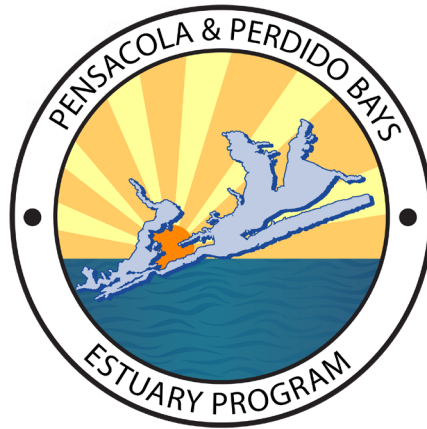


Research Summary Report

Community Perspectives of the Pensacola & Perdido Bay Watersheds



Haas Center
UNIVERSITY *of* WEST FLORIDA

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Introduction

This document outlines the key findings of the Community Perspectives of the Pensacola & Perdido Bay Watersheds research project conducted by the University of West Florida Haas Center. The goals of the research project were to survey area residents and visitors regarding:

- Current use of the Pensacola and Perdido Bay watersheds
- Valued aspects of the watersheds
- Perceived environmental challenges facing the watersheds
- Appropriate sources of funding to support the Pensacola and Perdido Bay Watersheds

Method

Seven-hundred fifty-four participants completed the online survey. See Appendix A1 for a map of completed surveys by geography. Participants were recruited via three main methods: 1) email lists taken from fishing licenses and registered voter files from Escambia, Santa Rosa, and Baldwin Counties, 2) social media boosting, and 3) flyer distribution. All references of statistical significance are at the 95% confidence level. See Appendix A2 for survey demographic information. Reported percentage values have an estimated margin of error of approximately +/- 3.6% points at the 95% confidence level. See Appendix A3 for a map of the water-bodies discussed in this report. See Appendix A4 for the verbatim open-ended feedback captured by the survey.

Key Findings

39.90% of participants reported awareness of the Pensacola and Perdido Bays Estuary Program.

- Program awareness did not significantly vary by age.
- Participants who reported more water-body use were significantly more aware of the program.
- Participants from the ZIP codes most associated with Escambia Districts 2, 3, and 4, reported more awareness of the program than participants from the ZIP codes most associated with Districts 1 and 5.

67% of participants perceived the current overall environmental condition of the Perdido Bay watershed as “average” or better. Opinion is mixed regarding whether the watershed has improved (21.70%) or degraded (22.40%) in the last five years, with the remainder stating no change (38.60%) or unsure (17.30%).

- The length of time participants reported living in their current county did not significantly influence the perceptions noted above.
- There is a significant positive correlation between current watershed health and whether the watershed has improved (or degraded) in the past five years (people who rated the watershed quality as high also tended to report it had improved in the past five years).

76% of participants perceived the current overall environmental condition of the Pensacola Bay watershed as “average” or better. Opinion is slightly trending towards perceptions of an improved (24.90%) vs. degraded (19.30%) watershed in the last five years, with the remainder stating no change (40.30%) or unsure (15.30%).

- The length of time participants reported living in their current county did not significantly influence the perceptions previously noted.
- There is a significant positive correlation between current watershed health and whether the watershed has improved (or degraded) in the past five years (people who rated the watershed quality as high also tended to report it had improved in the past five years).

Waterfront dining (29.80%), wildlife viewing (28.40%), and beaching (27.80%) are the most popular activities participants reported engaging in at least monthly in the Perdido Bay watersheds.

Waterfront dining (37.80%), wildlife viewing (36.40%), and beaching (35.50%) are the most popular activities participants reported engaging in at least monthly in the Pensacola Bay watersheds.

Participants consistently ranked natural beauty, ecosystem services (e.g., flood and erosion control, water and air filtration), and fishable water as their top three most valued aspects of both watersheds.

Healthy habitats (e.g., wetlands, seagrass beds, oysters, and upland forests) and trash free land and water stood out as the most important aspects of a healthy watershed for participants. However, most tested items were deemed important.

Industrial discharges, coastal development, and municipal sewage treatment discharges were the most cited environmental concerns for the Pensacola Bay watershed.

- Younger participants were significantly more likely to cite climate change, sea level rise, and coastal development as environmental concerns.

Industrial discharges, coastal development, and agriculture activities within the watershed were the most cited environmental concerns for the Perdido Bay watershed.

- Younger participants were significantly more likely to cite climate change, sea level rise, and commercial fishing as environmental concerns.

Water quality improvements (71.70%) and Natural habitat restoration (e.g., seagrass, oysters) (70.70%) were both deemed as very important priorities for financial investments.

Participants strongly agreed that state government (55.88%), tourist development tax (55.40%), and local government (50.90%) were appropriate potential sources of funding for investments towards a healthy watershed.

- Participants' agreement that local governments were appropriate potential funding sources for investments towards a healthy watershed did not significantly vary by participant location.
- Participants who cited healthy habitats, wildlife diversity, and natural riverbanks and shorelines as important aspects of healthy watersheds were significantly more likely to support financial investments toward a healthy watershed.

Recommendations

Participants tended to judge (perceived importance) watershed health based on the lack of trash and the presence of healthy habitats. Watershed investments that address these factors have the most potential to influence public perception of watershed health.

Prioritize financial investments to improve watershed health for water-bodies with 50% or greater reported use.

Prioritize financial investments to improve watershed health related to factors linked to natural beauty and ecosystem services, as participants with both passive and active water-body use are likely to find such improvements valuable.

Given that participants who live near a water-body are more likely to visit it, investments in watershed health should be geographically distributed or focused on the list of water-bodies, which tend to attract frequent visitors from each of the primary geographic areas surveyed in this research.

All else equal, investments in watershed health should target improvements related to industrial discharges, coastal development, and municipal sewage treatment discharges. These are the items of greatest concern among survey participants.

Perceived Environmental Conditions

Overall, most participants reported “good” to “average” perceived current environmental conditions in both watersheds. However, a minority report poor to terrible conditions. Over the past five years, perceptions of watershed quality remained relatively stable. Compared to area residents, visitors were significantly more likely to report better perceived current environmental conditions for both watersheds.

In your opinion, how would you rate the current overall environmental condition of the Perdido Bay watershed?					
Excellent	Good	Average	Poor	Terrible	Unsure
4%	30.10%	33.30%	18.90%	6.70%	6.90%

In your opinion, over the past five years, has the Perdido Bay watershed...?					
Improved a great deal	Improved	Remained about the same	Degraded	Degraded a great deal	Unsure
1.10%	20.60%	38.60%	18.70%	3.70%	17.30%

In your opinion, how would you rate the current overall environmental condition of the Pensacola Bay watershed?					
Excellent	Good	Average	Poor	Terrible	Unsure
4%	36.00%	36.40%	14.10%	2.30%	7.20%

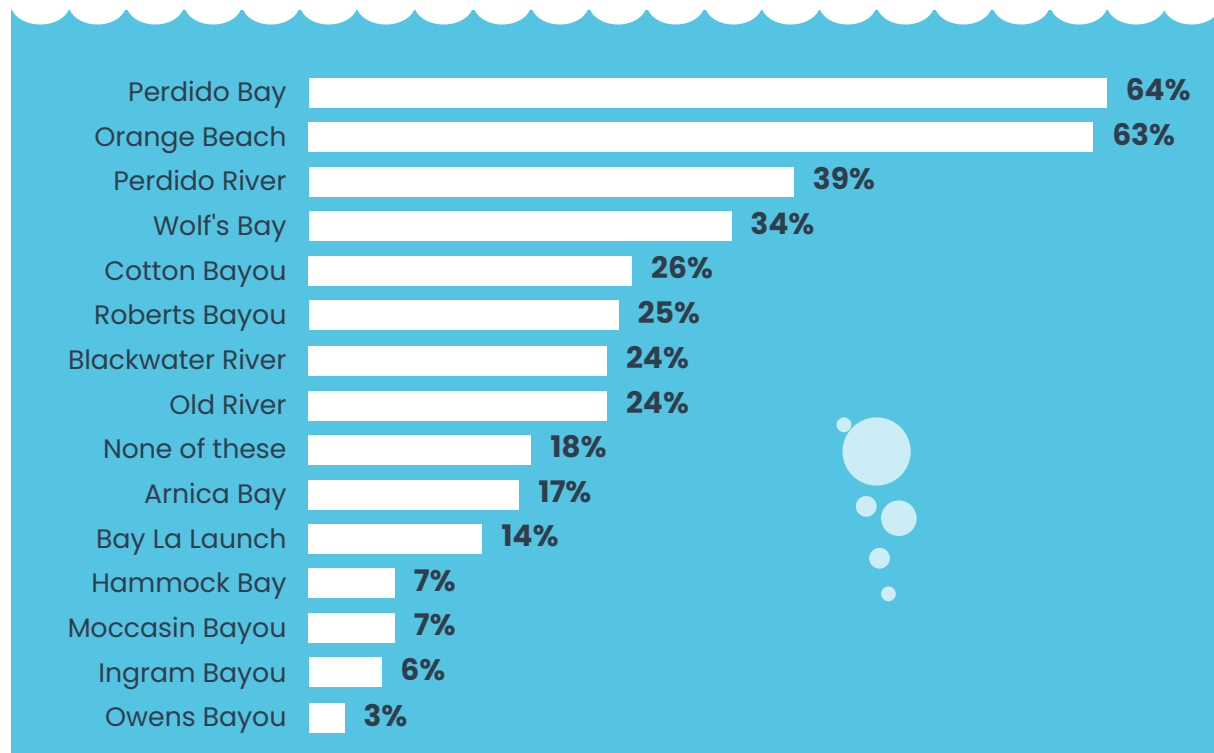
In your opinion, over the past five years, has the Pensacola Bay watershed...?					
Improved a great deal	Improved	Remained about the same	Degraded	Degraded a great deal	Unsure
1.90%	23.00%	40.30%	17.00%	2.60%	15.30%

Current Use and Priorities: Perdido Bay Watershed

Participants reported frequent use of many water-bodies within the Perdido Bay watershed. Perdido Bay and Orange Beach were standouts in terms of popularity.

Wildlife viewing, Waterfront dining, shopping, or entertainment, and beaching represented the top three reported uses of area water-bodies. Participants appeared to value the natural beauty and ecosystem services of the Perdido Bay watershed more than aspects related to active use (recreation and swimming). As stated above, participants reported more frequent use of water-bodies in their local area. However, Orange Beach, Perdido Bay, and the Perdido River were able to attract frequent visitors from each of the primary geographic areas surveyed in this research. Compared to area residents, visitors were significantly more likely to report visiting Orange Beach and engage in beaching; land-based recreation; wildlife viewing; and waterfront dining, shopping, and entertainment.

