

MAINE AND NEW HAMPSHIRE COASTAL RESIDENT PILOT SURVEY RESIDENT RESPONSE REPORT



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SCHOOL OF ECONOMICS

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OVERVIEW

The purpose of this document is to report descriptive statistics for the responses collected from the NEST 2015 Maine and New Hampshire Coastal Resident Survey. The survey was intended to help identify the perceptions, values, and attitudes of Mainers and New Hampshire residents about water quality along the Gulf of Maine coast. The hope is that the survey may identify unexpected perceptions of risk and actual behaviors relating to water quality, and provide the context to help improve or better align management practices with resident attitudes for more effective policies in the future.

ACKNOWLEDGEMENTS

We acknowledge the key role stakeholders, collaborators, and colleagues played in the design of the 2015 Maine and New Hampshire Coastal Resident Pilot Survey. Many of our questions are a direct response to question and information needs of key stakeholders and emerging research questions about beach recreation, shellfish consumption, water quality, public health risks, beach management, shellfish growing area management, and environmental change. We thank numerous coastal stakeholders, collaborating researchers on NEST's Safe Beaches and Shellfish Project, and colleagues involved with similar research projects nationally for their excellent feedback.

We thank NSF EPSCoR, and Maine EPSCoR for their support of this research.

INTRODUCTION AND METHODS

The NEST Maine and New Hampshire Beachgoer Survey (Qualtrics online survey software) administered in the Fall of 2014 was followed in Spring 2015 by the Maine and New Hampshire Coastal Resident Survey. While the Coastal Resident Survey also utilized Qualtrics online survey software, the invitations to participate in the online survey were distributed through the mail, making the survey a mixed media survey. The sample area was from the New Hampshire Seacoast north through Downeast Maine—residents from each town with waterfront were invited to participate in the survey process. The sample (n=6000) of Maine and New Hampshire coastal resident information was purchased from InfoUSA. There were 3960 Maine residents in the sample, half (n=1980) of whom received an ME Beaches version of the survey, the other half (n=1980) of whom received the ME Shellfish version of the survey. Correspondingly, there were 2040 New Hampshire residents in the sample, half (n=1020) of whom received a NH Beaches version of the survey, the other half (n=1020) received the NH Shellfish version of the survey.

The first round of invitations to ME and NH coastal residents was mailed on January 5, 2015. It is important to note that in this first round of invitations, there were several errors in printing and mailing the letters. The major issue was that the ‘survey access code’ did not print; rather, it was replaced by the ‘contact ID’ number which also appeared at the top of the letter. This mishap may have contributed to the low response rate from the first round of survey invitations. The response rate was 6% for the first round. One possible theory to explain the low response rate from New Hampshire residents is that the invitation letters were printed on University of Maine letterhead—residents may have simply thrown the invitations out, thinking they were spam from an out of state institution.

In the second round of invitations, we mailed out a printed letter to NH residents on 2/26/15 and a day later to ME residents on 2/27/15. The undeliverable addresses from the first mailing sample were not all removed from the second mailing sample—some were returned undeliverable twice because the first round was not successfully delivered (due to possible complications on the US Postal Service end). In order to improve response rates, we purchased the email address information for 957 Maine residents (461 ME Shellfish and 496 ME Beach) and 558 New Hampshire residents (303 NH Shellfish and 255 NH Beach). InfoUSA sent our email merge, which increased response rates slightly.

The results were as follows (as of 4/9): for the ME Beach survey, we received 266 undeliverable letter returns and 185 responses, giving us a 10.8% response rate and a 13% undeliverable rate; for the ME Shellfish survey, we received 317 undeliverable letter returns and 203 responses, giving us a 12.2% response rate and a 16% undeliverable rate; for the NH Beach survey, we received 68 undeliverable letter returns and 68 responses, giving us a 7.1% response rate and an 7% undeliverable rate; finally, for the NH Shellfish survey we received 60 undeliverable letter returns and 75 responses, giving us a 7.8% response rate and an 8% undeliverable rate. The combined ME data were: 583 returned undeliverable, 415 responses, 11.5% response rate, and a 15% undeliverable rate. The combined NH data were: 128 returned undeliverable, 143 responses, 7.5% response rate, 6% undeliverable rate. The total combined data for ME and NH coastal residents were: 711 returned undeliverable, 558 responses, 10.0% response rate, and an 11.9% undeliverable rate.

COASTAL RESIDENT DEMOGRAPHICS

This section details the respondents' demographics: age, gender, level of education, employment status, income, and other key data. Though respondents answered demographic questions in the last section of the online survey, we report the survey demographics first in order to provide a more detailed picture of who responded to the survey.

Q1 What is your gender?

Q. What is your gender?		
Gender	Frequency	Percent
Male	252	57.8
Female	184	42.2
n= 436		

Q2 How old are you?

Q. How old are you?	
Age	
Mean	57.33
Std Dev	14.14
Minimum	22
Maximum	95
n= 457	

Q3 How many years have you lived in the state?

Q. How many years have you lived in this state?	
Years	
Mean	34.43
Std Dev	20.42
Minimum	1
Maximum	87
n= 459	

Q4 How many years have you lived at your current address?

Q. How many years have you lived at your current address?	
Years	
Mean	15.57
Std Dev	13.64
Minimum	0
Maximum	87
n=460	

Q5 How would you describe your house?

Q. How would you best describe your house?		
Home type	Frequency	Percent
Primary	450	97.8
Secondary	10	2.2
n=460		

Q6 What type of water and waste system does your household use?

Q. What type of water/waste system does your household use?		
Type	Frequency	Percent
Town/city water and sewer	228	49.5
Private well and septic system	194	42.1
Other	39	8.5
n=461		

Q7 What is the highest level of education you have completed?

Q. What is the highest level of education you have completed?		
Level	Frequency	Percent
0-11 years	1	0.2
12 years (High school graduate or GED)	46	10.0
1-3 years college (Some college or Associate's degree)	98	21.3
College Graduate (Bachelor degree or equivalent)	166	36.1
Postgraduate (Master's Doctorate, Law or other degree)	149	32.4
n= 460		

Q8 Which of the following best describes your current employment status?

Q. Which of the following best describes your employment status?		
Status	Frequency	Percent
Student	3	0.7
Employed Full-time	226	49.2
Employed Part-time	43	9.4
Retired (not working)	144	31.4
Employed at home	27	5.9
Homemaker	7	1.5
Unemployed	9	2.0
n= 459		

Q9 In the past year, did you engage in any of the following activities?

Q. In the past year, did you engage in any of the following outdoor recreational activities?		
Activity	Frequency	Percent Respondents
Hiking	361	14.6
Nature photography	210	8.5
Wildlife watching	302	12.2
Camping	126	5.1
ATV/dirt biking	23	0.9
Snowmobiling	27	1.1
Hunting	46	1.9
Biking/mountain biking	165	6.7
Surfing	19	0.8
Freshwater sail/canoe/kayak	153	6.2
Freshwater boating	118	4.8
Freshwater fishing	100	4.1
Freshwater swimming	194	7.9
Coastal sail/canoe/kayak	148	6.0
Coastal boating	131	5.3
Coastal fishing	87	3.5
Coastal swimming	212	8.6
Other	46	1.9
n= 2468		

Q10 Which of the following categories represents your total household income before taxes?

Q. Which of the following categories represents your total household income (before taxes)?		
Category	Frequency	Percent
Less than \$10,000	5	1.2
\$10,000 - \$14,999	6	1.4
\$15,000 - \$24,999	20	4.7
\$25,000 - \$34,999	31	7.3
\$35,000 - \$49,999	54	12.7
\$50,000 - \$74,999	100	23.6
\$75,000 - \$99,999	72	17.0
\$100,000 - \$149,999	74	17.5
\$150,000 - \$199,999	35	8.3
\$200,000 +	27	6.4
n=424		

Q11 How many people, including yourself, live in your household in each of the following age groups?

