Q1: How important will issues related to HABITAT CHANGE (degradation, loss, restoration, etc.) be to your program over the next five years?

	Very Important	Important	Not Very Important	Count
All Gulf of Maine Respondents	67%	27%	6%	63
Country				
United States	76%	18%	5%	38
Canada	52%	40%	8%	25
State				
MA	75%	19%	6%	16
ME ME	75%	19%	6%	16
ME NH	/6% 80%	18%	6% 0%	1 / 5
NS	50%	36%	14%	14
NB	55%	45%	0%	11
Program				
Coastal Mgmt	61%	36%	3%	33
NERR	100%	0%	0%	5
NEP	83%	17%	0%	6
ASFPM	0%	0%	100%	2
ASWM	100%	0%	0%	2
ASIWPCA	100%	0%	0%	1
IFMC	100%	0%	0%	3
Other	55%	36%	9%	11
Location				
HQ / Main Office	66%	28%	6%	53
Field Office	70%	20%	10%	10
Position				
Program Manager	78%	11%	11%	18
Management Staff	67%	33%	0%	6
Technical Staff	63%	33%	4%	27
Policy Staff	40%	60%	0%	5
Advisory Committee	50%	25%	25%	4
Other	100%	0%	0%	3

Gulf Of Maine Science & Technology Survey

1	Uplands (including riparian/special habitats)	7	Shellfish beds/reefs
2	Freshwater wetlands	8	Barrier beaches/islands
3	Coral reefs	9	Rocky shorelines (bluffs/intertidal)
4	Salt marshes	10	Engineered shorelines
5	Seagrass beds	11	Artificial reefs
6	Mangroves	12	Other

	1	2	3	4	5	7	8	9	10	12	Count
All Gulf of Maine Respondents	31%	31%	2%	83%	34%	44%	15%	27%	3%	19%	59
Country											
United States	36%	33%	0%	83%	53%	47%	17%	17%	3%	8%	36
Canada	22%	26%	4%	83%	4%	39%	13%	43%	4%	35%	23
State											
MA	7%	13%	0%	67%	93%	67%	20%	20%	0%	13%	15
ME	56%	44%	0%	94%	25%	31%	19%	19%	6%	6%	16
NH	60%	60%	0%	100%	20%	40%	0%	0%	0%	0%	5
NS	42%	42%	8%	92%	0%	25%	0%	25%	8%	33%	12
NB	0%	9%	0%	73%	9%	55%	27%	64%	0%	36%	11
Program											
Coastal Mgmt	31%	28%	0%	88%	31%	44%	19%	28%	6%	13%	32
NERR	100%	40%	0%	100%	20%	20%	20%	0%	0%	0%	5
NEP	17%	50%	0%	83%	83%	67%	0%	0%	0%	0%	6
ASWM	0%	100%	0%	50%	0%	0%	50%	50%	0%	0%	2
ASIWPCA	0%	0%	0%	100%	100%	100%	0%	0%	0%	0%	1
IFMC	0%	0%	0%	33%	100%	100%	0%	33%	0%	33%	3
Other	20%	20%	10%	80%	0%	30%	10%	50%	0%	60%	10
Location											
HQ / Main Office	36%	34%	0%	86%	30%	38%	18%	26%	4%	12%	50
Field Office	0%	11%	11%	67%	56%	78%	0%	33%	0%	56%	9
Position											
Program Manager	38%	50%	0%	81%	31%	38%	19%	31%	6%	6%	16
Management Staff	17%	33%	17%	100%	17%	50%	0%	17%	0%	33%	6
Technical Staff	23%	15%	0%	85%	50%	46%	19%	23%	4%	23%	26
Policy Staff	40%	40%	0%	60%	0%	60%	20%	60%	0%	20%	5
Advisory Committee	33%	33%	0%	67%	0%	0%	0%	33%	0%	33%	3
Other	67%	33%	0%	100%	33%	67%	0%	0%	0%	0%	3

Q1B: Select no more than THREE of the following RESEARCH ACTIVITIES that would best help you to address habitat change over the next five years. (Multiple responses possible. Percentages sum to more than 100%.)

1	Cumulative impact assessments	6	Provide ecological characterization
2	Identify indicators of habitat health	7	Valuations of social, ecological, economic factors
3	Identify causes of loss/gain	8	Determine effects of scale on data and analysis
4	Rate of freshwater inflow	9	Effects of human values and choices
5	Evaluate effectiveness of restoration/	10	Other
	protection techniques		

	1	2	3	5	6	7	8	9	10	Count
All Gulf of Maine Respondents	63%	53%	41%	44%	34%	31%	5%	15%	10%	59
Country										
United States	64%	56%	44%	44%	33%	22%	3%	17%	14%	36
Canada	61%	48%	35%	43%	35%	43%	9%	13%	4%	23
State										
MA	73%	53%	47%	33%	47%	13%	7%	7%	20%	15
ME	50%	50%	50%	44%	25%	31%	0%	31%	13%	16
NH	80%	80%	20%	80%	20%	20%	0%	0%	0%	5
NS	58%	42%	42%	50%	33%	25%	17%	8%	8%	12
NB	64%	55%	27%	36%	36%	64%	0%	18%	0%	11
Program										
Coastal Mgmt	72%	50%	34%	53%	28%	25%	3%	13%	16%	32
NERR	20%	40%	0%	40%	60%	60%	20%	60%	0%	5
NEP	50%	83%	67%	33%	33%	33%	0%	0%	0%	6
ASWM	100%	50%	50%	100%	0%	0%	0%	0%	0%	2
ASIWPCA	100%	0%	100%	0%	100%	0%	0%	0%	0%	1
IFMC	67%	67%	67%	33%	67%	0%	0%	0%	0%	3
Other	50%	50%	50%	20%	30%	50%	10%	20%	10%	10
Location										
HO / Main Office	64%	52%	36%	48%	26%	34%	4%	18%	12%	50
~ '										
Field Office	56%	56%	67%	22%	78%	11%	11%	0%	0%	9
Position										
Program Manager	69%	69%	38%	44%	44%	19%	6%	13%	0%	16
Management Staff	33%	50%	33%	33%	33%	33%	17%	17%	33%	6
Technical Staff	58%	42%	46%	46%	35%	31%	4%	15%	15%	26
Policy Staff	80%	60%	20%	40%	20%	60%	0%	20%	0%	5
Advisory Committee	67%	33%	33%	33%	33%	67%	0%	33%	0%	3
Other	100%	67%	67%	67%	0%	0%	0%	0%	0%	3

QIC: Select no more than THREE of the following TYPES OF INFORMATION that would best help you to address habitat change over the next five years. (Multiple responses possible. Percentages sum to more than 100%.)

- 1 Access, retrieval and analysis of data
- 2 Trends analysis (rate of loss/gain, success of restoration, etc)
- 3 Standardized methodologies and reporting
- 4 Ecological and physical baselines and inventories.
- 5 State-of-knowledge reports/success stories
- 6 More geospatial data for GIS (includes maps: e.g., soils and seamless bathymetry/topo maps)
- 7 Other

	1	2	3	4	5	6	7	Count
All Gulf of Maine Respondents	36%	69%	25%	68%	32%	49%	5%	59
Country								
United States	36%	78%	28%	69%	28%	53%	0%	36
Canada	35%	57%	22%	65%	39%	43%	13%	23
G Lata								
State	220	720	470	720	1.00	600	0.0	1.5
MA	33%	73%	47%	73%	13%	60%	0%	15
ME	44%	75%	13%	75%	31%	56%	0%	16
NH	20%	100%	20%	40%	60%	20%	0%	5
NS	25%	75%	17%	50%	50%	42%	17%	12
NB	45%	36%	27%	82%	27%	45%	9%	11
Program								
Coastal Mgmt	25%	69%	28%	69%	31%	56%	6%	32
NERR	20%	80%	0%	80%	20%	100%	0%	5
NEP	33%	83%	33%	67%	33%	33%	0%	6
ASWM	50%	100%	50%	0%	50%	0%	0%	2
ASIWPCA	0%	100%	100%	100%	0%	0%	0%	1
IFMC	67%	33%	0%	100%	33%	67%	0%	3
Other	70%	60%	20%	60%	40%	20%	10%	10
Location								
HO / Main Office	32%	72%	26%	70%	34%	48%	4%	50
Field Office	56%	56%	22%	56%	22%	56%	11%	9
Field Office	20%	20%	22%	20%	225	20%	114	9
Position								
Program Manager	38%	69%	31%	63%	25%	63%	0%	16
Management Staff	50%	100%	0%	50%	33%	50%	0%	6
Technical Staff	19%	69%	35%	73%	35%	46%	12%	26
Policy Staff	40%	40%	0%	80%	40%	60%	0%	5
Advisory Committee	67%	33%	33%	67%	67%	0%	0%	3
Other	100%	100%	0%	67%	0%	33%	0%	3

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Q1D: 1d. Select ANY of the following CONTINUOUS OBSERVATION AND MONITORING VARIABLES that you consider necessary to help you address habitat change over the next five years. (Multiple responses possible. Percentages sum to more than 100%.)