Which of the following Alabama water-bodies or beaches in our local watersheds have you visited?

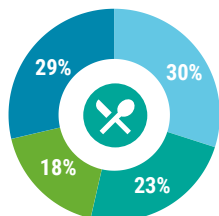


Please select how frequently you engage in each of the following activities in the Perdido Bay watersheds:

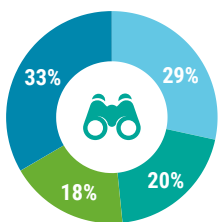
	A great deal (e.g., more than once per week)	Moderate amount (e.g., monthly)	Sometimes (e.g., bi- annually, quarterly)	Rarely (e.g., annually)	Never	Valid Frequency
Wildlife viewing	13.50%	14.90%	20.00%	18.20%	33.40%	588
Waterfront dining, shopping, or entertainment	10.20%	19.60%	23.70%	17.80%	28.70%	595
Land-based recreation (e.g., hiking, walking, yoga)	9.00%	13.70%	21.40%	19.20%	36.70%	586
Beaching	8.40%	19.40%	21.80%	23.70%	26.70%	608
Power boating or sailing	8.00%	13.90%	16.80%	16.00%	45.30%	584
Recreational fishing (including shellfishing)	7.60%	14.50%	19.80%	16.70%	41.40%	594
Swimming	6.90%	15.60%	21.20%	19.90%	36.40%	591
Kayaking/canoeing/paddle boarding	3.80%	10.60%	17.80%	17.10%	50.70%	591
Eco tourism (e.g., dolphin tours, sunset cruises, etc.)	1.60%	3.80%	11.50%	19.10%	64.00%	583
Other	1.50%	1.50%	1.60%	1.60%	93.80%	163
Commercial fishing (including shellfishing)	1.30%	2.40%	4.00%	9.00%	83.30%	580
Diving/snorkeling	1.10%	4.60%	11.50%	19.50%	63.30%	578
Hunting	0.80%	1.50%	3.10%	10.30%	84.30%	576
Waterskiing	0.30%	1.50%	4.00%	9.00%	85.20%	571

Top 5 Activities: Perdido Bay Watersheds

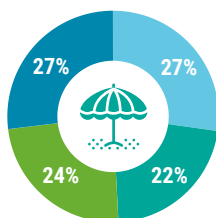
Waterfront Dining, Shopping,
or Entertainment



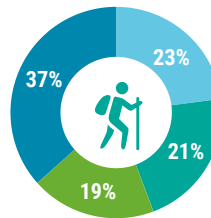
Wildlife Viewing



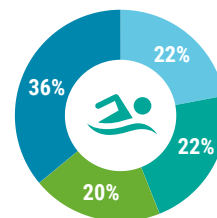
Beaching



Land-Based Recreation

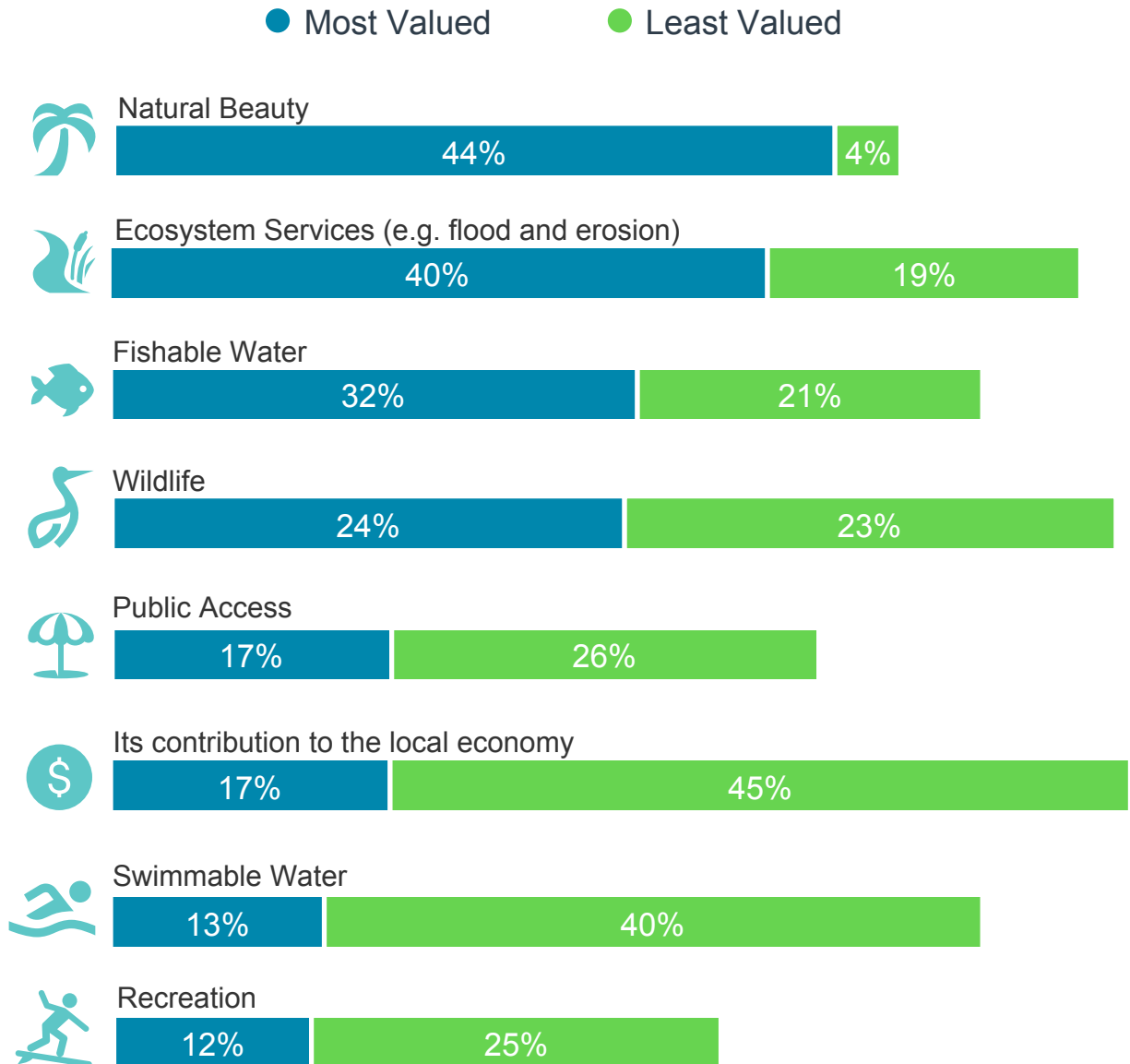


Swimming



● At Least Monthly
 ● Bi-Annually, Quarterly
 ● Annually
 ● Never

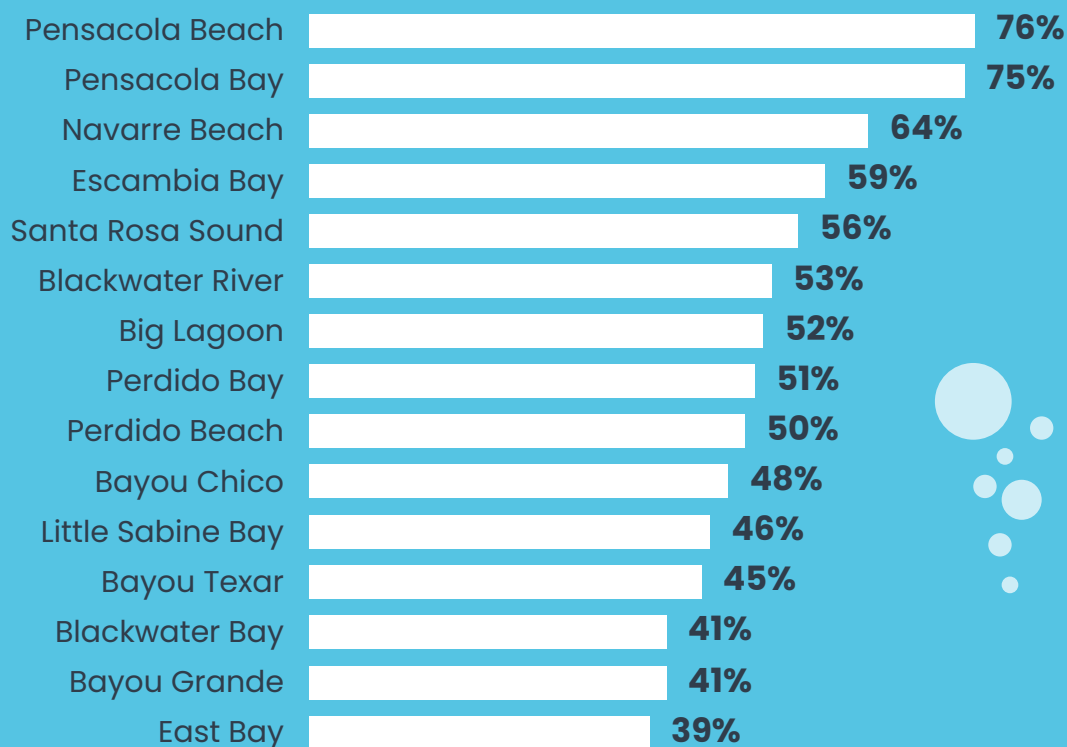
Perdido Bay Watershed - Most Valued and Least Valued Aspects



Current Use and Priorities: Pensacola Bay Watersheds

Participants reported frequent use of many water-bodies within the Pensacola Bay watershed. However, Pensacola Beach, Pensacola Bay, and Navarre Beach were the most popular. Participants appeared to value the natural beauty, ecosystem services, and recreational fishing of the Pensacola Bay watershed more than other aspects of the watershed. Again, participants reported more frequent use of water-bodies in their local area. However, Pensacola Bay, Pensacola Beach, and Navarre Beach were able to attract frequent visitors from outside their local communities. Compared to area residents, visitors were not significantly more likely to visit area water-bodies. However, they were more likely to report the specific activities of beaching; land-based recreation; wildlife viewing; kayaking/canoeing/paddle boarding; and waterfront dining, shopping, and entertainment.

Which of the following Florida water-bodies or beaches in our local watersheds have you visited?

