

How prepared are we now? Florida and Alabama coastal residents' opinions five years after the DWH oil spill.

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Executive Summary

How prepared are we now? Florida and Alabama coastal residents' opinions five years after the DWH oil spill.

April 2015

Introduction

Following the explosion of the Deepwater Horizon (DWH) oil rig, hundreds of thousands of Gulf Coast residents were affected. This research study has sought to describe Florida and Alabama coastal residents' opinions of recovery, five years after the DWH disaster. The telephone survey was completed by 444 residents along the Gulf Coast, from Baldwin County Alabama to Levy County Florida in January 2015.

Key Findings

- 28.7% of respondents in this study indicated that they were personally affected by the DWH oil spill.
- 39.4% of respondents were dissatisfied or very dissatisfied with leaders in their communities after the DWH oil spill.
- 42% disagree or strongly disagree that their community is stronger after the DWH oil than it was before.
- 34.3% of residents are dissatisfied or very dissatisfied with their community's economy after the DWH oil spill. Only 15.6% were dissatisfied or very dissatisfied with their community's economy before the oil spill, while 34.9% disagree or strongly disagree that their community's economy has fully recovered from the DWH oil spill.
- 41.1% of respondents were satisfied or very satisfied with the Gulf Coast seafood industry after the DWH oil spill. 50.4% agree or strongly agree that they trust Gulf Coast seafood is currently safe to eat.
- 66.7% of respondents were satisfied or very satisfied with emergency response in their communities following the DWH oil spill.
- 31.6% of respondents indicated that they agree or strongly agree that community programs established following the oil spill continue to provide benefits.
- 73.7% of respondents indicated that volunteer programs are moderately or very important in response to an environmental disaster or crisis.
- 72% of respondents indicated that the local media providing up-to-date and factual information is moderately or very important following an environmental disaster.
- 53.4% of respondents indicated that mental health services are moderately or very important following an environmental disaster.
- 55.5% of respondents strongly agreed that they trusted Gulf Coast seafood was safe before the DWH oil spill, while 29.5% strongly agreed that they trust Gulf Coast seafood is currently safe to eat.

Background

On April 20, 2010, an explosion aboard British Petroleum's (BP) oilrig, Deepwater Horizon (DWH), resulted in the largest known accidental oil spill. It was estimated that approximately

4.9 million barrels of oil were released into the Gulf of Mexico. The explosion of the DWH resulted in a loss of eleven lives and substantial environmental and economic losses for residents along the Gulf Coast region. In the aftermath of the spill, A University of Florida (UF) led team of researchers has been working on a project studying the physiological, psychological and sociological effects in order to help communities recover and prepare for future potential natural and manmade disasters.

The five-year, \$6.5 million grant, entitled Healthy Gulf, Healthy Communities (HGHC): Health Impact of Deepwater Horizon Spill in Eastern Gulf Coast Communities, includes researchers from five universities, including UF, Arizona State University, University of Maryland, University of New Orleans and University of West Florida, and is led by Dr. J. Glenn Morris, Jr., director of the Emerging Pathogens Institute at UF.

This survey was designed to examine Gulf Coast residents' opinions related to recovery five years after the DWH oil spill occurred. The survey included items that identify the perceptions of Gulf Coast residents as to:

- Preferred sources when seeking information about issues in their communities;
- Personal impact from the oil spill;
- Personal and family recovery;
- Opinions of the compensation process, if personally affected;
- Levels of dissatisfaction or satisfaction with their communities before the DWH oil spill;
- Levels of dissatisfaction or satisfaction with their communities after the DWH oil spill;
- Opinions of community recovery;
- Opinions of Gulf Coast seafood;
- Opinions of whether or not effects from the DWH oil spill are still visible;
- Opinions of the level of importance community resources have following an environmental disaster or crisis.

Methods

In January 2015, a telephone survey was administered to 444 Gulf Coast residents, age 18 and older, in Baldwin County in Alabama, Escambia, Santa Rosa, Okaloosa, Walton, Bay, Gulf, Franklin, Wakulla, Jefferson, Taylor, Dixie, and Levy counties in Florida. To ensure the respondents were representative of the Florida and southern Alabama population according to the 2010 U.S. Census (seen in Table 1), the data were weighted using postratification techniques. Weighting procedures are commonly used in public opinion research with non-probability samples to make population estimates (Baker et al., 2013).