Q. How many people, including yourself, live in your household in each of the following age groups?							
Age Group	0 - 6 years	7 - 12 years	13 - 18 years	19 - 44 years	45 - 64 years	65 - 84 years	85 or older
Mean	0.10	0.08	0.17	0.48	0.84	0.54	0.03
Std Dev	0.41	0.35	0.48	0.78	0.86	0.79	0.21
Minimum	0	0	0	0	0	0	0
Maximum	3	3	3	4	2	4	2
Frequency	32	27	56	145	248	163	12

Q12 Are you a member of a religious-based community organization?

Q. Are you a member of a religious-based community organization?		
Answer	Frequency	Percent
Yes	114	24.9
No	344	75.1
n=458		

Q13 Are you a member of any conservation or environmental organization?

Q. Are you a member of a conservation or environmental organization?		
Answer	Frequency	Percent
Yes	115	25.0
No	345	75.0
n= 460		

Q14 Do you, or an immediate family member, hold any of the following licenses?

Q. Do you or an immediate family member hold any of the following licenses?		
Type	Frequency	Percent
Commercial Shellfish Harvesting License	11	2.2
Recreational Shellfish Harvesting License	12	2.4
Other Commercial Harvesting License	6	1.2
Other Recreational Harvesting License	20	3.9
None of the above	350	68.8
n= 508		

GENERAL COASTAL QUESTIONS

The following survey questions were common to both shellfish and beach survey versions. The general questions appear in the first section of the survey, as a way to introduce respondents to the topics they would encounter later. The questions in this section are meant to gauge residents' sense of coastal cleanliness, coastal protection and improvement priorities and perceptions of the impacts their behavior has on the coastal environment.

Q15 How important are the following to you as a resident of a coastal area?

Q. How important are the following to you as a resident of a coastal area?										
Answer choice	N	Mean	Std. Dev.	1	2	3	4	5	6	7
Amusements and theme parks	491	2.33	1.50	27 (42.2%)	92 (18.7%)	86 (17.5%)	60 (12.2%)	28 (5.7%)	9 (1.8%)	9 (1.8%)
Cultural/arts amenities (museums, galleries, theater)	487	4.96	1.51	18 (3.7%)	18 (3.7%)	35 (7.2%)	97 (19.9%)	118 (24.3%)	128 (26.3%)	73 (15.0%)
Beautiful scenery	487	6.32	0.94	0 (0%)	2 (0.4%)	7 (1.4%)	14 (2.9%)	56 (11.5%)	137 (28.1%)	271 (55.6%)
Casinos	485	1.56	1.19	367 (75.7%)	45 (9.3%)	30 (6.2%)	20 (4.1%)	13 (2.7%)	7 (1.4%)	3 (0.6%)
Clean ocean, estuary, and river waters	492	6.58	0.76	1 (0.2%)	1 (0.2%)	0 (0%)	10 (2.0%)	27 (5.5%)	113 (23.0%)	340 (69.1%)
Dining amenities	485	4.91	1.40	14 (2.9%)	16 (3.3%)	36 (7.4%)	99 (20.4%)	140 (28.9%)	127 (26.2%)	53 (10.9%)
Land-based recreation opportunities (hiking, walking)	490	5.99	1.14	3 (0.6%)	5 (1.0%)	9 (1.8%)	32 (6.5%)	76 (15.5%)	169 (34.5%)	196 (40.0%)
Pleasant weather	483	5.24	1.43	11 (2.2%)	8 (1.7%)	27 (5.6%)	98 (20.3%)	116 (24.0%)	112 (23.2%)	111 (23.0%)
Other	91	5.33	2.31	17 (18.7%)	1 (1.1%)	0 (0%)	6 (6.6%)	8 (8.8%)	11 (12.1%)	48 (52.7%)
Public access to coastal resources	490	6.23	1.04	2 (0.4%)	0 (0%)	8 (1.6%)	23 (4.7%)	73 (14.9%)	118 (24.1%)	266 (54.0%)
Sandy beaches	488	5.34	1.56	11 (2.3%)	21 (4.3%)	31 (6.4%)	69 (14.1%)	91 (18.6%)	124 (25.4%)	141 (28.9%)
Shopping amenities	483	3.99	1.55	36 (7.5%)	56 (11.6%)	80 (16.6%)	118 (24.4%)	109 (22.6%)	67 (13.9%)	17 (3.5%)
Working waterfronts	488	5.66	1.31	2 (0.4%)	11 (2.3%)	19 (3.9%)	60 (12.3%)	95 (19.5%)	141 (28.9%)	160 (32.8%)

Water-based recreation opportunities (swimming, boating, kayaking, surfing)	486	5.70	1.42	12 (2.5%)	11 (2.3%)	13 (2.7%)	39 (8.0%)	97 (20.0%)	136 (28.0%)	178 (36.6%)
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Q16 In your opinion, what level of priority should coastal managers assign to each of the following?

Q. In your opinion, what level of priority should coastal managers assign to each of the following issues?										
Priority	N	Mean	Std. Dev.	1	2	3	4	5	6	7
Siting of aquaculture facilities in coastal areas	193	4.86	1.38	4 (2.1%)	5 (2.6%)	23 (11.9%)	37 (19.2%)	60 (31.1%)	41 (21.2%)	23 (11.9%)
Reducing impacts of coastal growth & development	202	5.63	1.35	1 (0.5%)	3 (1.5%)	11 (5.4%)	24 (11.9%)	50 (24.8%)	39 (36.6%)	74 (36.6%)
Reducing erosion at sandy beaches	203	5.23	1.51	7 (3.4%)	2 (1.0%)	17 (8.4%)	30 (14.8%)	51 (25.1%)	48 (23.6%)	48 (23.6%)
Supporting Commercial Fishing Industry	199	5.55	1.20	2 (1.0%)	1 (0.5%)	7 (3.5%)	18 (9.0%)	73 (36.7%)	44 (22.1%)	54 (27.1%)
Siting of oil & gas energy facilities in coastal areas	211	3.10	1.89	66 (31.3%)	26 (12.3%)	32 (15.2%)	35 (16.6%)	25 (11.8%)	15 (7.1%)	12 (5.7%)
Reducing spread of invasive species	231	5.81	1.19	1 (0.4%)	3 (1.3%)	4 (1.7%)	19 (8.2%)	63 (27.3%)	55 (23.8%)	86 (37.2%)
Other	41	4.27	2.27	9 (22.0%)	3 (7.3%)	1 (2.4%)	7 (17.1%)	8 (19.5%)	2 (4.9%)	11 (26.8%)
Reducing pollution entering coastal and ocean environments	233	6.37	1.01	1 (0.4%)	0 (0%)	4 (1.7%)	8 (3.4%)	29 (12.4%)	44 (18.9%)	147 (63.1%)
Preventing threats to life and destruction of property from coastal hazards such as flooding, sea level rise, and storm surge	203	5.09	1.52	7 (3.4%)	7 (3.4%)	11 (5.4%)	37 (18.2%)	56 (27.6%)	43 (21.2%)	42 (20.7%)

Attaining increased opportunities for public access to coastal areas	209	5.27	1.36	2 (1.0%)	5 (2.4%)	16 (7.7%)	27 (12.9%)	68 (32.5%)	43 (20.6%)	48 (23.0%)
Protection, restoration, or enhancement of shellfish growing areas	185	5.87	1.09	1 (0.5%)	0 (0%)	5 (2.7%)	9 (4.9%)	50 (27.0%)	56 (30.3%)	64 (34.6%)
Siting of tidal energy facilities in coastal areas	195	4.61	1.56	11 (5.6%)	8 (4.1%)	21 (10.8%)	42 (21.5%)	64 (32.8%)	23 (11.8%)	26 (13.3%)
Expanding tourist attractions in coastal areas	204	3.93	1.42	11 (5.4%)	18 (8.8%)	52 (25.5%)	50 (24.5%)	48 (23.5%)	17 (8.3%)	8 (3.9%)
Protection, restoration, or enhancement of coastal wetlands	188	6.01	1.17	1 (0.5%)	2 (1.1%)	3 (1.6%)	10 (5.3%)	43 (22.9%)	42 (22.3%)	87 (46.3%)
Siting of wind energy facilities in coastal areas	186	4.29	1.75	17 (9.1%)	18 (9.7%)	19 (10.2%)	40 (21.5%)	46 (24.7%)	25 (13.4%)	21 (11.3%)
Protection, restoration, or enhancement of working waterfronts	174	5.53	1.19	0 (0%)	3 (1.7%)	6 (3.4%)	19 (10.9%)	59 (33.9%)	42 (24.1%)	45 (25.9%)
Protection or enhancement of coastal water quality	213	6.12	1.08	1 (0.5%)	0 (0%)	4 (1.9%)	10 (4.7%)	43 (20.2%)	50 (23.5%)	105 (49.3%)

Q17 Please think about water quality in terms of the risks to people’s health, including the safety of swimming in the water and the health of the marine environment, including the health of plants and animals. In your opinion, how would **you** rate the ocean water quality in these New England States and Canadian Provinces?