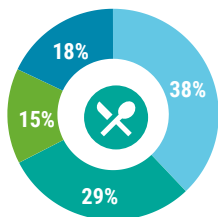


Please select how frequently you engage in each of the following activities in the Pensacola Bay watersheds:

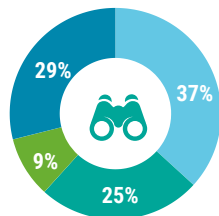
	A great deal (e.g., more than once per week)	A moderate amount (e.g., monthly)	Sometimes (e.g., bi-annually, quarterly)	Rarely (e.g, annually)	Never	Valid Frequency
Wildlife viewing	15.60%	20.80%	25.10%	9.40%	29.10%	651
Land-based recreation (e.g., hiking, walking, yoga)	11.40%	19.10%	27.90%	16.20%	25.40%	649
Waterfront dining, shopping, or entertainment	10.90%	26.90%	29.60%	14.60%	18.00%	658
Recreational fishing (including shellfishing)	10.20%	18.30%	21.90%	16.70%	32.90%	658
Beaching	9.80%	25.70%	25.90%	21.20%	17.40%	665
Power boating or sailing	9.70%	17.20%	19.00%	15.40%	38.70%	649
Swimming	7.60%	19.20%	25.70%	23.50%	24.00%	654
Kayaking/canoeing/paddle boarding	5.00%	13.90%	20.30%	27.10%	33.70%	646
Other	1.50%	1.20%	2.30%	0.90%	94.10%	152

Top 5 Activities: Pensacola Bay Watersheds

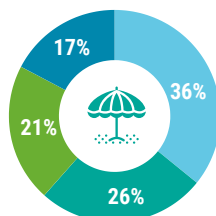
Waterfront Dining, Shopping, or Entertainment



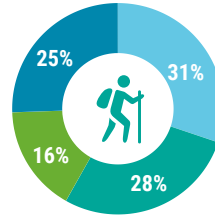
Wildlife Viewing



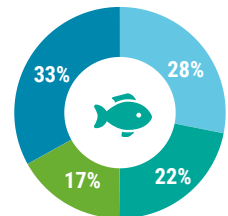
Beaching



Land-Based Recreation

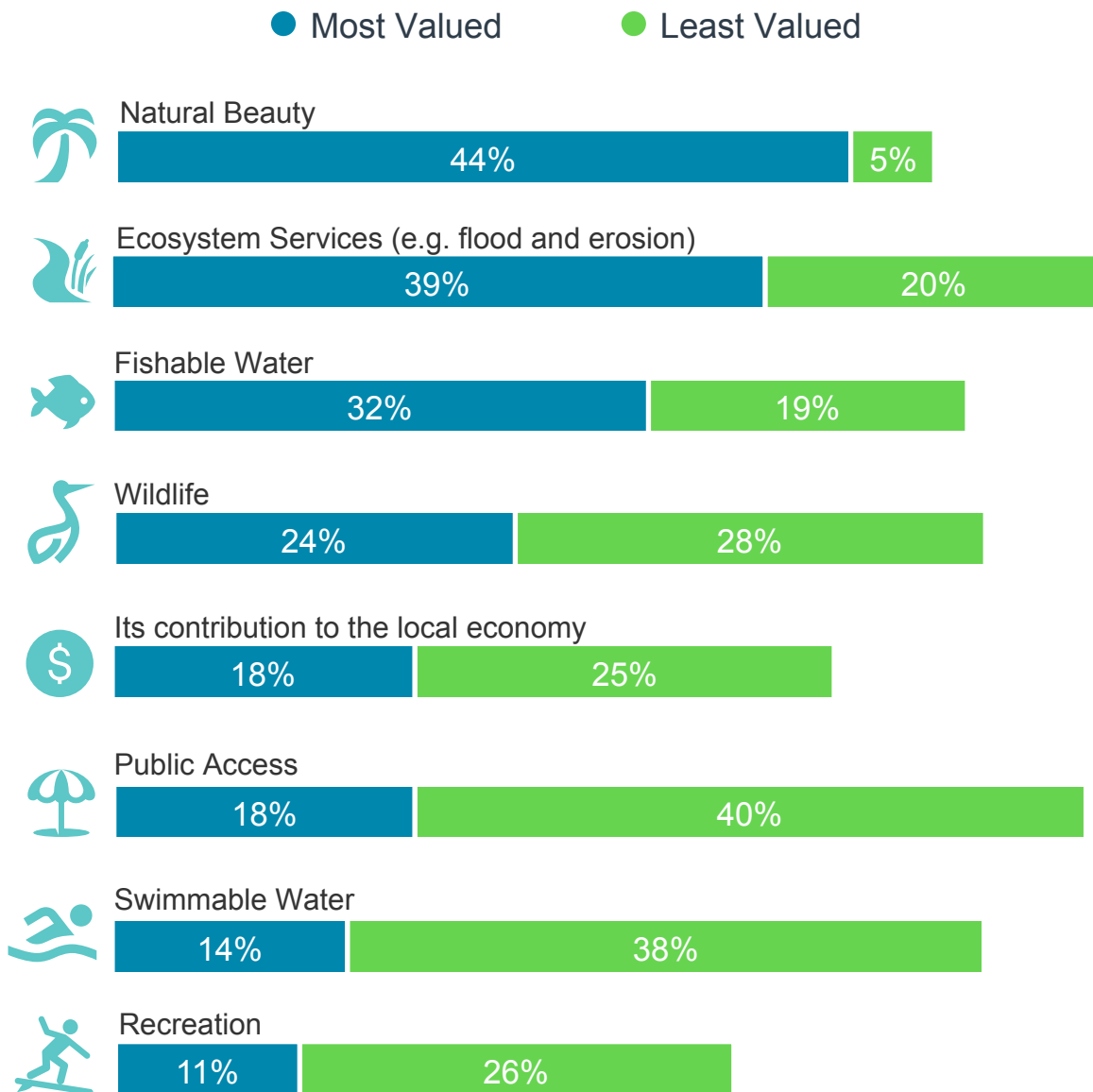


Recreational Fishing



● At Least Monthly
 ● Bi-Annually, Quarterly
 ● Annually
 ● Never

Pensacola Bay Watershed - Most Valued and Least Valued Aspects



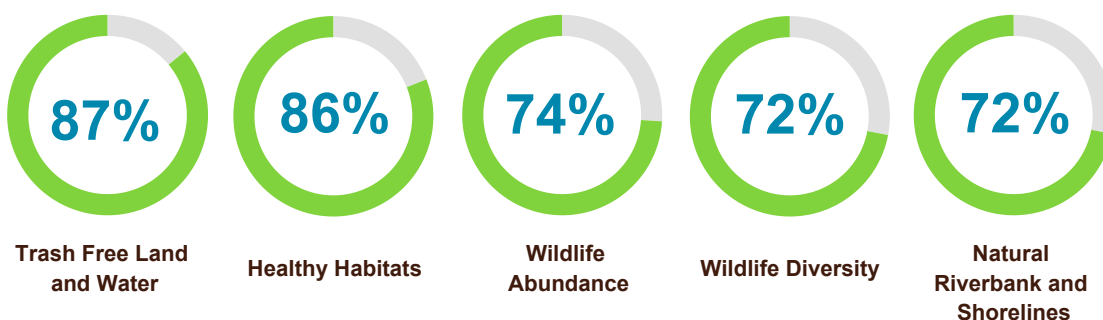
Items of Perceived Importance for Healthy Watersheds

Participants reported most aspects of a healthy watershed as important. However, trash free land and water and healthy habitats are slight standouts.

In your opinion, how important are each of the following for healthy watersheds?					
	Very important	Important	Neutral	Low importance	Not at all important
Trash free land and water	86.72%	11.89%	0.83%	0.28%	0.28%
Healthy habitats (e.g., wetlands, seagrass beds, oysters, and upland forests)	86.31%	12.03%	1.52%	0.14%	0.00%
Wildlife abundance	74.65%	22.44%	2.91%	0.00%	0.00%
Wildlife diversity	72.34%	21.16%	6.22%	0.28%	0.00%
Natural riverbanks and shorelines	71.87%	23.82%	3.62%	0.28%	0.42%
Recreationally fishable water (e.g., shellfish and other types of fish)	68.84%	22.44%	5.68%	2.49%	0.55%
Swimmable water	60.60%	27.90%	8.60%	2.20%	0.70%
Commercially fishable water (e.g., shellfish and other types of fish)	28.45%	26.36%	26.64%	11.30%	7.25%

In your opinion, how important are each of the following for healthy watersheds?

Top 5 Items Perceived as "Very Important"