Dr. Tracy Irani, Dr. Angela Lindsey, and Kacie Pounds developed the survey instrument. The survey was developed utilizing Qualtrics survey questionnaire design software. A telecommunications company was contracted through Qualtrics to administer the survey to the target population.

Table 1: Florida Census Data from 2010

Demographic Category	Percentage of Florida Residents in 2010 U.S. Census
Gender	
Male	48.9
Female	51.1
Age	
19 and younger	1.3
20-29 years	12.8
30-39 years	12.2
40-49 years	14.2
50-59 years	13.5
60-69 years	11.1
70-79 years	7.4
80 and older	4.9

Results

Demographics

Gender

Fifty point one percent of respondents were male and 49.9% of respondents were female (Table 2).

Table 2: Sex

Sex	Percentage of Respondents
Male	50.1
Female	49.9

Respondents were asked “what is your sex?”

Marital Status

Fifty-one point nine percent of respondents reported being married or in a domestic partnership and 27.7% reported being single (Table 3).

Table 3: Marital Status

Marital Status	Percentage of Respondents
Single, never married	27.7
Married or domestic partnership	51.9
Separated	0.7
Divorced	9.4
Widowed	10.3

Respondents were asked “what is your current marital status?”

Employment Status

Forty-two point four percent of respondents were employed, 26.8% were unemployed, and 16.1% were unemployed (Table 4)

Table 4: Employment Status

Employment Status	Percentage of Respondents
Retired	26.8
Student	2.5
Homemaker	2.6
Self-employed	9.3
Employed	42.4
Seasonal worker	0.5
Unemployed	16.1

Respondents were asked “what is your current employment status

Household Income

Thirty point nine percent of respondents' household incomes were below \$25,000 annually, 19.5% reported their gross household income as \$25,000 to \$50,000, and 15.3% refused to answer this question (Table 5).

Table 5: Household Income

Household Income before taxes	Percentage of Respondents
Under \$25,000	30.9
\$25,000 to \$50,000	19.5
\$50,000 to \$75,000	11.5
\$75,000 to \$100,000	10.7
\$100,000 to \$200,000	7.0
More than \$200,000	5.2
Refused to answer	15.3

Respondents were asked "What was your total household income before taxes during the past 12 months?"

Home Ownership

Seventy-three point seven percent of respondents owned their home and 26.3% rent (Table 6).

Table 6: Home Ownership

Own or Rent	Percentage of Respondents
Own	73.7
Rent	26.3

Respondents were asked "Do you own or rent your home?"

Age

Forty-four point eight percent of respondents were the age of 18 to 44, 19.7% were 45 to 54 years old, 16.4% were 55 to 64 years old (Table 7).

Table 7: Age Group

Age Group	Percentage of Respondents
18-44	44.8
45-54	19.7
55-64	16.4
65-74	11.0
75 or older	8.1

Respondents were asked "what month and year were you born?"

Preferred Information Sources

Websites (50.6%), local TV networks (42.8%), and major TV networks (41.6%) had the highest degree of likelihood in being sought out for information, with the majority of respondents indicating that they were extremely likely to use those sources. The majority of respondents indicated that they were extremely unlikely to use Twitter (87.5%), national newspapers (62.5%), Facebook (38.4%), and government agencies (38.1%) when seeking information about issues in their community (Table 8).

Table 8: Likelihood of using sources when seeking information about issues in the community

Source	Percentage of Respondents
Face to face communication	
Extremely unlikely	16.6
Unlikely	13.7
Neutral	22.8
Likely	9.4
Extremely Likely	37.6
Facebook	
Extremely unlikely	38.4
Unlikely	16.6
Neutral	11.1
Likely	7.9
Extremely Likely	26.1
Twitter	
Extremely unlikely	87.5
Unlikely	5.6
Neutral	2.7
Likely	1.7
Extremely Likely	2.4
Website or search engine (Google, Yahoo, Bing, etc.)	
Extremely unlikely	14.0
Unlikely	4.8
Neutral	10.1
Likely	20.5
Extremely Likely	50.6
Local TV networks	
Extremely unlikely	9.9
Unlikely	7.4
Neutral	20.3
Likely	19.6
Extremely Likely	42.8
Local newspapers	
Extremely unlikely	26.3
Unlikely	13.7
Neutral	15.2
Likely	12.9
Extremely Likely	32.0
Local organizations (nonprofit and service organizations)	

