

THE CITY OF ROCKPORT

COMMUNITY SURVEY SYNTHESIS

Conducted in conjunction with the Aransas County
Floodplain Management Planning Process

AUGUST 2016



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Special thanks to:



and the citizens of Rockport for their support on this project.

INTRODUCTION

Texas Sea Grant collaborated with the City of Rockport to conduct a community survey to gather information about the experiences and perceptions of individuals who live, work, and own businesses in Rockport. Specifically, the survey was designed to find out about the experiences and perceptions of these individuals regarding flooding hazards in the city. This data will be used to assist in the development of floodplain management strategies for the city, and in the development of a Floodplain Management Plan for Aransas County. This final report and supplemental data will be made available to the public through the City of Rockport and Texas Sea Grant.

The survey questions were developed by a team which included representatives from Texas Sea Grant, the City of Rockport, and Mission-Aransas National Estuarine Reserve. A focus group was convened to test the survey and provide local expertise and feedback. Karen Bareford, as the lead researcher for Texas Sea Grant on this project, also received Institutional Review Board/Human Subjects approval from Texas A&M University for the survey. As a part of this review, it was decided that no personal identifying information would be collected from the survey participants. As such, all responses are anonymous.

The survey, conducted on-line via the Survey Monkey site, was officially announced via email distribution on Tuesday, July 5, 2016. The email went to key partners including City of Rockport personnel, the Rockport-Fulton Chamber of Commerce and several other local associates of Texas Sea Grant and the Mission-Aransas National Estuarine Research Reserve. Some of these recipients further disseminated the email to other known Rockport groups and residences. Flyers announcing the survey, its purpose, and how to access the survey were distributed throughout the city. The flyer distribution sites included public institutions, businesses, non-profit organizations, Home Owner Associations and apartment complexes, RV parks, and a local golf course. (A complete listing of flyer distribution sites, a copy of the flyer, and a list of the questions in the survey are included in Appendix 1.) Finally, the survey was posted to the front page of the City of Rockport's website.

The survey was open from July 1-31, 2016. A total of 77 respondents accessed the survey. Respondents were able to leave the survey at any time, and skip any questions they did not wish to answer. Of the 77 respondents, one individual only answered one question (Question 4), and this response was recorded as "not applicable." As such, that survey was removed from the analysis, and the total pool of respondents was reduced to 76. Three additional respondents did not provide answers to any question after question 7. While these surveys are considered "incomplete," they were included in the analysis. The discussion and summary tables for each question identifies the total respondents for that question, and the summary analysis for each question is based on the number of responses to that specific question. It should be noted that the small number of respondents (sample size) for this survey does not allow us to confidently generalize the results to the population of the City of Rockport. However, the results do provide a glimpse into the experiences and perceptions of flooding impacts to the individuals who live, work, and own businesses in the area.

Rockport has a diverse population in terms of residency and employment. This is a coastal community, and many homes are secondary residences that are used on the weekends, and for vacations. RV parks are common throughout the region, and "Winter Texans" are drawn to this area due to the mild temperatures experienced during the winter months. Many of the retirees who have chosen to move to the city are no longer a part of the labor force. In addition, some of the existing

labor force is seasonal, as their work is dependent on the vacationers (tourism) and the seasonal migratory patterns of the birds, fish, and seafood in the area (ecotourism, fishing guides, etc.). Aransas County, where Rockport is located, contains several small towns, and a large amount of unincorporated areas. As such, many people commute between towns and across municipal boundaries for work. One of the goals of this survey was to better understand these different segments of the population.

This document is designed to provide an explanation of the survey results. Key observations are underlined throughout the document. These observations, and any associated recommendations, are then summarized in the final section of this report.

QUESTION 1

1) I _____ in the city of Rockport. (Check all that apply)

- Live full-time
- Live part-time
- Work full-time
- Work part-time
- Own a business
- Other (Please specify below)

This question was intended to capture information about the interests of respondents; do they live, own a business, or work in the City of Rockport. The answers provided to this question will also be used to provide additional insight to responses later in the survey.

All 76 respondents answered this question. The data indicates that 82.9% of the respondents live in the city full-time. Another 7.9% of the residents live in the city part-time.

Table 1: Summary of Responses for Question 1.

Possible Answers	Number of Responses	Percentage of Total Responses
Live full-time	63	82.9%
Live part-time	6	7.9%
Work full-time	12	15.8%
Work part-time	7	9.2%
Own a business	9	11.8%
Other (Please specify)	11	14.5%
Total Responses:	76	--
Respondents who Skipped Question:	0	--

All 12 of the respondents who answered that they work full-time in the city, also live full-time in the city. Similarly, all 7 of the respondents who said the work part-time in the city, also live full-time in Rockport. As such, 100 percent of the respondents who said they work in the city, also live full-time in Rockport. The total percentage of respondents who work in the city is quite low, 25%; however, we know that 50.5 % of the population of Rockport is not included in the labor force ⁽¹⁾. The City of Rockport has a high number of retirees which, along with seasonal employee's most likely account for the low percentage of survey respondents who work in the city. Further, the low survey response rate was only 1%, which does not allow for these results to be generalized to the city.

Table 2: Survey Responses as a Percentage of Rockport's Population.

2010 Rockport Population:	8,766
Survey Responses:	76
% of population who completed this survey:	1.0%

One additional point of clarification is that none of the residents who live in the city part-time, work in the city (full-time or part-time). This is not surprising, as these people are only here for portions of the year; as such, they may be retired, or have jobs in other areas of the state, or country, and come to Rockport for vacation and holidays.

Seven of the nine respondents who said they own a business in Rockport also live full-time in the city. Of the other two respondents who indicated that they own a business in Rockport, one states in Question 2 that they live in Rockport 12 months a year. Therefore, one of these answers (Question 1 or 2) for this respondent must be an error. The other respondent answered the question with “0 months;” therefore, this individual must live outside the city limits.

The survey was open to anyone, over the age of 18, who wished to participate. Therefore, this question also tried to quantify people who do not technically live or work in Rockport, but are interested in floodplain management issues in the city. This was accomplished through the inclusion of an “other” option, which asks respondents to specify their interest. There were 11 respondents (14.5%) who claimed “other.” The short answers following this option included four responses indicating that the people lived or owned second homes outside the city limits; three responses specifying that the individuals own a second home in, or near Rockport; and three responses that were either a mistake, or discussed work activities. (See Appendix 2 for a list of the complete answers provided.)

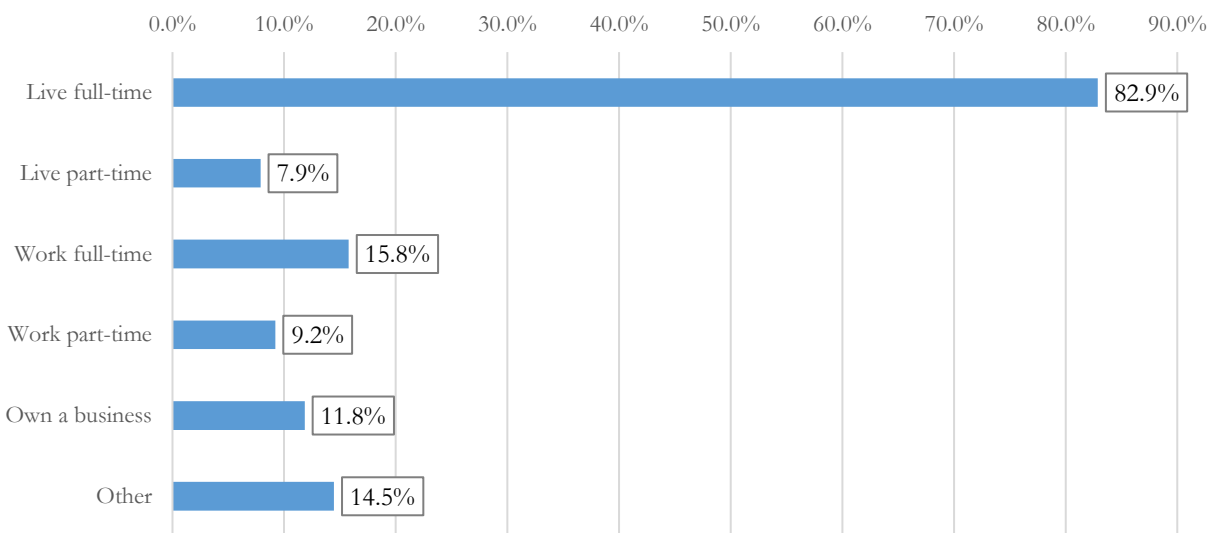


Figure 1: Question 1 Responses.

¹ U.S. Census Data. (2014). Retrieved from http://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml

QUESTION 2

2) How many months of the year do you live in Rockport?

Question 2 asks individuals to specify the number of months, per year, they reside in Rockport. The respondents could choose one answer from a dropdown list with responses ranging from 0 months to 12 months. Seven people chose to skip this question. The majority (84.1%) indicated they live in Rockport 12 months out of the year. The other possible answers received two or fewer responses. Of the 69 responses to this question, 58 live in Rockport 12 months a year, while only 11 (14.5%) live in the city 11 months or less each year. Further, only 6 (8.7%) of the respondents live in Rockport for less than 6 months each year.

Table 3: Summary of Responses for Question 2.

Possible Answers	Number of Responses	Percentage of Total Responses
0 months	1	1.45%
1 months	0	0%
2 months	0	0%
3 months	2	2.9%
4 months	2	2.9%
5 months	0	0%
6 months	2	2.9%
7 months	0	0%
8 months	1	1.45%
9 months	2	2.9%
10 months	0	0%
11 months	1	1.45%
12 months	58	84.06%
Total Responses:	69	--
Respondents who Skipped Question:	7	--

While seven respondents skipped this question, 4 of the individuals who skipped it indicated in question 1 that they live in the city full-time. If one includes those numbers, that would mean that 62 people, out of 73 (84.9%), live in Rockport 12 months a year.

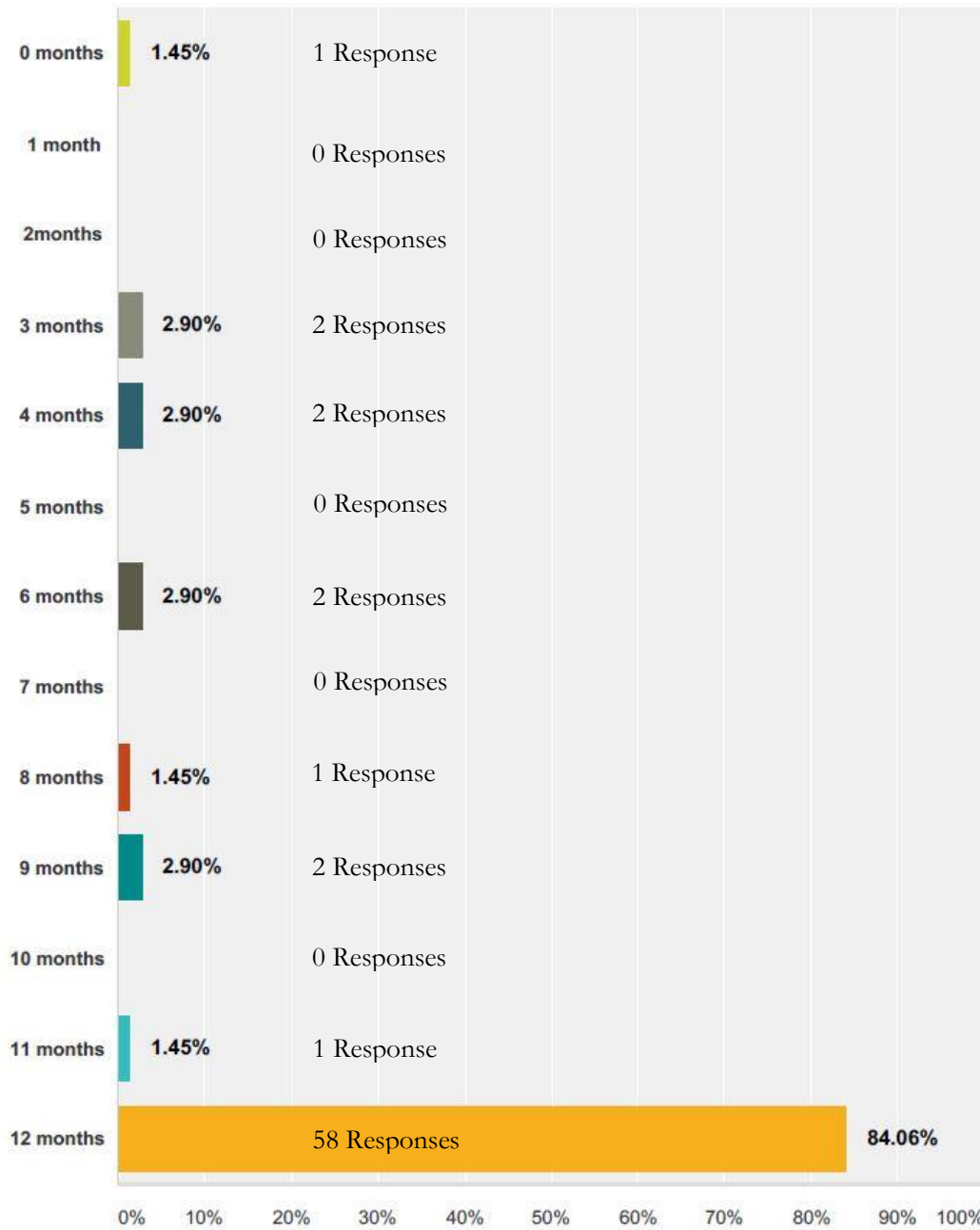


Figure 2: Question 2 Responses. (Graph created using Survey Monkey results.)