1 Se	a level						9		Organic	matter								
2 Su	rface and/or su	ubsurface	curren	ts			10		-			utrients	3					
3 Su	rface waves						11		Dissolve	ed oxva	en							
4 Su	rface winds						12		Zooplan									
5 Su	rface salinity						13		Phytopla	-								
	rface temperati	ure					14		Ocean c		-							
	ght penetration						15		Aerial/	satelli	te imaq	erv						
	thymetry/bottor						16		Other		_	-						
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Count
ll Gulf of Maine Re	spondents	45%	30%	11%	14%	25%	30%	38%	48%	39%	54%	54%	41%	45%	7%	61%	30%	56
ountry																		
United States		51%	26%	11%	11%	29%	23%	37%	54%	31%	49%	54 %	40%	43%	6%	69%	29%	35
Canada		33%	38%	10%	19%	19%	43%	38%	38%	52%	62%	52%	43%	48%	10%	48%	33%	21
tate																		
MA		33%	20%	7 %	7%	13%	20%	47%	53%	27%	47%	53%	33%	33%	0%	53%	20%	15
ME		60%	40%	20%	20%	47%	27%	27%	60%	40%	47%	47%	40%	47%	13%	80%	40%	15
NH		80%	0%	0%	0%	20%	20%	40%	40%	20%	60%	80%	60%	60%	0%	80%	20%	5
NS		55%	27%	9%	27%	18%	55%	36%	36%	36%	45 %	45%	27%	27%	18%	55%	45%	11
NB		10%	50%	10%	10%	20%	30%	40%	40%	70%	80%	60%	60%	70%	0%	40%	20%	10
rogram																		
Coastal Mgmt		47%	30%	17%	20%	17%	23%	30%	57%	33%	50%	53%	27%	27%	3%	57%	37%	30
NERR		40%	20%	0%	0%	60%	20%	0%	40%	20%	20%	60%	60%	80%	0%	80%	20%	5
NEP		67%	17%	0%	17%	50%	50%	83%	50%	50%	67%	67%	83%	83%	17%	83%	0%	6
ASWM		100%	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	0%	0%	100%	50%	2
ASIWPCA		0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	0%	0%	0%	100%	1
IFMC		67%	67%	33%	33%	67%	67%	100%	67%	67%	67%	100%	67%	67%	33%	67%	0%	3
Other		11%	44%	0%	0%	11%	44%	33%	22%	67%	78%	44%	56%	67%	11%	44%	33%	9
ocation																		
HQ / Main Offic	e	48%	27%	10%	15%	23%	29%	31%	46%	38%	52%	56%	38%	42%	4%	63%	29%	48
Field Office		25%	50%	13%	13%	38%	38%	75%	63%	50%	63%	38%	63%	63%	25%	50%	38%	8
osition																		
Program Manager		67%	33%	13%	20%	33%	33%	40%	60%	33%	47%	60%	67%	67%	7 %	73%	13%	15
Management Staf		33%	17%	0%	0%	33%	33%	33%	17%	33%	50%	17%	50%	50%	17%	67%	50%	6
Technical Staff		36%	24%	12%	12%	24%	32%	40%	52%	44%	52%	56%	32%	36%	4%	48%	44%	25
Policy Staff		60%	60%	20%	20%	0%	0%	20%	40%	40%	60%	40%	20%	20%	0%	60%	0%	5
Advisory Commit	tee	0%	50%	0%	0%	0%	50%	50%	0%	50%	100%	100%	0%	50%	0%	50%	0%	2
Other		33%	33%	0%	33%	33%	33%	33%	67%	33%	67%	67%	33%	33%	33%	100%	33%	3

QIE: Select no more than THREE of the following IMPROVED TECHNOLOGIES that would best help you to address habitat change over the next five years. (Multiple responses possible. Percentages sum to more than 100%.)

- 1 Models that predict or simulate
- 2 High resolution remote sensing
- 3 Low cost remote sensing platforms to measure change
- 4 New restoration techniques
- 5 Rapid ecological assessment and evaluation technology
- 6 Habitat restoration BMPs
- 7 Long-term monitoring equipment
- 8 Other

	1	2	3	4	5	6	7	8	Count
All Gulf of Maine Respondents	43%	40%	47%	24%	55%	33%	47%	9%	58
Country									
United States	39%	50%	47%	28%	47%	36%	42%	8%	36
Canada	50%	23%	45%	18%	68%	27%	55%	9%	22
State									
MA	40%	53%	47%	20%	53%	27%	40%	13%	15
ME	50%	50%	50%	19%	38%	44%	44%	6%	16
NH	0%	40%	40%	80%	60%	40%	40%	0%	5
NS	36%	0%	55%	27%	73%	27%	64%	18%	11
NB	64%	45%	36%	9%	64%	27%	45%	0%	11
Program									
Coastal Mgmt	48%	39%	39%	23%	61%	35%	42%	13%	31
NERR	60%	60%	60%	0%	20%	40%	60%	0%	5
NEP	17%	67%	67%	33%	50%	33%	33%	0%	6
ASWM	0%	0%	50%	50%	100%	50%	0%	0%	2
ASIWPCA	100%	0%	100%	0%	100%	0%	0%	0%	1
IFMC	67%	33%	33%	33%	33%	0%	100%	0%	3
Other	30%	30%	50%	30%	50%	30%	60%	10%	10
ocation									
HQ / Main Office	39%	39%	45%	24%	57%	39%	45%	10%	49
Field Office	67%	44%	56%	22%	44%	0%	56%	0%	9
Position									
Program Manager	50%	38%	38%	25%	69%	44%	31%	0%	16
Management Staff	33%	17%	33%	50%	83%	33%	50%	0%	6
Technical Staff	36%	44%	48%	20%	48%	24%	56%	20%	25
Policy Staff	100%	60%	60%	0%	20%	20%	40%	0%	5
Advisory Committee	33%	0%	67%	33%	67%	33%	67%	0%	3
Other	0%	67%	67%	33%	33%	67%	33%	0%	3

Q2: How important will issues related to LAND USE be to your program over the next five years?

	Very important	Important	Not very	Not relevant	Count	
ll Gulf of Maine Respondents	59%	30%	10%	2%	63	
_						
Country						
United States	74%	24%	3%	0%	38	
Canada	36%	40%	20%	4%	25	
tate						
MA	63%	38%	0%	0%	16	
ME	76%	18%	6%	0%	17	
NH	100%	0%	0%	0%	5	
NS	36%	36%	21%	7%	14	
NB	36%	45%	18%	0%	11	
rogram						
Coastal Mgmt	48%	42%	6%	3%	33	
NERR	100%	0%	0%	0%	5	
NEP	100%	0%	0%	0%	6	
ASFPM	100%	0%	0%	0%	2	
ASWM	100%	0%	0%	0%	2	
ASIWPCA	100%	0%	0%	0%	1	
IFMC	33%	33%	33%	0%	3	
Other	36%	36%	27%	0%	11	
Cocation						
HQ / Main Office	64%	26%	88	2%	53	
Field Office	30%	50%	20%	0%	10	
osition						
Program Manager	72%	17%	11%	0%	18	
Management Staff	50%	33%	17%	0%	6	
Technical Staff	44%	48%	4%	4%	27	
Policy Staff	80%	0%	20%	0%	5	
Advisory Committee	50%	25%	25%	0%	4	
Other	100%	0%	0%	0%	3	

Q2A: Select no more than THREE of the following LAND USE ISSUES that you consider most important to address over the next five years. (Multiple responses possible. Percentages sum to more than 100%.)

- 1 Secure/maintain public access or viewsheds
- 2 Manage the effects of coastal development (includes build-out and infill potential)
- 3 Understand the effects of transit patterns on development.
- 4 Integrate watershed/ecosystem planning at the state and local level
- 5 Conserve open space and/or natural habitat protection
- 6 Reduce the impacts of nonpoint source pollution
- 7 Other

		1	2	3	4	5	6	7	Count
Al	L Gulf of Maine Respondents	9%	77%	4%	68%	67%	56%	9%	57
Cot	intry								
	United States	11%	76%	5%	59%	78%	49%	8%	37
	Canada	5%	80%	0%	85%	45%	70%	10%	20
Q+:	ate								
54	MA	6%	81%	6%	50%	75%	63%	13%	16
	ME	19%	63%	6%	75%	75% 75%	31%	13°	16
	NH	0%	100%	0%	40%	100%	60%	0%	5
	NS	9%	73%	0%	91%	45 %	64%	18%	11
	NB	0%	89%	0%	78%	44%	78%	0%	9
Pro	ogram								
	Coastal Mgmt	10%	83%	0%	67%	67%	53%	10%	30
	NERR	20%	20%	0%	100%	100%	60%	0%	5
	NEP	0%	83%	17%	50%	67%	67%	0%	6
	ASFPM	0%	100%	50%	0%	50%	0%	50%	2
	ASWM	0%	50%	0%	50%	100%	0%	50%	2
	ASIWPCA	0%	100%	0%	100%	0%	100%	0%	1
	IFMC	0%	100%	0%	50%	50%	100%	0%	2
	Other	11%	78%	0%	89%	56%	67%	0%	9
	oulei	110	70 8	0.0	050	50%	078	•	,
Loc	cation								
	HQ / Main Office	10%	75%	4%	69%	69%	52%	88	48
	Field Office	0%	89%	0%	67%	56%	78%	11%	9
Pos	sition								
-	Program Manager	6%	81%	13%	63%	63%	50%	13%	16
	Management Staff	17%	67%	0%	67%	67%	67%	0%	6
	Technical Staff	8%	80%	0%	68%	72%	56%	8%	25
	Policy Staff	25%	100%	0%	100%	50%	25%	0%	4
	Advisory Committee	25° 0%	33%	0% 0%	67%	67%	100%	33%	3
	_								
	Other	0%	67%	0%	67%	67%	67%	0%	3

Q2B: Select no more than THREE of the following RESEARCH ACTIVITIES that would best help you to address your most important land use issues over the next five years.

(Multiple responses possible. Percentages sum to more than 100%.)