Extremely unlikely	28.6
Unlikely	20.5
Neutral	25.5
Likely	12.1
Extremely Likely	13.3
Local events	
Extremely unlikely	21.8
Unlikely	20.8
Neutral	29.9
Likely	12.8
Extremely Likely	14.7
State and local colleges and universities	
Extremely unlikely	36.5
Unlikely	20.5
Neutral	19.3
Likely	12.0
Extremely Likely	11.7
Major network TV (NBC, CBS, Fox, etc.)	
Extremely unlikely	10.2
Unlikely	6.6
Neutral	21.8
Likely	19.7
Extremely Likely	41.6
National newspapers (USA Today, The New York Times, etc.)	
Extremely unlikely	62.5
Unlikely	12.7
Neutral	8.8
Likely	6.9
Extremely Likely	9.0
Government agencies	
Extremely unlikely	38.1
Unlikely	19.8
Neutral	19.5
Likely	9.5
Extremely Likely	13.1

Respondents were asked to “please rate how likely you are to use the following sources when seeking information about issues in your community.”

Personally Affected

Seventy-one point three percent of respondents indicated that they were not personally affected and 28.7% of respondents were personally affected by the DWH oil spill (Table 9).

Table 9: Personally Affected by the DWH Oil Spill

Were you personally affected by the DWH oil spill?	Percentage of Respondents
Yes	28.7
No	71.3

Respondents were asked “were you personally affected by the DWH oil spill in 2010?”

Respondents who indicated that they had been personally affected by the oil spill were asked a series of questions about their recovery. The majority of those personally affected neither agree nor disagree (29.5%) that they have fully recovered from the DWH oil spill, while 28.3% of those affected strongly disagree that their family has fully recovered. Forty-nine point three percent of respondents strongly disagree or disagree with the statement “I feel the process to compensate people after the oil spill was fair” (Table 10).

Table 10: Personal recovery from the DWH oil spill

Statement	Percentage of Respondents	Mean
I have fully recovered from the DWH oil spill.		3.03
Strongly disagree	21.7	
Disagree	13.1	
Neither agree nor disagree	29.5	
Agree	11.7	
Strongly agree	23.9	
My family has fully recovered from the DWH oil spill.		2.87
Strongly disagree	28.3	
Disagree	20.9	
Neither agree nor disagree	12.5	
Agree	12.0	
Strongly agree	26.3	
I feel the process to compensate people after the oil spill was fair.		2.43
Strongly disagree	39.2	
Disagree	10.1	
Neither agree nor disagree	28.1	
Agree	13.4	
Strongly agree	9.2	

Note: Responses based on a Likert-type scale from 1=strongly disagree to 5=strongly agree.

Community Satisfaction

When asked about their level of dissatisfaction or satisfaction with several aspects of their community before the DWH oil spill, the majority of respondents indicated that they were very satisfied with the Gulf Coast seafood industry (37.2%) and emergency response (34.3%). In all other categories, the majority of respondents indicated a neutral level of satisfaction.

Respondents were least satisfied with mental health services/counseling (mean=2.70) prior to the DWH oil spill (Table 11).

Table 11: Level of community satisfaction before the DWH oil spill

Level of dissatisfaction or satisfaction with each of the following in the community BEFORE the DWH oil spill.	Percentage of Respondents	Mean
Economy		3.34
Very dissatisfied	5.6	
Dissatisfied	10.0	
Neutral	43.5	
Satisfied	26.1	
Very satisfied	14.7	
Community leaders		2.93
Very dissatisfied	13.6	
Dissatisfied	16.8	
Neutral	43.5	
Satisfied	15.4	
Very satisfied	10.7	
Community programs (geared toward families, children, seniors, etc.)		3.25
Very dissatisfied	7.2	
Dissatisfied	15.5	
Neutral	39.4	
Satisfied	21.0	
Very satisfied	16.8	
Local Media		3.45
Very dissatisfied	7.7	
Dissatisfied	5.5	
Neutral	41.8	
Satisfied	24.0	
Very satisfied	20.9	
Mental health services/counseling		2.70
Very dissatisfied	20.0	
Dissatisfied	18.5	
Neutral	41.9	
Satisfied	10.5	
Very satisfied	9.1	
Gulf Coast seafood industry		3.88
Very dissatisfied	8.4	
Dissatisfied	2.7	
Neutral	18.3	
Satisfied	33.4	
Very satisfied	37.2	
Faith based organizations		3.32
Very dissatisfied	11.6	
Dissatisfied	11.3	
Neutral	33.5	