QUESTION 3

3) I _____ my home, business, or property in the city of Rockport.

- Own
- Rent
- Not applicable

Question 3 asks respondents to specify whether they own or rent their home, business, or property in Rockport. All 76 respondents answered this question. The majority of individuals (86.8%) indicated that they own their home business or property in Rockport. Of the people who own, 55 live full-time in the city; 5 of those people also own a business in Rockport. An additional 8 respondents who own their homes only live in the city part-time. Three of the individuals that indicated they own live outside the city boundaries; but own a business. For this survey we are assuming that they own the property on which the businesses reside.

Table 4: Summary of Responses for Question 3.

Possible Answers	Number of Responses	Percentage of Total Responses
Own	66	86.8%
Rent	8	10.5%
Not applicable	2	2.6%
Total Reponses:	76	--
Respondents who Skipped Question:	0	--

Eight respondents (10.5%) indicated that they rent. Six of those people live full-time in the city. The remaining two individuals live outside Rockport; but own a business within the city. As such, this should indicate that these two people rent the land on which the businesses reside. Only 2 people (2.6%) claimed that this question was “not applicable.” One of these respondents identified that they live in Aransas County, and do not work or own a business in Rockport, in Question 1. The other person identified in Question 1 that they live, and work, full-time in Rockport; as such it is unclear why this question isn’t applicable. The person could live in an RV, live rent free with family, or may have even clicked the wrong button by accident.

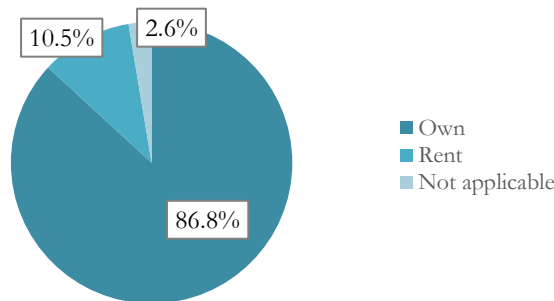


Figure 3: Question 3 Responses.

QUESTION 4

4) Is your home, business, or property in the floodplain?

- Yes
- No
- Not sure
- Not applicable

Question 4 asks if the respondent’s home, business, or property is located in the floodplain. All of the respondents answered this question (76). The majority of the individuals (39.5%) were not sure if their home, business, or property was in the floodplain. The fact that so many individuals were unsure if their property is in the floodplain provides an opportunity for education and outreach, as this is critical information when trying to prepare homes for weather events.

Table 5: Summary of Responses for Question 4.

Possible Answers	Number of Responses	Percentage of Total Responses
Yes	26	33.2%
No	19	25.0%
Not sure	30	39.5%
Not applicable	1	1.3%
Total Responses:	76	--
Respondents who Skipped Question:	0	--

Of the respondents who know if their property is in the floodplain (58.5%), 33.2% are within the floodplain while 25.0% are not. One additional responded (1.3%) answered that this question was “not applicable,” this is the same individual who answered this way in Question 3, while indicating that they live and work full-time in the city.

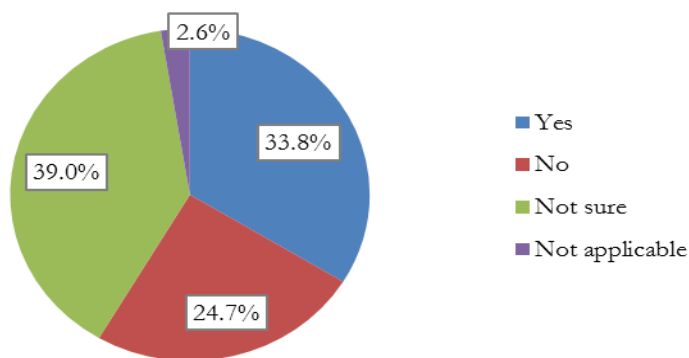


Figure 4: Question 4 Responses.

QUESTION 5

5) Are you aware of any current flood control or management projects in the City of Rockport?

- Yes
 No
 Not sure

(If yes, please specify what projects you are aware of below)

This question attempts to gather information about whether respondents are knowledgeable about ongoing flood control projects in the City of Rockport. The city completed a Master Drainage Plan in 2002, which was updated in early 2016. That plan includes more than \$11 million in capital improvement projects designed to enhance drainage and reduce flooding in the area. Table X provides a list of the major drainage projects completed in the last 15 years⁽²⁾.

Table 6: Major Drainage Projects Completed in Rockport in the last 15 years.

Year	Project
2001-2002	South Rockport east of Highway 35 close to Water Street: Pump stations and infrastructure were installed to improve outfall drainage. (This is the outfall area for multiple drainage basins.)
2004	Cherry Street, from Omohundro to SH 35: A box culvert was installed to improve drainage. (Cherry Street is the outfall for multiple drainage basins.)
2005	Tule Ditch improvements: A master planned drainage ditch was constructed to connect the Pearl Street drainage system to Tule Ditch. The project also included erosion control improvements downstream.
2010	Rockport Country Club: Storm sewer infrastructure was installed to increase the drainage outfall capacity throughout the golf course, and installed weirs to regulate the water levels.
2011	Lady Claire Street: Storm sewer infrastructure was installed on Lady Claire, along with an additional box culvert down Cherry Street to upgrade the outfall for multiple drainage basins.
2012	Live Oak Learning Center: The Aransas County Independent School District constructed a drainage ditch through the school property to provide drainage from Griffith Street to the downstream system. (This was a City-planned ditch necessitated by the new school construction.)
2013	Disaster Recovery Supplemental Grant (DRS) Project 2.1: A box culvert was installed down First Street) to upgrade the drainage outfall for a large area of South Rockport. This included a major crossing at SH 35; as well as crossings at SH 35 and Second Street, and two crossings of Loop 70 (Church Street).
2016	Spanish Woods Area Drainage Improvements: Three master planned drainage crossings were installed to upgrade the infrastructure downstream of multiple drainage basins including Spanish Woods, Chaparral Street, and Mesquite Street. The crossings were on Spanish Woods Drive, Sanctuary Drive, and FM 1781.
2016	DRS Project 2.2: Drainage infrastructure was upgraded along 30 blocks in South Rockport from Kossuth Street to SH 35 and from King to Third.
Ongoing	Ditch clearing is done throughout the city, as needed, to ensure that water flows efficiently within the drainage ditches.
Ongoing	Rockport Country Club: Removal of pond sediment to increase detention capacity and assist in flood control for the country club and the downstream drainage systems. (Done about every 2 years, last completed in 2014-2015.)

72% of respondents to this question (54 people) were not aware of any flood control or management projects within the city. Another 13.3% of respondents (10 people) were unsure if they

² Personal communication, Brandi Karl, Urban Engineering; & Art Smith, City of Rockport

knew of any flood control projects. Finally, 14.7% of respondents (11 people) indicated that they were aware of current flood control projects in Rockport. One individual skipped this question.

Table 7: Summary of Responses for Question 5.

Possible Answers	Number of Responses	Percentage of Total Responses
Yes	11	14.7%
No	54	72.0%
Not Sure	10	13.3%
Total Responses:	75	--
Respondents who Skipped Question:	1	--

If respondents indicated that they were aware of current flood control projects, they were asked to identify those projects in a short answer box. Only 7 respondents actually specified projects. Two individuals mentioned drainage improvements in South Rockport, while another individual referenced the Water Street work. Both of these projects were completed in 2001-2002. Another person commented on the Bayshore efforts on Key Allegro which is a current effort to address beach erosion. This project has no impact on flooding or drainage issues. Three respondents identified larger, ongoing projects, one of which focuses on Aransas County efforts. The first individual referenced seeing ditches “being cleared for better water flow.” Another respondent referenced the city’s Master Drainage Plan. Finally, one person wrote about the Aransas County Stormwater Management Program, created in 2008, and the recently updated stormwater management plan. While each of the projects mentioned have, or are occurring in Rockport and Aransas County, the answers show that there is a lack of knowledge about the efforts to improve drainage and reduce flooding in the city. This is an area where the City of Rockport might consider additional outreach efforts in the future. (See Appendix 2 for a list of the complete answers provided.)

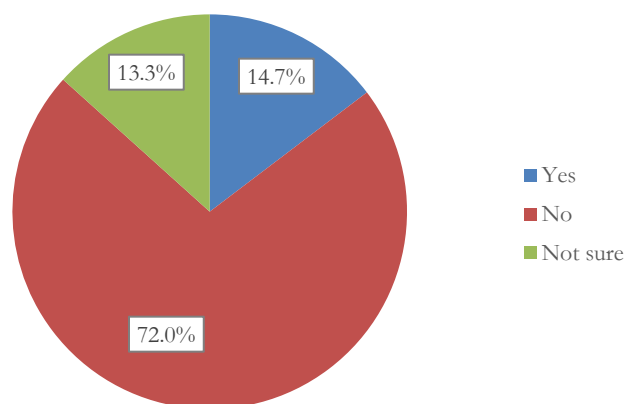


Figure 5: Summary of Responses for Question 5.

QUESTION 6

6) Do you have flood insurance for your home, business, or property? (Check all that apply)

- Home
- Business
- Property
- None of the above
- Not sure
- Not applicable

Questions 6 through 8 relate to flood insurance. If someone owns a home in the floodplain and does not have a mortgage, there is no requirement to have flood insurance. However, federally-backed mortgages, on buildings that are constructed in the high-risk flood area (also known as Special Flood Hazard Areas, these areas are denoted on FEMA Flood Maps using codes which begin with an “A” or “V”), do require flood insurance. In addition many non-federal mortgages and financial assistance programs require flood insurance; some even require insurance on buildings located in moderate to low-risk areas (denoted on FEMA Flood Maps using codes which begin with the letters “X,” “B,” or “C”)⁽³⁾.

“Over a 30-year period, a property sitting in a high-risk flood area has a 26 percent chance of flooding”⁽⁴⁾.

Question 6 asks if respondents have flood insurance on their home, business, or property. Flood insurance for the home was selected by the majority of respondents (65.8%), followed by those who do not have any insurance (26.3%) (captured by the “none of the above” response). In addition, 10.5% of the respondents carry insurance on their business, and 13.2% carry policies on property.

Table 8: Summary of Responses for Question 6.

Possible Answers	Number of Responses	Percentage of Total Responses
Home	50	65.8%
Business	8	10.5%
Property	10	13.2%
None of the above	20	26.3%
Not Sure	1	1.3%
Not applicable	3	4.0%
Total Responses:	76	--
Respondents who Skipped Question:	0	--

14 of the 19 respondents who answered Question 4 by saying they did not live in the floodplain, carry insurance on their homes anyway (73.9%) (the other 5 do not carry insurance). There are eight respondents who state that they carry insurance on their business, of those 5 also carry insurance on

⁽³⁾ National Flood Insurance Program. (2016). What are flood maps? Retrieved from https://www.floodsmart.gov/floodsmart/pages/understanding_flood_maps/understanding_flood_maps.jsp

⁽⁴⁾ Guerra, T. (n.d.). If I Paid Off My Mortgage, Am I Required to Buy Flood Insurance? *San Francisco Gate*. Retrieved from <http://homeguides.sfgate.com/paid-off-mortgage-am-required-buy-flood-insurance-52577.html>

their home. All of the individuals who indicated that they carry insurance on their property, also answered that they carry insurance on their home. One respondent answered that they carry insurance on their home, business, and property. Finally, 3 individuals answered that this question was not applicable to them, 2 of those stated that they live in the floodplain; therefore, it is suspected that they probably own their homes outright and therefore are not mandated to carry flood insurance. One individual responded to this question by indicating they were unsure whether they carry flood insurance on their home, business, or property. In total, 53 of the 76 respondents to this question (69.7%) identified that they carry at least one flood insurance policy.