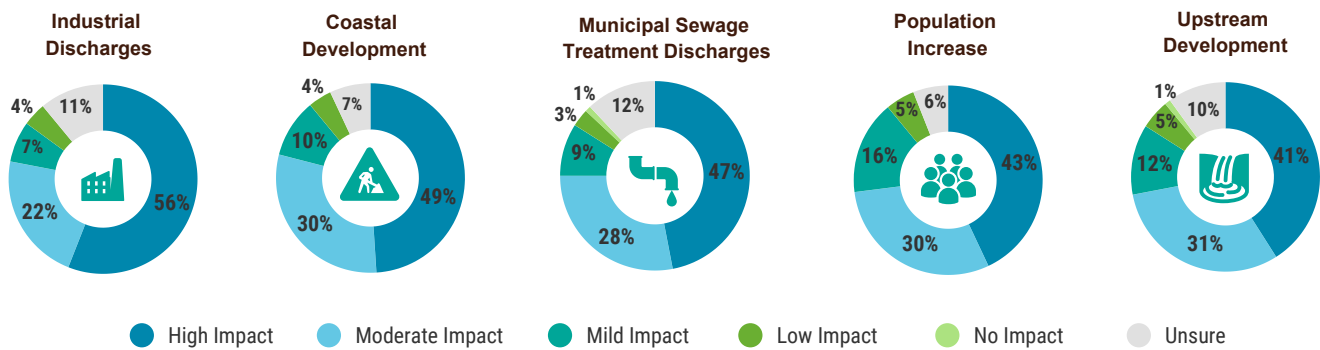


Perceived Environmental Challenges: Perdido Bay Watershed

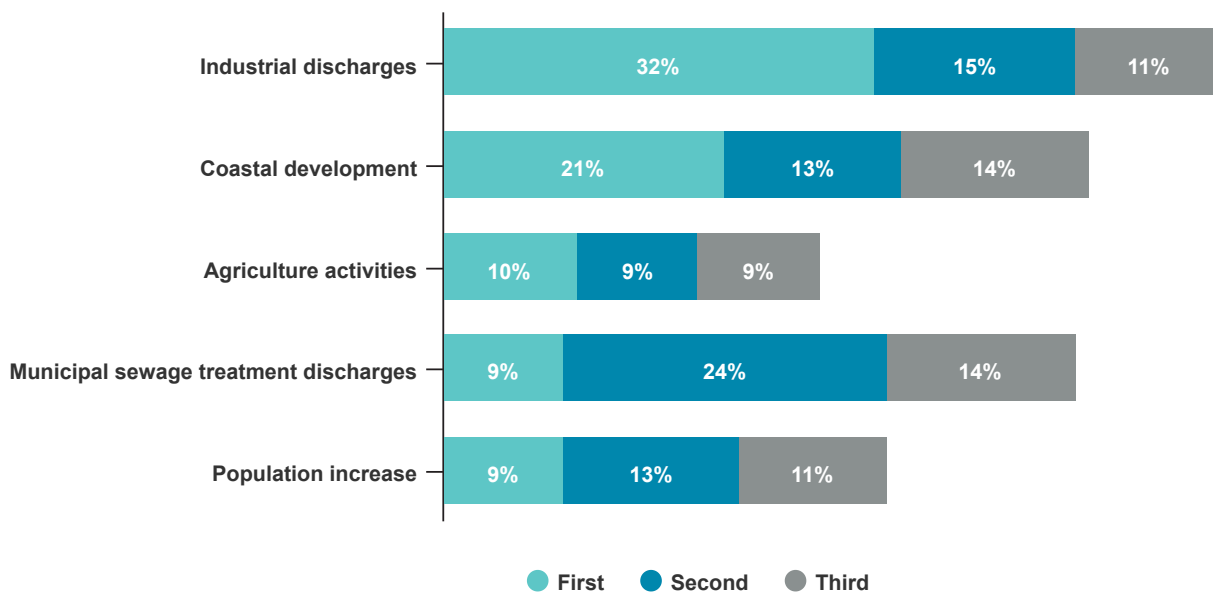
Participants reported many areas of concern regarding the environmental challenges they perceived for the Perdido Bay watershed. Industrial discharges and coastal development were the noted areas of most concern in terms of perceived impact. When asked to prioritize the list of environmental challenges via a ranked order question, industrial discharge and coastal development were much more likely to be cited as a first concern.

Please rate each environmental challenge on how strongly it impacts the Perdido Bay watershed.						
	High impact	Moderate Impact	Mild Impact	Low Impact	No Impact	Unsure
Industrial discharges	55.97%	21.88%	7.24%	3.69%	0.57%	10.65%
Coastal development	48.79%	30.53%	10.27%	3.42%	0.43%	6.56%
Municipal sewage treatment discharges	47.03%	28.47%	9.49%	2.55%	0.57%	11.90%
Population increase	43.22%	29.96%	15.69%	4.71%	0.14%	6.28%
Upstream development	40.69%	31.38%	11.89%	4.87%	1.15%	10.03%
Stormwater runoff	40.34%	31.53%	13.07%	4.83%	1.42%	8.81%
Agriculture activities within the watershed	31.88%	32.86%	15.66%	6.21%	1.69%	11.71%
Climate change	21.68%	19.97%	17.69%	17.55%	13.27%	9.84%
Sea-level rise	18.38%	21.51%	18.95%	15.38%	13.82%	11.97%
Other (please specify)	16.98%	3.77%	3.77%	1.89%	5.66%	67.92%
Air pollution	14.18%	27.66%	25.11%	17.30%	4.96%	10.78%
Commercial fishing activities within the watershed	14.04%	25.96%	26.24%	17.87%	3.97%	11.91%
Recreational activities (other than fishing) within the watershed	5.70%	19.23%	33.19%	25.78%	7.83%	8.26%
Recreational fishing activities within the watershed	4.11%	16.03%	30.50%	29.08%	12.20%	8.09%

Top 5 Perceived Environmental Impacts: Perdido Bay Watershed



Environmental Impacts Ranked by Impact: Perdido Bay

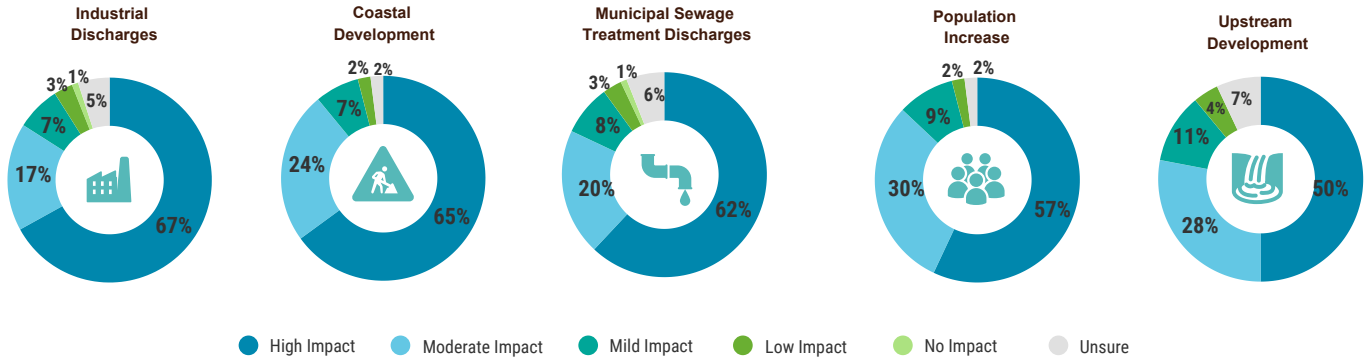


Perceived Environmental Challenges: Pensacola Bay Watershed

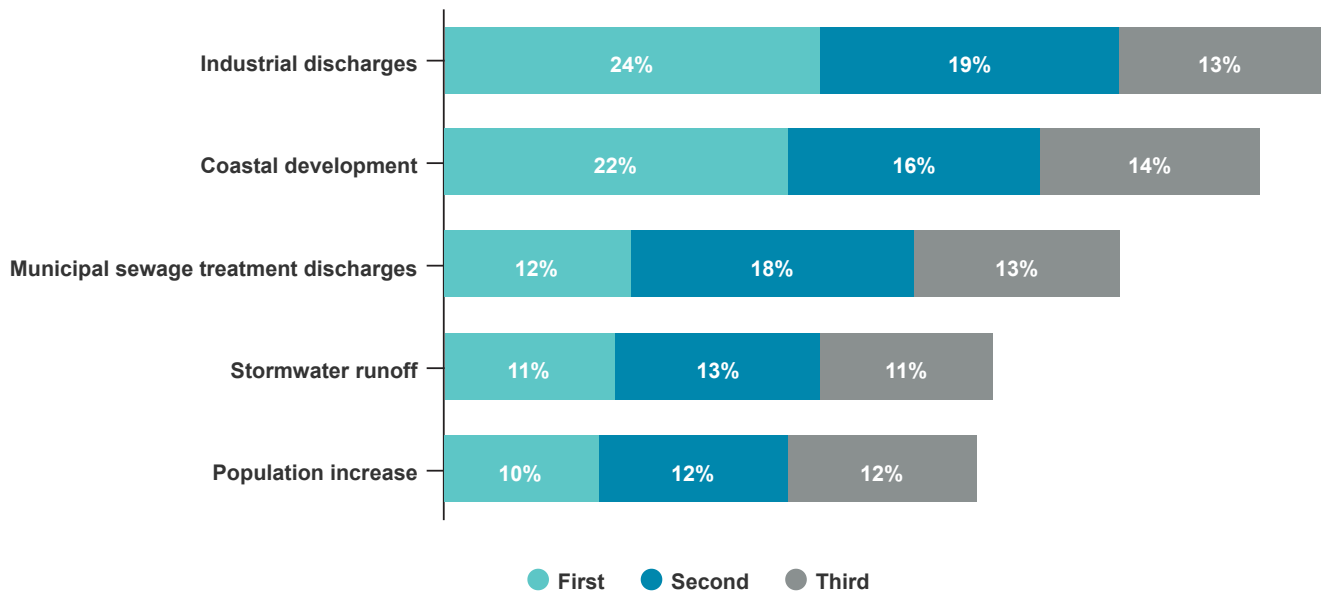
Participants reported many areas of concern regarding the environmental challenges they perceived for the Pensacola Bay watershed. Industrial discharges and coastal development were the most noted areas of concern in terms of perceived impact. Again, when asked to prioritize the list of environmental challenges via a ranked order question, industrial discharge and coastal development were much more likely to be cited as a first concern.

Please rate each environmental challenge on how strongly it impacts the Pensacola Bay watershed.						
	High impact	Moderate Impact	Mild Impact	Low Impact	No Impact	Unsure
Industrial discharges	66.67%	17.36%	6.61%	3.31%	0.83%	5.23%
Coastal development	64.88%	24.24%	6.75%	1.93%	0.55%	1.65%
Municipal sewage treatment discharges	61.54%	19.78%	8.52%	3.43%	0.69%	6.04%
Population increase	56.58%	30.27%	9.04%	1.92%	0.14%	2.05%
Upstream development	49.86%	28.16%	10.99%	3.71%	0.55%	6.73%
Stormwater runoff	49.04%	28.08%	12.74%	5.62%	0.96%	3.56%
Agriculture activities within the watershed	44.58%	27.98%	14.13%	5.08%	0.96%	7.27%
Climate change	26.65%	21.02%	18.41%	15.25%	13.74%	4.95%
Air pollution	24.52%	30.55%	24.25%	13.01%	2.88%	4.79%
Other (please specify)	24.37%	8.40%	3.36%	0.00%	5.04%	58.82%
Commercial fishing activities within the watershed	20.96%	31.51%	25.89%	12.19%	2.60%	6.85%
Sea-level rise	20.71%	24.42%	20.16%	12.07%	13.72%	8.92%
Recreational activities (other than fishing) within the watershed	8.00%	26.07%	35.86%	20.83%	6.48%	2.76%
Recreational fishing activities within the watershed	4.66%	21.81%	32.78%	27.71%	9.74%	3.29%

Top 5 Perceived Environmental Impacts: Pensacola Bay Watershed



Environmental Impacts Ranked by Impact: Pensacola Bay

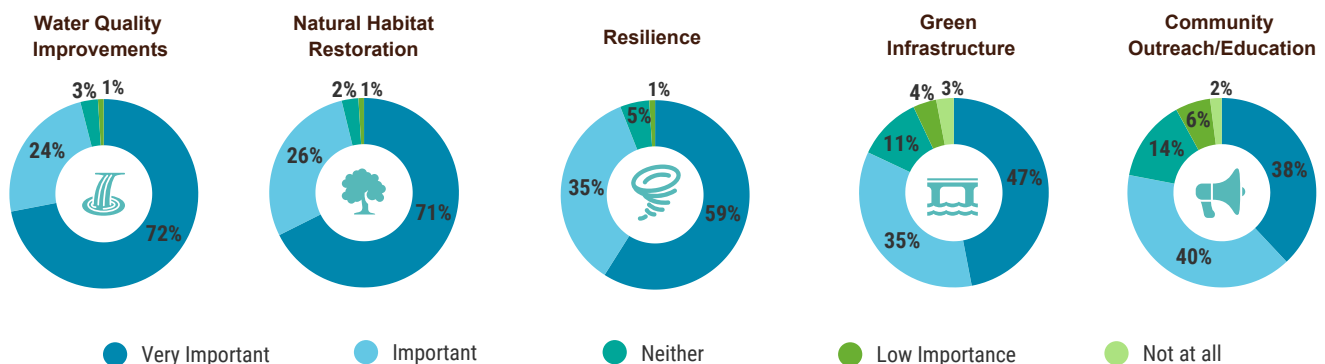


Perceptions Regarding Financial Investments in Healthy Watersheds

Participants indicated that water quality improvements and natural habitat restoration were important areas of focus regarding financial investments. Resilience also received notable support. In terms of the source of financial investments, most participants strongly agreed that state government, tourist development tax, and local government were appropriate sources of funding.