Satisfied	20.7	
Very satisfied	22.9	
State regulator agencies		2.76
Very dissatisfied	18.1	
Dissatisfied	21.9	
Neutral	35.7	
Satisfied	14.9	
Very satisfied	9.4	
Emergency response		3.86
Very dissatisfied	5.9	
Dissatisfied	4.5	
Neutral	21.6	
Satisfied	33.7	
Very satisfied	34.3	

Note: Responses based on a Likert-type scale of 1=very dissatisfied to 5=very satisfied

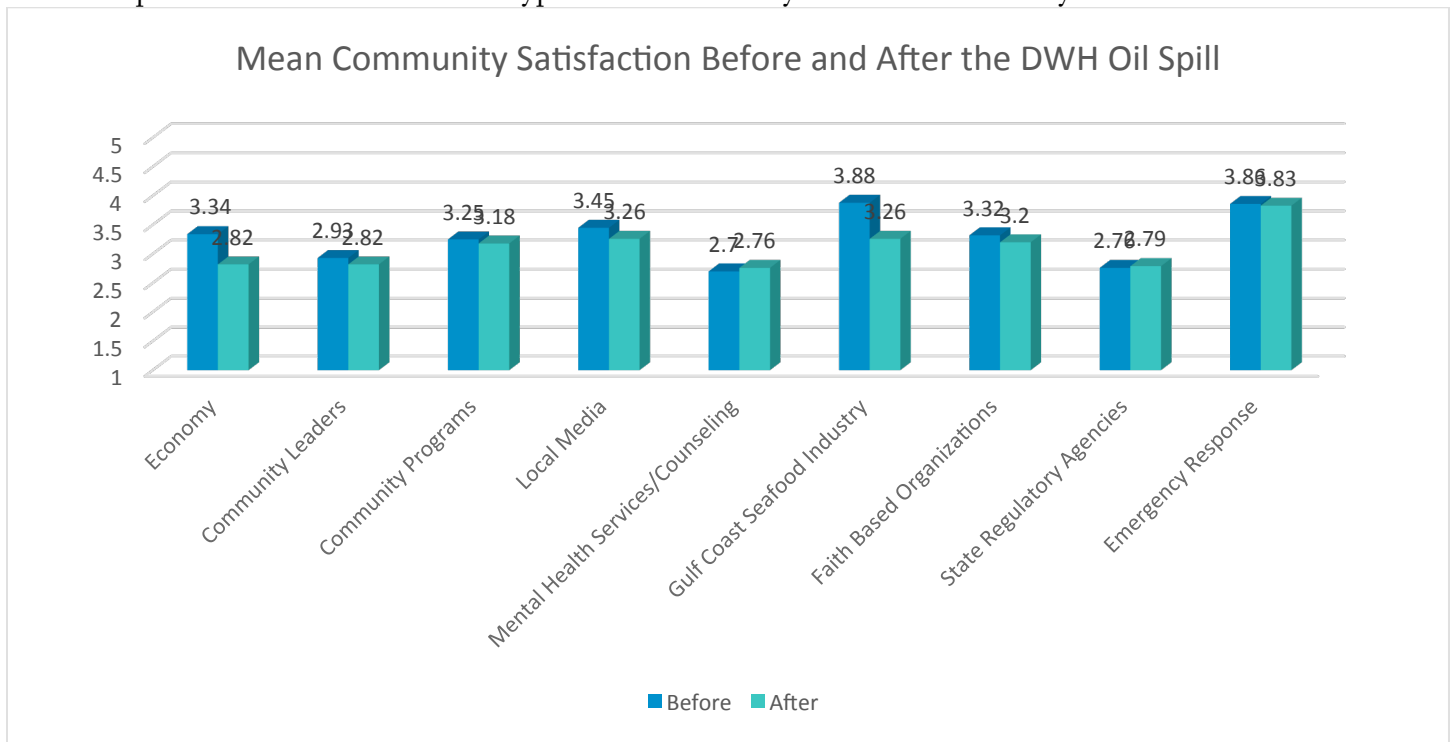
After indicating their levels of satisfaction with their communities before the DWH oil spill, respondents were asked to indicate their levels of dissatisfaction or satisfaction with the same categories after the DWH oil spill. Thirty-three point seven percent of respondents indicated that they are satisfied with community programs and 33.4% indicated that they are satisfied with emergency response after the DWH oil spill. Similar to respondents' levels of satisfaction before the DWH oil spill, the majority of respondents indicated a neutral level of satisfaction in all other categories. Emergency response (mean=3.83) had the highest mean level of satisfaction and mental health services (mean=2.76) had the lowest mean level of satisfaction (Table 12).