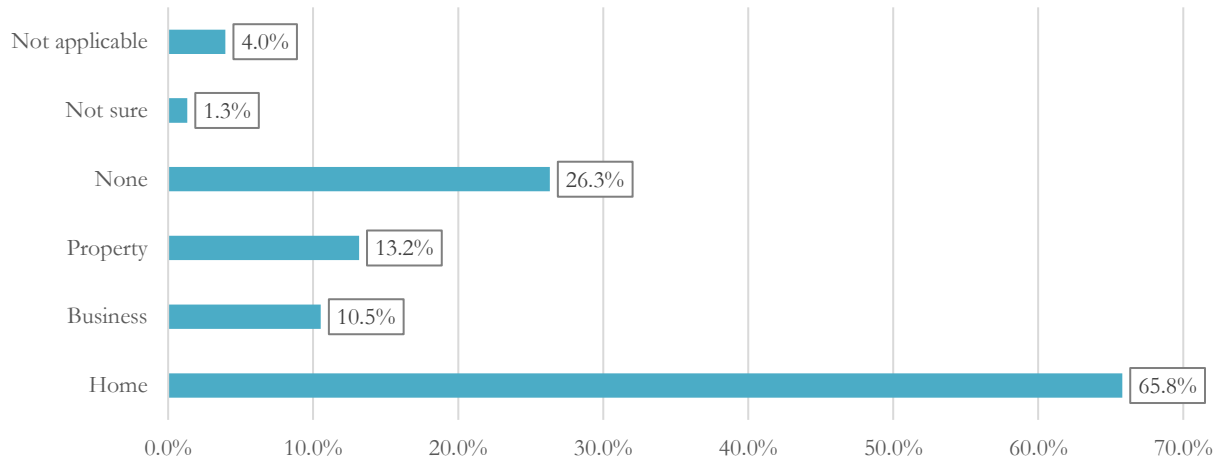


Figure 6: Summary of Responses to Question 6.

QUESTION 7

7) If you have flood insurance, why do you carry it? (Check all that apply)

- It is required because I live in the floodplain
- It is required because I have a mortgage
- It is required because I accepted disaster recovery funds from the government in the past
- It is not required but I felt it was advantageous
- Not applicable

Question 7 asks those respondents who stated in Question 6 that they carry flood insurance policies, why they carry said policies. Respondents could select as many reasons that applied to their situation. The first three answers involved situations which require insurance policies. The majority of respondents (22.5%) have flood insurance policies because it is required due to their home, business, or property being located in the floodplain. Another 19.7% have flood insurance policies because it is required due to their mortgage agreement. None of the respondents indicated that they are required to carry flood insurance due to the acceptance of disaster recovery funds in the past. These results show that 42.3% of the survey respondents are required to carry flood insurance. Interestingly, the same percentage of respondents (42.3%) answered that they are not required to carry flood insurance, but do so because they feel it is advantageous. Five respondents chose to skip this question.

Table 9: Summary of Responses for Question 7.

Possible Answers	Number of Responses	Percentage of Total Responses
It is required because I live in the floodplain	16	22.5%
It is required because I have a mortgage	14	19.7%
It is required because I accepted disaster recovery funds from the government in the past	0	0%
It is not required but I felt it was advantageous	30	42.3%
Not applicable	19	26.8%
Total Responses:	71	--
Respondents who Skipped Question:	5	--

Further analysis of the responses to the survey revealed several other interesting facts about the respondents. These items have been grouped according to those who carry insurance, and those who do not carry insurance. There are two noteworthy items regarding those respondents who carry insurance. First, only 7 respondents checked the boxes indicating that they are required to carry insurance both because they live in the floodplain, and due to their mortgage. Second, 1 respondent indicated that they are required to have insurance because they live in the floodplain, and that they are not required to carry insurance, but do so because it is advantageous. This person indicated in Question 6 that they carry insurance on both their home and property. Therefore, it is assumed that one of these responses had to do with their home, and the other was relevant to their property.

When looking at the responses of the individuals who indicated that they do not carry insurance the following items were noted. There were 30 people who indicated that they are not required to carry insurance, but do so because they believe it is advantageous. Six of these individuals answered Question 4 by stating that their house, business or property is in the flood zone. The home, business, or property of these individuals could be located within the 500-year flood zone, placing it within a low-risk zone for flooding where insurance is not required. Second, all 19 of the respondents who thought this question did not apply to them, stated in Question 6 that they either did not carry insurance, or that flood insurance was not applicable to them. In addition, 3 of the individuals who skipped this question also indicated in Question 6 that they do not carry flood insurance. By adding those 3 responses to the 19 which answered “not applicable” enables us to estimate that 29.7% (of 74 potential respondents) do not carry flood insurance.

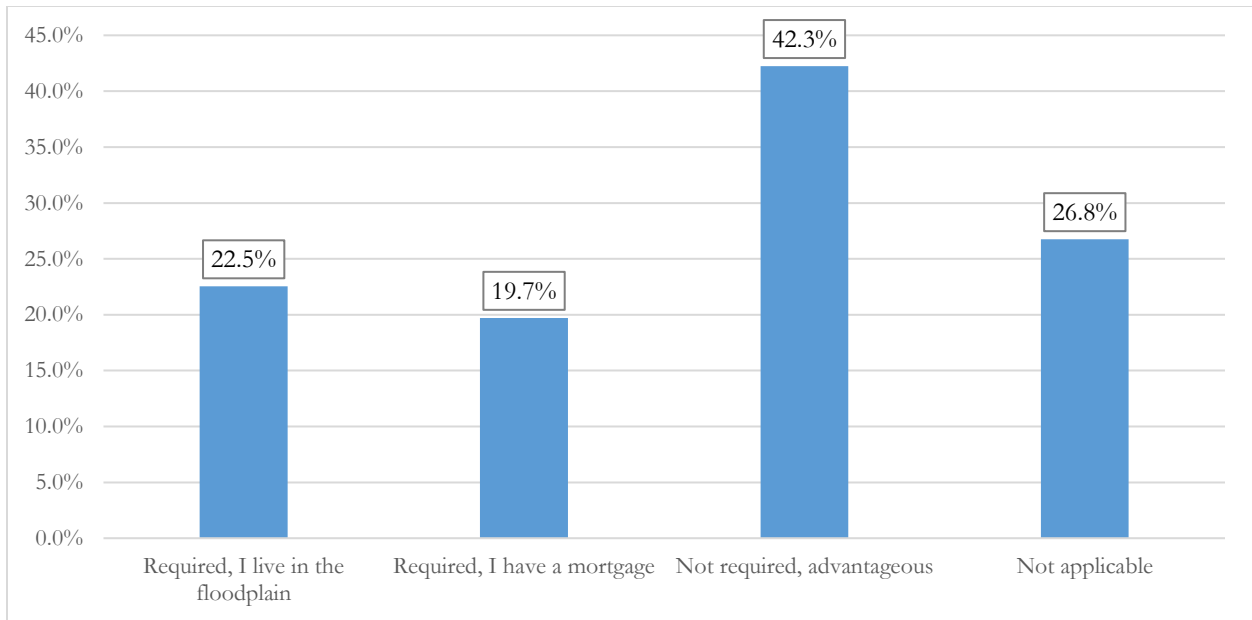


Figure 7: Summary of Responses to Question 7.

QUESTION 8

8) If you do not have flood insurance, why don't you carry it? (Check all that apply)

- I do not live in the floodplain
- My home, business, or property is elevated or otherwise protected
- I rent
- Insurance is too expensive
- I don't need it because it never floods
- I never really considered it
- Not applicable
- Other (Please specify below)

Question 8 asks those respondents who stated in Question 6 that they do not carry flood insurance policies, why they made this decision. Again, respondents could select as many responses that applied to their situation. The majority of respondents (69.5%) indicated that this question did not apply to them. When considering that almost 30% of the responses to Question 7 indicated that individuals did not carry insurance, it is logical that almost 70% of the responses to this question indicate that people carry insurance.

Table 10: Summary of Responses for Question 8.

Possible Answers	Number of Responses	Percentage of Total Responses
I do not live in the floodplain	3	5.1%
My home, business, or property is elevated or otherwise protected	7	11.9%
I rent	4	6.8%
Insurance is too expensive	9	15.3%
I don't need it because it never floods	0	0.0%
I never really considered it	1	1.7%
Not applicable	41	69.5%
Other (Please specify below)	1	1.7%
Total Responses:	59	--
Respondents who Skipped Question:	17	--

The most common reason for not individuals not carrying insurance was because it is too expensive (15.3%). The second most common reason was that the home, business, or property is elevated or otherwise protected (11.9%). Four people (6.8%) indicated that they do not carry insurance because they rent. While 5.1% of the respondents indicated that they do not carry insurance because they do not live in the floodplain. Interestingly, one of these individuals indicated in Question 4 that they were not sure if their home, business, or property was in the floodplain. One person (1.7%) answered that they had never considered the idea of flood insurance. None of the respondents

indicated that they do not need insurance because it never floods. Finally, one individual checked the “other” response, and indicated in the short answer section that they do not have insurance because they “can’t afford it.” This response can be categorized as “insurance is too expensive” which would raise the percentage of that response to 16.9%.

There were 17 respondents who chose to skip this question. Fourteen of those indicated in Questions 6 & 7 that they carry insurance. By adding those 14 responses to the 41 which answered “not applicable” enables us to estimate that 75.3% (of 73 potential respondents) carry flood insurance.

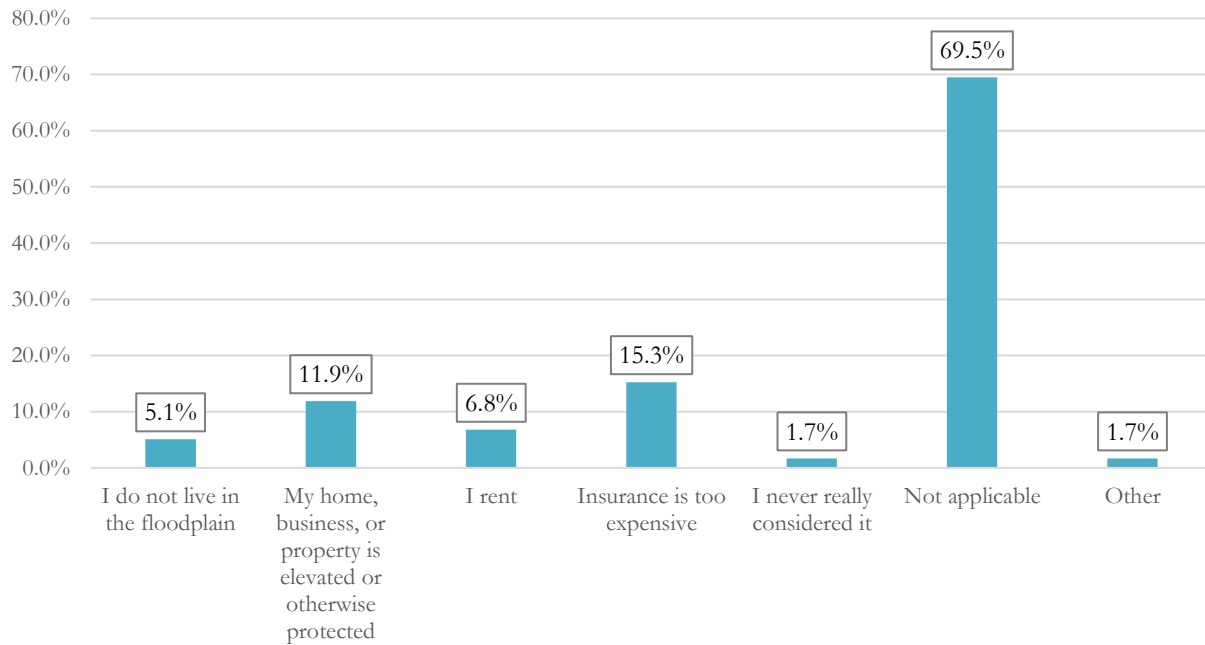


Figure 8: Summary of Responses to Question 8.

QUESTIONS 9 & 10

9) Has your life or property been impacted by high water or flooding in Rockport

- Never
 Occasionally
 Regularly

10) Has your daily work or routine been impacted by, high water or flooding in Rockport?

- Never
 Occasionally
 Regularly

Questions 9 and 10 deal with the impacts of flooding in Rockport on the individuals completing the survey. The focus group, used to test the original survey instrument, requested that these questions be included. The intent of Question 9 was to establish if people had experienced damage to their property; or even to themselves or their families. This might include flooding of, or damage to, their property; as well as possible harm to individuals in the form of physical or emotional impacts. Question 10 was then requested to identify if the daily routines, or schedules, of individuals had been impacted by things like road closures, and changes to local's schedules as a result of flood events.