- 1 Identify cumulative effects of development
- 2 Provide socioeconomic cost/benefit analysis of various land use options
- 3 Understand demographic changes and/or cultural influences on development patterns
- 4 Develop indicators that link land use with ecosystem impact
- 5 Quantify impact of land use on water quality (e.g., nutrients and bacteria)
- 6 Develop methodologies to calculate pollutant removal efficiencies (e.g., nutrients and bacteria).
- 7 Identify growth patterns/land use conversion patterns
- 8 Assess low impact development
- 9 Other

	1	2	3	4	5	6	7	8	9	Count
All Gulf of Maine Respondents	61%	23%	11%	70%	59%	27%	27%	11%	4%	56
Country										
United States	58%	19%	8%	72%	64%	25%	28%	14%	3%	36
Canada	65%	30%	15%	65%	50%	30%	25%	5%	5%	20
State										
MA	47%	20%	20%	67%	73%	33%	20%	13%	7%	15
ME	63%	19%	0%	75%	50%	25%	44%	6%	0%	16
NH	80%	20%	0%	80%	80%	0%	0%	40%	0%	5
NS	45%	36%	9%	64%	64%	27%	27%	0%	9%	11
NB	89%	22%	22%	67%	33%	33%	22%	11%	0%	9
Program										
Coastal Mgmt	62%	34%	14%	66%	41%	24%	28%	10%	7%	29
NERR	60%	0%	0%	100%	80%	40%	20%	0%	0%	5
NEP	67%	0%	0%	67%	100%	17%	17%	33%	0%	6
ASFPM	50%	50%	0%	0%	0%	0%	100%	50%	0%	2
ASWM	100%	0%	50%	50%	50%	0%	50%	0%	0%	2
ASIWPCA	0%	0%	0%	100%	100%	100%	0%	0%	0%	1
IFMC	100%	0%	0%	50%	100%	50%	0%	0%	0%	2
Other	44%	22%	11%	89%	78%	33%	22%	0%	0%	9
Location										
HQ / Main Office	60%	21%	11%	72%	57%	28%	30%	11%	4%	47
Field Office	67%	33%	11%	56%	67%	22%	11%	11%	0%	9
Position										
Program Manager	75%	25%	13%	56%	38%	25%	38%	25%	0%	16
Management Staff	50%	17%	17%	67%	100%	33%	17%	0%	0%	6
Technical Staff	46%	25%	13%	71%	67%	29%	21%	8%	4%	24
Policy Staff	100%	25%	0%	75%	25%	25%	50%	0%	0%	4
Advisory Committee	33%	33%	0%	100%	67%	33%	0%	0%	33%	3
Other	100%	0%	0%	100%	67%	0%	33%	0%	0%	3

Q2C: Select no more than THREE of the following TYPES OF INFORMATION that would best help you to address your most important land use issues over the next five years.

(Multiple responses possible. Percentages sum to more than 100%.)

- 1 Access, retrieval and analysis of data
- 2 Land-use classification
- 3 Land use change analysis
- 4 Standardized methodologies
- 5 State-of-knowledge reports/success stories
- 6 More geospatial data for GIS (including maps)
- 7 Build-out/infill analysis
- 8 Land suitability analysis.
- 9 Other

	1	2	3	4	5	6	7	8	9	Count	:
All Gulf of Maine Respondents	33%	31%	69%	18%	27%	49%	24%	25%	7%	55	5
Country											
United States	25%	22%	72%	17%	28%	44%	33%	31%	8%	36	
Canada	47%	47%	63%	21%	26%	58%	5% 5%	16%	5% 5%	19	
Canada	4/3	4/3	03%	213	20%	36%	3%	10%	3%	19	,
State											
MA	33%	13%	80%	20%	20%	33%	40%	13%	13%	15	5
ME	19%	31%	69%	19%	25%	50%	31%	44%	0%	16	5
NH	20%	20%	60%	0%	60%	60%	20%	40%	20%	5	6
NS	60%	70%	60%	20%	30%	40%	0%	10%	0%	10)
NB	33%	22%	67%	22%	22%	78%	11%	22%	11%	9)
Program											
Coastal Mgmt	32%	29%	75%	21%	25%	50%	21%	21%	4%	28	3
NERR	20%	20%	80%	0%	20%	80%	20%	40%	0%	5	5
NEP	50%	33%	67%	17%	33%	17%	50%	17%	17%	6	5
ASFPM	0%	50%	50%	0%	0%	100%	50%	50%	0%	2	
ASWM	50%	0%	100%	0%	50%	50%	0%	0%	0%	2	
ASIWPCA	0%	0%	100%	0%	0%	100%	0%	0%	100%	1	_
IFMC	0%	0%	50%	0%	50%	50%	100%	50%	0%	2	2
Other	44%	56%	44%	33%	33%	33%	0%	33%	11%	9)
Location											
HQ / Main Office	33%	30%	72%	20%	28%	43%	24%	28%	4%	46	;
Field Office	33%	33%	56%	11%	22%	78%	22%	11%	22%	9	
Position											
Program Manager	31%	19%	81%	13%	31%	56%	19%	25%	6%	16	5
Management Staff	33%	33%	50%	17%	33%	50%	0%	33%	0%	6	5
Technical Staff	38%	33%	54%	29%	25%	46%	25%	25%	13%	24	Į.
Policy Staff	0%	50%	100%	0%	25%	50%	75%	0%	0%	4	ļ
Advisory Committee	50%	50%	100%	0%	50%	0%	0%	50%	0%	2	2
Other	33%	33%	100%	0%	0%	67%	33%	33%	0%	3	3

Q2D: Select ANY of the following CONTINUOUS OBSERVATION AND MONITORING VARIABLES that you consider necessary to help you address your most important land use issues over the next five years. (Multiple responses possible. Percentages sum to more than 100%.)

1	Sea level						8		Dissolv						
2	Surface waves						9		Zooplan	_					
3	Surface winds						10)	Phytopl	ankton :	species				
4	Surface temperat	ture					11	_	Ocean c	olor					
5	Bathymetry/botto	om type					12	2	Aerial/	satelli	te imag	ery			
6	Organic matter						13	3	Other						
7	Dissolved inorga	anic nutri	ents.												
		1	2	3	4	5	6	7	8	9	10	11	12	13	Count
All Gulf of Maine	Respondents	28%	15%	13%	11%	22%	41%	46%	46%	15%	22%	7%	72%	24%	54
Country															
United State	s	24%	15%	15%	15%	24%	29%	38%	44%	12%	21%	6%	79%	32%	34
Canada		35%	15%	10%	5%	20%	60%	60%	50%	20%	25%	10%	60%	10%	20
State															
MA		29%	14%	14%	21%	14%	43%	50%	43%	7 %	14%	14%	86%	29%	14
ME		27%	20%	20%	13%	40%	20%	27%	47%	20%	33%	0%	80%	33%	15
NH		0%	0%	0%	0%	0%	20%	40%	40%	0%	0%	0%	60%	40%	5
NS		36%	9%	9%	0%	18%	55%	64%	55%	9%	18%	18%	55%	18%	11
NB		33%	22%	11%	11%	22%	67%	56%	44%	33%	33%	0%	67%	0%	9
Program															
Coastal Mgmt	:	37%	22%	19%	11%	26%	41%	48%	48%	15%	22%	7 %	74%	30%	27
NERR		20%	0%	20%	40%	40%	40%	20%	60%	20%	60%	0%	60%	20%	5
NEP		17%	0%	0%	0%	0%	17%	33%	17%	0%	0%	0%	83%	17%	6
ASFPM		50%	50%	0%	0%	50%	0%	0%	0%	0%	0%	0%	100%	0%	2
ASWM		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	50%	2
ASIWPCA		0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	100%	0%	1
IFMC		50%	50%	50%	50%	50%	50%	50%	100%	50%	50%	50%	50%	50%	2
Other		11%	0%	0%	0%	11%	67%	78%	67%	22%	22%	11%	56%	11%	9
Location															
HQ / Main Of	fice	29%	11%	11%	11%	22%	36%	44%	47%	16%	24%	4%	71%	27%	45
Field Office	1	22%	33%	22%	11%	22%	67%	56%	44%	11%	11%	22%	78%	11%	9
Position															
Program Mana	ger	31%	25%	13%	6%	19%	25%	31%	31%	19%	25%	0%	888	19%	16
Management S	taff	20%	0%	0%	20%	0%	60%	60%	60%	40%	40%	20%	60%	40%	5
Technical St	aff	25%	17%	21%	17%	29%	50%	54 %	54%	8%	21%	13%	71%	25%	24
Policy Staff	•	67%	0%	0%	0%	67%	33%	33%	33%	33%	33%	0%	67%	0%	3
		••	•	•	•	•		6 00	68 0	•	•	•			_

67%

33%

0%

0%

0%

33%

33%

33%

3

3

33%

67%

33%

33%

Advisory Committee

Other

33%

0%

0%

0%

0%

Q2E: Select no more than THREE of the following IMPROVED TECHNOLOGIES that could help you to address your most important land use issues over the next five years.

(Multiple responses possible. Percentages sum to more than 100%.)

- 1 Improved models that predict and/or simulate
- 2 Change detection sensors
- 3 Affordable remote sensing
- 4 Customized GIS
- 5 QA/QC of existing technology
- 6 Other

		1	2	3	4	5	Count
All Gulf of	Maine Respondents	65%	31%	67%	75%	25%	55
Country							
_	States	67%	31%	64%	72%	22%	36
Canada		63%	32%	74%	72° 79%	32%	19
Canada		05 8	32 0	740	750	32 0	13
State							
MA		60%	27%	47%	60%	33%	15
ME		69%	44%	75%	88%	13%	16
NH		80%	0%	80%	60%	20%	5
NS		60%	40%	80%	70%	30%	10
NB		67%	22%	67%	89%	33%	9
Program							
Coasta	1 Mgmt	68%	36%	68%	75%	14%	28
NERR		80%	20%	80%	100%	20%	5
NEP		83%	17%	67%	50%	17%	6
ASFPM		50%	0%	50%	100%	100%	2
ASWM		50%	50%	0%	100%	50%	2
ASIWPC	A	100%	0%	100%	100%	0%	1
IFMC		50%	50%	100%	50%	50%	2
Other		44%	33%	67%	67%	44%	9
Location							
	ain Office	65%	35%	63%	76%	26%	46
Field		67%	11%	89%	67%	22%	9
11014		3 , 0		0,50	• • • • • • • • • • • • • • • • • • • •		•
Position							
Progra	m Manager	69%	25%	69%	69%	25%	16
Manage	ment Staff	67%	17%	50%	83%	0%	6
Techni	cal Staff	58%	29%	67%	75%	38%	24
Policy	Staff	75%	50%	100%	75%	0%	4
Adviso	ry Committee	100%	50%	50%	50%	50%	2
Other		67%	67%	67%	100%	0%	3

Q3: How important will issues related to NUTRIENT ENRICHMENT be to your program over the next five years?