Table 12: Level of community satisfaction after the DWH oil spill

Level of dissatisfaction or satisfaction with each of the following in the community AFTER the DWH oil spill.	Percentage of Respondents	Mean
Economy		2.82
Very dissatisfied	15.6	
Dissatisfied	18.7	
Neutral	41.3	
Satisfied	17.1	
Very satisfied	7.4	
Community leaders		2.82
Very dissatisfied	14.9	
Dissatisfied	24.5	
Neutral	33.9	
Satisfied	16.8	
Very satisfied	9.9	
Community programs (geared toward families, children, seniors, etc.)		3.18
Very dissatisfied	8.1	
Dissatisfied	16.6	
Neutral	33.2	
Satisfied	33.7	
Very satisfied	8.4	
Local Media		3.26
Very dissatisfied	13.5	
Dissatisfied	8.0	
Neutral	34.5	
Satisfied	26.3	
Very satisfied	17.6	
Mental health services/counseling		2.76
Very dissatisfied	17.3	
Dissatisfied	20.1	
Neutral	41.5	
Satisfied	11.2	
Very satisfied	9.9	
Gulf Coast seafood industry		3.26
Very dissatisfied	9.8	
Dissatisfied	13.7	
Neutral	35.3	
Satisfied	23.3	
Very satisfied	17.8	
Faith based organizations		3.20
Very dissatisfied	14.3	
Dissatisfied	13.0	
Neutral	30.9	
Satisfied	22.5	
Very satisfied	19.3	

State regulator agencies		2.79
Very dissatisfied	20.2	
Dissatisfied	15.5	
Neutral	39.0	
Satisfied	15.6	
Very satisfied	9.8	
Emergency response		3.83
Very dissatisfied	6.2	
Dissatisfied	4.8	
Neutral	22.3	
Satisfied	33.4	
Very satisfied	33.3	

Note: Responses are based on a Likert-type scale from 1=very dissatisfied to 5=very satisfied



Community Recovery

The majority (34.5%) of respondents neither agree nor disagree with the statement “community programs following the DWH oil spill continue to provide benefits,” while 33.8% of respondents disagree or strongly disagree with that statement. The statement “my community’s economy has fully recovered from the DWH oil spill had the highest degree of agreement with a mean of 2.97, while the statement “my community is stronger after the DWH oil spill than it was before” had the lowest degree of agreement with a mean of 2.67 (Table 13).

Table 13: Community recovery five years after the DWH oil spill

Statement	Percentage of Respondents	Mean
Community programs following the DWH oil spill continue to provide benefits		2.89
Strongly disagree	20.7	
Disagree	13.1	
Neither agree nor disagree	34.5	
Agree	19.6	
Strongly agree	12.0	
My community's economy has fully recovered from the DWH oil spill		2.97
Strongly disagree	17.5	
Disagree	17.4	
Neither agree nor disagree	30.2	
Agree	20.5	
Strongly agree	14.5	
My community is stronger after the DWH oil spill than it was before.		2.67
Strongly disagree	23.3	
Disagree	18.7	
Neither agree nor disagree	33.1	
Agree	17.9	
Strongly agree	7.0	

Note: Responses are based on a Likert-type scale from 1=strongly disagree to 5=strongly agree

When asked if there were still visible effects of the oil spill present in their communities, 61.2% of respondents indicated that there were no visible effects still present in their communities, while 38.8% of respondents indicated that the effects were still visible five years after the oil spill (Table 14).

Table 14: Visible effects still present

Are the effects of the DWH oil spill still visible in your community?	Percentage of Respondents
Yes	38.8
No	61.2

Community Resources

Volunteer programs (51.4%), direct assistance targeting those in need (48.5%), recovery programs (46.4%), and the local media providing up-to-date information (44.8%) had the highest levels of importance with the majority of respondents indicating that they were very important community resources in response to environmental disaster or crisis. Mental health services (33.3%), and ways to provide feedback (32.8%) had the lowest levels of importance, however, the majority of respondents still indicated that they were very important resources (Table 15).