Table 11: Summary of Responses for Questions 9 & 10.

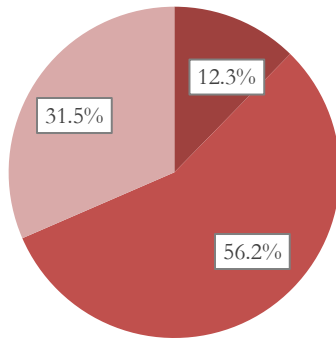
Possible Answers	Question 9		Question 10	
	Number of Responses	Percentage of Total Responses	Number of Responses	Percentage of Total Responses
Never	23	31.5%	16	22.2%
Occasionally	41	56.2%	50	69.4%
Regularly	9	12.3%	6	8.3%
Total Reponses:	73	--	72	--
Respondents who Skipped Question:	3	--	4	--

The majority of respondents stated that their life or property (56.2%), and their daily work or routines (69.4%) are occasionally impacted by high water or flooding. Between one quarter and one third of the respondents indicated that high water or flooding has never impacted their lives or properties (31.5%), or their daily routines (22.2%). A small portion of respondents stated that their lives and properties (12.3%), or their daily routines (8.3%) are regularly impacted.

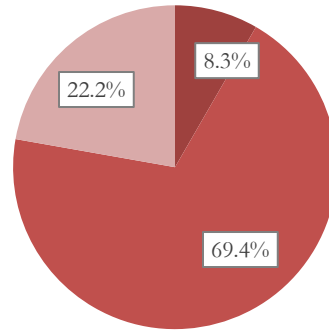
These results show that 68.5% of the respondents' experience impacts to their live and property, at least occasionally, due to flooding in Rockport. Even more concerning is that 77.7% of the respondents' experience impacts to their daily routines, at least occasionally, due to flooding in the

city. This figure confirms the need and importance for the City of Rockport to address floodplain management issues.

Question 9: Life & Property



Question 10: Daily Routine



- Regularly
- Occasionally
- Never

Figure 9: Responses to Questions 9 & 10.

QUESTION 11

11) How concerned are you about the possibility of Rockport being impacted by a flood event?

- Very concerned
- Somewhat concerned
- Mildly concerned
- Not concerned

Question 11 allows people rate their concern about the possibility of Rockport being impacted by a flood event. Half of the respondents (50%) answered that they are very concerned about potential impacts to Rockport from flooding. Another 40.3% indicated that they are somewhat concerned about potential impacts to the city from flooding. This means that 90.3% of the individuals who answered this question were somewhat or very concerned about the possibility of the City of Rockport being impacted by flooding. Conversely, only 6.9% of respondents were mildly concerned, and 2.8% were not concerned, about a flood event impacting the city. These numbers make another compelling testimony to the need and importance for Rockport to address floodplain management issues.

Table 12: Summary of Responses for Question 11.

Possible Answers	Number of Responses	Percentage of Total Responses
Very Concerned	36	50%
Somewhat Concerned	29	40.3%
Mildly Concerned	5	6.9%
Not Concerned	2	2.8%
Total Reponses:	72	--
Respondents who Skipped Question:	4	--

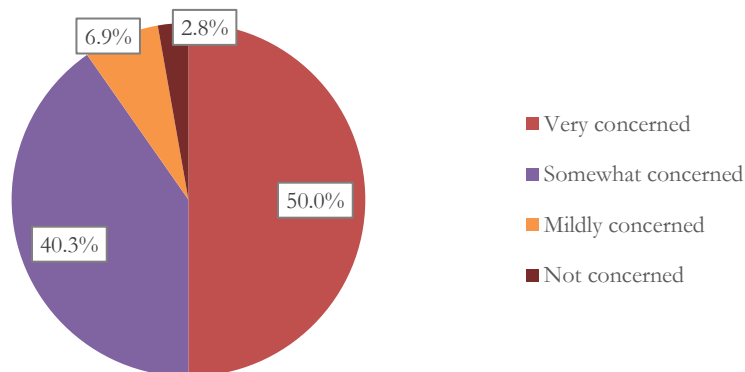


Figure 10: Responses to Question 11.

QUESTION 12

12) Which of the following actions have you taken to protect your home, business, or property from a flood event? (Check all that apply)

- Purchased flood insurance
- Fortified my home, business, or property with sandbags
- Elevated my home or business
- I have not taken any actions
- I have taken other actions (Please list below)

Question 12 attempts to identify what actions people have taken to protect their home, business, or property from potential flooding. Respondents were able to select as many answers that apply. The majority of people identified that they have purchased flood insurance (65.8%). In addition, 15.1% of individuals stated that they have fortified their home, business, or property with sandbags, while 13.7% indicated that they elevated their home or business. In addition, 15.1% stated that they “have taken other action(s).” These respondents were then asked to identify the other actions that they have taken. The answers included choosing a home with a higher elevation (3); purchasing or using pumps to move water to other areas (2); placing items higher in the home in order to protect them from potential flooding (2); the use of window coverings or hurricane shutters (2); having an alternative travel route during times of floods (1); and having a drainage plan for their property (1) (See Appendix 2 for detailed responses).

Table 13: Summary of Responses for Question 12.

Possible Answers	Number of Responses	Percentage of Total Responses
Purchased flood insurance	48	65.8%
Fortified my home, business, or property with sandbags	11	15.1%
Elevated my home or business	10	13.7%
I have not taken any actions	17	23.3%
I have taken other actions (Please list below)	11	15.1%
Total Reponses:	73	--
Respondents who Skipped Question:	3	--

Further analysis of these responses show that 10 people carry insurance and have fortified with sandbags, and that 6 individuals carry insurance and have elevated their home or business. In total, 57 of the respondents have taken some kind of action to protect their home, business, or property. Of those that have taken some action, 23 respondents have taken multiple actions to protect their home, business, or property against flooding.

The converse of all of these actions to protect homes, businesses, and properties is the fact that 23.3% of the respondents indicate that they have not taken any actions to protect against a flood event. Three individuals skipped this question.

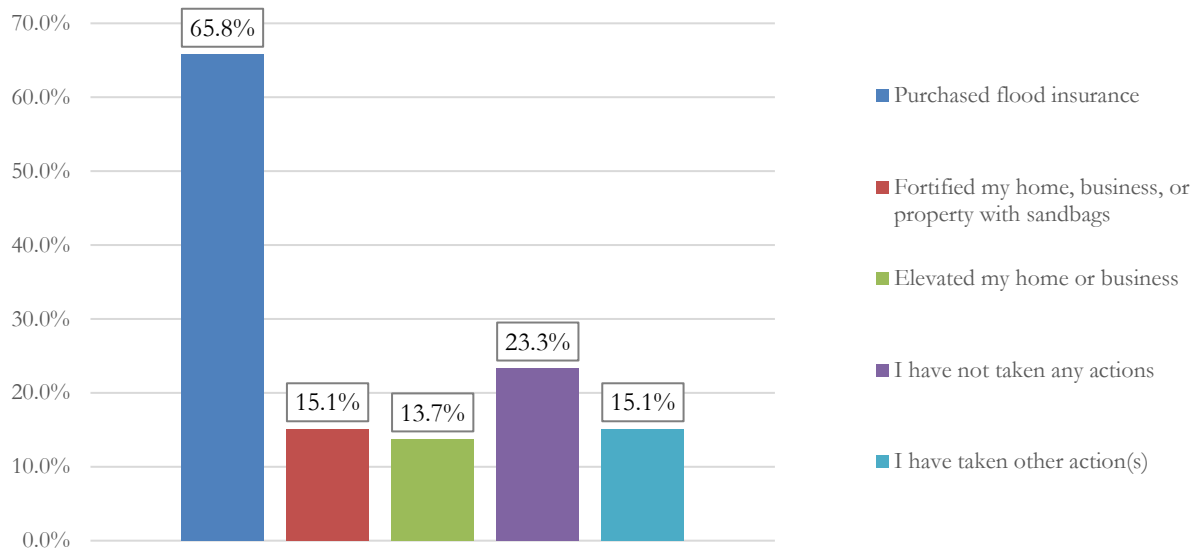


Figure 11: Responses to Question 12.

QUESTION 13

13) What sources have you used to collect information about protecting your home, business, or property from a flood event? (Check all that apply)

- Governmental agency
- Schools or Libraries
- Real-estate agent/Seller/Landlord
- Faith-based institution
- Community events
- TV/Radio news
- Internet/Social media
- Friends/Family/Neighbors
- My involvement in a non-profit or social organization
- My personal experience with flood events
- Other sources

Question 13 attempts to find out where respondents have received information about how to protect their home, business, or property from a flood event. Respondents were able to select as many answers that apply to them. Three answers were chosen by more than 40% of the respondents: personal experience (56.5%), Internet/Social media (43.5%), and Government agencies (42%). An additional four options were chosen by more than 15% of the respondents: Family/friends/neighbors (33.3%), Real estate agent/seller/landlord (23.2%), TV/Radio (21.7%), and Community events (18.8). The least selected answers were: through involvement with a non-

Table 14: Summary of Responses for Question 13.

Possible Answers	Number of Responses	Percentage of Total Responses
Governmental agency	29	42.0%
Schools or Libraries	3	4.4%
Real-estate agent/Seller/Landlord	16	23.2%
Faith-based institution	2	2.9%
Community events	13	18.8%
TV/Radio news	15	21.7%
Internet/Social media	30	43.5%
Friends/Family/Neighbors	23	33.3%
My involvement in a non-profit or social organization	5	7.3%
My personal experience with flood events	39	56.5%
Other sources	7	10.1%
Total Responses:	69	--
Respondents who Skipped Question:	7	--

profit or social organization (7.3%), Schools or Libraries (4.4%), and finally Faith-based institutions (2.9%). Finally, 10.2% of the respondents said they received information from sources other than the 11 identified. Unfortunately, we do not know what those sources might be.

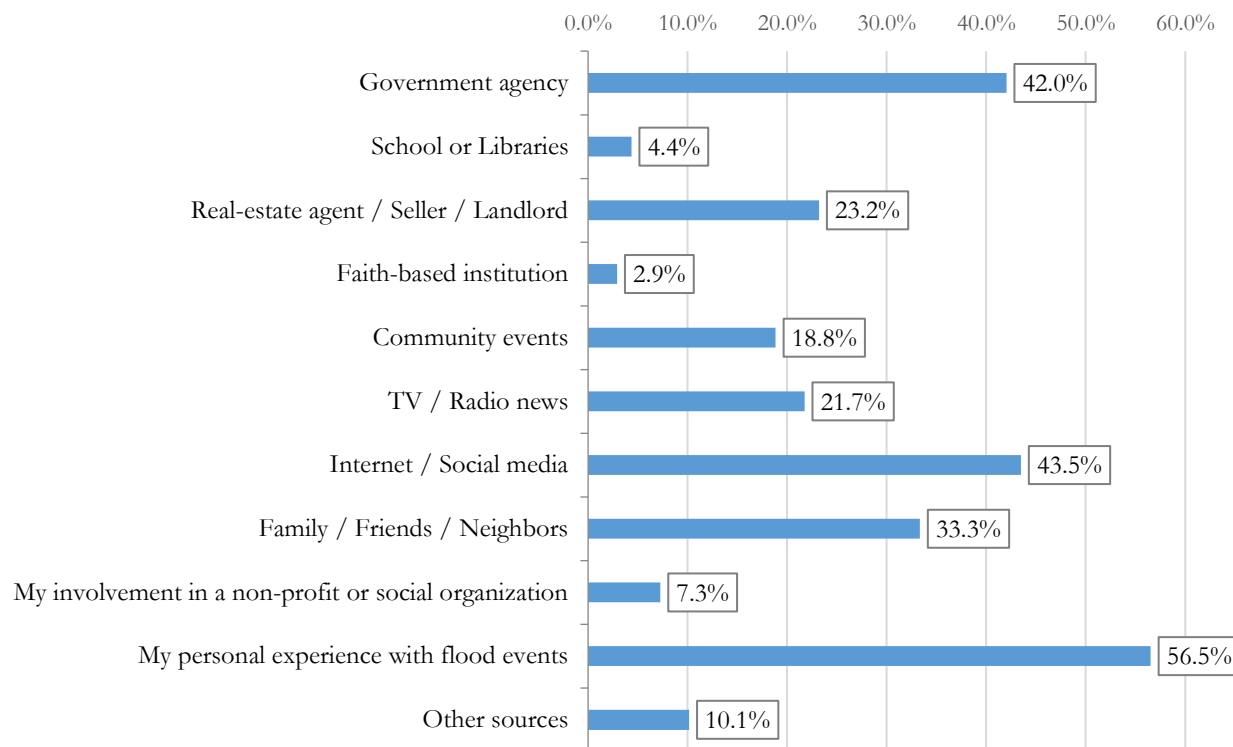


Figure 12: Responses to Question 13.

