-	11	-	24	-	15	-	19	-	7	-	9	6	20	0

Note: Data highlighted in red indicate the top three choices in each county.

* This option was first included on the 2023 Annual Survey.

** Data for Marion, Levy, and Sumter counties was gathered beginning with the 2023 Annual Survey.

Appendix I: 2023 Chassahowitzka River Annual Survey Questions

1. When was the last time you visited the Chassahowitzka River?

- a. Within the last six months
- b. 6 months to one year ago
- c. More than one to five years ago
- d. More than five years ago [TERMINATE]
- e. Don't know [TERMINATE]
- f. Never visited [TERMINATE]

2. In which Florida county do you live?

- a. Hillsborough
- b. Pasco
- c. Hernando
- d. Pinellas
- e. Citrus
- f. Polk
- g. Marion
- h. Levy
- i. Sumter
- j. I don't live in FL
- k. Other [TEXT BOX]

**3. Which of the following resources do you use when planning a trip to the Chassahowitzka River?
Select all that apply.**

- a. YouTube videos
- b. Social media pages (Facebook, Twitter)
- c. Search engines (Google, Bing)
- d. Travel Websites
- e. ChassahowitzkaFlorida.com
- f. Visitors Bureau
- g. Word of Mouth
- h. I'm a local resident
- i. Visited previously
- j. Other [TEXT BOX]

4. Please select up to three recreation activities you engage in while on the Chassahowitzka River.

- a. Boat (motorized vehicle)
- b. Kayak or Canoe
- c. Paddleboard
- d. Fishing
- e. Tubing [SKIP TO Q6]
- f. Swim or snorkel [SKIP TO Q6]
- g. Rope Swing [SKIP TO Q6]
- h. Observe wildlife (manatees, birds etc.) [SKIP TO Q6]
- i. Camp [SKIP TO Q6]

- j. Hike [SKIP TO Q6]
- k. Picnic [SKIP TO Q6]
- l. Other [TEXT BOX] [SKIP TO Q6]

5. If you exit your vessel, where do you leave it while on the river?

- a. I don't leave my vessel while I'm on the river.
- b. Park on riverbanks
- c. Tie off in shallow waters
- d. Let it float freely
- e. I did not bring a vessel
- f. Other [TEXT BOX]

6. How much do you agree or disagree with the following statements? (Strongly Agree, Agree, Neither agree nor disagree, Disagree, Strongly Disagree)

- a. People should stay in their vessels on the river.
- b. Climbing on banks damages the river.
- c. Climbing trees and rope swings damages trees.
- d. The number of vessels should be limited on the river.
- e. Vessels should only be allowed to park in designated spots on the river.
- f. The river is too crowded with visitors.

7. Based on what you know or have heard, what challenges does the Chassahowitzka River face? Select all that apply.

- a. No challenges at the moment
- b. Too many kayakers
- c. Trampled or scarred vegetation
- d. Too many people recreating on the river at one time
- e. Worn down or eroded shorelines
- f. Climbing and rope swinging from trees
- g. Too much trash in the river
- h. Too many motorized boats
- i. Motorized boats traveling too fast
- j. Other [TEXT BOX]

8. How likely are you to take the following actions knowing it would protect the Chassahowitzka River? (Very Likely, Somewhat Likely or Not at all likely).

- a. Stay in the vessel when possible.
- b. If you have to leave the vessel, tie off in shallow waters.
- c. Avoid docking on riverbanks.
- d. Don't trample vegetation or kick up silt.
- e. Avoid climbing on.
- f. Don't climb trees or use rope swings.
- g. Don't throw out litter or leave anything behind.
- h. Trim boat motors to prevent propeller scarring.

9. In the past six months, where did you see or hear messages about protecting the Chassahowitzka River? Please select all that apply.

- a. I have not seen or heard messages about protecting the Chassahowitzka River.
- b. Radio
- c. Internet

- d. Social media
- e. Billboard
- f. Television
- g. Newspaper
- h. Campground
- i. Vacation rental or hotel
- j. Newsletter
- k. [Water Management District website at WaterMatters.org](https://www.watermatters.org/)

Appendix II: Agreement statements all counties

People should stay in their vessels on the river.