Table 15: Importance of community resources following disaster

The level of importance of the following community resources in response to an environmental disaster or crisis.	Percentage of Respondents	Mean
Volunteer programs		4.10
Not at all important	5.0	
Slightly important	5.4	
Neutral	16.0	
Moderately important	22.3	
Very important	51.4	
Recovery programs		4.01
Not at all important	4.7	
Slightly important	7.4	
Neutral	16.9	
Moderately important	24.7	
Very important	46.4	
Direct assistance targeting those in need		4.03
Not at all important	5.2	
Slightly important	5.0	
Neutral	20.0	
Moderately important	21.3	
Very important	48.5	
Local media to provide up-to-date factual information		3.98
Not at all important	7.7	
Slightly important	3.3	
Neutral	17.0	
Moderately important	27.2	
Very important	44.8	
Ways for me to provide feedback or ask questions		3.61
Not at all important	7.2	
Slightly important	10.2	
Neutral	30.3	
Moderately important	19.5	
Very important	32.8	
Mental health services		3.57
Not at all important	9.9	
Slightly important	10.4	
Neutral	26.4	
Moderately important	20.1	
Very important	33.3	

Note: Responses are based on a Likert-type scale from 1=not at all important to 5=very important

Trust in Gulf Coast Seafood

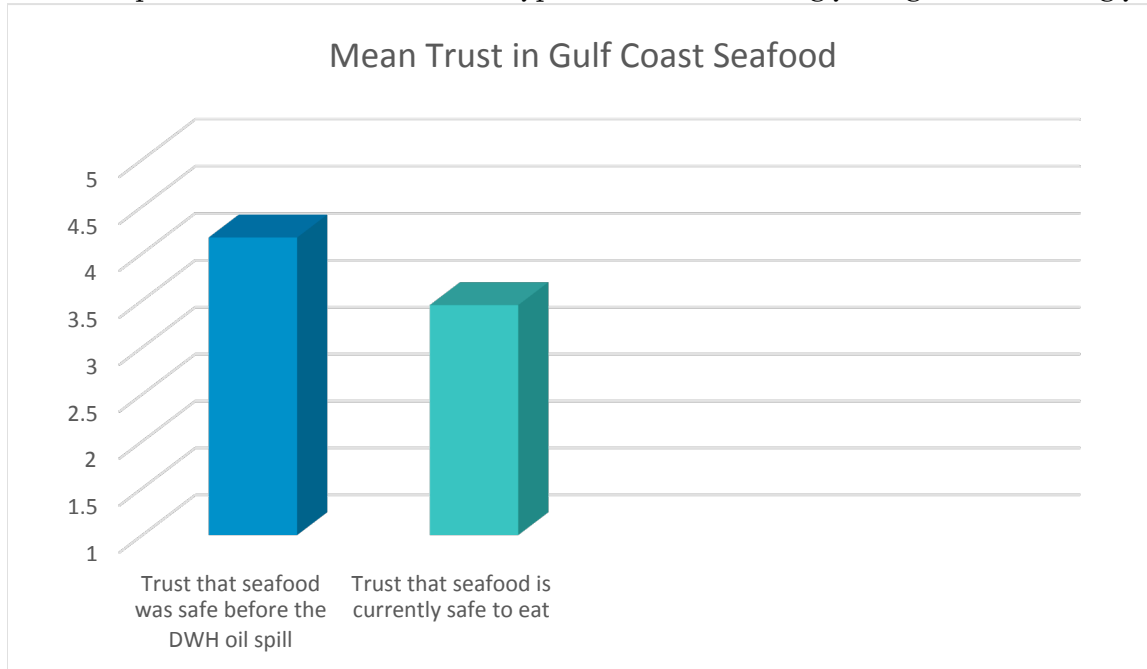
Fifty-five point five percent of respondents indicated that they strongly agreed with the statement “before the DWH oil spill, I trusted that Gulf Coast seafood was safe to eat.” The

majority of respondents (29.5%) also strongly agreed with the statement “I trust that Gulf Coast seafood is currently safe to eat.” However, the mean degree of agreement that Gulf Coast seafood is safe to eat dropped from 4.17 before the oil spill to 3.45 after the oil spill.

Table 16: Trust in Gulf Coast seafood

Statement	Percentage of Respondents	Mean
Before the DWH oil spill, I trusted that Gulf Coast seafood was safe to eat.		4.17
Strongly disagree	7.8	
Disagree	2.7	
Neither agree nor disagree	10.3	
Agree	23.8	
Strongly agree	55.5	
I trust that Gulf Coast seafood is currently safe to eat.		3.45
Strongly disagree	14.2	
Disagree	6.5	
Neither agree nor disagree	28.9	
Agree	20.9	
Strongly agree	29.5	

Note: Responses are based on a Likert-type scale from 1=strongly disagree to 5=strongly agree



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