Further analysis shows that while there were 69 responses to this question (7 individuals skipped this item) only 27 individuals (39.1%) only chose one option. In reality, the majority of people (47 individuals, 68.1%) only chose one to three options (10 individuals (14.5%) chose two options, and 12 individuals (17.4%) chose three options. Fewer individuals (20 for 29.0%) chose four to seven responses (9 individuals (13.0%) chose four options, and five individuals (7.2%) chose five options, four individuals (5.8%) chose six options, and 2 individuals (2.9%) chose seven options.

None of the respondents chose more than seven options. Ultimately, the average number of information source options chosen by each respondent was 2.6 options. This means that, on average, each of the respondents go to 2.6 different sources to find information about protecting their home, business, or property from a flood event. This indicates a need for readily accessible information about flooding and flood events for citizens. As such, the city should consider a multi-pronged approach to public education through the floodplain management planning process; as well as, a coordinated long-term approach to providing relevant, timely, information in the future. Starting this education process during the floodplain management planning process will allow city staff, and the citizens, to collaborate on what is most needed, and the best ways to convey that information so that it is most useful to the citizens.

QUESTION 14

14) How would you MOST like to receive time-sensitive warnings and instructions regarding a flood event?

- TV
- Radio
- Cellphone Alerts (similar to Amber Alerts or Silver Alerts)
- Text Message
- Email
- Social media
- Other (Please list below)

Question 14 seeks to identify which source respondents would most like to see used to deliver time-sensitive warnings and instructions for the City of Rockport in the event of an actual flood.

Cellphone alerts (similar to Amber and Silver Alerts) was the most popular choice (49.3%), followed by Text messages (29.6%). Email was chosen by 8.5% of the respondents, while TV, social media, and “other” each received 4.2% of the responses. The idea of receiving notices via the radio was not chosen by any respondents. Each of the three respondents who chose “other” provided information about this response. Two individuals indicated that they would like to receive notices in “all of the above” ways, indicating that they would like to see all of these options utilized. The final respondent wrote “no local way.”

Table 15: Summary of Responses for Question 14.

Possible Answers	Number of Responses	Percentage of Total Responses
TV	3	4.2%
Radio	0	0.0%
Cellphone Alerts (similar to Amber, or Silver, Alerts)	35	49.3%
Text Message	21	29.6%
Email	6	4.2%
Social Media	3	4.2%
Other	3	4.3%
Total Reponses:	71	--
Respondents who Skipped Question:	5	--

The demography of the respondents may be related to the responses for this question. Different generations use technology, the internet, and social media in different ways. In addition, different socio-economic groups have dissimilar access to technology and the internet. The results of this question could be heavily biased by the demographics of the respondents that participated in this survey. Therefore, while the results of this survey show a clear preference for cellphone alerts;

further ground-truthing of this data is advisable prior to the city making any final decisions regarding how best to notify citizens about warnings and instructions in the event of a flood.

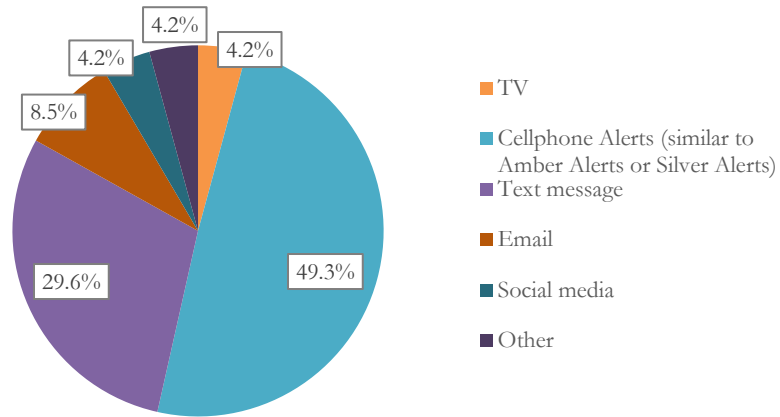


Figure 13: Responses to Question 14.

QUESTION 15

15) When you moved into your home, business, or purchased your property, did you consider the impacts of potential flood events?

- Yes
- No
- Not sure
- Not applicable

Question 15 asks respondents if they considered the impacts of potential flood events when they moved into their home or business, or when they purchased their property. A large majority (74.3%) responded that they did consider the potential impacts of flooding when they purchased, or moved into, their home, business, or property. Over one fifth of the respondents (21.4%) answered that they did not consider the impacts of flooding. A small percentage (2.9%) were unsure if they considered the potential impacts of flooding when they purchased, or moved into, their home, business, or property. Finally, only 1.4% claimed this question was not applicable to them. It is not known why this individual felt this way; but their home and property are not in the floodplain, yet they still carry insurance because they think it is beneficial. Six individuals skipped this question.

Table 16: Summary of Responses for Question 15.

Possible Answers	Number of Responses	Percentage of Total Responses
Yes	52	74.3%
No	15	21.4%
Not sure	2	2.9%
Not applicable	1	1.4%
Total Responses:	70	--
Respondents who Skipped Question:	6	--

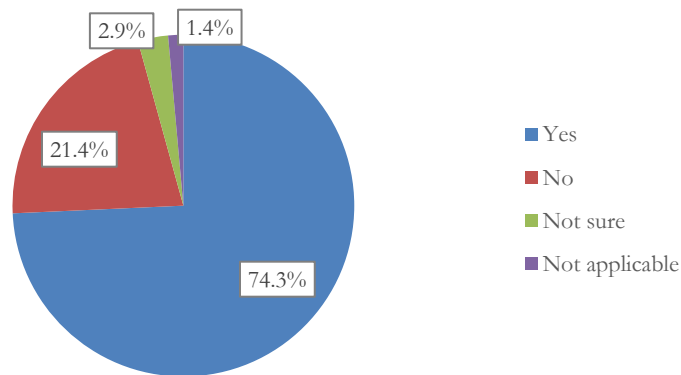


Figure 14: Responses to Question 15.

QUESTION 16

- 3) If your home, business, or property were designated as “in a high flood hazard area,” or received repeated damages from flooding, would you consider a program where a government agency would pay you current market value for it; therefore allowing you relocate to a safer location?
- Yes
- No
- Not sure
- Not applicable

Question 16 asks respondents if they would support a program which is commonly called a “buyout program.” A program like this allows a government agency to pay a landowner current market value for their home, business, or property, after it is designated to be within a “high flood hazard area,” or has received repeated damages due to flooding. The owner can use this money received to relocate to a location outside the high flood hazard area. As the frequency of flooding increases throughout the nation, this option may become more popular. It should be recognized that not all communities, or owners, support this program. One potential complication can be that communities within high hazard areas may have very strong, interconnected social systems in which members count on each other for vital tasks like childcare. The loss of these social networks upon relocation can have the potential to leave families, and individuals, unable to successfully function. Any potential buyout program should be scrutinized for potential success, and social implications, in an area prior to implementation. It is vital that this analysis include the impacted communities, and further, decisions should be made, and programs put into place before flooding occurs.

The survey responses show that 43.7% of the respondents would be interested in a buyout program. Another 31% of the individuals indicated that they were unsure if they would support this type of program. Only 12.7% of the individuals who answered this question said they would not support such a program, while an additional 12.7% did not think the question was applicable to them. Five individuals chose to skip this question. These numbers indicate that it would be beneficial for the City of Rockport to work with the community to investigate the potential of a buy-out program.

Table 17: Summary of Responses for Question 16.

Possible Answers	Number of Responses	Percentage of Total Responses
Yes	31	43.7%
No	9	12.7%
Not sure	22	31.0%
Not applicable	9	12.7%
Total Reponses:	71	--
Respondents who Skipped Question:	5	--

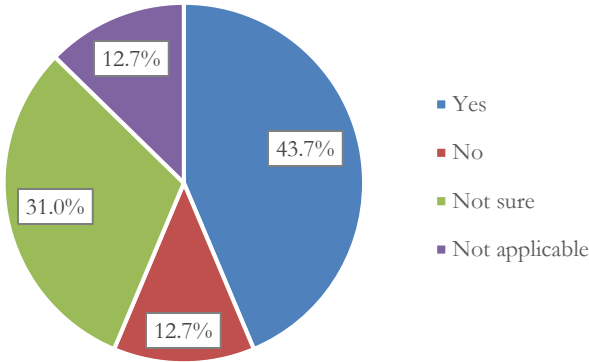


Figure 15: Responses to Question 16.

QUESTION 17

17) Would you support rules regarding how land within a known “high flood hazard area” can be used or zoned, to reduce risks associated with future flood events in Rockport?

- Strongly support
- Somewhat support
- Do not support
- Not sure

Question 17 asks respondents if they would support potential land use regulations in areas known to have a high hazard of flooding. Communities throughout the nation have implemented rules and regulations on what can be built, or what activities can be performed, in “high flood hazard areas.” These efforts are undertaken in order to reduce the risk involved with a potential flood event. Although this question did not give examples of such regulations, it gave respondents the opportunity to express their general support for such measures. Five individuals chose to skip this question. Of the 71 respondents, 43.7% strongly support these types of potential regulations. Another 32.4% somewhat support the potential regulations, which provides 76.1% of the respondents showing some level of support for this option. An additional 12.7% of the respondents were unsure if they would support this type of regulation, while only 11.3% do not support this idea.

Table 18: Summary of Responses for Question 17.

Possible Answers	Number of Responses	Percentage of Total Responses
Strongly support	31	43.7%
Somewhat support	23	32.4%
Do not support	8	11.3%
Not sure	9	12.7%
Total Responses:	71	--
Respondents who Skipped Question:	5	--

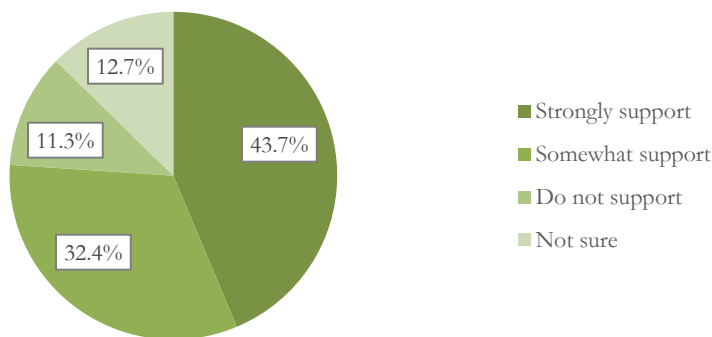


Figure 16: Responses to Question 17.

QUESTIONS 18-25

Questions 18-25 are similar in that each asks respondents to rate their support for different types of potential actions that can reduce the risks associated with future flood events. The questions are listed below (each question uses the same possible responses; as such, these are only listed once):

18) How much you would support **engineered projects such as levees, dams, and bulkheads** designed to reduce the risks associated with flood events?

- Strongly support
- Somewhat support
- Do not support
- Not sure

Q 19: How much would you support **stronger building codes and land use rules** in floodplain areas to reduce the risks associated with flood events?

Q 20: How much would you support **retrofitting infrastructure such as roads and drainage** to reduce the risks associated with flood events?

Q 21: How much would you support **retrofitting critical facilities such as fire stations and hospitals** to reduce the risks associated with flood events?

Q 22: How much would you support **retrofitting utility infrastructure to reduce the disruption of service** during and after flood events?

Q 23: How much would you support **protecting natural areas, such as wetlands, and their inherent flood-preventing benefits** in effort to reduce the risks associated with flood events?

Q 24: How much would you support **buying vulnerable properties and increasing natural areas** to reduce the risks associated with flood events?

Q 25: How much would you support **better access to information about flood risks and protective actions that individual households can take** to reduce the risk associated with flood events?

Four of the proposed actions had more than 60% of the respondents indicate that they would “strongly support” that alternative (retrofitting infrastructure (Q20) 80.0%, retrofitting utility infrastructure (Q22) 70.0%, better access to information (Q25) 69.6%; and retrofitting critical facilities (Q21) 68.6%). The remaining alternatives all had 40.0% or greater of the respondents indicate that they would “somewhat support” that action (engineered projects (Q18) 54.3%, stronger building codes and land use rules (Q19) 53.6%%, protecting natural areas (Q23) 48.6%, and buying vulnerable properties (Q24) 40.0%).