Q. In your opinion, how would you rate the ocean water quality in these New England States and Canadian Provinces?								
State	N	Mean	Std. Dev.	1	2	3	4	5
Connecticut	390	2.53	0.80	29 (7.4%)	168 (43.1%)	152 (39.0%)	38 (9.7%)	3 (0.8%)
Massachusetts	410	2.66	0.81	22 (5.4%)	157 (38.3%)	173 (42.2%)	53 (12.9%)	5 (1.2%)
Rhode Island	396	2.67	0.83	24 (6.1%)	145 (36.6%)	173 (43.7%)	47 (11.9%)	7 (1.8%)
New Hampshire	427	3.43	0.83	2 (0.5%)	48 (11.2%)	179 (41.9%)	159 (37.2%)	39 (9.1%)
Maine	475	3.82	0.79	0 (0.0%)	26 (5.5%)	122 (25.7%)	239 (50.3%)	88 (18.5%)
New Brunswick	387	3.82	0.80	0 (0%)	18 (4.7%)	110 (28.4%)	183 (47.3%)	76 (19.6%)
Nova Scotia	389	3.93	0.83	0 (0%)	16 (4.1%)	98 (25.2%)	171 (44.0%)	104 (26.7%)

Q18 Do you think there is any change you could make in your everyday behavior, for instance actions you take in your house or in your yard, that would help to improve the quality of **your state’s** coastal water?

Q. Do you think there is any change you could make in your everyday behavior, for example actions you take in your house or yard, that would help to improve the quality of your state's coastal water?		
Answer	Frequency	Percent
Yes	259	53.6
No	224	46.4
n=483		

Q19 Do you think there is anything that you do now as a part of your everyday behavior, for example action you take in your house or in your yard, that worsens the quality of **your state's** coastal water?

Q. Do you think there is anything that you do now as part of your everyday behavior, for example actions you take in your house and yard, that worsens Maine's coastal water quality?		
Answer	Frequency	Percent
Yes	138	29
No	338	71
n= 476		

Q20 In your opinion, if most of your neighbors changed their everyday behavior, how much would it improve the quality of **your state's** coastal water?

Q. In your opinion, if most of your neighbors changed their everyday behavior, how much would it improve the quality of your state's coastal water?		
Answer	Frequency	Percent
A great deal	76	15.6
Some	222	45.7
Not much	110	22.6
A little	49	10.1
None	29	6.0
n= 486		

Q21 In your opinion, how important are each of the following benefits of coastal water that is clean and free of pollution or contaminants to **you and your family**?

Q. In your opinion, how important are each of the following benefits of coastal water that is clean and free of pollution or contaminants to you and your family?										
Answer choice	N	Mean	Std. Dev.	1	2	3	4	5	6	7
I can do my favorite coastal activities	480	5.56	1.24	2 (0.4%)	5 (1.0%)	22 (4.6%)	67 (14.0%)	104 (21.7%)	157 (32.7%)	123 (25.6%)
Others can do their favorite coastal activities	476	5.39	1.30	4 (0.8%)	12 (2.5%)	17 (3.6%)	74 (15.5%)	126 (26.5%)	140 (29.4%)	103 (21.6%)
Allows for commercial aquaculture production of shellfish	481	5.42	1.49	13 (2.7%)	12 (2.5%)	21 (4.4%)	73 (15.2%)	91 (18.9%)	137 (28.5%)	134 (27.9%)
Improved coastal experience (views, boating, etc.)	484	5.56	1.25	3 (0.6%)	6 (1.2%)	22 (4.5%)	55 (11.4%)	128 (26.4%)	140 (28.9%)	130 (26.9%)
Provides a healthy marine environment for animals, fish, birds, and other marine species	483	6.57	0.79	0 (0%)	2 (0.4%)	1 (0.2%)	14 (2.9%)	25 (5.2%)	100 (20.7%)	341 (70.6%)
Other	32	3.90	2.68	12 (37.5%)	2 (6.3%)	1 (3.1%)	3 (9.4%)	0 (0%)	4 (12.5%)	10 (31.3%)
Increased property values in coastal communities	480	4.22	1.74	48 (10%)	46 (9.6%)	55 (11.5%)	101 (21.0%)	105 (21.9%)	84 (17.5%)	41 (8.5%)
People do not get sick from contaminated water (e.g. stomach ailments, infections)	477	6.37	1.16	3 (0.6%)	8 (1.7%)	9 (1.9%)	21 (4.4%)	25 (5.0%)	98 (20.5%)	314 (65.8%)
Increased coastal tourism	485	4.63	1.58	24 (4.9%)	33 (6.8%)	46 (9.5%)	103 (21.2%)	121 (24.9%)	107 (22.1%)	51 (10.5%)
Allows for harvesting of shellfish	483	5.92	1.25	4 (0.8%)	6 (1.2%)	16 (3.3%)	34 (7.0%)	78 (16.1%)	148 (30.6%)	197 (40.8%)

Q22 In your opinion, how important are each of the following problems associated with **poor coastal water quality**?

Q. In your opinion, how important are each of the following problems associated with poor coastal water quality?										
Answer choice	N	Mean	Std. Dev.	1	2	3	4	5	6	7
Reduced opportunities for coastal activities	477	5.61	1.19	3 (0.6%)	3 (0.6%)	17 (3.6%)	55 (11.7%)	119 (24.9%)	156 (32.7%)	123 (25.8%)
People being advised not to go to the beach	478	5.94	1.34	6 (1.3%)	8 (1.7%)	17 (3.6%)	30 (6.3%)	79 (16.5%)	115 (24.1%)	223 (46.7%)
Harming animals, fish, and birds	479	6.50	0.90	1 (0.2%)	2 (0.4%)	3 (0.6%)	16 (3.3%)	31 (6.5%)	100 (20.9%)	326 (68.1%)
Reduced quality of coastal experience	473	5.64	1.23	3 (0.6%)	7 (1.5%)	12 (2.5%)	59 (12.5%)	106 (22.4%)	152 (32.1%)	134 (28.3%)
Cloudy or murky water	475	5.74	1.32	3 (0.6%)	12 (2.5%)	14 (2.9%)	46 (9.7%)	101 (21.3%)	124 (26.1%)	175 (36.8%)
Other	41	4.36	2.59	12 (30%)	2 (4.9%)	1 (2.4%)	5 (12.2%)	1 (2.4%)	5 (12.2%)	15 (36.6%)
Decreased coastal property values	481	4.36	1.72	40 (8.3%)	46 (9.6%)	48 (10.0%)	99 (20.6%)	112 (23.3%)	88 (18.3%)	48 (10.0%)
People getting sick from contaminated water (e.g. stomach ailments, infections)	478	6.32	1.21	7 (1.5%)	5 (1.0%)	8 (1.7%)	21 (4.4%)	31 (6.5%)	101 (21.1%)	305 (63.8%)
Decreased coastal tourism	476	4.80	1.51	15 (3.2%)	26 (5.5%)	37 (7.8%)	107 (22.5%)	128 (26.9%)	96 (20.2%)	67 (14.1%)
People being unable to harvest shellfish	479	6.00	1.26	4 (0.8%)	4 (0.8%)	17 (3.5%)	38 (7.9%)	64 (13.4%)	126 (26.3%)	226 (47.2%)

Q23 In your opinion, how much of a negative impact do the following have on coastal water quality in your state?