When thinking about the health of our local economy, how important is it to you that financial investments are made in each of the following?					
	Very important	Important	Neither important nor unimportant	Low importance	Not at all important
Water quality improvements	71.70%	24.40%	2.80%	0.70%	0.40%
Natural habitat restoration (e.g., seagrass, oysters)	70.70%	25.90%	2.50%	0.70%	0.10%
Resilience (e.g., ability to recover after disturbances such as a hurricane, habitat destruction, oil spills, etc.)	59.10%	34.80%	5.30%	0.80%	0.00%
Green infrastructure (e.g., low impact development, living shorelines)	47.10%	35.50%	10.60%	4.00%	2.80%
Community outreach/education	37.60%	40.50%	14.30%	5.80%	1.70%
Public access to natural resources	34.80%	44.90%	13.30%	5.80%	1.10%
Renewable energy	31.70%	26.50%	21.50%	12.70%	7.50%

Top 5 Investment Priorities

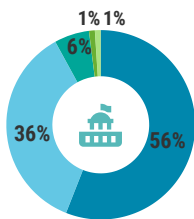


Of the following potential funding sources, how strongly would you agree or disagree with each providing financial investments toward a healthy watershed?

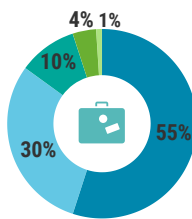
	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
State government	55.88%	35.68%	6.36%	1.38%	0.69%
Tourist development tax	55.40%	29.78%	9.70%	3.88%	1.25%
Local government	50.90%	37.69%	8.34%	2.36%	0.70%
Federal government	48.26%	32.13%	12.10%	5.15%	2.36%
Public private investments	39.39%	40.08%	18.30%	1.54%	0.70%
Private investments	38.85%	38.57%	18.79%	2.95%	0.84%
Organizations (not government)	37.60%	43.04%	18.11%	1.25%	0.00%
Academic institutions	32.77%	38.10%	25.07%	3.50%	0.56%
Other (please specify)	24.69%	7.41%	53.09%	1.23%	13.58%

Top 5 Funding Sources

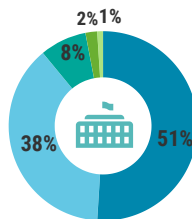
State Government



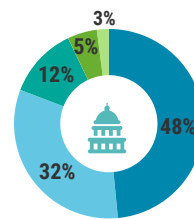
Tourist Development Tax



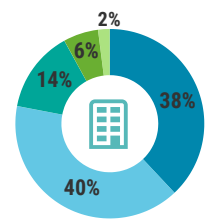
Local Government



Federal Government



Public Private Institutions



Strongly Agree

Agree

Neutral

Disagree

Strongly Disagree

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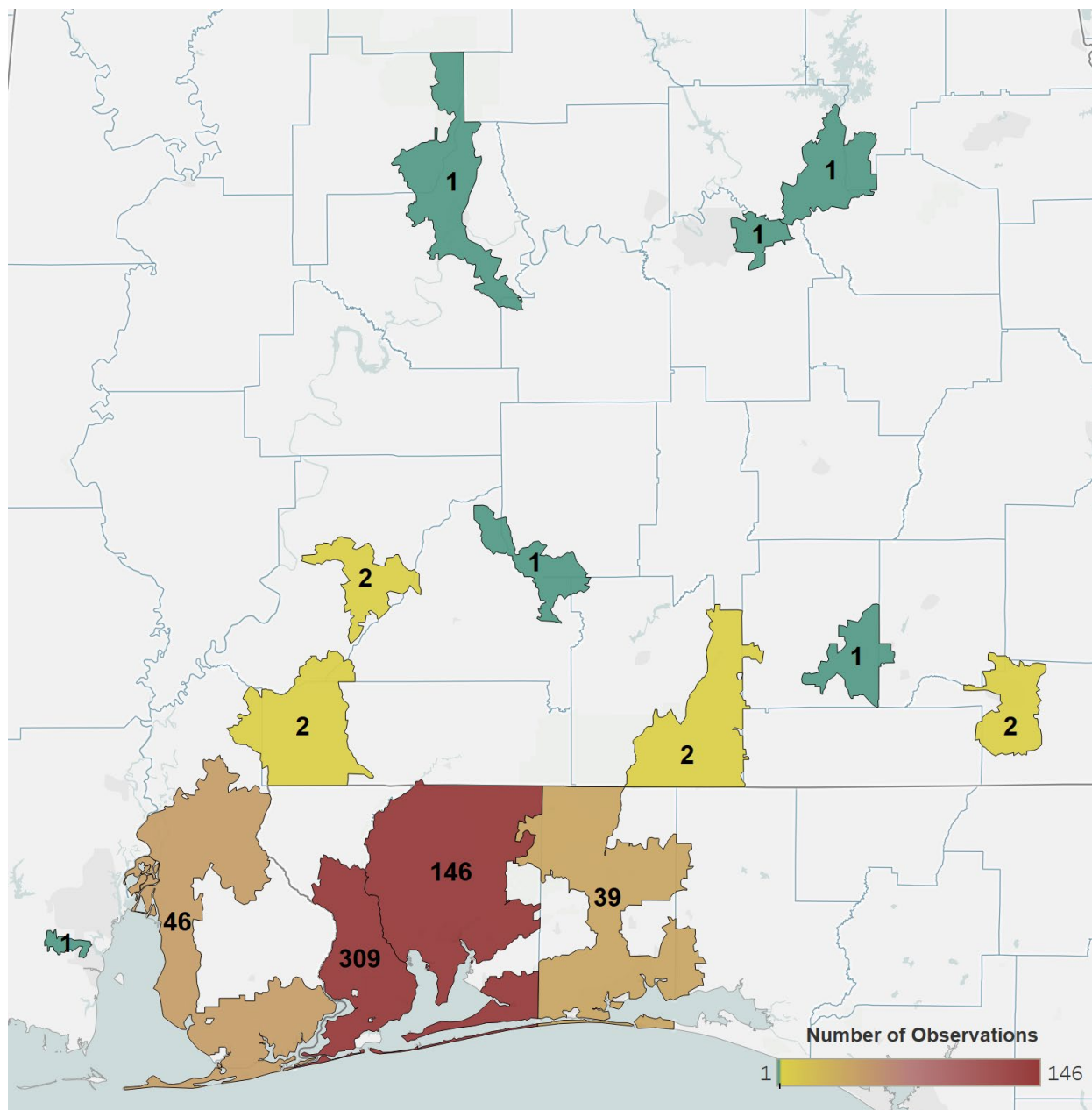
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About Us

Haas Center's Mission: we support communities with market research, workforce development, and industrial innovation. We are known for the breadth and depth of our data resources and have been for 25 years. We provide textured, meaningful analysis to an array of customers from the public and non-profit sectors to private industry, including manufacturing. Immersive public manufacturing laboratories, like Sea3D in Pensacola's Historic District, showcase what is possible when creative minds intersect with manufacturing and workforce partners. Our market research covers a variety of topics, including economic impact studies, consumer, and visitor profiles, as well as research on talent gaps. The Haas Center combined with Sea3D and data visualization techniques allow accurate mapping of the region's industrial resources.