Interestingly, the four options with the highest percentages of respondents who “strongly support” that action, also have the lowest rate of individuals who are unsure if they would support the alternative. Further, the one action with the lowest rate of respondents who would “strongly support” the alternative was also the option with the highest rate of respondents who would “somewhat support” the alternative (Q24: buying vulnerable properties). Ultimately the percentage of respondents who were unsure if they would support an option, or would not support an option was quite low for all of the alternatives (below 10%).

Table 19: Summary of Responses for Questions 18-25.

Possible Answers	Number of Responses	Percentage of Total Responses
Q 18: Engineered projects such as levees, dams, and bulkheads		
Strongly support	38	54.3%
Somewhat support	24	34.3%
Do not support	6	8.6%
Not sure	2	2.9%
Total Responses:	70	--
Respondents who Skipped Question:	6	--
Q 19: Stronger building codes and land use rules		
Strongly support	37	53.6%
Somewhat support	25	36.2%
Do not support	5	7.3%
Not sure	2	2.9%
Total Responses:	69	--
Respondents who Skipped Question:	7	--
Q 20: Retrofitting infrastructure such as roads and drainage		
Strongly support	56	80.0%
Somewhat support	11	15.7%
Do not support	2	2.9%
Not sure	1	1.4%
Total Responses:	70	--
Respondents who Skipped Question:	6	--
Q 21: Retrofitting critical facilities such as fire stations and hospitals		
Strongly support	48	68.6%
Somewhat support	19	27.1%
Do not support	1	1.4%
Not sure	2	2.9%
Total Responses:	70	--
Respondents who Skipped Question:	6	--
Q 22: Retrofitting critical facilities such as fire stations and hospitals		
Strongly support	48	68.6%
Somewhat support	19	27.1%
Do not support	1	1.4%
Not sure	2	2.9%
Total Responses:	70	--
Respondents who Skipped Question:	6	--
Q 23: Protecting natural areas, such as wetlands, and their inherent flood-preventing benefits		
Strongly support	34	48.6%
Somewhat support	26	37.1%
Do not support	4	5.7%
Not sure	6	8.6%
Total Responses:	70	--
Respondents who Skipped Question:	6	--

Table 19 (continued): Summary of Responses for Questions 18-25.

Possible Answers	Number of Responses	Percentage of Total Responses
Q 24: Buying vulnerable properties and increasing natural areas		
Strongly support	28	40.0%
Somewhat support	30	42.9%
Do not support	7	10.0%
Not sure	5	7.1%
Total Responses:	70	--
Respondents who Skipped Question:	6	--
Q 25: Better access to information about flood risks and protective actions		
Strongly support	48	69.6%
Somewhat support	18	26.1%
Do not support	1	1.5%
Not sure	2	2.9%
Total Responses:	69	--
Respondents who Skipped Question:	7	--

Figure 17 shows a side-by-side comparison of the potential actions, and their relative support.

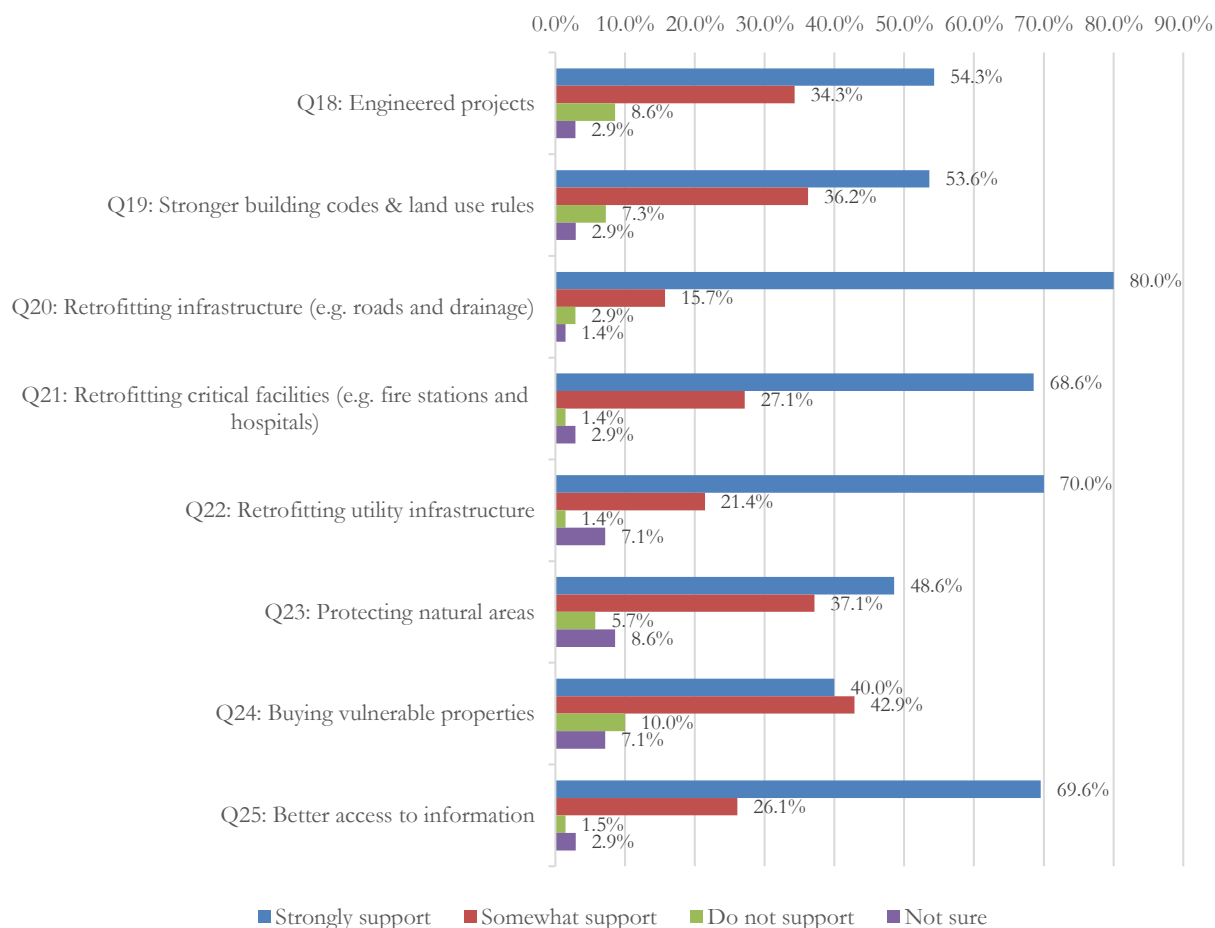


Figure 17: Responses to Questions 18-25.

Another way of looking at the data is to show what percentage of respondents showed some support for the alternatives. This is shown in Table 20, and in Figure 18. All of the responses had more than 80.0% of the respondents showing some support. The alternatives with the highest percentages of support were retrofitting infrastructure (Q20), retrofitting critical facilities (Q21), and better access to information (Q25) all at 95.7%. The next group includes retrofitting utility infrastructure (Q22) 91.4%, stronger building codes and land use rules (Q19) 89.9%, and engineered projects (Q18) 88.6%. The alternatives that ranked lowest in the percentage of respondents showing some level of support were protecting natural areas (Q23) 85.7%, and buying vulnerable properties (Q24) 82.9%. Interestingly, these two alternatives often go hand in hand. These two alternatives also had two of the greatest percentage of respondents who did not support them (8.6% for protecting natural areas, and 7.1% for buying vulnerable areas), or who were unsure if they would support them (5.7% for protecting natural areas and 10.0% for buying vulnerable areas).

Table 20: Total Support for Action Alternatives.

	Strongly Support	Somewhat Support	Total Support
Q18: Engineered projects	54.3%	34.3%	88.6%
Q19: Stronger building codes & land use rules	53.6%	36.2%	89.9%
Q20: Retrofitting infrastructure (e.g. roads and drainage)	80.0%	15.7%	95.7%
Q21: Retrofitting critical facilities (e.g. fire stations and hospitals)	68.6%	27.1%	95.7%
Q22: Retrofitting utility infrastructure	70.0%	21.4%	91.4%
Q23: Protecting natural areas	48.6%	37.1%	85.7%
Q24: Buying vulnerable properties	40.0%	42.9%	82.9%
Q25: Better access to information	69.6%	26.1%	95.7%

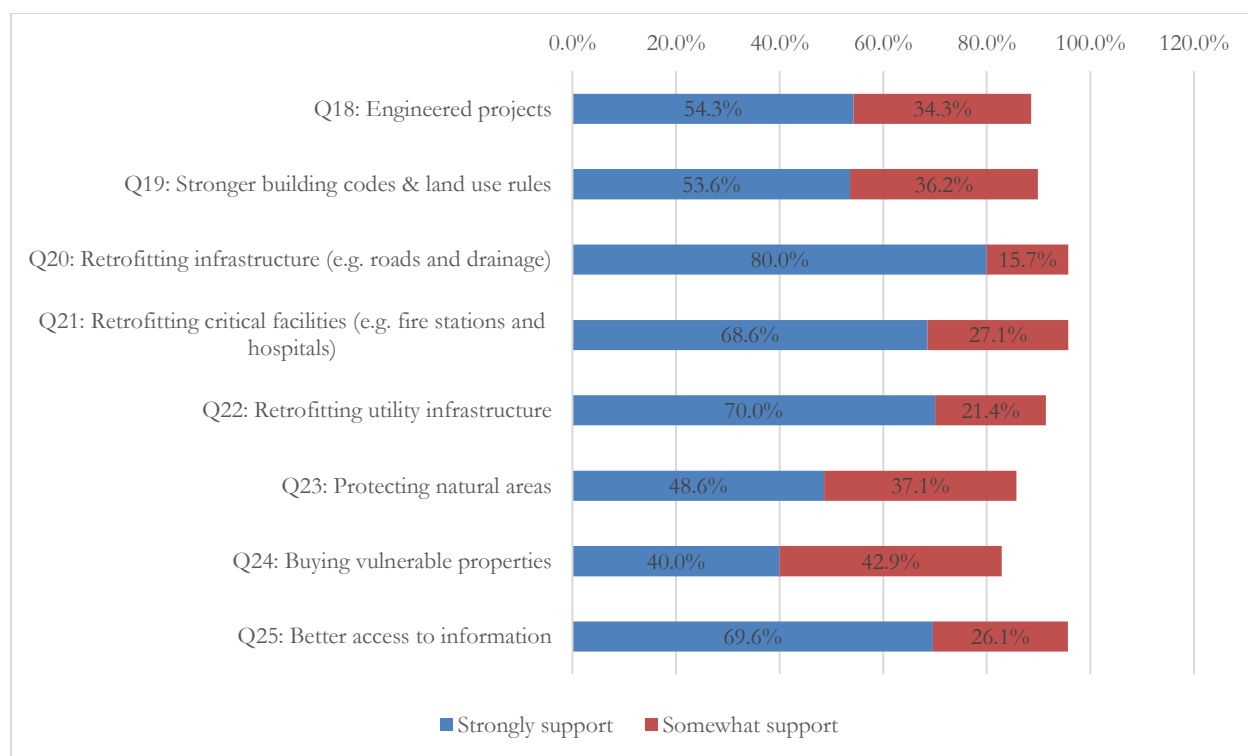


Figure 18: Percentage of Respondents Showing Some Support for Alternatives.

QUESTIONS 26 & 27

26) Are there any other types of actions that you would support to reduce the risks associated with flood events? (Please specify below)

27) Please provide any additional information regarding Rockport's efforts to plan for the long-term management of our floodplains.

These questions provided an opportunity to gather additional information from the respondents that may not have been captured through any of the other questions. Question 26 asks the respondents if there are any additional actions, not already discussed in the survey that they would like to see utilized to reduce the risks of flooding in Rockport. Question 27 offered an opportunity for the respondents to specify any additional information that they think might be beneficial to the long-term process of reducing the risks of flooding in Rockport. The responses to these questions were coded in order to categorize and summarize the information collected. Codes were established for key concepts that were identified in the answers, allowing each response to receive multiple codes. Appendix 3 includes a listing of each response and the codes assigned. Table 21 lists the number of responses for each question that fall under the individual codes.

Table 21: Summary of Coded Responses to Questions 26 & 27.