Q. In your opinion, how much of a negative impact do the following have on coastal water quality in your state?										
Answer choice	N	Mean	Std. Dev.	1	2	3	4	5	6	7
Coastal algae blooms	469	5.70	1.30	3 (0.6%)	10 (2.1%)	18 (3.8%)	48 (10.2%)	88 (18.8%)	150 (31.8%)	152 (32.4%)
Nearby boats&/or marinas	473	4.73	1.42	9 (1.9%)	25 (5.3%)	62 (13.1%)	82 (17.3%)	152 (32.1%)	97 (20.5%)	46 (9.7%)
Climate change (including ocean warming, ocean acidification, etc.)	475 6	5.27	1.85	31 (6.5%)	27 (5.7%)	27 (5.7%)	47 (9.9%)	73 (15.4%)	107 (22.5%)	164 (34.5%)
Coastal industrial &/or residential development	473	6.23	1.27	2 (0.4%)	6 (1.3%)	27 (5.7%)	44 (9.3%)	118 (24.9%)	132 (27.9%)	144 (30.4%)
Inland industrial &/or residential development	468	5.22	1.48	9 (1.9%)	19 (4.1%)	39 (8.1%)	56 (12.0%)	120 (25.6%)	126 (26.9%)	100 (21.4%)
Other	37	4.46	2.44	10 (27.0%)	0 (0.0%)	2 (5.4%)	5 (13.5%)	3 (8.1%)	5 (13.5%)	12 (32.4%)
Fertilizers, pesticides, and chemicals	478	6.21	1.11	1 (0.2%)	5 (1.0%)	11 (2.3%)	23 (4.8%)	52 (10.9%)	129 (27.0%)	257 (53.8%)
Animal waste (including dogs and birds)	475	4.72	1.63	14 (2.9%)	46 (9.7%)	59 (12.4%)	57 (12.0%)	127 (26.9%)	105 (22.1%)	66 (13.9%)
Industrial pollution	475	6.03	1.24	2 (0.4%)	8 (1.7%)	15 (3.2%)	31 (6.5%)	66 (13.9%)	122 (25.7%)	231 (48.6%)
Polluted river/stream runoff	474	6.13	1.18	2 (0.4%)	6 (1.3%)	14 (3.0%)	24 (5.1%)	59 (12.4%)	125 (26.4%)	244 (51.5%)
Failing septic systems	475	5.84	1.28	2 (0.4%)	7 (1.5%)	22 (4.6%)	40 (8.4%)	77 (16.2%)	140 (29.5%)	187 (39.4%)
Aging or failing wastewater treatment facilities	473	6.07	1.20	3 (0.6%)	4 (0.8%)	19 (4.0%)	20 (4.2%)	67 (14.2%)	131 (27.7%)	229 (48.4%)

CONTINGENT VALUATION

The contingent valuation questions were common to both beaches and shellfish versions of the surveys. The following questions about protecting and improving coastal water quality were intended to assess respondents' willingness to contribute to a hypothetical Coastal Water Quality Improvement Program. Respondents were also asked to explain their choices. Text responses for this section can be found in Appendix A.

Q24 In your opinion, how important are the following actions to protecting **your state's** coastal water?

Q. In your opinion, how important are the following actions to protecting your state's water?										
Answer Choice	N	Mean	Std. Dev.	1	2	3	4	5	6	7
Making water quality data available to the public	278	5.78	1.24	1 (0.4%)	5 (1.8%)	4 (1.4%)	35 (12.6%)	56 (20.1%)	76 (27.3%)	101 (36.3%)
Improving water quality monitoring to detect pollution levels and sources	323	6.09	1.02	2 (0.6%)	0 (0.0%)	4 (1.2%)	16 (5.0%)	53 (16.4%)	111 (34.4%)	137 (42.4%)
Improving wastewater treatment	302	6.23	0.99	2 (0.7%)	1 (0.3%)	4 (1.3%)	7 (2.3%)	35 (11.6%)	108 (35.8%)	145 (48.0%)
Updating and maintaining septic systems	300	5.94	1.12	1 (0.3%)	1 (0.3%)	9 (3.0%)	17 (5.7%)	65 (21.7%)	89 (29.7%)	118 (39.3%)
Better management of industrial development in coastal areas	291	6.05	1.17	1 (0.3%)	2 (0.7%)	9 (3.1%)	17 (5.8%)	53 (18.2%)	69 (23.7%)	140 (48.1%)
Better management of industrial development in upstream areas	294	6.03	1.09	2 (0.7%)	1 (0.3%)	4 (1.4%)	18 (6.1%)	53 (18.0%)	93 (31.6%)	123 (41.8%)
Better management of marinas	283	5.39	1.27	3 (1.1%)	4 (1.4%)	15 (5.3%)	37 (13.1%)	79 (27.9%)	88 (31.1%)	57 (20.1%)
Better management of residential development in coastal areas	304	5.82	1.15	1 (0.3%)	4 (1.3%)	7 (2.3%)	22 (7.2%)	70 (23.0%)	99 (32.6%)	101 (33.2%)
Better management of residential	300	5.70	1.19	2 (0.4%)	2 (0.4%)	7 (2.3%)	35 (11.7%)	71 (23.7%)	92 (30.7%)	91 (30.3%)

development in upstream areas										
Protecting and restoring coastal wetlands	299	6.12	1.08	0 (0.0%)	4 (1.3%)	1 (0.3%)	21 (7.0%)	48 (16.1%)	79 (26.4%)	146 (48.8%)
Educating and/or providing financial resources to municipal officials	307	5.43	1.42	6 (2.0%)	8 (2.6%)	14 (4.6%)	43 (14.0%)	62 (20.2%)	97 (31.6%)	77 (25.1%)
Reducing the use of fertilizers, pesticides, and chemicals in homes and gardens	302	5.96	1.29	2 (0.7%)	7 (2.3%)	4 (1.3%)	31 (10.3%)	39 (12.9%)	80 (26.5%)	139 (46.0%)
Reducing pollution from animal waste (including dogs and birds)	302	5.01	1.62	14 (4.6%)	11 (3.6%)	25 (8.3%)	54 (17.9%)	62 (20.5%)	76 (25.2%)	60 (19.9%)
Treating stormwater runoff	293	5.70	1.25	2 (0.7%)	3 (1.0%)	10 (3.4%)	34 (11.6%)	63 (21.5%)	85 (29.0%)	96 (32.8%)

Q25 Think about coastal water quality in terms of risks to people's health, including the safety of swimming in the water and of shellfish harvesting from flats and waters, and the health of the marine environment, including the health of plants and animals. What is your level of agreement with the following statement: I would be willing to pay higher water/sewer/septic fees to improve coastal water quality.

What is your level of agreement with the following statement: I would be willing to pay higher water/sewer/septic fees to improve coastal water quality		
Answer	Frequency	Percent
Strongly disagree	23	4.5
Disagree	33	7.1
Neither agree nor disagree	125	26.7
Agree	211	45.1
Strongly agree	76	16.2
n= 468		

Q26 If the Coastal Water Quality Improvement Program would cost your household an additional \$(randomized fee) per month, would you be willing to pay that amount and support the program?

If the Coastal Water Quality Improvement Program would cost your household an additional \$ (fee) per month, would you be willing to pay that amount and support the program?		
Answer	Frequency	Percent
Yes	315	67.9
No	149	32.1
n=464		

Q27 Please indicate the single most important reason for your response (select one).

Please indicate the single most important reason for your response (select one)		
Answer	Frequency	Percent
Cannot afford to pay anything at this time	33	22.1
I don't contribute to the problem and I shouldn't have to pay to fix it	10	6.7
I don't think the program's investments will work to improve coastal water quality	7	4.7
I do not have faith in the government to effectively manage this program	40	26.8
I am opposed to any new fees	24	16.1
Coastal water quality is not an important problem for me	1	0.7
I do not think there are problems with our coastal water quality	3	2.0
Other	29	19.5
n=149		

Q28 How much of the Coastal Water Quality Improvement Program budget would you like to see put towards each of the following actions (should sum to 100%).