	Very important	Important	Not very	Not important at	Not relevant	Count
All Gulf of Maine Respondents	33%	32%	25%	6%	3%	63
Country						
United States	32%	39%	18%	8%	3%	38
Canada	36%	20%	36%	4%	4%	25
State						
MA	44%	44%	6%	6%	0%	16
ME	24%	35%	24%	12%	6%	17
NH	20%	40%	40%	0%	0%	5
NS	21%	14%	50%	7%	7%	14
NB	55%	27%	18%	0%	0%	11
Program						
Coastal Mgmt	33%	21%	36%	3%	6%	33
NERR	40%	60%	0%	0%	0%	5
NEP	50%	33%	17%	0%	0%	6
ASFPM	0%	0%	0%	100%	0%	2
ASWM	0%	100%	0%	0%	0%	2
ASIWPCA	100%	0%	0%	0%	0%	1
IFMC	0%	100%	0%	0%	0%	3
Other	36%	27%	27%	9%	0%	11
Location						
HQ / Main Office	34%	30%	26%	6%	4%	53
Field Office	30%	40%	20%	10%	0%	10
Position						
Program Manager	28%	33%	28%	11%	0%	18
Management Staff	50%	33%	0%	17%	0%	6
Technical Staff	30%	33%	26%	4%	7%	27
Policy Staff	20%	40%	40%	0%	0%	5
Advisory Committee	75%	25%	0%	0%	0%	4
Other	33%	0%	67%	0%	0%	3

Q3A: Select no more than THREE of the following sources causing NUTRIENT ENRICHMENT that you consider most important to address over the next five years. (Multiple responses possible. Percentages sum to more than 100%.)

1	Stormwater sour	ces (incl	udes co	mbined			6		Fossil :	fuels (:	stationa	ary and	d mobile so	ırces)
	sewer overflows)					7		Agricul			-		
2	Urban runoff						8		Aquacul	ture/ma:	ricultu	re		
3	Onsite disposal	systems					9		Forestry	y source	es			
4	Sewage treatmen	t plants					10		Boat/sh	ip sour	ces			
5	Industrial source	ces					11		Other					
		1	2	3	4	5	6	7	8	9	10	11	Count	
All Gulf of Mai	ne Respondents	61%	44%	46%	39%	20%	5%	29%	27%	10%	5%	5%	41	
Country														
United Sta	tes	88%	50%	50%	46%	4%	4%	19%	12%	0%	8%	4%	26	
Canada		13%	33%	40%	27%	47%	7%	47%	53%	27%	0%	7 %	15	
State														
MA		85%	38%	69%	46%	0%	8%	23%	8%	0%	8%	8%	13	
ME		90%	70%	20%	40%	10%	0%	20%	20%	0%	10%	0%	10	
NH		100%	33%	67%	67 %	0%	0%	0%	0%	0%	0%	0%	3	
NS		33% 0%	50% 22%	50%	17% 33%	17% 67%	0%	83% 22%	17% 78%	33% 22%	0% 0%	0%	6 9	
NB		0%	22%	33%	33%	67%	11%	22%	78%	22%	0%	11%	9	
Program														
Coastal Mg	mt	59%	53%	53%	41%	24%	0%	18%	29%	0%	6%	12%	17	
NERR		80%	40%	20%	60%	0%	20%	40%	0%	0%	0%	0%	5	
NEP		80%	40%	80%	60%	0%	0%	20%	20%	0%	0%	0%	5	
ASWM		100%	50%	50%	50%	0%	0%	0%	0%	0%	0%	0%	2	
ASIWPCA		100%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	1	
IFMC		67%	33%	33%	33%	0%	0%	67%	33%	0%	33%	0%	3	
Other		25%	25%	25%	13%	50%	13%	50%	50%	50%	0%	0%	8	
Location														
HQ / Main	Office	67%	48%	48%	42%	18%	3%	21%	21%	9%	3%	6%	33	
Field Offi		38%	25%	38%	25%	25%	13%	63%	50%	13%	13%	0%	8	
Position			_	_	_			_						
Program Ma	-	45%	55%	55%	64%	18%	0%	36%	18%	9%	0%	0%	11	
Management		67%	33%	33%	33%	33%	0%	17%	33%	0%	0%	0%	6	
Technical		81%	38%	44%	38%	6%	13%	25%	19%	6%	13%	13%	16	
Policy Sta		33%	33%	67%	0%	67%	0%	0%	67%	33%	0%	0%	3	
Advisory C	ommittee	25%	50%	50%	25%	25%	0%	75%	25%	25%	0%	0%	4	
Other		100%	100%	0%	0%	0%	0%	0%	100%	0%	0%	0%	1	

Q3B: Select no more than THREE of the following RESEARCH ACTIVITIES that would best help you to address nutrient enrichment over the next five years. (Multiple responses possible. Percentages sum to more than 100%.)

- 1 Cumulative impact assessments (factors that lead to eutrophication)
- 2 Source identification/tracking
- 3 Effects on species/communities
- 4 Understanding factors that trigger HABs
- 5 Bio-indicators
- 6 Spatial and temporal trends analysis
- 7 Development of rapid assessment techniques to predict HABs
- 8 Efficacy of education and outreach efforts.
- 9 Other

	1	2	3	4	5	6	7	8	9	Count
All Gulf of Maine Respondents	73%	71%	63%	5%	27%	24%	7%	24%	5%	41
Country										
United States	69%	77%	62%	4%	27%	31%	8%	19%	4%	26
Canada	80%	60%	67%	7%	27%	13%	7%	33%	7%	15
State										
MA	92%	85%	38%	0%	31%	23%	88	15%	88	13
ME	30%	70%	80%	10%	20%	50%	10%	30%	0%	10
NH	100%	67%	100%	0%	33%	0%	0%	0%	0%	3
NS	83%	83%	50%	0%	0%	17%	17%	50%	0%	6
NB	78%	44%	78%	11%	44%	11%	0%	22%	11%	9
	,,,			ŕ	•	ŕ		*	-	_
Program										
Coastal Mgmt	76%	71%	47%	12%	29%	24%	0%	29%	12%	17
NERR	20%	80%	60%	0%	40%	60%	0%	40%	0%	5
NEP	80%	60%	100%	0%	40%	20%	0%	0%	0%	5
ASWM	100%	100%	50%	0%	0%	0%	0%	50%	0%	2
ASIWPCA	100%	100%	0%	0%	0%	100%	0%	0%	0%	1
IFMC	67%	67%	100%	0%	0%	0%	67%	0%	0%	3
Other	88%	63%	75%	0%	25%	13%	13%	25%	0%	8
Location										
HQ / Main Office	70%	70%	61%	6%	30%	24%	3%	30%	6%	33
Field Office	88%	75% 75%	75%	0%	13%	25%	25%	0%	0%	8
rieid Ollice	00%	138	138	Uf	138	238	236	0.9	Uf	
Position										
Program Manager	64%	55%	73%	9%	27%	9%	18%	36%	9%	11
Management Staff	50%	83%	67%	0%	17%	17%	0%	50%	17%	6
Technical Staff	88%	75%	56%	0%	31%	38%	6%	6%	0%	16
Policy Staff	67%	67%	33%	33%	33%	67%	0%	0%	0%	3
Advisory Committee	75%	75%	75%	0%	25%	0%	0%	50%	0%	4
110112017 00111112000										

Q3C: Select no more than THREE of the following TYPES OF INFORMATION that would best help you to address nutrient enrichment over the next five years. (Multiple responses possible. Percentages sum to more than 100%.)

- 1 Access, retrieval and analysis of data
- 2 Short-term forecasts of nutrient loading
- 3 Quality assurance/control
- 4 BMP effectiveness or cost/benefit analysis
- 5 State-of-knowledge reports/success stories
- 6 Land use analysis
- 7 More geospatial data for GIS
- 8 Other

	1	2	3	4	5	6	7	8	Count
ll Gulf of Maine Respondents	41%	56%	20%	49%	34%	51%	37%	5%	41
Country									
United States	35%	50%	15%	42%	38%	65%	38%	4%	26
Canada	53%	67%	27%	60%	27%	27%	33%	7%	15
State									
MA	38%	54%	15%	54 %	23%	62%	31%	8%	13
ME	30%	50%	10%	20%	50%	70%	60%	0%	10
NH	33%	33%	33%	67%	67%	67%	0%	0%	3
NS	33%	50%	17%	67%	50%	50%	17%	17%	6
NB	67%	78%	33%	56%	11%	11%	44%	0%	9
Program									
Coastal Mgmt	24%	59%	24%	53%	35%	53%	29%	12%	17
NERR	40%	40%	0%	0%	20%	100%	80%	0%	5
NEP	60%	80%	20%	40%	40%	20%	40%	0%	5
ASWM	50%	50%	0%	100%	50%	50%	0%	0%	2
ASIWPCA	100%	0%	0%	100%	0%	0%	100%	0%	1
IFMC	33%	33%	33%	67%	33%	67%	33%	0%	3
Other	63%	63%	25%	50%	38%	38%	25%	0%	8
Location									
HQ / Main Office	33%	61%	18%	52%	39%	55%	27%	6%	33
Field Office	75%	38%	25%	38%	13%	38%	75%	0%	8
Position									
Program Manager	55%	64%	27%	45%	9%	36%	55%	0%	11
Management Staff	50%	33%	0%	33%	67%	83%	17%	0%	6
Technical Staff	25%	56%	25%	56%	31%	63%	31%	6%	16
Policy Staff	33%	67%	33%	33%	33%	33%	67%	0%	3
Advisory Committee	50%	50%	0%	75%	75%	25%	0%	25%	4
Other	100%	100%	0%	0%	0%	0%	100%	0%	1

Q3D: Select ANY of the following CONTINUOUS OBSERVATION AND MONITORING VARIABLES that you consider necessary to help you address nutrient enrichment over the next five years. (Multiple responses possible. Percentages sum to more than 100%.)