Q26	Q27	Code	Description of Code
6	7	L	Specific locations mentioned
9	3	Eng.	Hard engineering or maintenance offered as a solution
6	1	Ed.	Need for education /information/community involvement
--	6	Need	Action needed soon
3	2	Adv.	Adverse effects on one area due to action in another area
1	4	OD	Over development perceived as an issue
--	4	B	Belated efforts perceived by respondent
1	3	Coord.	Need for coordination within the City, and with bordering areas
1	2	Plan	Need for better, or more, planning
1	1	PR	Need for permits /stricter regulations
1	1	Nat.	Need to protect natural areas
--	1	OI	Old Infrastructure
4	5	NP	Answers that did not provide practical information

The majority of the responses to Question 26 offered ideas about engineering or maintenance suggestions (9 responses) that would allow for better drainage. Many of the answers also identified specific locations where these activities are needed (6 responses). In addition, a desire for more information and education about flooding, the associated risks, and appropriate actions was expressed (6 responses). The responses for Question 27 showed an express need for action, and that “now is the time to do something” (6 responses) Recommendations included additional engineering or maintenance suggestions (3 responses), and a need for planning (2 responses) and coordination within the city, and with the neighboring communities (3 responses). Again many respondents identified specific locations where action is needed (7 responses). A belief that parts of the city have already been over developed was expressed (4 responses), along with stories of individuals

experiencing negative repercussions from the actions of the city or neighbors (2 responses). Finally, individuals identified that the city's infrastructure is "old and inadequate," that there is a need to protect "natural wetland barriers," and that "stricter new building requirements" are needed in some areas.

SUMMARY OF RECOMENDATIONS

The results detailed in this document summarize the answers provided for each question in the survey. The following is a short summary of the key findings and recurring recommendations. First and foremost, it is critical to understand that response rate for this survey was quite low (1%). While these results offer a snapshot of the thoughts, needs, and wants of the people of Rockport, they cannot be considered a true representation of the population. The project team highly recommends another survey, in addition to significant dialogue with the citizens of Rockport before making any strategic decisions. The development of a floodplain management plan affords an ideal opportunity to initiate that dialogue.

The survey confirmed, though the high percentage of experienced impacts documented in Questions 9 & 10, the levels of concern regarding flooding impacts recorded in the responses to Question 11, and from the responses provided to questions 26 & 27, that there is an express need and desire for the City of Rockport to address floodplain management issues. The responses provided clearly show that the citizens are experiencing impacts, are concerned about this issue, and have strong ideas about what could be done.

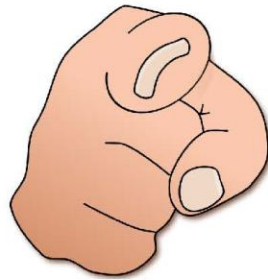
The responses to Question 13 and 14 support the need for education and readily accessible information about flooding, flooding hazards, flood events, and possible precautionary actions for citizens. As such, the city should consider a multi-pronged approach to public education through the floodplain management planning process; as well as, a coordinated long-term approach to providing relevant, timely, information in the future. Starting this education process during the floodplain management planning process will allow city staff, and the citizens, to collaborate on what is most needed, and the best ways to convey that information so that it is most useful to the citizens.

Finally, the responses to Questions 18-25 indicate support for the previous recommendations in that they citizens of Rockport showed a greater than 80.0% support rate for all proposed actions. In addition, the answers supported the need for education about the flooding, their associated risks, and the potential actions that the city, and individuals, can take.

APPENDIX 1: SURVEY IMPLEMENTATION

APPENDIX 1.1: Survey Flyer

**We Need You
to help the
City of Rockport
become BETTER!**



We are working to develop a Floodplain Management Plan for the City. In an effort to include your concerns and local knowledge in the development of this plan, Texas Sea Grant has developed an online survey to gather information about your experiences and perceptions regarding flooding hazards in the City of Rockport. Your participation in this survey will help us to ensure that all segments of the population of Rockport are represented.

If you are ready to help us, please follow the link below to complete the survey before July 31, 2016. *This should not take more than 6-8 minutes of your time.*

If you do not wish to participate in the survey; but would like to provide input regarding the Floodplain Management Planning Process, please contact Karen Bareford, Coastal Planning Specialist with Texas Sea Grant, at (361)825-3225, or karen.bareford@tamu.edu.

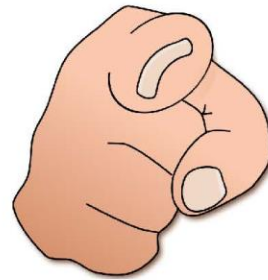


<http://svy.mk/29aIfcv>



IRB NUMBER: IRB2016-0448D
IRB APPROVAL DATE: 07/01/2016
IRB EXPIRATION DATE: 07/01/2017

**We Need You
to help the
City of Rockport
become BETTER!**



We are working to develop a Floodplain Management Plan for the City. In an effort to include your concerns and local knowledge in the development of this plan, Texas Sea Grant has developed an online survey to gather information about your experiences and perceptions regarding flooding hazards in the City of Rockport. Your participation in this survey will help us to ensure that all segments of the population of Rockport are represented.

If you are ready to help us, please follow the link below to complete the survey before July 31, 2016. *This should not take more than 6-8 minutes of your time.*

If you do not wish to participate in the survey; but would like to provide input regarding the Floodplain Management Planning Process, please contact Karen Bareford, Coastal Planning Specialist with Texas Sea Grant, at (361)825-3225, or karen.bareford@tamu.edu.



<http://svy.mk/29aIfcv>



IRB NUMBER: IRB2016-0448D
IRB APPROVAL DATE: 07/01/2016
IRB EXPIRATION DATE: 07/01/2017

Lead Researcher: Karen Bareford with Texas Sea Grant

Partners:

- City of Rockport
- Mission-Aransas Reserve

Purpose of this survey: To gather information about your experiences and perceptions regarding flooding hazards in the City of Rockport.

Importance: The data collected from this survey will be used in the development of a Floodplain Management Plan for Rockport which will provide a strategy of programs, goals, and actions to reduce the adverse impact of hazards on the community.

Benefit to you: The hazards associated with potential flooding can affect individuals. These impacts can be personal, through the destruction of property, and even include physical harm to individuals. These impacts can also alter the daily lives of individuals as physical infrastructure and access to critical facilities (including utilities, emergency perceives, and roads) can be affected. All of these impacts have the potential to influence individuals emotionally, financially, their personal comfort, and time. By participating in the survey you are contributing to the process of creating a plan to minimize all of these impacts.

For additional information, or questions, please contact:

Karen Bareford, Ph.D.
 Coastal Planning Specialist
 Texas Sea Grant College Program
 Texas A&M University at Corpus Christi
 6300 Ocean Drive
 NRC-2800, Unit 5840
 Corpus Christi, TX 78412
 (361) 825-3225

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APPENDIX 1.2: Distribution List for Informational Flyers

Public Institutions

Aransas County Public Library
Agrilife Extension office
Bay Education Center
Rockport Service Center
Rockport City Hall
University of Texas Marine Science Institute

Businesses

Castaways Thrift Shop
H.E.B.
Pirate Coin Laundry
Speedy Wash Laundromat

Non-profit Organizations

Good Samaritan Office
History Center
Rockport Center for the Arts
Rockport-Fulton Chamber of Commerce
Texas Maritime Museum
The Aquarium at Rockport Harbor
Veterans of Foreign Wars

Home Owners Associations & Apartment Complexes

Bay of Aransas Garden Apartments
Flour Bluff Apartments
Linden Oaks Apartments
Rockport Harbor View Apartments
Rockport Oaks Garden Apartments
Wind Wood Apartments
Oaks at Bentwater Apartments
Oak Harbor Apartments
Fifty Oaks Apartments
Sea Mist Townhomes
Key Allegro Home Owners Association

RV Parks

Ancient Oaks
Beacon RV Park
Blue Lagoons RV Resort
Copano Bay RV Resort
Copano Hideaway RV Park
Country Oaks Mobile Home & RV
Lagoons RV Resort
Rockport Central RV Park
Taylor Oaks RV Park
Woody Acres Resort

Other

Rockport Country Club

APPENDIX 1.3: Survey

City of Rockport Floodplain Management Planning Survey

Project Title: City of Rockport Floodplain Management Planning Survey

You are invited to take part in a research survey being conducted by Karen Bareford, a researcher from Texas Sea Grant College Program at Texas A&M University and funded by the Texas General Land Office. This project is being conducted in order to collect data that will be used to assist in the development of a Floodplain Management Plan for the City of Rockport. The information in this form is provided to help you decide whether or not to take part. If you decide you do not want to participate, there will be no penalty to you, and you will not lose any benefits you normally would have.

Why Is This Study Being Done?

This survey is being done to gather information about the experiences and perceptions of individuals who live, work, and own businesses in Rockport, specifically, the survey is designed to find out about your experience and perceptions regarding flooding hazards in the City

Why Am I Being Asked To Be In This Study?

You are being asked to be in this study because you may live, work, or own a business in Rockport, and are over the age of 18.

How Many People Will Be Asked To Be In This Study?

We would like to capture as many responses as possible to this survey. As such we are casting a very wide net using the city website, email distribution of the link to the survey, and informational flyers that include the link to the survey. We apologize for cross-postings; but need to get as wide a distribution as possible in order to capture the maximum potential responses, to represent as diverse a cross-section of the population as feasible.

What Are the Alternatives to being in this study?

The alternative to taking the survey are to not take the survey. If you would like to provide input regarding the Floodplain Management Planning Process, but do not want to take the survey, please contact Karen Bareford, Coastal Planning Specialist with Texas Sea Grant, at (361)825-3225, or karen.bareford@tamu.edu.

What Will I Be Asked To Do In This Study?

You will be asked to answer questions about your experiences and perceptions regarding flooding hazards in the City of Rockport. The survey will be open through July 31, 2016, and your participation should not take more than 8 minutes.

Are There Any Risks To Me?

The things that you will be doing are no greater risks than you would come across in everyday life.

Are There Any Benefits To Me?

The hazards associated with potential flooding can affect individuals. These impacts can be personal, through the destruction of property, and even include physical harm to individuals. These impacts can also alter the daily lives of individuals as physical infrastructure and access to critical facilities (including utilities, emergency services, and roads) can be affected. All of these impacts have the potential to influence individuals emotionally, financially, their personal comfort, and time. By participating in the survey you are contributing to the process of creating a plan to minimize all of these impacts.



IRB Approved Survey, Page 1.

Will There Be Any Costs To Me?

Aside from your time, there are no costs for taking part in the study.

Will I Be Paid To Be In This Study?

You will not be paid for being in this study.

Will Information From This Study Be Kept Private?

The records of this study will be kept private. No identifiers linking you to this study will be collected. Research records will be stored securely and only staff affiliated with this research will have access to the raw data.

Information will be stored in computer files protected with a password.

People who have access to the raw data collected include the Lead Researcher and research study personnel. Representatives of regulatory agencies such as the Office of Human Research Protections (OHRP) and entities such as the Texas A&M University Human Subjects Protection Program may access your records to make sure the study is being run correctly and that information is collected properly.

Who may I Contact for More Information?

You may contact the Lead Researcher, Karen Bareford, Ph.D., to tell her about a concern or complaint about this research at (361) 825-3225 or karen.bareford@tamu.edu.

For questions about your rights as a research participant, to provide input regarding research, or if you have questions, complaints, or concerns about the research, you may call the Texas A&M University Human Subjects Protection Program office by phone at 1-979-458-4067, toll free at 1-855-795-8636, or by email at irb@tamu.edu.

What if I Change My Mind About Participating?

This research survey is voluntary and you have the choice whether or not to be in this research study. You may decide to not begin or to stop participating at any time. If you choose not to be in this study or stop being in the study, there will be no negative effects for you.

By completing the survey, you are giving permission for the investigator to use your information for research purposes.

Thank you.

Karen Bareford

After reviewing the above information, please click (*appropriate text will be entered according to needs*) to continue to the survey.

(Continue to next page)



IRB Approved Survey, Page 2.

- 1) I _____ in the city of Rockport. (Check all that apply)
- Live full-time
 - Live part-time (Number of months you live in Rockport each year _____)
 - Work full-time
 - Work part-time
 - Own a business
 - Other (Please specify below)
- 2) I _____ my home, business, or property in the city of Rockport.
- Own
 - Rent
 - Not applicable
- 3) Is your home, business, or property in the floodplain?
- Yes
 - No
 - Not sure
 - Not applicable
- 4) Are you aware of any current flood control or management projects in the City of Rockport?
- Yes
 - No
 - Not sure
- (If yes, please specify what projects you are aware of below)

(Continue to next page)



IRB Approved Survey, Page 3.

- 5) Do you have flood insurance for your home, business, or property? (Check all that apply)
- Home
 - Business
 - Property
 - None of the above
 - Not sure
 - Not applicable
- 6) If you have flood insurance, why do you carry it? (Check all that apply)
- It is required because I live in the floodplain
 - It is required because I have a mortgage
 - It is required because I accepted disaster recovery funds from the government in the past
 - It is not required but I felt it was advantageous
 - Not applicable
- 7) If you do not have flood insurance, why don't you carry it? (Check all that apply)
- I do not live in the floodplain
 - My home, business, or property is elevated or otherwise protected
 - I rent
 - Insurance is too expensive
 - I don't need it because it never floods
 - I never really considered it
 - Not applicable
 - Other (Please specify below)
- 8) Has your life or property been impacted by high water or flooding in Rockport?
- Never
 - Occasionally
 - Regularly

(Continue to next page)



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IRB APPROVAL DATE: 07/01/2016
IRB EXPIRATION DATE: 07/01/2017

IRB Approved Survey, Page 4.