How much of the Coastal Water Quality Improvement Program budget would you like to see put towards each of the following actions (should sum to 100%).					
Answer	N	Min	Max	Mean	Std. Dev.
% Updating and maintaining septic systems	310	0	50	13.80	8.73
% Improving wastewater treatment, sewer, and stormwater infrastructure	313	0	90	20.81	13.37
% Improving water quality monitoring to detect pollution levels and sources	314	0	50	13.16	7.40
% Making water quality data available to the public	312	0	25	6.50	5.00
% Educating and/or providing financial resource to municipal officials	310	0	40	7.51	6.06
% Better management of industrial development	312	0	60	13.89	8.99
% Better management of residential development	312	0	100	11.43	8.92
% Reducing pollution from animal waste (including waste from dogs and birds)	310	0	40	5.54	5.56
% Improving home and garden practices	311	0	50	7.17	6.64

Q29 How important are the following Coastal Water Quality Improvement Program outcomes to you?

How important are the following Coastal Water Quality Improvement Program outcomes to you?										
Answer	N	Mean	Std. Dev.	1	2	3	4	5	6	7
Improved beach safety (fewer advisories posted at ocean beaches)	312	5.55	1.27	1 (0.3%)	8 (2.6%)	14 (4.5%)	36 (11.5%)	65 (20.8%)	112 (35.9%)	76 (24.4%)
Increases in flats and waters open for shellfish harvesting (fewer closures)	314	5.52	1.43	4 (1.3%)	12 (3.8%)	12 (3.8%)	41 (13.1%)	57 (18.2%)	95 (30.3%)	93 (29.6%)
Healthy environment for marine animals, fish, birds, and other species	312	6.56	0.71	0 (0.0%)	0 (0.0%)	1 (0.3%)	4 (1.3%)	21 (6.7%)	80 (25.6%)	206 (66.0%)

Increased opportunities for aquaculture	312	5.09	1.50	11 (3.5%)	9 (2.9%)	24 (7.7%)	48 (15.4%)	80 (25.6%)	86 (27.6%)	54 (17.3%)
Improved coastal experience (views, boating, etc.)	312	5.23	1.26	3 (1.0%)	8 (2.6%)	10 (3.2%)	62 (19.9%)	90 (28.8%)	89 (28.5%)	50 (16.0%)

Q30 What other program outcomes matter to you?

This is a text response question only. Responses are included in Appendix A

Q31 Who do you trust to run the Coastal Water Quality Improvement Program?

Who do you trust to run the Coastal Water Quality Improvement Program?—Maine Resident Responses										
Answer	N	Mean	Std. Dev.	1	2	3	4	5	6	7
Maine Department of Marine Resources (DMR)	214	5.40	1.29	2 (0.9%)	4 (1.9%)	8 (3.7%)	39 (18.2%)	46 (21.5%)	70 (32.7%)	45 (21.0%)
Maine Department of Environmental Protection (DEP)	215	4.99	1.58	9 (4.2%)	10 (4.7%)	14 (6.5%)	38 (17.7%)	54 (25.1%)	51 (23.7%)	39 (18.1%)
University of Maine	210	5.58	1.20	0 (0.0%)	3 (1.4%)	9 (4.3%)	28 (13.3%)	45 (21.4%)	74 (35.2%)	51 (24.3%)
U.S. Environmental Protection Agency (EPA)	210	4.52	1.70	18 (8.6%)	11 (5.2%)	16 (7.6%)	53 (25.2%)	51 (24.3%)	32 (15.2%)	29 (13.8%)
National Oceanographic and Atmospheric Administration (NOAA)	212	5.35	1.35	1 (0.5%)	6 (2.8%)	12 (5.7%)	36 (17.0%)	49 (23.1%)	59 (27.8%)	49 (23.1%)
Maine Center for Disease Control (CDC)	206	4.45	1.49	9 (4.4%)	13 (6.3%)	27 (13.1%)	50 (24.3%)	58 (28.2%)	33 (16.0%)	16 (7.8%)
Maine Department of Agriculture, Forestry and Conservation (DACF)	208	4.64	1.52	8 (3.8%)	12 (5.8%)	24 (11.5%)	46 (22.1%)	51 (24.5%)	47 (22.6%)	20 (5.3%)
Maine Sea Grant	183	4.80	1.51	8 (4.4%)	5 (2.7%)	18 (9.8%)	40 (21.9%)	50 (27.3%)	37 (20.2%)	25 (13.7%)
Other	15	4.53	2.26	3 (20.0%)	1 (6.7%)	0 (0.0%)	2 (13.3%)	2 (13.3%)	4 (26.7%)	3 (20.0%)

Who do you trust to run the Coastal Water Quality Improvement Program?--New Hampshire Resident Responses										
Answer	N	Mean	Std. Dev.	1	2	3	4	5	6	7
New Hampshire Natural Resources Conservation Services (NRCS)	75	5.37	1.04	0 (0.0%)	0 (0.0%)	1 (1.3%)	17 (22.7%)	21 (28.0%)	25 (33.3%)	11 (14.7%)
New Hampshire Department of Environmental Services (DES)	79	5.32	1.10	0 (0.0%)	1 (0.8%)	3 (3.8%)	13 (16.5%)	26 (32.9%)	25 (31.6%)	11 (13.9%)
University of New Hampshire	81	5.94	1.09	0 (0.0%)	0 (0.0%)	2 (2.5%)	7 (8.6%)	17 (21.0%)	23 (28.4%)	32 (39.5%)
U.S. Environmental Protection Agency (EPA)	78	4.24	1.77	6 (7.7%)	7 (9.0%)	16 (20.5%)	15 (19.2%)	8 (10.3%)	19 (24.4%)	7 (9.0%)
National Oceanographic and Atmospheric Administration (NOAA)	78	4.97	1.42	1 (1.3%)	3 (3.8%)	8 (10.3%)	16 (20.5%)	18 (23.1%)	21 (26.9%)	11 (14.1%)
New Hampshire Center for Disease Control (CDC)	77	4.27	1.41	4 (5.2%)	3 (3.9%)	12 (15.6%)	25 (32.5%)	20 (26.0%)	8 (10.4%)	5 (6.5%)
New Hampshire Sea Grant	69	5.00	1.35	1 (1.4%)	1 (1.4%)	6 (8.7%)	19 (27.5%)	13 (18.8%)	20 (29.0%)	9 (13.0%)
Other	4	3.50	1.73	1 (25.0%)	0 (0.0%)	0 (0.0%)	2 (50.0%)	1 (25.0%)	0 (0.0%)	0 (0.0%)

Q32 Where would you like the efforts of the program to focus?

This is a text response question only. Responses are included in Appendix A

RISK BEHAVIOR

The risk behavior questions were common to both beaches and shellfish versions of the survey. The following questions were intended to assess coastal residents' risk-related behaviors, in order to create a risk profile for respondents.

Q33 Please express how often do you engage in the following activities?