1 5	Sea level						9		Organic	matter								
	Surface and/or s	subsurface	e curre	nts			10		Dissolv			utrient	s					
	Surface waves						11		Dissolv		-							
	Surface winds						12		Zooplan									
5 \$	Surface salinity	,					13		Phytopl	-								
	Surface temperat						14		Ocean c									
-	Light penetration						15		Aerial/		te imad	erv						
•	Bathymetry/botto						16		Other	DUCCILI	cc mag	CLY						
	outry me ery , po e e e	zm cypc																
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Count
All Gulf of Maine F	Respondents	5%	24%	10%	12%	22%	24%	51%	22%	61%	63%	78%	41%	61%	20%	39%	15%	41
country																		
United States		4%	19%	12%	15%	27%	19%	54%	15%	54%	62%	77%	35%	58%	19%	42%	12%	26
Canada		7%	33%	7%	7%	13%	33%	47%	33%	73%	67%	80%	53%	67%	20%	33%	20%	15
State																		
MA		8%	23%	8%	15%	15%	15%	62%	23%	54%	62%	69%	15%	23%	15%	38%	15%	13
ME		0%	20%	20%	20%	40%	20%	40%	10%	50%	60%	90%	50%	90%	20%	50%	10%	10
NH		0%	0%	0%	0%	33%	33%	67%	0%	67%	67%	67%	67%	100%	33%	33%	0%	3
NS		17%	17%	0%	0%	0%	17%	33%	33%	50%	67%	83%	33%	50%	33%	33%	33%	6
NB		0%	44%	11%	11%	22%	44%	56%	33%	89%	67%	78%	67%	78%	11%	33%	11%	9
Program																		
Coastal Mgmt		0%	29%	6%	12%	18%	29%	53%	29%	59%	59%	76%	35%	53%	12%	47%	18%	17
NERR		20%	0%	20%	20%	40%	20%	0%	0%	40%	20%	80%	60%	80%	0%	20%	20%	5
NEP		0%	20%	20%	20%	40%	40%	100%	40%	60%	80%	80%	60%	80%	40%	20%	0%	5
ASWM		0%	0%	0%	0%	0%	0%	50%	0%	50%	50%	0%	0%	50%	0%	50%	0%	2
ASIWPCA		0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	100%	0%	0%	0%	0%	100%	1
IFMC		0%	100%	33%	33%	33%	33%	100%	33%	100%	67%	100%	33%	67%	67%	67%	0%	3
Other		13%	13%	0%	0%	13%	13%	25%	13%	75%	100%	88%	50%	63%	25%	38%	13%	8
Location																		
HQ / Main Offi	ice	6%	18%	9%	12%	24%	24%	45%	18%	58%	64%	79%	45%	64%	15%	39%	12%	33
Field Office		0%	50%	13%	13%	13%	25%	75%	38%	75%	63%	75%	25%	50%	38%	38%	25%	8
Position																		
Program Manage	er	9%	27%	9%	9%	0%	18%	73%	27%	55%	45%	73%	45%	73%	27%	55%	0%	11
Management Sta	aff	0%	0%	0%	0%	17%	17%	33%	0%	50%	67%	50%	33%	50%	33%	33%	17%	6
Technical Staf	ff	6%	25%	13%	19%	31%	31%	50%	25%	69%	69%	94%	44%	63%	13%	31%	25%	16
Policy Staff		0%	33%	0%	0%	33%	0%	33%	33%	100%	67%	67%	67%	33%	0%	33%	0%	3
Advisory Commi	ittee	0%	25%	0%	0%	25%	25%	25%	0%	25%	75%	75%	0%	50%	0%	25%	25%	4
Other		0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	0%	1

Q3E: Select no more than THREE of the following IMPROVED TECHNOLOGIES that would best help you to address nutrient enrichment over the next five years. (Multiple responses possible. Percentages sum to more than 100%.)

- 1 Improved models that simulate and/or predict
- 2 Rapid benthic/pelagic community assessment
- 3 Cost effective long-term monitoring/sampling equipment
- 4 Rapid measurements of concentration
- 5 Improved treatment technologies
- 6 Enhanced remote sensing
- 7 Effective mitigation strategies
- 8 Other

	1	2	3	4	5	6	7	8	Count
All Gulf of Maine Respondents	54%	24%	66%	27%	37%	20%	54%	2%	41
Country									
United States	54 %	15%	65%	27%	35%	23%	54 %	4%	26
Canada	53%	40%	67%	27%	40%	13%	53%	0%	15
State									
MA	62%	8%	62%	23%	38%	23%	46%	8%	13
ME	40%	20%	60%	40%	40%	30%	50%	0%	10
NH	67%	33%	100%	0%	0%	0%	100%	0%	3
NS	50%	50%	50%	50%	33%	17%	33%	0%	6
NB	56%	33%	78%	11%	44%	11%	67%	0%	9
Program									
Coastal Mgmt	47%	29%	65%	12%	41%	18%	59%	6%	17
NERR	20%	20%	80%	20%	40%	60%	40%	0%	5
NEP	60%	20%	80%	40%	20%	0%	60%	0%	5
ASWM	100%	0%	100%	0%	50%	0%	50%	0%	2
ASIWPCA	100%	0%	0%	100%	0%	100%	0%	0%	1
IFMC	33%	33%	67%	33%	67%	0%	67%	0%	3
Other	75%	25%	50%	50%	25%	13%	50%	0%	8
ocation									
HQ / Main Office	55%	21%	67%	18%	39%	21%	58%	3%	33
Field Office	50%	38%	63%	63%	25%	13%	38%	0%	8
osition									
Program Manager	55%	18%	55%	36%	55%	18%	36%	0%	11
Management Staff	33%	33%	50%	33%	50%	0%	83%	0%	6
Technical Staff	44%	25%	75%	19%	25%	25%	63%	6%	16
Policy Staff	100%	33%	67%	0%	33%	33%	33%	0%	3
Advisory Committee	75%	25%	75%	25%	25%	25%	50%	0%	4
Other	100%	0%	100%	100%	0%	0%	0%	0%	1

Q4: How important will issues related to ENVIRONMENTAL CONTAMINATION be to your program over the next five years?

	Very important	Important	Not very important	Count	
ll Gulf of Maine Respondents	24%	40%	37%	63	
Country					
United States	18%	42%	39%	38	
Canada	32%	36%	32%	25	
State					
MA	19%	44%	38%	16	
ME	24%	41%	35%	17	
NH	0%	40%	60%	5	
NS	43%	14%	43%	14	
NB	18%	64%	18%	11	
Program					
Coastal Mgmt	21%	42%	36%	33	
NERR	20%	40%	40%	5	
NEP	33%	50%	17%	6	
ASFPM	0%	0%	100%	2	
ASWM	0%	0%	100%	2	
ASIWPCA	100%	0%	0%	1	
IFMC	0%	67%	33%	3	
Other	36%	36%	27%	11	
Location					
HQ / Main Office	21%	42%	38%	53	
Field Office	40%	30%	30%	10	
Position					
Program Manager	11%	39%	50%	18	
Management Staff	50%	17%	33%	6	
Technical Staff	26%	41%	33%	27	
Policy Staff	20%	60%	20%	5	
Advisory Committee	25%	25%	50%	4	
Other	33%	67%	0%	3	

Q4A: Select no more than THREE of the following types of ENVIRONMENTAL CONTAMINATION ISSUES that you consider most important to address over the next five years.

(Multiple responses possible. Percentages sum to more than 100%.)

- 1 Mercury
- 2 Polycyclic Aromatic Hydrocarbons (PAHs)
- 3 Dioxins/Furans
- Biocides (Pesticides and anti-fouling agents)
- 5 Petroleum Hydrocarbons
- 6 Pathogens
- 7 Sewage
- 8 Excess Nitrogen
- 9 Other

	1	2	3	4	5	6	7	8	9	Count
All Gulf of Maine Respondents	38%	15%	5%	40%	28%	50%	55%	48%	13%	40
Country										
United States	52%	22%	4%	26%	35%	52%	48%	48%	9%	23
Canada	18%	6%	6%	59%	18%	47%	65%	47%	18%	17
State										
MA	33%	11%	0%	22%	33%	67%	44%	78%	11%	9
ME	67%	33%	8%	33%	25%	42%	50%	25%	8%	12
NH	50%	0%	0%	0%	100%	50%	50%	50%	0%	2
NS	25%	0%	0%	38%	25%	50%	75%	25%	25%	8
NB	11%	11%	11%	78%	11%	44%	56%	67%	11%	9
Program										
Coastal Mgmt	25%	10%	0%	35%	35%	50%	65%	50%	15%	20
NERR	75%	25%	0%	50%	25%	0%	75%	50%	0%	4
NEP	80%	40%	20%	20%	40%	60%	0%	40%	0%	5
ASIWPCA	0%	0%	0%	0%	0%	100%	100%	100%	0%	1
IFMC	50%	0%	0%	50%	0%	50%	100%	50%	0%	2
Other	25%	13%	13%	63%	13%	63%	38%	38%	25%	8
Location										
HQ / Main Office	39%	15%	6%	39%	27%	45%	58%	48%	12%	33
Field Office	29%	14%	0%	43%	29%	71%	43%	43%	14%	7
Position										
Program Manager	22%	11%	0%	44%	11%	78%	67%	67%	0%	9
Management Staff	20%	0%	0%	40%	60%	40%	60%	40%	20%	5
Technical Staff	53%	12%	0%	47%	24%	41%	53%	41%	18%	17
Policy Staff	50%	25%	25%	25%	25%	50%	50%	50%	0%	4
Advisory Committee	0%	0%	0%	50%	0%	100%	50%	50%	50%	2

Q4B: Select no more than THREE of the following RESEARCH ACTIVITIES that would best help you to address your most important types of environmental contamination over the next five years. (Multiple responses possible. Percentages sum to more than 100%.)