- 9) Has your daily work or routine been impacted by, high water or flooding in Rockport?
- Never
 - Occasionally
 - Regularly
- 10) How concerned are you about the possibility of Rockport being impacted by a flood event?
- Very concerned
 - Somewhat concerned
 - Mildly concerned
 - Not concerned
- 11) Which of the following actions have you taken to protect your home, business, or property from a flood event? (Check all that apply)
- Purchased flood insurance
 - Fortified my home, business, or property with sandbags
 - Elevated my home or business
 - I have not taken any actions
 - I have taken other actions (Please list below)

(Continue to next page)



IRB Approved Survey, Page 5.

- 12) What sources have you used to collect information about protecting your home, business, or property from a flood event? (Check all that apply)
- Governmental agency
 - Schools or Libraries
 - Real-estate agent/Seller/Landlord
 - Faith-based institution
 - Community events
 - TV/Radio news
 - Internet/Social media
 - Friends/Family/Neighbors
 - My involvement in a non-profit or social organization
 - My personal experience with flood events
 - Other sources
- 13) How would you MOST like to receive time-sensitive warnings and instructions regarding a flood event?
- TV
 - Radio
 - Cellphone Alerts (similar to Amber Alerts or Silver Alerts)
 - Text Message
 - Email
 - Social media
 - Other (Please list below)
- 14) When you moved into your home, business, or purchased your property, did you consider the impacts of potential flood events?
- Yes
 - No
 - Not sure
 - Not applicable

(Continue to next page)



IRB Approved Survey, Page 6.

- 15) If your home, business, or property were designated as “in a high flood hazard area,” or received repeated damages from flooding, would you consider a program where a government agency would pay you current market value for it; therefore allowing you relocate to a safer location?
- Yes
- No
- Not sure
- Not applicable
- 16) Would you support rules regarding how land within a known “high flood hazard area” can be used or zoned, to reduce risks associated with future flood events in Rockport?
- Strongly support
- Somewhat support
- Do not support
- Not sure

The following nine questions will ask you to rate how much you would support different types of actions designed to reduce risks associated with flood events.

- 17) How much you would support engineered projects such as levees, dams, and bulkheads designed to reduce the risks associated with flood events?
- Strongly support
- Somewhat support
- Do not support
- Not sure

(Continue to next page)



IRB Approved Survey, Page 7.

- 18) How much you would support stronger building codes and land use rules in floodplain areas to reduce the risks associated with flood events?
- Strongly support
- Somewhat support
- Do not support
- Not sure
- 19) How much you would support retrofitting infrastructure such as roads and drainage to reduce the risks associated with flood events?
- Strongly support
- Somewhat support
- Do not support
- Not sure
- 20) How much you would support retrofitting critical facilities such as fire stations and hospitals to reduce the risks associated with flood events?
- Strongly support
- Somewhat support
- Do not support
- Not sure
- 21) How much you would support retrofitting utility infrastructure to reduce disruption of services during and after flood events?
- Strongly support
- Somewhat support
- Do not support
- Not sure

(Continue to next page)



IRB Approved Survey, Page 81.

- 22) How much you would support protection of natural areas, such as wetlands, and their inherent flood-preventing benefits in an effort to reduce the risks associated with flood events?
- Strongly support
- Somewhat support
- Do not support
- Not sure
- 23) How much you would support buying vulnerable properties and increasing natural areas to reduce the risks associated with flood events?
- Strongly support
- Somewhat support
- Do not support
- Not sure
- 24) How much you would support better access to information about flood risks and protective actions individual households can take to reduce the risks associated with flood events?
- Strongly support
- Somewhat support
- Do not support
- Not sure
- 25) Are there any other types of actions that you would support to reduce the risks associated with flood events? (Please specify below)
- 26) Please provide any additional information regarding Rockport's efforts to plan for the long-term management of our floodplains.

Thank you for your time!



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IRB NUMBER: IRB2016-0448D
IRB APPROVAL DATE: 07/01/2016
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IRB Approved Survey, Page 9.

APPENDIX 2: SHORT ANSWERS RESPONSE FOR QUESTIONS 1, 5, AND 12

APPENDIX 2:1: Short Answer Responses to Question 1

Question 1 asks respondents to identify how much they live or work in the city, and if they own a business. The last option provides an opportunity for respondents to identify another interest in the city by choosing “other.” If the respondents choose this option, they are asked to specify their interest. The table below presents the actual responses provided.

Table 22: Short Answer Responses to Question 1.

Actual Responses
Live in Aransas county
P
Live in Fulton
Weekend home owner
live just outside city limits
Former resident
Work from home for the Tx Drought Project
Own 2nd home near airport
Partner in co-op business
I live in Aransas Co outside Rockport
Run an organization

APPENDIX 2:2: Short Answer Responses to Question 5

Question 5 asks respondents if they are you aware of any current flood control or management projects in the City of Rockport. The respondents who respond positively are asked to specify what projects they are knowledgeable about. The table below presents the actual responses provided regarding flood control projects.

Table 23: Short Answer Responses to Question 5.

Actual Responses
Large drains, pipes, valves, ets put in south rockport
There have been some drainage I,proved in South Rockport
I saw ditches being cleared for better water flow
water street
Bayshore on Key Allegro
a master plan
Aransas County established a Storm Water Manage progran in 2008. The City has also recently updated its SW managmrnt plan.

APPENDIX 2.3: Short Answer Responses to Question 12

Question 12 asks respondents to identify what actions they have taken to protect their home, business, or property from potential flooding. The last option “I have taken other actions” provides a space for additional short answer response and asks the individual to please list these additional actions. The table below presents the actual responses provided, and shows how those answers were categorized.

Table 24: Short Answer Responses to Question 12.

Actual Responses	Category
Purposely purchased a higher elevation home. Studied storm surge maps.	Elevation
Bought a high volume pump to pump water across the street where it will drain, the ditch on my side will not drain	Pumps
Keeping things up higher off ground	Elevated storage
Hurricane shutters	Window coverings
Use alternative routes to travel to and from work and my child's daycare during flooding events.	Alternative travel routes
When we get a lot of rain, I clear the floors of my store with most merchandise in case of flooding.	Elevated storage
Created drainage plan for our property	Drainage plan
I have measured the elevation of my homes before buying them.	Elevation
pumps to take water to drainage ditch, that is NOT deep enough so still standing water.	Pumps
Ordinary preparation with window coverings, etc.	Window coverings
Purchased residential propert that was elevated	Elevation

APPENDIX 3: CODED, OPEN-ENDED ANSWERS FOR QUESTIONS 26 AND 27

APPENDIX 3.1: Responses to Question 26

Question 26 asks respondents if there any other types of actions that you would support to reduce the risks associated with flood events in Rockport. The table below presents the actual responses provided, and shows how those answers were categorized.

Table 24: Responses to Question 26.

Codes	Actual Responses
Adv.	Flooding at my home increased after the city "fixed" the problem at other end of street. I have raised my property at my own expense while seeing city trucks dump sand on property owned by person with connections. I feel a tax credit may help in some areas. If I continually flood I should not pay same taxes as someone who does not have to face that problem
Plan/L	Better planning from the city before they undertake redoing streets (downtown area)...some foresight into the repercussions that occur when projects are undertaken
NP	Fix the flood problem in Rockport - period!
Nat./OD/L	I'm very concerned that Aransas County is not doing enough to protect natural wetland barriers and over developing along the bay shore.
NP	No
Eng.	Like the ones up there by Hitchcock, Texas. very large drain canal.
Eng.	Blocking off tidal input, and pumping rain water out.
NP	Use of common sense
Eng.	Frequent cleaning storm water inlets and sewer
Eng./L	South Rockport specifically needs better street drainage
NP	none come to mind
Adv./L	South magnolia is the low point in the bowl. Stop allowing sand by the truckloads to build up lots that used to hold rain water. This water is displaced on existing homes and adding to the flooding. These were wet lands. As more lots are built up, the existing homes absorb the water from their new neighbors. The sump pumps have been useless two years in a row due to high tide from what I have been told. My garage went 12"+ completely underwater. Actually the entire lot at 1311 s magnolia went 6-18" underwater twice in 12 months. My car was flooded inside the cab due to high water parked on the concrete driveway. All the water that used to sit on numerous lots are all being built up 3-4' and now that land doesn't hold it's own water as required by law their water flows to existing homes and flood them. Every owner is responsible for their water run off. The sump pumps are a failure. The discharge is below the high tide.
Ed.	Need more information about resources thst are available.
Eng.	Better drainage ditches, better culverts
Ed./Eng.	Educating local people and businesses about the risks of allowing debris to block natural drainage and storm sewers, and correcting the silting-in that has been allowed to occur in creeks designed for drainage
Coord./Ed./L	More cooperation from city officials and departments in areas, such as downtown, which always flood. Never hear anything from the city before, during or afterwards.
Ed.	Make sure purchasers are aware of the history of the property they are buying. Many people are buying property that was historically a lake or swamp.
Eng./PR/Adv.	Increase the depth of road drainage ditches. Permit required for any topography changes to property that could cause flooding to neighbors' properties.

Eng./L	Improve the storm drainage on Magnolia Street, in the Magnolia Park block. Our house flooded during Tropical Storm Bill last year. Also put up road barricades on flooded residential streets. Kids driving trucks fast down our flooded street increased the amount of water that came in.
Ed.	Lots of information. People don't pay attention until they have been bombarded with information or they are faced with the need for it.
Eng.	to general question. This is a location and land use specific issue. For Rockport in general, I would recommend raising the elevation of all bay/water front roads, hardening their shorelines, and adding elevated pumping stations inland to discharge flooded city streets quickly during high rain + high tide events
Ed.	Education as to what products are out there to help people protect their homes and businesses.

APPENDIX 3.2: Responses to Question 27

Question 27 asks respondents if there is any additional information that they would like to provide regarding Rockport's efforts to plan for long-term floodplain management. The table below presents the actual responses provided, and shows how those answers were categorized.

Table 25: Responses to Question 27.

Codes	Actual Responses
Adv./Need	I have seen buildings and developments allowed that will acerbate the problem for the neighbors and neighborhood. All areas need attention, not just the high dollar neighborhoods
OI/B	Infrastructure is so old and inadequate ...I don't know where you begin
B/OD/Need	The entire county seems to be behind as far as drainage and with the increased building that is going on, Now is the time to do something about it
Coord.	Include Fulton and make them have a plan as well.
Ed.	Answering some of these questions may have been easier if examples were provided. In some cases, my level of support may depend on the actual actions taken by the City. Thanks.
Nat./OD/L	I'm very concerned that Aransas County is not doing enough to protect natural wetland barriers and over developing along the bay shore.
NP	Don't build here
Coord.	The City, The County, and The State should work together on our flood problems.
B/OD	This survey and any action that needs to be implemented are way behind, example, newly constructed building and roads allowed to be build below acceptable high water levels.
Plan	Work to reduce insurance costs
NP	I'm sorry to say this, but based on the personal attacks and threats leveled on me when I, as a water policy professional, tried to help local citizens understand groundwater conservation, I'd say it's impossible to get any traction on this issue in Rockport. Good luck.
Plan/PR/L	A good flood management plan for the city would be greatly appreciated. Stricter new building requirements and redesigning Austin St. would greatly help.
NP/Need	Fix downtown
NP	None I can recommend
Eng./L	Drainage ditch maintenance. Some of the drainage to Copano Bay has filled in with trees (follow the ditch along the north edge of the Rockport City Service Center for a prime example).
NP/OD	When they build Key Allegro and Kon Tiki they gave up any efforts to do real management.
B/L/Need	Please act on this as soon as possible. Those of us who live in the downtown area have to deal with this problem a lot, and there are so many associated dangers, like snakes and power lines in water, as well as mosquitoes.
L/Need	Market street and hwy 35 intersection needs to be looked at

Eng./L	Improvement of drainage in downtown area should be high priority.
Eng.	identify inland areas that historically back-up and flood during high rain + high tide events. Install elevated pumping stations and associated discharge systems to more rapidly drain the flooded streets, as opposed to waiting on the tides to recede.
Adv./Need/L	Please help the stores in downtown Rockport. Please be mindful on if the harborfront develops and is built higher than downtown, a bowl type situation would be detrimental to our businesses.
Coord.	Make sure County and City are working together