Responses for each category are listed left to right as follows: 2022 Pre/ 2022 Post/ 2023 Annual.

2022 Pre/ 2022 Post/ 2023 Annual Recorded as %	Strongly Agree			Agree			Neither Agree nor Disagree			Disagree			Strongly Disagree		
Citrus	20	19	22	13	13	19	25	18	22	23	29	22	19	14	15
Hernando	19	22	29	16	12	7	28	24	26	22	22	23	15	16	16
Hillsborough	9	12	8	13	9	17	36	15	17	24	41	42	18	15	17
Pasco	18	20	16	13	13	11	20	20	16	30	26	32	20	1	24
Pinellas	12	10	9	8	20	22	44	28	13	20	28	51	16	6	4
Polk	22	5	4	4	10	9	17	40	17	22	10	44	35	35	26
Marion	-	-	14	-	-	5	-	-	46	-	-	36	-	-	0
Levy	-	-	20	-	-	20	-	-	20	-	-	20	-	-	20
Sumter	-	-	14	-	-	0	-	-	57	-	-	14	-	-	14

Climbing on banks damages the river.

Responses for each category are listed left to right as follows: 2022 Pre/ 2022 Post/ 2023 Annual.

2022Pre/ 2022 Post/ 2023 Annual Recorded as %	Strongly Agree			Agree			Neither Agree nor Disagree			Disagree			Strongly Disagree		
Citrus	34	30	38	23	29	27	24	16	26	12	13	6	8	5	3
Hernando	27	28	52	34	29	19	16	19	26	15	10	3	8	9	0
Hillsborough	22	24	25	24	41	28	20	9	17	20	15	22	13	3	8
Pasco	20	32	41	25	29	30	23	15	14	23	12	11	10	4	5
Pinellas	32	32	38	28	36	40	24	16	11	16	4	11	0	4	0
Polk	22	15	17	17	20	22	30	30	22	13	25	22	17	10	17
Marion	-	-	32	-	-	36	-	-	23	-	-	0	-	-	9
Levy	-	-	20	-	-	20	-	-	20	-	-	20	-	-	20
Sumter	-	-	29	-	-	29	-	-	29	-	-	0	-	-	14

Climbing trees and rope swings damages trees.

Responses for each category are listed left to right as follows: 2022 Pre/ 2022 Post/ 2023 Annual.

2022 Pre/ 2022 Post/ 2023 Annual Recorded as %	Strongly Agree			Agree			Neither Agree nor Disagree			Disagree			Strongly Disagree		
Citrus	35	31	32	20	22	34	23	17	21	14	17	8	8	7	6
Hernando	28	32	36	28	24	32	16	18	13	20	15	16	8	7	3
Hillsborough	18	21	33	22	21	22	22	35	22	22	12	17	16	3	6
Pasco	21	35	32	20	22	22	27	17	19	20	12	19	13	6	8
Pinellas	32	28	36	28	34	38	24	16	13	12	12	11	4	2	2
Polk	13	15	17	17	10	13	30	35	17	13	25	26	26	15	26
Marion	-	-	32	-	-	18	-	-	27	-	-	14	-	-	9
Levy	-	-	20	-	-	20	-	-	20	-	-	20	-	-	20
Sumter	-	-	14	-	-	29	-	-	29	-	-	14	-	-	14

The number of vessels should be limited on the river.

Responses for each category are listed left to right as follows: 2022 Pre/ 2022 Post/ 2023 Annual.

2022 Pre/ 2022 Post/ 2023 Annual Recorded as %	Strongly Agree			Agree			Neither Agree nor Disagree			Disagree			Strongly Disagree		
Citrus	27	22	16	21	19	23	12	23	19	20	21	27	20	8	14
Hernando	12	18	23	24	19	23	31	18	13	14	29	29	19	12	13
Hillsborough	18	9	14	16	18	14	18	24	31	31	27	28	18	15	14
Pasco	16	17	27	16	20	14	25	19	24	31	23	14	13	12	22
Pinellas	28	38	20	8	16	20	28	18	27	28	20	27	8	0	7
Polk	22	25	9	30	10	13	17	20	17	9	15	39	22	30	22
Marion	-	-	14	-	-	32	-	-	27	-	-	18	-	-	9
Levy	-	-	0	-	-	0	-	-	20	-	-	60	-	-	20
Sumter	-	-	14	-	-	29	-	-	14	-	-	29	-	-	14

Vessels should only be allowed to park in designated spots on the river.