Q. Please express how often you engage in the following activities.										
Activity:	N	Mean	Std Dev	1	2	3	4	5	6	7
Eat expired food that still looks okay	368	2.90	1.71	111 (30.2%)	68 (18.5%)	33 (9.0%)	103 (28.0%)	20 (5.4%)	21 (5.7%)	12 (3.3%)
Expose yourself to the sun without sunscreen	408	3.80	1.70	34 (8.3%)	73 (17.9%)	60 (14.7%)	129 (31.6%)	33 (8.1%)	42 (10.3%)	37 (9.1%)
Wash hands before eating	399	5.99	1.39	2 (0.5%)	11 (2.2%)	12 (3.0%)	48 (12.0%)	32 (8.0%)	81 (20.3%)	213 (53.4%)
Eat raw shellfish	364	2.31	1.74	194 (80.6%)	46 (7.8%)	25 (4.7%)	53 (3.9%)	15 (0.2%)	23 (1.7%)	8 (1.0%)
Swim in coastal waters after a heavy rainfall	375	2.60	1.46	124 (33.1%)	67 (17.9%)	62 (16.5%)	93 (24.8%)	16 (4.3%)	11 (2.9%)	2 (0.5%)
Pump out and maintain your septic system	338	4.61	2.35	83 (24.6%)	8 (2.4%)	2 (0.6%)	43 (12.7%)	30 (8.9%)	74 (21.9%)	98 (29.0%)
Pick up and dispose of pet waste properly	341	5.60	2.02	35 (10.3%)	8 (2.3%)	10 (2.9%)	38 (11.1%)	8 (2.3%)	57 (16.7%)	185 (54.3%)
Discharge boat waste into coastal waters	313	1.28	0.98	281 (89.8%)	12 (3.8%)	2 (0.6%)	10 (3.2%)	1 (0.3%)	5 (1.6%)	2 (0.6%)
Feed wildlife, including sea birds	369	2.92	2.04	138 (37.4%)	63 (17.1%)	31 (8.4%)	61 (16.5%)	13 (3.5%)	28 (7.6%)	35 (9.5%)
Eat raw meat	408	1.44	1.12	329 (80.6%)	32 (7.8%)	19 (4.7%)	16 (3.9%)	1 (0.2%)	7 (1.7%)	4 (1.0%)

Q34 To what extent do you agree or disagree with the following statements?

Q. To what extent do you agree or disagree with the following statements?										
Activity:	N	Mean	Std. Dev.	1	2	3	4	5	6	7
Global climate change is caused mostly by human activities	463	4.996	1.99	44 (9.5%)	35 (7.6%)	19 (4.1%)	67 (14.5%)	57 (12.3%)	98 (21.2%)	143 (30.9%)
I generally try to avoid taking risks	460	4.72	1.61	11 (2.4%)	45 (9.8%)	64 (13.9%)	51 (11.1%)	114 (24.8%)	119 (25.9%)	56 (12.2%)
I don't have enough money to take vacations	451	3.52	2.10	97 (21.5%)	101 (22.4%)	55 (12.2%)	26 (5.8%)	58 (12.9%)	67 (14.9%)	47 (10.4%)
Maine/New Hampshire residents are responsible for helping solve coastal {issue} problems	463	5.80	1.16	3 (0.6%)	6 (1.3%)	10 (2.2%)	35 (7.6%)	95 (20.5%)	171 (36.9%)	143 (30.9%)
Local government is responsible for protecting coastal water quality	461	4.89	1.48	10 (2.2%)	30 (6.5%)	34 (7.4%)	89 (19.3%)	129 (28.0%)	104 (22.6%)	65 (14.1%)
I am healthier than the average person	461	5.28	1.32	4 (0.9%)	7 (1.5%)	38 (8.2%)	74 (16.1%)	110 (23.9%)	142 (30.8%)	86 (18.7%)
My state is an important part of who I am	463	4.10	1.29	7 (1.5%)	13 (2.8%)	14 (3.0%)	44 (9.5%)	83 (17.9%)	145 (31.3%)	157 (33.9%)
Local government is effective in protecting coastal water quality	463	3.94	1.32	22 (4.8%)	51 (11.0%)	66 (14.3%)	178 (38.4%)	94 (20.3%)	44 (9.5%)	8 (1.7%)
I think scientists are doing important work	463	5.88	1.22	5 (1.1%)	2 (0.4%)	15 (3.2%)	36 (7.8%)	84 (18.1%)	142 (30.7%)	179 (38.7%)

Scientists provide unbiased information	462	4.42	1.64	31 (6.7%)	31 (6.7%)	61 (13.2%)	110 (23.8%)	89 (19.3%)	99 (21.4%)	41 (8.9%)
I trust public health scientists who study the safety of the food we eat	462	4.87	1.54	17 (3.7%)	22 (4.8%)	44 (9.5%)	89 (19.3%)	102 (22.1%)	127 (27.5%)	61 (13.2%)

Q35 To what extent do you agree or disagree with the following statements?

Q. To what extent do you agree or disagree with the following statements?										
Activity:	N	Mean	Std. Dev.	1	2	3	4	5	6	7
Global climate change is happening	460	5.73	1.70	23 (5.0%)	13 (2.8%)	14 (3.0%)	43 (9.3%)	56 (12.2%)	83 (18.0%)	228 (49.6%)
I don't have enough money to buy the things I (or my family) needs	458	2.54	1.71	160 (34.9%)	129 (28.2%)	66 (14.4%)	25 (5.5%)	39 (8.5%)	20 (4.4%)	19 (4.1%)
I don't have the money to make needed improvements to my living situation (move, renovate).	454	3.21	2.01	109 (24.0%)	118 (26.0%)	58 (12.8%)	32 (7.0%)	56 (12.3%)	36 (7.9%)	45 (9.9%)
Visitors to Maine should be responsible for helping solve coastal {issue type} problems	463	5.01	1.64	16 (3.5%)	33 (7.1%)	38 (8.2%)	56 (12.1%)	112 (24.2%)	116 (25.1%)	92 (19.9%)
It is too difficult for someone like me to do much about {issue type} issues	463	3.16	1.59	74 (16.0%)	118 (25.5%)	88 (19.0%)	76 (16.4%)	65 (14.0%)	34 (7.3%)	8 (1.7%)
I consider myself a Mainer/New Hampshire	463	5.92	1.45	11 (2.4%)	8 (1.7%)	17 (3.7%)	28 (6.0%)	71 (15.3%)	98 (21.2%)	230 (49.7%)

My community is an important part of who I am	463	5.46	1.40	6 (1.3%)	15 (3.2%)	29 (6.3%)	39 (8.4%)	114 (24.6%)	141 (30.5%)	119 (25.7%)
State government is effective in protecting coastal water quality	463	4.10	1.29	17 (3.7%)	42 (9.1%)	64 (13.8%)	158 (34.1%)	126 (27.2%)	48 (10.4%)	8 (1.7%)
Science can raise our standard of living	462	5.41	1.37	8 (1.7%)	11 (2.4%)	21 (4.5%)	65 (14.1%)	99 (21.4%)	155 (33.5%)	103 (22.3%)
Scientists provide reliable information	460	5.09	1.39	9 (2.0%)	16 (3.5%)	26 (5.7%)	90 (19.6%)	124 (27.0%)	125 (27.2%)	70 (15.2%)
I trust environmental scientists who study how pollution affects the ocean	464	5.34	1.42	11 (2.4%)	15 (3.2%)	18 (3.9%)	63 (13.6%)	112 (24.1%)	146 (31.5%)	99 (21.3%)

Q36 To what extent do you agree or disagree with the following statements?

Q. To what extent do you agree or disagree with the following statements?										
Activity:	N	Mean	Std. Dev .	1	2	3	4	5	6	7
I am generally a person prepared to take risks	460	4.12	1.58	28 (6.1%)	61 (13.3%)	76 (16.5%)	63 (13.7%)	148 (32.2%)	65 (14.1%)	19 (4.1%)
I don't have enough money to pay my rent or mortgage	454	1.71	1.33	301 (66.3%)	84 (18.5%)	26 (5.7%)	13 (2.9%)	11 (2.4%)	12 (2.6%)	7 (1.5%)
It is my responsibility to help solve coastal {issue type} problems	459	4.96	1.35	9 (2.0%)	17 (3.7%)	38 (8.3%)	70 (15.3%)	161 (35.1%)	112 (24.4%)	52 (11.3%)
Government uses best available science in making coastal {field/issue} decisions	459	3.91	1.38	35 (7.6%)	38 (8.3%)	67 (14.6%)	175 (38.1%)	92 (20.0%)	43 (9.4%)	9 (2.0%)
My health is my top priority	459	5.7	1.22	4 (0.9%)	5 (1.1%)	26 (5.7%)	21 (4.6%)	103 (22.4%)	175 (38.1%)	125 (27.2%)
Others would consider me a Mainer/New Hampshire	458	5.46	1.62	12 (2.6%)	22 (4.8%)	25 (5.5%)	58 (12.7%)	67 (14.6%)	114 (24.9%)	160 (34.9%)
State government is responsible for protecting coastal water quality	460	5.31	1.24	3 (0.7%)	7 (1.5%)	32 (7.0%)	59 (12.8%)	136 (29.6%)	147 (32.0%)	76 (16.5%)
Science has greatly improved my life	457	5.40	1.36	9 (2.0%)	7 (1.5%)	22 (4.8%)	61 (13.3%)	125 (27.4%)	122 (26.7%)	111 (24.3%)
I trust scientists	457	4.92	1.45	15 (3.3%)	14 (3.1%)	40 (8.8%)	88 (19.3%)	127 (27.8%)	114 (24.9%)	59 (12.9%)
Scientists share my values	454	4.66	1.33	9 (2.0%)	16 (3.5%)	32 (7.0%)	178 (39.2%)	92 (20.3%)	82 (18.1%)	45 (9.9%)

BEACH-SPECIFIC QUESTIONS

The beach-specific questions only appeared on the beaches version of each survey. The following questions were intended to assess coastal residents' beach-going behaviors and perceptions.