2 3 4 5	Identification In-situ transpo	of source	s										
4	In-situ transpo						8		Effecti:	veness o	of remed	diation	n techniques
		rt rates					9		Test an	d valida	ate asse	essment	t techniques
5	Bioindicators						10)	Rate of	freshwa	ater in	flow	
	Select/validate	biomarke	rs for o	chemica	ls		11	L	Other				
6	Toxicity analys	sis											
	· · · · · · · · · · · · · · · · · · ·												
		1	2	3	4	5	6	7	8	9	10	11	Count
All Gulf of Mai	ne Respondents	73%	63%	10%	35%	10%	20%	28%	33%	8%	3%	3%	40
Country													
United Sta	ites	61%	65%	13%	43%	4%	13%	35%	26%	13%	4%	4%	23
Canada		88%	59%	6%	24%	18%	29%	18%	41%	0%	0%	0%	17
0 1 - 1 -													
State MA		56%	78%	11%	22%	0%	11%	44%	33%	11%	11%	11%	9
ME		58%	58%	17%	58%	8%	8%	25%	25%	17%	0%	0%	12
NH		100%	50%	0%	50%	0%	50%	50%	0%	0%	0%	0%	2
NS		88%	88%	13%	38%	13%	13%	0%	38%	0%	0%	0%	8
NB		89%	33%	0%	11%	22%	44%	33%	44%	0%	0%	0%	9
Program													
Coastal Mo	mt	80%	65%	0%	50%	10%	15%	25%	35%	10%	0%	5%	20
NERR		50%	50%	25%	50%	0%	0%	0%	25%	25%	0%	0%	4
NEP		80%	40%	20%	20%	20%	20%	60%	20%	0%	20%	0%	5
ASIWPCA		0%	100%	0%	100%	0%	0%	0%	100%	0%	0%	0%	1
IFMC		50%	100%	50%	0%	0%	0%	100%	0%	0%	0%	0%	2
Other		75%	63%	13%	0%	13%	50%	13%	38%	0%	0%	0%	8
Location													
HQ / Main	Office	76%	61%	6%	39%	12%	18%	27%	36%	9%	0%	3%	33
Field Offi	.ce	57%	71%	29%	14%	0%	29%	29%	14%	0%	14%	0%	7
Position													
Program Ma	nager	67%	56%	22%	22%	22%	11%	33%	33%	0%	11%	0%	9
Management	-	80%	60%	0%	20%	0%	40%	40%	40%	0%	0%	0%	5
Technical	Staff	59%	65%	12%	35%	6%	24%	29%	29%	12%	0%	6%	17
Policy Sta	aff	100%	75%	0%	50%	0%	25%	25%	25%	0%	0%	0%	4
Advisory (Committee	100%	50%	0%	0%	50%	0%	0%	100%	0%	0%	0%	2
Other		100%	67%	0%	100%	0%	0%	0%	0%	33%	0%	0%	3

Q4C: Select no more than THREE of the following TYPES OF INFORMATION that would best help you to address your most important types of environmental contamination over the next five years. (Multiple responses possible. Percentages sum to more than 100%.)

- Bioassay numeric guidelines
- 2 Epidemiology of contaminants
- 3 TMDL guidelines
- 4 Explanation of interactions among contaminants
- 5 Economic impact evaluations
- 6 Remediation options
- 7 More geospatial data for GIS
- 8 Cost/benefit analysis of remediation
- 9 Other

	1	2	3	4	5	6	7	8	9	Count
All Gulf of Maine Respondents	20%	25%	20%	43%	38%	60%	28%	35%	5%	40
Country										
United States	13%	26%	30%	39%	35%	61%	22%	30%	9%	23
Canada	29%	24%	6%	47%	41%	59%	35%	41%	0%	17
State										
MA	0%	11%	67%	11%	22%	67%	22%	44%	11%	9
ME	17%	33%	0%	58%	42%	58%	25%	25%	8%	12
NH	50%	50%	50%	50%	50%	50%	0%	0%	0%	2
NS	38%	25%	13%	63%	25%	63%	25%	25%	0%	8
NB	22%	22%	0%	33%	56%	56%	44%	56%	0%	9
Program										
Coastal Mgmt	15%	25%	30%	50%	35%	65%	25%	25%	5%	20
NERR	0%	25%	0%	25%	75%	25%	50%	0%	25%	4
NEP	40%	20%	20%	60%	20%	40%	20%	40%	0%	5
ASIWPCA	0%	0%	0%	0%	0%	100%	100%	100%	0%	1
IFMC	0%	50%	50%	0%	50%	100%	0%	50%	0%	2
Other	38%	25%	0%	38%	38%	63%	25%	63%	0%	8
Location										
HQ / Main Office	21%	24%	18%	48%	36%	64%	21%	33%	6%	33
Field Office	14%	29%	29%	14%	43%	43%	57%	43%	0%	7
Position										
Program Manager	0%	22%	22%	33%	33%	33%	33%	44%	0%	9
Management Staff	0%	0%	20%	20%	60%	80%	20%	40%	20%	5
Technical Staff	35%	41%	24%	47%	29%	59%	29%	24%	6%	17
Policy Staff	0%	25%	0%	75%	50%	75%	50%	25%	0%	4
Advisory Committee	50%	0%	0%	0%	50%	50%	0%	100%	0%	2
Other	33%	0%	33%	67%	33%	100%	0%	33%	0%	3

Q4D: Select ANY of the following CONTINUOUS OBSERVATION AND MONITORING VARIABLES that you consider necessary to help you address your most important types of environmental contamination over the next five years. (Multiple responses possible. Percentages sum to more than 100%.)

1	Sea level						9	С	rganic	matter								
2	Surface and/or s	ubsurfac	e curre	nts			10		Dissolv	ed inor	ganic n	utrient	s					
3	Surface waves						11		Dissolv	ed oxyg	en							
4	Surface winds						12		Zooplan	kton sp	ecies							
5	Surface salinity						13		Phytopl	ankton	species							
6	Surface temperat	ure					14		Ocean c	olor								
7	Light penetration	n					15		Aerial/	satelli	te imag	ery						
8	Bathymetry/botto	m type					16		Other									
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Count
All Gulf of Maine	Respondents	6%	31%	11%	20%	17%	26%	20%	31%	63%	60%	49%	37%	46%	11%	31%	23%	35
Country																		
United State	s	5%	30%	10%	25%	20%	15%	20%	25%	50%	50%	40%	30%	40%	5%	45%	25%	20
Canada		7%	33%	13%	13%	13%	40%	20%	40%	80%	73%	60%	47%	53%	20%	13%	20%	15
State																		
MA		0%	43%	14%	29%	43%	29%	43%	29%	43%	57%	43%	29%	43%	0%	57%	29%	7
ME		8%	25%	8%	25%	8%	8%	8%	25%	50%	42%	33%	33%	42%	88	42%	25%	12
NH		0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	100%	0%	0%	0%	0%	0%	1
NS		14%	29%	14%	14%	14%	43%	14%	57%	71%	57%	57%	29%	29%	29%	14%	29%	7
NB		0%	38%	13%	13%	13%	38%	25%	25%	88%	88%	63%	63%	75%	13%	13%	13%	8
Program																		
Coastal Mgmt		0%	41%	6%	24%	12%	29%	18%	41%	65%	71%	59%	29%	41%	18%	35%	18%	17
NERR		0%	0%	0%	0%	25%	25%	0%	0%	0%	25%	25%	25%	25%	0%	50%	50%	4
NEP		0%	0%	0%	0%	25%	0%	0%	25%	75%	0%	0%	25%	25%	0%	25%	0%	4
ASIWPCA		0%	0%	0%	0%	0%	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	100%	1
IFMC		50%	100%	100%	100%	50%	50%	100%	100%	100%	100%	100%	100%	100%	0%	0%	0%	2
Other		14%	29%	14%	14%	14%	29%	14%	14%	86%	71%	57%	57%	71%	14%	29%	29%	7
Location																		
HQ / Main Of	fice	3%	28%	3%	14%	14%	28%	14%	31%	66%	59%	52%	34%	45%	14%	34%	21%	29
Field Office		17%	50%	50%	50%	33%	17%	50%	33%	50%	67%	33%	50%	50%	0%	17%	33%	6
Position																		
Program Mana	ger	25%	25%	25%	25%	13%	25%	13%	25%	63%	50%	38%	63%	63%	25%	38%	0%	8
Management S		0%	25%	25%	25%	0%	25%	0%	0%	50%	50%	50%	50%	50%	0%	50%	25%	4
Technical St		0%	29%	7 %	14%	29%	36%	36%	43%	57%	71%	57%	29%	43%	14%	36%	36%	14
Policy Staff		0%	50%	0%	25%	0%	0%	0%	50%	100%	75%	50%	50%	50%	0%	25%	0%	4
Advisory Com	mittee	0%	50%	0%	0%	50%	50%	50%	0%	50%	50%	50%	0%	50%	0%	0%	50%	2
Other		0%	33%	0%	33%	0%	0%	0%	33%	67%	33%	33%	0%	0%	0%	0%	33%	3

Q4E: Select no more than THREE of the following IMPROVED TECHNOLOGIES that would best help you to address your most important types of environmental contamination over the next five years. (Multiple responses possible. Percentages sum to more than 100%.)

- 1 Improved models that simulate and/or predict
- 2 Reliable DNA fingerprinting
- 3 Rapid/real time detection
- 4 Cost effective long-term monitoring equipment
- 5 Improved remote sensing/sampling technologies
- 6 Improved treatment or removal technologies
- 7 Reliable public health testing
- 8 Other

	1	2	3	4	5	6	7	8	Count
All Gulf of Maine Respondents	31%	41%	56%	38%	44%	54%	15%	3%	39
Country									
United States	27%	45%	59%	32%	55%	45%	18%	5%	22
Canada	35%	35%	53%	47%	29%	65%	12%	0%	17
State									
MA	13%	63%	88%	25%	13%	63%	38%	0%	8
ME	42%	33%	50%	33%	75%	33%	0%	8%	12
NH	0%	50%	0%	50%	100%	50%	50%	0%	2
NS	13%	38%	63%	50%	25%	63%	0%	0%	8
NB	56%	33%	44%	44%	33%	67%	22%	0%	9
Program									
Coastal Mgmt	37%	47%	47%	32%	47%	58%	5%	5%	19
NERR	25%	50%	50%	50%	75%	25%	0%	0%	4
NEP	0%	40%	60%	20%	40%	40%	60%	0%	5
ASIWPCA	0%	100%	100%	0%	0%	100%	0%	0%	1
IFMC	50%	50%	100%	50%	0%	50%	0%	0%	2
Other	38%	13%	63%	63%	38%	63%	25%	0%	8
Location									
HQ / Main Office	28%	44%	53%	38%	47%	53%	13%	3%	32
Field Office	43%	29%	71%	43%	29%	57%	29%	0%	7
Position									
Program Manager	38%	25%	63%	13%	38%	63%	25%	0%	8
Management Staff	20%	40%	80%	40%	60%	60%	0%	0%	5
Technical Staff	24%	59%	59%	47%	35%	47%	18%	0%	17
Policy Staff	75%	50%	25%	25%	50%	50%	25%	0%	4
Advisory Committee	0%	0%	50%	50%	0%	100%	0%	0%	2
Other	33%	0%	33%	67%	100%	33%	0%	33%	3

Q5: How important will issues related to NONINDIGENOUS SPECIES be to your program over the next five years?