Responses for each category are listed left to right as follows: 2022 Pre/ 2022 Post/ 2023 Annual.

2022 Pre/ 2022 Post/ 2023 Annual Recorded as %	Strongly Agree			Agree			Neither Agree nor Disagree			Disagree			Strongly Disagree		
Citrus	24	18	25	18	16	34	13	23	18	22	24	12	23	13	11
Hernando	16	16	32	28	24	23	20	16	10	23	24	23	13	16	13
Hillsborough	11	15	19	22	24	22	24	18	11	27	18	31	16	18	17
Pasco	20	23	30	20	26	19	20	10	27	27	20	8	14	12	16
Pinellas	32	26	29	16	24	40	12	26	4	24	14	20	16	2	7
Polk	35	5	4	9	20	13	13	25	22	22	25	35	22	25	26
Marion	-	-	14	-	-	41	-	-	27	-	-	9	-	-	9
Levy	-	-	40	-	-	0	-	-	0	-	-	40	-	-	20
Sumter	-	-	29	-	-	14	-	-	43	-	-	0	-	-	14

The river is too crowded with visitors.

Responses for each category are listed left to right as follows: 2022 Pre/ 2022 Post/ 2023 Annual.

2022 Pre/ 2022 Post/ 2023 Annual Recorded as %	Strongly Agree			Agree			Neither Agree nor Disagree			Disagree			Strongly Disagree		
Citrus	46	36	16	23	19	27	13	23	41	14	13	12	5	3	3
Hernando	29	22	19	26	24	36	23	35	29	17	6	13	5	9	3
Hillsborough	31	18	14	18	21	22	24	18	39	20	27	17	7	9	8
Pasco	21	22	24	23	23	32	34	25	24	18	19	11	4	3	8
Pinellas	28	26	13	32	16	33	16	34	29	24	16	20	0	0	4
Polk	30	30	17	13	10	13	26	45	35	30	5	22	0	10	13
Marion	-	-	23	-	-	23	-	-	36	-	-	14	-	-	5
Levy	-	-	40	-	-	0	-	-	40	-	-	20	-	-	0
Sumter	-	-	14	-	-	43	-	-	29	-	-	0	-	-	14

Appendix III: Other challenges listed

All submitted responses recorded without editing or condensing for similarity.

- Airboats too fast. Sometimes too many of both boats and kayakers.
- Algae growth on the bottom has exploded in the last 5 years
- Algae problem
- Allowing motorized boats up in the springs area
- Allowing pumping has slowed the flow and allows growth of algae
- Businesses should not be allowed to bus in kayakers, etc
- Canals need dredging. Near 3to4 feet deepwitp in some places w
- Government interference
- Lots of river algae, getting thicker every year who ever is responsible for cleaning it should do so, if it wasn't for the boaters moving it around it would turn into muck river
- Motorized vessels of all kind should be prohibited!
- Over pumping of the spring leading to salt water intrusion farther and farther up river and decreased water levels
- Poor outflow at main spring leading to poor water quality
- Public land..we trash it the problem becomes everybody and temp charge for maintainance damage
- Runoff concerns and destruction from CONSTRUCTION and overcrowding from NEW DEVELOPMENT
- Semi permanent setups at the 7 sisters springs. People blasting music and tying off with umbrellas etc.
- Sewer run off , no turtle or ell grass , no crabs , like there was
- Should be No One admitted during hunting season that is NOT hunting
- Too many kayakers taking the navigable channel blocking boat paths. Need more kayaker education
- too much gov overreach
- Water quality Water quality is very poor due to lack of natural
- Water usage in the area is drawing the river down