Q37 During the summer months, how often do members of your household visit ocean beaches in

Q. During the summer months, how often do members of your household visit ocean beaches in Maine/NH?		
Answer	Frequency	Percent
Daily	24	10.6
Once per week	77	34.1
Once per month	74	32.7
Less than once per month	8	3.5
Never	43	19
n=226		

Q38 Have you taken any day trips to ocean beaches in Maine or New Hampshire since January 1, 2014?

Q. Have you taken any day trips to ocean beaches in Maine or New / Hampshire since January 1, 2014?		
Answer	Frequency	Percent
Yes	189	86.7
No	29	13.3
N=218		

Q39 How many day trips to Maine or New Hampshire ocean beaches have you taken since January 1, 2014?

Q. How many day trips to Maine or New Hampshire ocean beaches have you taken since January 1, 2014?	
N	162
Minimum	0
Maximum	365
Mean	15.83
Std. Deviation	35.39

Q40 Please select the regions in which you took a day trip in New Hampshire or Maine.

Q. Please click on the regions in which you took a day trip in Maine or New Hampshire.		
Answer	Frequency	Percent respondents
Downeast Maine	55	17.57
Midcoast Maine	64	20.45
Greater Portland Area	56	17.89
Southern Maine Coast	81	25.88
New Hampshire Coast	57	18.21
n=313		

Q41 Have you ever taken any overnight trips to ocean beaches in New Hampshire or Maine since January 1, 2014?

Q. Have you taken any overnight trips to ocean beaches in Maine or New / Hampshire since January 1, 2014?		
Answer	Frequency	Percent
Yes	56	29.5
No	134	70.5
N=190		

Q42 How many overnight trips to New Hampshire or Maine have you taken since January 1, 2014?

Q. How many overnight trips to Maine or New Hampshire ocean beaches have you taken since January 1, 2014?	
N	63
Minimum	0.0
Maximum	150.0
Mean	5.90
Std. Deviation	22.45

Q43 Please select the regions in which you took a day trip in New Hampshire or Maine.

Q. Please click on the regions in which you took an overnight trip in Maine or New Hampshire.		
Answer	Frequency	Percent respondents
Downeast Maine	20	31.25
Midcoast Maine	21	32.81
Greater Portland Area	7	10.94
Southern Maine Coast	11	17.19
New Hampshire Coast	5	7.81
n=64		

Q44 What activities do you typically do at the beach? (Please select all that apply)

Q. What activities do you typically do at the beach? (Please select all that apply)		
Activity	Frequency	Percent respondents
Boating	47	4.21
Recreational shellfish harvesting	17	1.52
Eat at local restaurants	114	10.21
Fishing	30	2.69
Glass and shell collecting	77	6.89
Sea Kayaking	35	3.13
Other	16	1.43
Photography	73	6.54
Reading/relaxing	115	10.30
Sightseeing	119	10.65
Shopping	29	2.60
Beach games and sports	39	3.49
Sunbathing	101	9.04
Surfing	11	0.98
Swimming	116	10.38
Walking	179	16.03
n=1117		

Q45 Do you ever seek information about the water quality at your state’s coastal beaches?

Q. Do you ever seek information about the water quality at your state's coastal beaches?		
Answer	Frequency	Percent
Yes	55	29.6
No	131	70.4
n= 186		

Q46 Where do you get information about the water at your state’s coastal beaches?

Q. Where do you seek information about the water quality at Maine's coastal beaches?		
Answer	Frequency	Percent
Beach Manager	13	9.2
Center for Disease Control (CDC)	3	2.1
Maine Cooperative Extension	6	4.3
Department of Agriculture, Forestry, and Conservation (DACF)	3	2.1
Maine Department of Conservation (DOC)	3	2.1
Department of Environmental Protection (DEP)	11	7.8
Family and friends	20	14.2
News and media	31	22.0
Maine Department of Marine Resources (DMR)	10	7.1
University of Maine	3	2.1
Maine Healthy Beaches Program	7	5.0
Maine Tourism Bureau	5	3.5
Maine Sea Grant	2	1.4
National Resource Defense Council's 'Testing the Waters'	4	2.8
Other	20	14.2
n=141		

Q. Where do you seek information about the water quality at New Hampshire's coastal beaches?		
Answer	Frequency	Percent
Beach Manager	1	3.2
New Hampshire Cooperative Extension	1	3.2
Online	6	19.4
NH Department of Environmental Services (DES)	2	6.5
Department of Health and Human Services (DHHS)	1	3.2
Family and friends	5	16.1
News and media	8	25.8
New Hampshire Fish and Game	5	16.1
University of New Hampshire	0	0.0
New Hampshire Natural Resource Conservation Services	1	3.2
New Hampshire Office of Travel and Tourism	0	0.0
New Hampshire Sea Grant	1	3.2
National Resource Defense Council's 'Testing the Waters'	0	0.0
Other	0	0.0
n=31		

Q47 How would you like to receive information about coastal water quality at your state's beaches?

Q. How would you like to receive information about water quality at your state's beaches		
Answer	Frequency	Percent
Signs at access points	63	42
Colored flags at beaches	26	17.3
Website	46	30.7
Text	4	2.7
Hotline	1	0.7
Other	10	6.7
n= 150		

Q48 Have you ever seen a beach monitoring program sign?

Q. Have you ever seen a beach monitoring program sign?		
Answer	Frequency	Percent
Yes	60	26.8
No	164	73.2
n= 224		

Q49 Did you or a family member ever get sick after swimming at a state coastal beach during the summer?

Q. Did you or a family member every get sick after swimming at a state coastal beach during the summer?		
Answer	Frequency	Percent
Yes	0.0	0.0
No	225	100
N= 225		

Q50 Which symptoms did you experience? (Select all that apply)

Q. Which symptoms did you experience? (Select all that apply)		
Answer	Frequency	Percent
Diarrhea	0	0.0
Vomiting	0	0.0
Stomachache	0	0.0
Flu-like	0	0.0
Skin/wound infection	0	0.0
Ear/eye infection	0	0.0
Sinus infection	0	0.0
Other	0	0.0
n= 509		

Q51 Did you report the illness?

Q. Did you report your illness?		
Answer	Frequency	Percent
Yes	0	0.0
No	0	0.0
n=509		

Q52 To whom did you report this illness?

This is a text response question only. Responses are included in Appendix A

Q53 Have you ever heard of, or seen, a coastal beach advisory in your state? The system advises beachgoers about unsafe conditions, such as pollution in the water, and may advise people to avoid entering the water or, in extreme cases, close the beach.

Q. Have you ever heard of, or seen, a coastal beach advisory in your state?		
Answer	Frequency	Percent
Yes	91	40.8
No	132	59.2
n= 223		

Q54 If you discover that a coastal beach you are at has been posted advising people not to enter the water, when do **you** feel you and your family would choose to enter the water?