	Very important	Important	Not very	Not important at	Not relevant	Count
			important	all		
ll Gulf of Maine Respondents	16%	40%	33%	10%	2%	63
Country						
United States	21%	39%	32%	8%	0%	38
Canada	8%	40%	36%	12%	4%	25
State						
MA	19%	50%	19%	13%	0%	16
ME	24%	29%	41%	6%	0%	17
NH	20%	40%	40%	0%	0%	5
NS	7%	21%	50%	21%	0%	14
NB	9%	64%	18%	0%	9%	11
Program						
Coastal Mgmt	15%	45%	33%	6%	0%	33
NERR	60%	0%	40%	0%	0%	5
NEP	0%	50%	50%	0%	0%	6
ASFPM	0%	0%	50%	50%	0%	2
ASWM	100%	0%	0%	0%	0%	2
ASIWPCA	0%	0%	100%	0%	0%	1
IFMC	0%	100%	0%	0%	0%	3
Other	0%	36%	27%	27%	9%	11
Location						
HQ / Main Office	19%	40%	32%	9%	0%	53
Field Office	0%	40%	40%	10%	10%	10
Position						
Program Manager	17%	44%	33%	6%	0%	18
Management Staff	33%	17%	33%	17%	0%	6
Technical Staff	19%	30%	37%	11%	4%	27
Policy Staff	0%	60%	40%	0%	0%	5
Advisory Committee	0%	50%	25%	25%	0%	4
Other	0%	100%	0%	0%	0%	3

Q5A: Select no more than THREE of the following NONINDIGENOUS SPECIES ISSUES that you consider most important to address over the next five years. (Multiple responses possible. Percentages sum to more than 100%.)

- Social impacts
- 2 Economic impacts
- 3 Public health impacts
- 4 Preventing introduction , , ,
- 5 Eradicate or control species.
- 6 Restoration of affected areas
- 7 Effects on native species and communities
- 8 Effects on water or sediment quality
- 9 Other

	1	2	3	4	5	6	7	8	9	Count
All Gulf of Maine Respondents	6%	47%	6%	58%	47%	36%	86%	8%	3%	36
Country										
United States	4%	42%	8%	54%	54%	42%	83%	8%	4%	24
Canada	8%	58%	0%	67%	33%	25%	92%	8%	0%	12
State										
MA	9%	36%	9%	55%	64%	27%	82%	9%	9%	11
ME	0%	40%	10%	70%	40%	40%	90%	10%	0%	10
NH	0%	67%	0%	0%	67%	100%	67%	0%	0%	3
ns	0%	50%	0%	75%	50%	0%	100%	0%	0%	4
NB	13%	63%	0%	63%	25%	38%	88%	13%	0%	8
M	130	03%	U-8	03.8	23.5	20%	00%	13-0	U	٥
Program										
Coastal Mgmt	11%	53%	11%	63%	42%	32%	79%	5%	5%	19
NERR	0%	25%	0%	50%	50%	50%	100%	25%	0%	4
NEP	0%	33%	0%	100%	67%	33%	67%	0%	0%	3
ASWM	0%	0%	0%	0%	100%	100%	100%	0%	0%	2
IFMC	0%	67%	0%	33%	33%	33%	100%	33%	0%	3
Other	0%	60%	0%	60%	40%	20%	100%	0%	0%	5
Location										
HQ / Main Office	6%	42%	6%	61%	52%	39%	84%	6%	3%	31
Field Office	0%	80%	0%	40%	20%	20%	100%	20%	0%	5
Position										
Program Manager	0%	36%	0%	73%	45 %	55%	91%	0%	0%	11
Management Staff	0%	60%	0%	0%	60%	60%	100%	0%	0%	5
Technical Staff	15%	38%	15%	54%	54 %	23%	77%	15%	8%	13
Policy Staff	0%	67%	0%	100%	0%	0%	100%	33%	0%	3
Advisory Committee	0%	100%	0%	100%	0%	0%	100%	0%	0%	1
Other	0%	67%	0%	67%	67%	33%	67%	0%	0%	3

Q5B: Select no more than THREE of the following RESEARCH ACTIVITIES that would best help you to address your most important nonindigenous species issues over the next five years. (Multiple responses possible. Percentages sum to more than 100%.)

- 1 Early detection of species
- 2 Cumulative impact assessments
- 3 Vector identification
- 4 Susceptibility factors for coastal invasive introduction
- 5 Effects of climate change/global warming
- 6 Rapid assessment techniques and analysis
- 7 Effectiveness of BMPs (e.g., ballast water treatment)
- 8 Human behaviors leading to introductions
- 9 Other

		1	2	3	4	5	6	7	8	9	Count
	0.15 - 5 Mail - 5 1 - 1 - 1	600	250	200	200	110	200	200	200	20	24
ATI	Gulf of Maine Respondents	68%	35%	38%	38%	11%	30%	30%	30%	3%	37
Cou	ntry										
	United States	63%	33%	38%	33%	88	29%	33%	42%	4%	24
	Canada	77%	38%	38%	46%	15%	31%	23%	8%	0%	13
Sta	te										
	MA	73%	18%	55%	18%	0%	27%	27%	55%	9%	11
	ME	60%	40%	30%	40%	20%	20%	50%	30%	0%	10
	NH	33%	67%	0%	67%	0%	67%	0%	33%	0%	3
	NS	80%	40%	40%	40%	0%	40%	0%	0%	0%	5
	NB	75%	38%	38%	50%	25%	25%	38%	13%	0%	8
Pro	gram										
	Coastal Mgmt	75%	40%	35%	40%	5%	30%	20%	40%	5%	20
	NERR	50%	50%	0%	50%	25%	25%	75%	0%	0%	4
	NEP	67%	33%	100%	33%	0%	0%	33%	33%	0%	3
	ASWM	0%	50%	0%	50%	0%	50%	0%	50%	0%	2
	IFMC	67%	0%	33%	33%	33%	33%	67%	33%	0%	3
	Other	80%	20%	60%	20%	20%	40%	20%	0%	0%	5
Loc	ation										
_50	HQ / Main Office	69%	38%	41%	38%	9%	28%	28%	31%	3%	32
	Field Office	60%	20%	20%	40%	20%	40%	40%	20%	0%	5
_	•••										
Pos	ition	640	4EC	260	070	00	070	070	4E0	00	
	Program Manager Management Staff	64% 20%	45%	36% 20%	27% 40%	9% 20%	27% 60%	27%	45% 20%	0% 0%	11
	Management Staff Technical Staff	20% 69%	40% 15%	20% 38%	40% 46%	20% 8%	60% 31%	20% 46%	20% 31%	0% 8%	5 13
		69% 100%	15* 33*	38* 33*	46* 33*	8* 33*	31% 33%	46% 33%	31* 0*	8* 0*	13
	Policy Staff	100%	33* 50*	33% 50%	33* 50*	33* 0*	33% 0%	33% 0%	0% 0%	0% 0%	2
	Advisory Committee	100%	50% 67%	50% 67%	33%	0% 0%	0% 0%	0% 0%	0% 33%	0% 0%	3
	Other	100%	0/8	0/8	33*	0.8	U fs	U fs	338	0.8	3

Q5C: Select no more than THREE of the following TYPES OF INFORMATION that would best help you to address your most important nonindigenous species issues over the next five years. (Multiple responses possible. Percentages sum to more than 100%.)

- 1 Access, retrieval and analysis of data
- 2 Ecosystem inventory
- 3 Land use assessment
- 4 State-of-knowledge reports/success stories
- 5 More geospatial data for GIS
- 6 Other

		1	2	3	4	5	6	Count
A11	. Gulf of Maine Respondents	65%	70%	22%	54%	49%	8%	37
Cou	intry							
	United States	54%	58%	25%	58%	50%	8%	24
	Canada	85%	92%	15%	46%	46%	8%	13
Sta								
	MA	55%	73%	0%	55%	55%	18%	11
	ME	50%	40%	40%	50%	60%	0%	10
	NH	67%	67%	67%	100%	0%	0%	3
	NS	80%	80%	20%	40%	40%	20%	5
	NB	88%	100%	13%	50%	50%	0%	8
D=	ogram							
PIC	Coastal Mgmt	65%	75%	25%	55%	40%	15%	20
	NERR	95% 25%	75∜ 25%	25∜ 75%	50%	40% 50%	15%	4
	NEP	25% 33%	25% 67%	75% 0%	50% 67%	50% 67%	0% 0%	3
			67% 50%		67% 50%	67% 50%	0% 0%	
	ASWM	100%		0%				2
	IFMC	67%	67%	0%	33%	100%	0%	3
	Other	100%	100%	0%	60%	40%	0%	5
Loc	cation							
	HQ / Main Office	63%	69%	25%	59%	41%	9%	32
	Field Office	80%	80%	0%	20%	100%	0%	5
Pos	ition							
	Program Manager	64%	64%	18%	55%	55%	0%	11
	Management Staff	80%	60%	20%	80%	20%	0%	5
	Technical Staff	54 %	77%	23%	38%	62%	23%	13
	Policy Staff	100%	67%	0%	67%	67%	0%	3
	Advisory Committee	50%	100%	50%	50%	0%	0%	2
	Other	67%	67%	33%	67%	33%	0%	3

Q5D: Select ANY of the following CONTINUOUS OBSERVATION AND MONITORING VARIABLES that you consider necessary to help you address your most important nonindigenous species issues over the next five years. (Multiple responses possible. Percentages sum to more than 100%.)