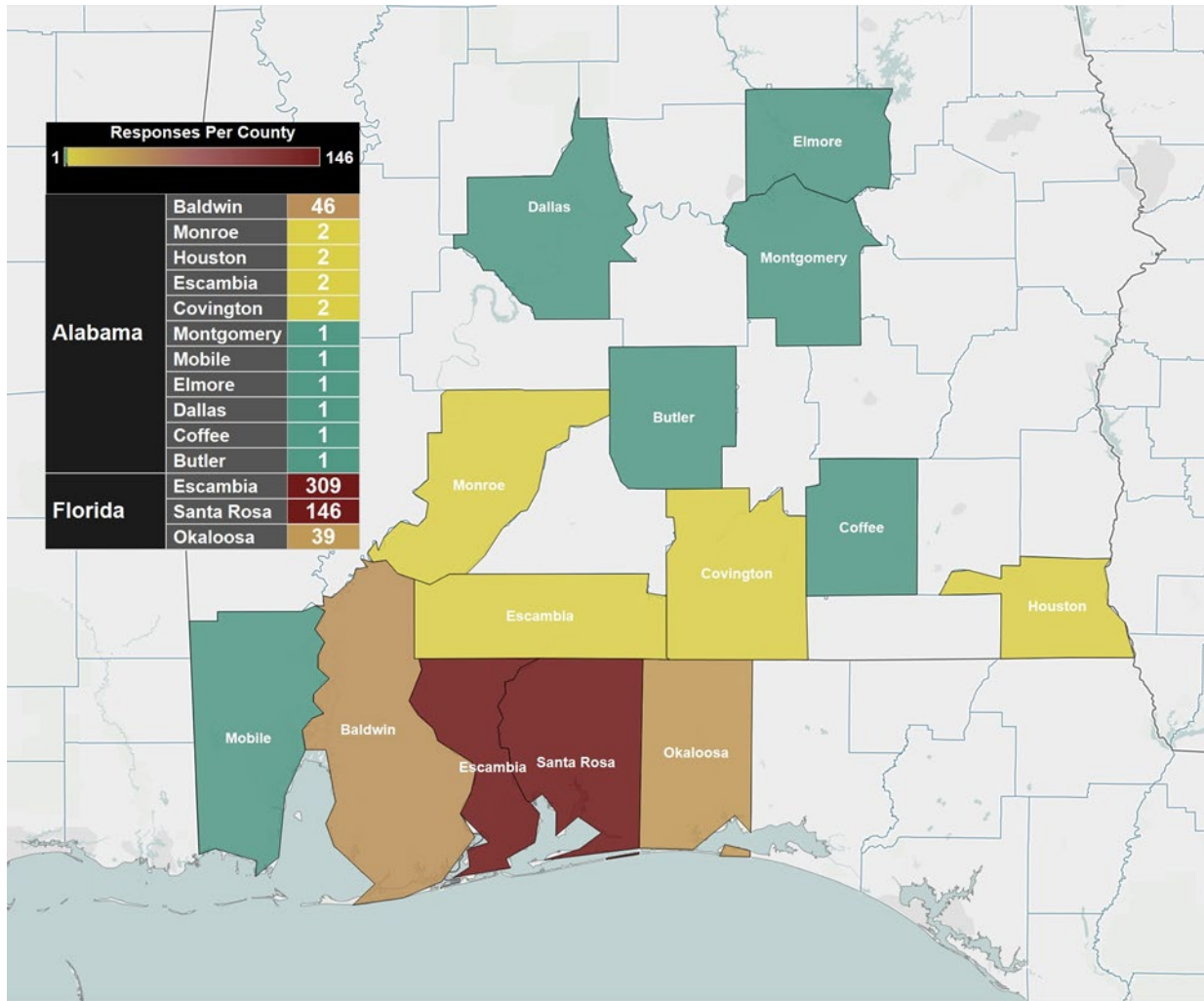
Appendix A

Survey Participation by Geographic Area - Overview



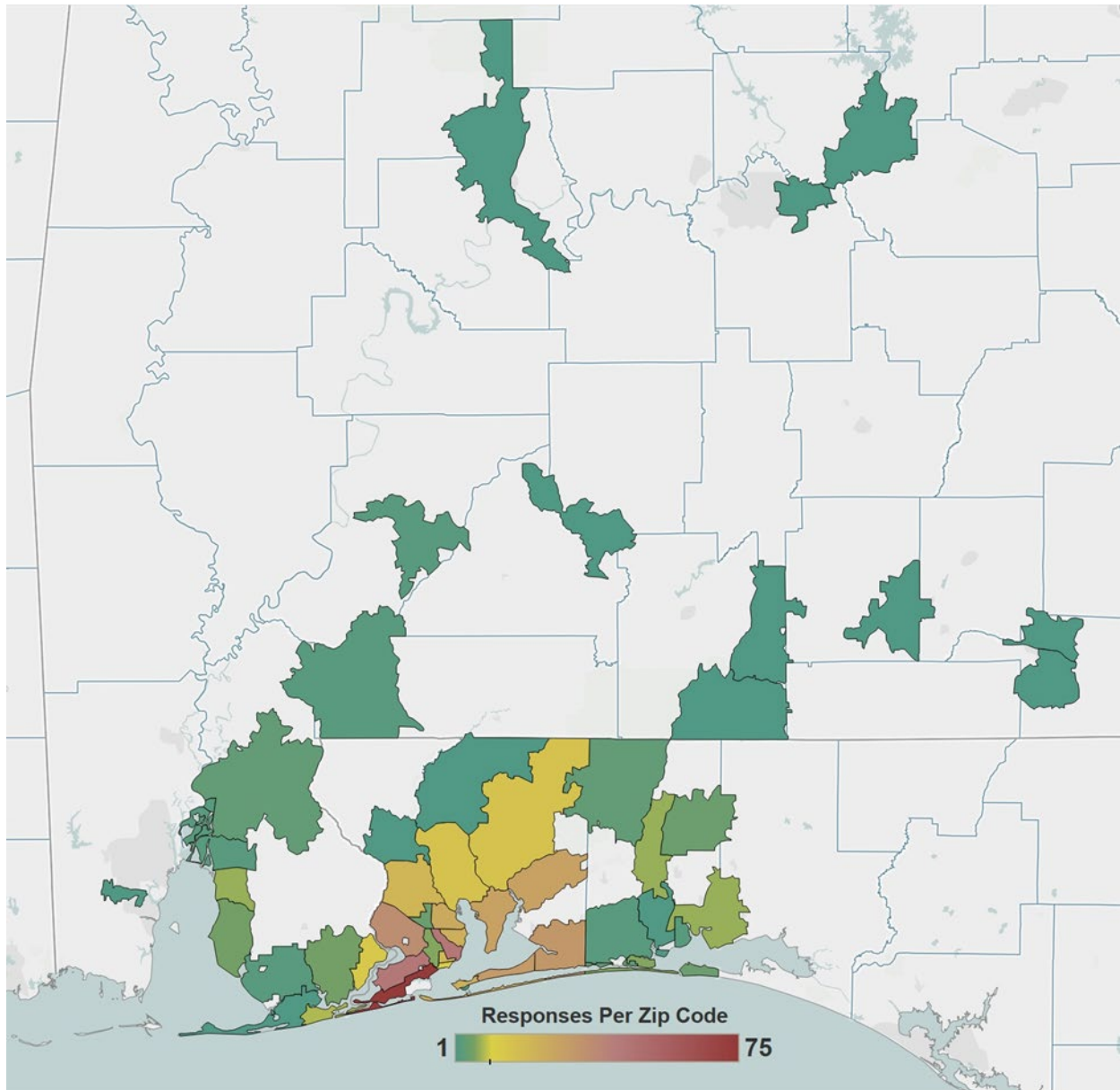
The graph above depicts the ZIP code locations of the survey respondents, grouped at the county level. For example, there was one observation in Mobile, Alabama in ZIP Code 36619.

Survey Participation by Geographic Area – Counties



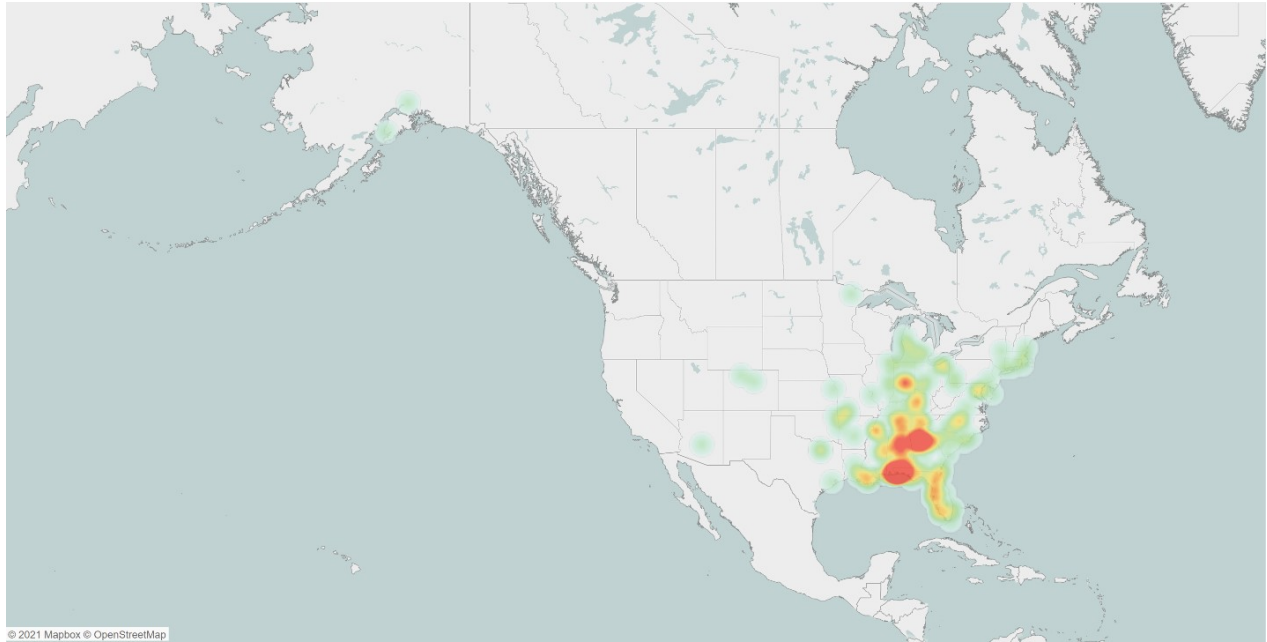
The map above shows the counties that responded to the survey and the total number of responses within that county.

Survey Participation by Geographic Area – ZIP Codes



This map aggregates response rate concentration within ZIP Codes.

Survey Participation by Geographic Area – National View



This map illustrates the density of responses to the survey at the national level.

Appendix A2

Sample Demographics by Source

Which age group do you belong to?			
	Sample Source		
	Total	Email List	Online Advertising
18–24	2.30%	1.20%	4.40%
25–34	5.30%	1.90%	12.00%
35–44	8.90%	7.90%	10.80%
45–54	17.80%	18.90%	15.70%
55–64	34.30%	37.10%	28.90%
65–74	23.80%	25.30%	20.90%
75–84	5.70%	6.40%	4.40%
85+	0.10%	0.20%	0.00%
Prefer not to respond	1.60%	1.00%	2.80%

What is your race or ethnicity?			
	Sample Source		
	Total	Email List	Online Advertising
Asian	0.60%	0.00%	1.60%
Black or African American	0.80%	0.80%	0.80%
American Indian or Alaskan Native	1.00%	0.80%	1.20%
Native Hawaiian or Pacific Islander	0.30%	0.00%	0.80%
White or Caucasian	84.90%	84.30%	81.30%
More than one race	2.10%	1.80%	2.40%
Other race	1.10%	1.40%	0.40%
Prefer not to respond	9.30%	8.00%	11.40%

Are you Spanish, Hispanic, Latino, or none of these			
	Sample Source		
	Total	Email List	Online Advertising
Yes	1.80%	1.70%	2.00%
None of these	88.90%	90.40%	86.00%
Prefer not to respond	9.40%	8.00%	12.00%