Q. If you discover that a coastal beach you are at has been posted advising people not to enter the water, when do you feel you and your family would choose to enter the water?		
Answer	Frequency	Percent
Enter the water that day	1	0.5
Enter the water after a tidal cycle	3	1.4
Enter the water after a few days	8	3.6
Enter the water after a heavy rain	0	0
Never enter the water at that beach again	17	7.7
Enter the water after the advisory sign has been lifted	193	86.9
n=222		

Q55 If a beach is posted advising people not to enter the water, and a person **like yourself** enters the water, **in your opinion**, how likely is it that this person gets sick?

Q. If a beach is posted advising people not to enter the water, and a person like yourself enters the water, in your opinion, how likely is it that this person gets sick?		
Answer	Frequency	Percent
Very unlikely	16	7.2
Somewhat unlikely	54	24.4
Somewhat likely	130	58.8
Very likely	21	9.5
n=221		

Q56 Would you please share with us the name(s) and location (town) of your two favorite local, ocean beaches?

This is a text response question only. Responses are included in Appendix A

SHELLFISH-SPECIFIC QUESTIONS

The following questions were intended to assess coastal residents' shellfish consumption behaviors and perceptions.

Q57 How often do members of your household consume seafood?

Q. How frequently does your household consume shellfish?		
Answer	Frequency	Percent
Daily	7	2.8
Once per week	164	64.6
Once per month	46	18.1
Less than once per month	31	12.2
Never	6	2.4
n= 254		

Q58 What types of seafood does your household consume? (Please select all that apply)

Q. What types of seafood does your household consume? (Select all that apply)		
Answer	Frequency	Percent of Respondents
Lobster	187	14.6
Shrimp	195	15.3
Clams	158	12.4
Crab	118	9.2
Scallops	198	15.5
Oysters	70	5.5
Mussels	107	8.4
Fish	239	18.7
Other	5	0.4
n= 1277		

Q59 Where do you typically obtain the seafood you eat? (Please select all that apply)
Text responses for “other” are included in Appendix A

Q. Where do you typically obtain the seafood that you eat? (Select all that apply)		
Answer	Frequency	Percent of Respondents
Restaurant	186	34.7
Harvester	89	16.6
Grocery Store	185	34.5
Wholesaler	53	9.9
Other Source	23	4.3
n= 536		

Q60 Where does the seafood you and your family eat typically come from? (Please select all that apply)
Text responses for “other” are included in Appendix A

Q. Where does the seafood you and your family eat typically come from? (Select all that apply)		
Answer	Frequency	Percent of Respondents
Canada	88	16.4
My local community	73	13.6
Maine	196	36.6
Other New England states	99	18.5
I don't know	54	10.1
Other	26	4.9
n=536		

Q61 Did you or a family member ever feel sick after eating shellfish (not an allergic reaction)?

Q. Did you or a family member ever feel sick after eating shellfish (not an allergic reaction)?		
Answer	Frequency	Percent
Yes	20	3.9
No	228	44.8
n= 248		

Q62 Which symptoms did you or your family member experience? (Select all that apply)

Text responses for “other” are included in Appendix A

Q. Which symptoms did you or your family member experience? (Select all that apply)		
Answer	Frequency	Percent of Respondents
Diarrhea	15	30.0
Nausea	10	20.0
Stomach ache	13	26.0
Vomiting	9	18.0
Flu-like	2	4.0
Other	1	2.0
n=50		

Q63 Did you report this illness?

Q. Did you report this illness?		
Answer	Frequency	Percent
Yes	3	20.0
No	12	80.0
n= 15		

Q64 Who did you report this illness to?

Text response only question, responses included in Appendix A

Q65 Do you ever seek information about the safety of eating seafood?

Q. Do you ever seek information about the safety of eating seafood?		
Answer	Frequency	Percent
Yes	62	34.8
No	116	65.2
n= 178		

Q66 Where do you seek information about the safety of eating seafood in your state?(Please select all that apply)

Q. Where do you seek information about the safety of seafood consumption?		
Answer	Frequency	Percent
Shellfish Manager	8	4.3
University of Maine Cooperative Extension	6	3.3
Maine Tourism Bureau	1	0.5
Maine Center for Disease Control (CDC)	10	5.4
Department of Agriculture, Conservation, and Forestry	4	2.2
Family and friends	28	15.2
News and media	42	22.8
University of Maine	2	1.1
Maine Department of Environmental Protection (DEP)	12	6.5
Maine Department of Marine Resources (DMR)	18	9.8
Maine Sea Grant	2	1.1
Local Harvester	18	9.8
Wholesaler or retailer	17	9.2
Other	16	8.7
n= 184		

Q67 Have you ever heard of, or seen, a shellfish area closure? These closures mandate that shellfish cannot be harvested from a specific area due to unsafe conditions, such as pollution in the water.

Q. Have you ever heard of, or seen, a shellfish area closure?		
Answer	Frequency	Percent
Yes	194	77.9
No	55	22.1
n= 249		

Q68 If a shellfish area is posted as closed, and a person like you eats shellfish from this area, in your opinion, how likely is it that this person will get sick?

Q. If a shellfish area is posted as closed, and a person like you eats shellfish from this area, in your opinion, how likely is it that this person will get sick?		
Answer	Frequency	Percent
Very likely	121	48.2
Somewhat likely	112	44.6
Somewhat unlikely	15	6
Very unlikely	3	1.2
n= 251		

Q69 Please express your opinion by selecting the answer that matches how you feel about each statement.

Q. Please express your opinion by selecting the answer that matches how you feel about each statement.										
Answer	N	Mean	Std. Dev.	1	2	3	4	5	6	7
My state's shellfish are cleaner than U.S. and Canadian shellfish	250	4.55	1.06	1 (0.4%)	2 (0.8%)	15 (6.0%)	138 (55.2%)	46 (18.4%)	31 (12.4%)	17 (6.8%)
Shellfish harvested in my local community are cleaner than other shellfish from my state	248	4.16	1.04	3 (1.2%)	13 (5.2%)	19 (7.7%)	151 (60.9%)	40 (16.1%)	13 (5.2%)	9 (3.6%)
Aquacultured shellfish are cleaner than wild shellfish from my state	248	3.75	1.25	18 (7.3%)	22 (8.9%)	35 (14.1%)	123 (49.6%)	31 (12.5%)	17 (6.9%)	2 (0.8%)
Shellfish that are wild harvested are cleaner than aquaculture-produced shellfish	249	4.19	1.07	1 (0.4%)	12 (4.8%)	32 (12.9%)	136 (54.6%)	40 (16.1%)	18 (7.2%)	10 (4.0%)
Local seafood from New England is safer to eat than seafood from other places	249	4.85	1.21	2 (0.8%)	7 (2.8%)	13 (5.2%)	81 (32.5%)	68 (27.3%)	57 (22.9%)	21 (8.4%)
When I shop for seafood, price matters more than whether it is local	247	3.17	1.72	46 (18.6%)	59 (23.9%)	55 (22.3%)	20 (8.1%)	34 (13.8%)	27 (10.9%)	6 (2.4%)
I buy less local seafood when I hear about problems with bacterial contamination	247	4.43	1.95	26 (10.5%)	22 (8.9%)	40 (16.2%)	27 (10.9%)	35 (14.2%)	58 (23.5%)	39 (15.8%)

or red tides in New England										
I worry about seafood being contaminated by bacteria that makes it unsafe to eat.	248	4.37	1.89	19 (7.7%)	32 (12.9%)	39 (15.7%)	28 (11.3%)	49 (19.8%)	40 (16.1%)	41 (16.5%)

Q70 Have you heard of the use of depuration tanks for shellfish?

Q. Have you heard of the use of depuration tanks for shellfish?		
Answer	Frequency	Percent
Yes	36	14.4
No	214	85.6
n= 250		

Q71 In your opinion, how do you rate the safety of shellfish treated in depuration tanks compared to other shellfish?

Q. In your opinion, how do you rate the safety of shellfish treated in depuration tanks compared to other shellfish?		
Answer	Frequency	Percent
Shellfish treated in depuration tanks are safer than other shellfish.	67	28.4
Shellfish treated in depuration tanks are just as safe as shellfish.	117	49.6
Shellfish treated in depuration tanks are less safe than other shellfish.	52	22
n= 236		