Perdido Bay Watershed



Pensacola Bay Watershed



Appendix A4

Verbatim Open-ended Feedback

Please select how frequently you engage in each of the following activities in the Perdido Bay watershed Other (please specify)-TEXT				
		Frequency	Valid Percent	Cumulative Percent
Valid		712	94.4	94.4
	2 x	1	0.1	94.6
	5	1	0.1	94.7
	Bicycling	2	0.3	95
	Bird Watching	1	0.1	95.1
	Birds	2	0.3	95.4
	Boat riding	1	0.1	95.5
	Camping	4	0.5	96
	Crabbing	1	0.1	96.2
	dog recreation	1	0.1	96.3
	Enjoy Natural Resources in general	1	0.1	96.4
	Enjoying our pristine riparian environment	1	0.1	96.6
	Enjoying sunsets on the water	1	0.1	96.7
	Fish & birds	1	0.1	96.8
	Fishing	1	0.1	96.9
	Fly Fishing	1	0.1	97.1
	golf	1	0.1	97.2
	I live on Perdido Bay at the North end and have been here for 71 years.	1	0.1	97.3
	Live on ICW	1	0.1	97.5
	Looking at water quality	1	0.1	97.6
	N/a	1	0.1	97.7
	none	1	0.1	97.9
	Offroad driving	1	0.1	98
	Paddle boarding	1	0.1	98.1
	Photography	1	0.1	98.3

Please select how frequently you engage in each of the following activities in the Perdido Bay watershed. Other (please specify)-TEXT

		Frequency	Valid Percent	Cumulative Percent
Valid		712	94.4	94.4
	Sailing	1	0.1	98.5
	Seashell searching	1	0.1	98.7
	Shell collecting	1	0.1	98.8
	Snorkeling and spear fishing	1	0.1	98.9
	State parks recreation	1	0.1	99.1
	Sunset viewing	1	0.1	99.2
	Surfing	3	0.4	99.6
	travel through by waterway	1	0.1	99.7
	Volunteering	1	0.1	99.9
	Water Quality Sampling	1	0.1	100
	Total	754	100	

What do you value most about the Perdido Bay watershed? Please rank each of the following from 1 (most valued) to 9 (least valued) by dragging and dropping each.

Other (please specify)-TEXT

		Frequency	Valid Percent	Cumulative Percent
Valid		717	95.1	95.1
	A valuable source of relaxation and mental health for the community.	1	0.1	95.4
	Absence of humans in sensitive areas	1	0.1	95.5
	Access to the Gulf	1	0.1	95.6
	All of the above	1	0.1	95.8
	All of the above	1	0.1	95.9
	Boat riding in the bays	1	0.1	96
	camping	1	0.1	96.2
	Camping	1	0.1	96.3
	Clean	1	0.1	96.4
	Clean non sewer water	1	0.1	96.6
	Clean water	1	0.1	96.7

What do you value most about the Perdido Bay watershed? Please rank each of the following from 1 (most valued) to 9 (least valued) by dragging and dropping each.

Other (please specify)-TEXT

		Frequency	Valid Percent	Cumulative Percent
Valid		717	95.1	95.1
	Contributio to economy	1	0.1	96.8
	Dining	1	0.1	96.9
	dog friendly	1	0.1	97.1
	Environmental indicator	1	0.1	97.2
	Family outings	1	0.1	97.3
	I	1	0.1	97.5
	Isn't ALL of this the Gulf of Mexico watershed?	1	0.1	97.6
	It's contribution to the future of the earth!	1	0.1	97.7
	It's people	1	0.1	97.9
	local quality of life benefits of a good environment	1	0.1	98
	N/A	1	0.1	98.1
	Na	1	0.1	98.3
	native vegetation	1	0.1	98.4
	No cost fishing	1	0.1	98.5
	none	1	0.1	98.7
	Not been there	1	0.1	98.8
	Patroled Waterways	1	0.1	98.9
	perdido bay is polluted don't get in the water.	1	0.1	99.1
	Perdido River	1	0.1	99.2
	Photography	1	0.1	99.3
	Preservation	1	0.1	99.5
	Socializing	1	0.1	99.6
	too many people going to FL	1	0.1	99.7
	variety of things to do	1	0.1	99.9
	Waterfront Living	1	0.1	100
	Total	754	100	

What do you value most about the Pensacola Bay watershed? Please rank each of the following from 1 (most valued) to 9 (least valued) by dragging and dropping each.

Other (please specify)-TEXT

		Frequency	Valid Percent	Cumulative Percent
Valid		735	97.5	97.5
	Bicycling	1	0.1	97.6
	Boat riding	1	0.1	97.7
	Clean	1	0.1	97.9
	dog friendly	1	0.1	98
	I	2	0.3	98.3
	I live on the south shore of Pensacola Bay	1	0.1	98.4
	I own waterfront	1	0.1	98.5
	It's people	1	0.1	98.7
	Na	1	0.1	98.8
	native vegetation	1	0.1	98.9
	none	1	0.1	99.1
	Photography	1	0.1	99.2
	Preservation	1	0.1	99.3
	Quality of life benefits of a good environment	1	0.1	99.5
	Sailing	1	0.1	99.6
	same as above	1	0.1	99.7
	The undeveloped areas	1	0.1	99.9
	Total	754	100	

Please select how frequently you engage in each of the following activities in the PensacolaBay watersheds. Other (please specify)-TEXT

		Frequency	Valid Percent	Cumulative Percent
Valid		723	95.9	95.9
	Birds	1	0.1	96
	Boat riding	1	0.1	96.2
	camping	1	0.1	96.3
	Camping	3	0.4	96.7
	dog friendly	1	0.1	96.8
	Fishing	1	0.1	96.9

Please select how frequently you engage in each of the following activities in the Pensacola Bay watersheds. Other (please specify)-TEXT

		Frequency	Valid Percent	Cumulative Percent
Valid		723	95.9	95.9
	Fly Fishing	1	0.1	97.1
	golf	1	0.1	97.2
	I live on Pensacola Bay	1	0.1	97.3
	Inspecting water quality.	1	0.1	97.5
	Jet Skiing	1	0.1	97.6
	Metal detection	1	0.1	97.7
	N/A	1	0.1	97.9
	na	1	0.1	98
	Na	1	0.1	98.1
	Near or on the water	1	0.1	98.3
	none	1	0.1	98.4
	Oystering	1	0.1	98.5
	Photography	1	0.1	98.7
	photography, history education	1	0.1	98.8
	Seashell searching	1	0.1	98.9
	Shell Collecting	1	0.1	99.1
	Socializing	1	0.1	99.2
	surfing	1	0.1	99.3
	Surfing	2	0.3	99.6
	The beauty of our waterways must be preserved	1	0.1	99.7
	Water Quality Monitoring	1	0.1	99.9
	We live on Blackwater Bay	1	0.1	100
	Total	754	100	

Please describe any additional characteristics of healthy water bodies.				
		Frequency	Valid Percent	Cumulative Percent
Valid		658	87.3	87.3
	Able to eat caught fish.	1	0.1	87.4
	Absence of contaminants, invasive species	1	0.1	87.5
	Absence of harmful bacteria	1	0.1	87.7
	accessability	1	0.1	87.8
	Better storm water runoff management - less pollutants and sediment in eater bodies after rain events	1	0.1	87.9
	Bird watching	1	0.1	88.1
	chemical and toxin free from all industry	1	0.1	88.2
	Chemical Free Water	1	0.1	88.3
	Chemically-free	1	0.1	88.5
	clean	1	0.1	88.6
	Clean water	2	0.3	88.9
	clear	1	0.1	89
	Clear	2	0.3	89.3
	Clear bottom	1	0.1	89.4
	Clear see through water	1	0.1	89.5
	Clear water	1	0.1	89.7
	Control of non-native species or invasive species.	1	0.1	89.8
	Control pollution/contaminated runoff	1	0.1	89.9
	Drinkable potable water	1	0.1	90.1
	easy to drive/walk around to appreciate the site.	1	0.1	90.2
	filter/limit nutrient runoff	1	0.1	90.3
	Free from septic run off	1	0.1	90.5
	Free of chemical run-off & leaching. CLARITY . Free of Erosion, less sediments	1	0.1	90.6
	FREE OF INDUSTRIAL POLLUTION	1	0.1	90.7
	Free of man causing red tide and pesticide runoffs	1	0.1	90.8
	Free of pollutants	1	0.1	91
	free of toxic area emissions and effluent	1	0.1	91.1
	Free of trash	1	0.1	91.2

Please describe any additional characteristics of healthy water bodies.				
		Frequency	Valid Percent	Cumulative Percent
Valid		658	87.3	87.3
	Healthy beds of aquatic vegetation	1	0.1	91.4
	Healthy sea grass	1	0.1	91.5
	Heathy sea grass. Clean water.	1	0.1	91.6
	I	2	0.3	91.9
	If we didn't have any commercial fishing that would be preffered. However, since we do could we rank it high and regulate, monitor, educate on it? You are wonderful!	1	0.1	92
	Imperiled species usage, like state listed shorebirds and terrapin	1	0.1	92.2
	Lack of environmental runoff	1	0.1	92.3
	Lack of fish kills	1	0.1	92.4
	Law enforcement	1	0.1	92.6
	limited storm water run off	1	0.1	92.7
	Limiting industrial pollution	1	0.1	92.8
	Low levels of toxins	1	0.1	93
	Low pollution from drainage and trash ends up in water	1	0.1	93.1
	low turbidity	1	0.1	93.2
	Natural beaty	1	0.1	93.4
	Natural vegetation	1	0.1	93.5
	No commercial fishing!	1	0.1	93.6
	No commercial nets	1	0.1	93.8
	no development	1	0.1	93.9
	no fertilizer run off	1	0.1	94
	no humans	1	0.1	94.2
	No oil or algae	1	0.1	94.3
	no paper co & corrupt FL politicians	1	0.1	94.4
	No pollution	1	0.1	94.6
	No Pollution	1	0.1	94.7
	No runoff from treated lawns, gold courses, etc	1	0.1	94.8
	none	1	0.1	95

Please describe any additional characteristics of healthy water bodies.				
		Frequency	Valid Percent	Cumulative Percent
Valid		658	87.3	87.3
	Not draining over flow untreated sewer in Perdido Bay	1	0.1	95.1
	Not having people - homeless live there and leave trash- we need another solution fir them	1	0.1	95.2
	Not overused	1	0.1	95.4
	Not overwhelmed by industrial runoff.	1	0.1	95.5
	Not permitted to be polluted by industry	1	0.1	95.6
	Not polluted by commercial and residential waste and runoff	1	0.1	95.8
	oyster reefs	1	0.1	95.9
	pesticide and fertilizer free	1	0.1	96
	Pollution control	1	0.1	96.2
	pollution free	1	0.1	96.3
	Pollution free	1	0.1	96.4
	pristine	1	0.1	96.6
	Proper drainage an filtration of trash and waste	1	0.1	96.7
	proper level of nutients and minimal pollution. Healthy esturaries that support diverse ecosystems.	1	0.1	96.8
	public access	1	0.1	96.9
	Public access to enjoy it	1	0.1	97.1
	Public conservation	1	0.1	97.2
	red tide free	1	0.1	97.3
	reduction of runoff	1	0.1	97.5
	Resilience in the face of impacts such as nutrients, drought, flood	1	0.1	97.6
	resilient	1	0.1	97.7
	Resilient to natural and man-made disruptions	1	0.1	97.9
	Runoff from fertilizers and pesticides must be minimized as well as pollution from industry.	1	0.1	98
	Safe to swim	1	0.1	98.1
	Salinity	1	0.1	98.3
	Sanitation	1	0.1	98.4

Please describe any additional characteristics of healthy water bodies.				
		Frequency	Valid Percent	Cumulative Percent
Valid		658	87.3	87.3
	Survey relates clean water to human activities. i.e. swimming and recreational or commercial fishing. Clean water should stand on its own. Bayous should have proper salinity from fresh water discharge from rivers and streams.	1	0.1	98.5
	The loss and restoration of our native submerged aquatic vegetation (SAV) is very important to me.	1	0.1	98.7
	Unimpeded geomorphological processes	1	0.1	98.8
	unpolluted	1	0.1	98.9
	Valued and protected by user communities	1	0.1	99.1
	variety of species	1	0.1	99.2
	void of commercial dumping	1	0.1	99.3
	water clarity	1	0.1	99.5
	Water clarity and natural shorelines, not hardened	1	0.1	99.6
	water quality	1	0.1	99.7
	water quality and clarity	1	0.1	99.9
	Wetlands, aquatic life, run off diversion,	1	0.1	100
	Total	754	100	

Please rate each environmental challenge on how strongly it impacts the Pensacola Bay watershed: -Other (please specify)-TEXT				
		Frequency	Valid Percent	Cumulative Percent
Valid		714	94.7	94.7
	Aviation and Military-related runoff (for example: contaminated runoff from bomb testing in Eglin AFB)	1	0.1	94.8
	Barges: High Impact	1	0.1	95
	Coal Power plant mercury in water	1	0.1	95.1
	Coastal erosion	1	0.1	95.2

Please rate each environmental challenge on how strongly it impacts the Pensacola Bay watershed: -Other (please specify)-TEXT

		Frequency	Valid Percent	Cumulative Percent
Valid		714	94.7	94.7
	Department of Agriculture leases out areas on the bay for commercail oysters. when we have storms the oyster traps often end up on the shore and they don't hold the persons/company responsible for picking up the trash. If they say say they do have it in the lease agreement that the party is responsible for upkeep, then it's not being enforced.	1	0.1	95.4
	Eglin burning the swamps causing large amounts of runoff to pollute creeks upstream	1	0.1	95.5
	Fishing	1	0.1	95.6
	Free moored vessels	1	0.1	95.8
	habitat loss	1	0.1	95.9
	historical impacts of toxic chemical sediments from Chemstrand et. al	1	0.1	96
	Human Invasion	1	0.1	96.2
	Hurricanes	1	0.1	96.3
	improper trash disposal from tourism	1	0.1	96.4
	Lack of ability to maintain shore up private property shorelines. To restrictive	1	0.1	96.6
	Lack of public truth in media	1	0.1	96.7
	Lack of recycling PLASTIC POLLUTION	1	0.1	96.8
	Lack of respect of locals and tourist	1	0.1	96.9
	Landfill run-off	1	0.1	97.1
	Mass clearing of land. (Ripping out all the trees is terrible)	1	0.1	97.2
	na	1	0.1	97.3
	Na	1	0.1	97.5
	Native foliage removal. Imported palms are boring and do not support native wildlife. This is not Miami or Cuba.	1	0.1	97.6
	No sewer in our area near NAS Pensacola Front Gate	1	0.1	97.7
	non native plant species	1	0.1	97.9
	Non source point pollution.	1	0.1	98
	Non-paved roads	1	0.1	98.1

Please rate each environmental challenge on how strongly it impacts the Pensacola Bay watershed: -Other (please specify)-TEXT

		Frequency	Valid Percent	Cumulative Percent
Valid		714	94.7	94.7
	non-point source runoff (septic, road/paved runoff)	1	0.1	98.3
	none	1	0.1	98.4
	Paper Co & corrupt FL politicians	1	0.1	98.5
	Plastic	1	0.1	98.7
	Poor decisions as to where sewer exeat takes place	1	0.1	98.8
	Red snapper	1	0.1	98.9
	Sea grass loss	1	0.1	99.1
	Septic tanks	1	0.1	99.2
	Sewage spills by ECUA	1	0.1	99.3
	stormwater, development impact is high and notable on Soundside Drive.	1	0.1	99.5
	Trash	2	0.3	99.7
	Trash like plastic that enters storm drainage	1	0.1	99.9
	Yes and thank you.	1	0.1	100
	Total	754	100	

In your opinion, which of the following has the greatest environmental impact on the Pensacola Bay Watershed - TEXT

		Frequency	Valid Percent	Cumulative Percent
Valid		744	98.7	98.7
	Agriculture activities upstream in the northern watersheds.	1	0.1	98.8
	development-related non-point discharge from septic systems, lawn fertilizer and pesticides, and roadway/paved runoff.	1	0.1	98.9
	Eglin is burning the natural filters that hold storm water. The swamps burning add tons of carbon/nitrogen to the creeks and is killing the oysters that filter the bays	1	0.1	99.1
	Inability to maintain put proper sea wall protection for private property	1	0.1	99.2
	Misleading media information	1	0.1	99.3
	No matter what happens, there is an economic impact.	1	0.1	99.5

In your opinion, which of the following has the greatest environmental impact on the Pensacola Bay Watershed - TEXT

		Frequency	Valid Percent	Cumulative Percent
Valid		744	98.7	98.7
	On site sewage, and poor funding and planning by ECUA as to priority of sewer expansion	1	0.1	99.6
	Paper Co & corrupt FL politicians	1	0.1	99.7
	Plastic	1	0.1	99.9
	Republicanism ignoring all the above	1	0.1	100
	Total	754	100	

In your opinion, which of the following has the third greatest environmental impact on the Pensacola Bay Watershed - TEXT

		Frequency	Valid Percent	Cumulative Percent
Valid		753	99.9	99.9
	Bridge builders, just look at the Garcon point bridge, they tore up wetlands when they built.....	1	0.1	100
	Total	754	100	

Please rate each environmental challenge on how strongly it impacts the Perdido Bay watershed: -Other (please specify)-TEXT

		Frequency	Valid Percent	Cumulative Percent
Valid		731	96.9	96.9
	Baldwin County Sewer System	1	0.1	97.1
	Can't believe there is not data on this. Sounding like a PR study.	1	0.1	97.2
	International Paper	1	0.1	97.3
	Landfill run-off	1	0.1	97.5
	Loss of sea grass	1	0.1	97.6
	Misleading media information	1	0.1	97.7
	Na	1	0.1	97.9
	New house construction without city sewage provided. On the new construction along Perdido Bay Shores without city sewage connection has greatly impacted the bay by using septic tank	1	0.1	98

Please rate each environmental challenge on how strongly it impacts the Perdido Bay watershed: -Other (please specify)-TEXT

		Frequency	Valid Percent	Cumulative Percent
Valid		731	96.9	96.9
	none	1	0.1	98.1
	Nutrient discharge from upstream agriculture	1	0.1	98.3
	On site septic systems	1	0.1	98.4
	Paper Co	1	0.1	98.5
	Paper Mill discharge	1	0.1	98.7
	Plastic	1	0.1	98.8
	Powerboat oils and refuse dumping near shoreline.	1	0.1	98.9
	septic tank contamination	1	0.1	99.1
	Septic tanks	1	0.1	99.2
	Septic Tanks	1	0.1	99.3
	Sewage	1	0.1	99.5
	sewage treatment discharge is the biggest problem right now, nasty water, worse than I have seen it in my lifetime.	1	0.1	99.6
	Shoreline development, bulk heads and unnatural material put at waters edge filled in behind and sodded then fertilized heavily	1	0.1	99.7
	Trash	2	0.3	100
	Total	754	100	

In your opinion, which of the following has the greatest environmental impact on the Perdido Bay Watershed - TEXT

		Frequency	Valid Percent	Cumulative Percent
Valid		752	99.7	99.7
	Media disinformation	1	0.1	99.9
	Plastic	1	0.1	100
	Total	754	100	

In your opinion, which of the following has the second greatest environmental impact on the Perdido Bay Watershed - TEXT

		Frequency	Valid Percent	Cumulative Percent
Valid		752	99.7	99.7
	International Paper	1	0.1	99.9
	Septic tank along the shores	1	0.1	100
	Total	754	100	

In your opinion, which of the following has the third greatest environmental impact on the Perdido Bay Watershed - TEXT

		Frequency	Valid Percent	Cumulative Percent
Valid		753	99.9	99.9
	corrupt FL politicians	1	0.1	100
	Total	754	100	

Of the following potential funding sources, how strongly would you agree or disagree with each providing financial investments toward a healthy watershed? Other (please specify)-TEXT

		Frequency	Valid Percent	Cumulative Percent
Valid		735	97.5	97.5
	Industry that does deep well injections	1	0.1	97.6
	Citizen/non-profit initiatives	1	0.1	97.7
	Citizens	1	0.1	97.9
	Commercial Fishing TAX	1	0.1	98
	Commercial users of the watershed for profit	1	0.1	98.1
	community + educational volunteers for improving area	1	0.1	98.3
	Community should be vetted and vested in this process	1	0.1	98.4
	Developers should pay a watershed impact fee	1	0.1	98.5
	Individual commitment ie solar etc	1	0.1	98.7
	Individuals	1	0.1	98.8
	Industrial wastewater dischargers	1	0.1	98.9
	Industries in the area.	1	0.1	99.1
	Na	1	0.1	99.2
	none	1	0.1	99.3
	Personal contributions volunteering	1	0.1	99.5

Of the following potential funding sources, how strongly would you agree or disagree with each providing financial investments toward a healthy watershed? Other (please specify)-TEXT

		Frequency	Valid Percent	Cumulative Percent
Valid		735	97.5	97.5
	relevant regulation essential	1	0.1	99.6
	RESTORE Act Funding used for projects that improve water quality	1	0.1	99.7
	The "local polluters"	1	0.1	99.9
	Toll booth into the watershed	1	0.1	100
	Total	754	100	