1	Sea level						9		Organic									
2	Surface and/or	aubaurfaa		+-			10		-		ganic n	ıtri ont	_					
3	Surface waves	Subsullace	curren	ics			11		Dissolv		-	ıcııenc	.5					
4	Surface waves						12		Zooplan									
5	Surface winds	_					13		_	_	species							
6	Surface tempera	_					14		Ocean c		species							
7	Light penetration						15				te image	~~~						
8	Bathymetry/bott						16		Other	saceiii	te Illage	srA						
0	Bathymetry/Dott	om cype					10		other									
		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Count	
All Gulf of Mai	ne Respondents	38%	9%	6%	22%	31%	19%	22%	22%	31%	25%	34%	41%	9%	31%	25%	32	
Country																		
United Sta	tes	41%	14%	9%	23%	27%	14%	18%	9%	27%	18%	23%	23%	5%	32%	27%	22	
Canada		30%	0%	0%	20%	40%	30%	30%	50%	40%	40%	60%	80%	20%	30%	20%	10	
State																		
MA		60%	20%	10%	20%	40%	10%	30%	10%	30%	20%	20%	20%	0%	20%	20%	10	
ME		33%	11%	11%	33%	22%	22%	11%	0%	11%	11%	33%	33%	11%	33%	44%	9	
NH		0%	0%	0%	0%	0%	0%	0%	33%	67%	33%	0%	0%	0%	67%	0%	3	
NS		33%	0%	0%	33%	33%	67%	67%	67%	67%	67%	67%	67%	33%	0%	33%	3	
NB		29%	0%	0%	14%	43%	14%	14%	43%	29%	29%	57%	86%	14%	43%	14%	7	
Program																		
Coastal Mg	mt	35%	6%	0%	6%	35%	18%	18%	24%	29%	24%	47%	47%	12%	29%	24%	17	
NERR		25%	0%	0%	50%	0%	0%	25%	0%	0%	0%	0%	0%	0%	25%	25%	4	
NEP		67%	33%	33%	67%	33%	33%	33%	0%	33%	33%	67%	67%	33%	33%	33%	3	
ASWM		0%	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	0%	0%	100%	0%	2	
IFMC		67%	33%	33%	33%	67%	0%	33%	33%	33%	33%	0%	33%	0%	0%	67%	3	
Other		33%	0%	0%	33%	33%	67%	33%	67%	67%	67%	33%	67%	0%	33%	0%	3	
Location																		
HQ / Main	Office	32%	7%	4%	21%	29%	21%	21%	18%	32%	25%	36%	39%	11%	36%	18%	28	
Field Offi	ce	75%	25%	25%	25%	50%	0%	25%	50%	25%	25%	25%	50%	0%	0%	75%	4	
Position																		
Program Ma	nager	30%	0%	0%	20%	10%	20%	20%	20%	10%	10%	50%	50%	10%	30%	40%	10	
Management	=	25%	0%	0%	0%	25%	0%	25%	25%	50%	25%	25%	25%	0%	25%	25%	4	
Technical		46%	15%	8%	23%	38%	15%	31%	15%	31%	23%	31%	31%	8%	31%	15%	13	
Policy Sta		0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	100%	0%	100%	0%	1	
Advisory C		50%	0%	0%	50%	50%	50%	0%	50%	50%	50%	0%	50%	0%	0%	50%	2	
_			50%	50%	50%	50%		0%			100%	50%	50%	50%		0%	2	
Other		50%	50%	50%	50%	50%	50%	0%	50%	100%	100%	50%	50%	50%	50%	0%	2	

Q5E: Select no more than THREE of the following IMPROVED TECHNOLOGIES that would best help you to address your most important nonindigenous species issues over the next five years. (Multiple responses possible. Percentages sum to more than 100%.)

- 1 Rapid detection and monitoring
- 2 Rapid response techniques
- 3 Treatment or removal technologies
- 4 Prevention techniques (e.g., irradiation)
- 5 Other

	1	2	3	4	5	Count
All Gulf of Maine Respondents	72%	56%	69%	78%	3%	36
Country						
United States	67%	58%	71%	79%	0%	24
Canada	83%	50%	67%	75%	8%	12
State						
MA	73%	73%	73%	64%	0%	11
ME	70%	60%	60%	90%	0%	10
NH	33%	0%	100%	100%	0%	3
NS NS	75%	0% 0%	100%	100%	0%	3 4
NB	75% 88%	75%	100% 50%	63%	13%	
NB	88%	/5%	50%	63%	13%	8
Program						
Coastal Mgmt	80%	45%	60%	85%	5%	20
NERR	50%	75%	75%	100%	0%	4
NEP	67%	100%	67%	67%	0%	3
ASWM	0%	0%	100%	100%	0%	2
IFMC	67%	67%	67%	67%	0%	3
Other	100%	75%	100%	25%	0%	4
Location						
HQ / Main Office	72%	56%	72%	78%	0%	32
Field Office	75%	50%	50%	75%	25%	4
Position						
Program Manager	64%	45%	64%	73%	9%	11
Management Staff	50%	75%	75%	75%	0%	4
Technical Staff	77%	62%	69%	85%	0%	13
Policy Staff	100%	67%	67%	67%	0%	3
Advisory Committee	50%	50%	100%	50%	0%	2
Other	100%	33%	67%	100%	0%	3

Q6: How important will issues related to COASTAL HAZARDS (including tectonic/catastrophic events and tsunamis) be to your program over the next five years?

	Very important	Important	Not very	Not important at	Not relevant	Count
			important	all		
ll Gulf of Maine Respondents	16%	16%	4 3%	11%	14%	63
Country						
United States	21%	13%	47%	11%	8%	38
Canada	8%	20%	36%	12%	24%	25
tate						
MA	31%	19%	38%	6%	6%	16
ME	18%	12%	53%	6%	12%	17
NH	0%	0%	60%	40%	0%	5
NS	7%	21%	29%	21%	21%	14
NB	9%	18%	45%	0%	27%	11
rogram						
Coastal Mgmt	21%	21%	42%	6%	9%	33
NERR	0%	20%	40%	0%	40%	5
NEP	0%	0%	50%	50%	0%	6
ASFPM	100%	0%	0%	0%	0%	2
ASWM	50%	0%	50%	0%	0%	2
ASIWPCA	0%	0%	0%	0%	100%	1
IFMC	0%	0%	100%	0%	0%	3
Other	0%	18%	36%	18%	27%	11
ocation						
HQ / Main Office	17%	19%	42%	13%	9%	53
Field Office	10%	0%	50%	0%	40%	10
osition						
Program Manager	28%	17%	50%	6%	0%	18
Management Staff	17%	0%	50%	0%	33%	6
Technical Staff	15%	19%	26%	15%	26%	27
Policy Staff	0%	40%	60%	0%	0%	5
Advisory Committee	0%	0%	75%	25%	0%	4
Other	0%	0%	67%	33%	0%	3

Q6A: Select no more than THREE of the following COASTAL HAZARD ISSUES that you consider most important to address over the next five years. (Multiple responses possible. Percentages sum to more than 100%.)

- 1 Managing areas subject to erosion
- 2 Managing areas subject to flooding
- 3 Managing areas subject to severe wind effects
- 4 Managing areas subject to high sedimentation rates
- 5 Managing for effects of shoreline stabilization
- 6 Providing emergency management/warning systems
- 7 Understanding economic impacts
- 8 Other

	1	2	3	4	5	6	7	8	Count
All Gulf of Maine Respondents	89%	79%	21%	5%	58%	16%	21%	5%	19
Country									
United States	100%	75%	8%	0%	75%	8%	17%	8%	12
Canada	71%	86%	43%	14%	29%	29%	29%	0%	7
State									
MA	100%	71%	0%	0%	71%	14%	14%	14%	7
ME	100%	80%	20%	0%	80%	0%	20%	0%	5
NS	75%	100%	50%	25%	0%	25%	25%	0%	4
NB	67%	67%	33%	0%	67%	33%	33%	0%	3
Program									
Coastal Mgmt	100%	75%	8%	0%	67%	17%	17%	8%	12
NERR	100%	100%	0%	0%	100%	0%	0%	0%	1
ASFPM	100%	100%	50%	0%	50%	0%	0%	0%	2
ASWM	100%	100%	0%	0%	100%	0%	0%	0%	1
Other	33%	67%	67%	33%	0%	33%	67%	0%	3
Location									
HQ / Main Office	94%	76%	24%	0%	65%	12%	18%	6%	17
Field Office	50%	100%	0%	50%	0%	50%	50%	0%	2
Position									
Program Manager	100%	888	38%	0%	50%	0%	13%	0%	8
Management Staff	50%	50%	0%	50%	50%	0%	100%	0%	2
Technical Staff	100%	86%	0%	0%	71%	29%	0%	14%	7
Policy Staff	50%	50%	50%	0%	50%	50%	50%	0%	2

Q6B: Select no more than THREE of the following RESEARCH ACTIVITIES that would best help you to address your most important coastal hazard issues over the next five years. (Multiple responses possible. Percentages sum to more than 100%.)

- 1 Littoral cell inventories
- 2 Shoreline characterizations
- 3 Risk and vulnerability assessments
- 4 Trends analysis
- 5 Effects of climate change/global warming
- 6 Attitudes, values and perceptions of risk.
- 7 Other

	1	2	3	4	5	6	7	Count
All Gulf of Maine Respondents	21%	53%	68%	42%	53%	37%	16%	19
Country								
United States	33%	58%	50%	50%	33%	50%	25%	12
Canada	0%	43%	100%	29%	86%	14%	0%	7
State								
MA	29%	43%	29%	71%	43%	57%	29%	7
ME	40%	80%	80%	20%	20%	40%	20%	5
NS	0%	25%	100%	25%	75%	25%	0%	4
NB	0%	67%	100%	33%	100%	0%	0%	3
Program								
Coastal Mgmt	23%	54%	62%	38%	54%	31%	23%	13
NERR	0%	100%	100%	0%	100%	0%	0%	1
ASFPM	0%	50%	100%	50%	0%	100%	0%	2
ASWM	100%	100%	0%	100%	0%	0%	0%	1
Other	0%	0%	100%	50%	100%	50%	0%	2
Location								
HQ / Main Office	22%	50%	67%	44%	50%	39%	17%	18
Field Office	0%	100%	100%	0%	100%	0%	0%	1
FIGIR OLLICE	0.8	1002	1002	0.9	1002	0.9	US	Τ.
Position								
Program Manager	25%	50%	63%	25%	50%	63%	13%	8
Management Staff	100%	0%	0%	0%	100%	100%	0%	1
Technical Staff	13%	63%	75%	63%	38%	13%	25%	8
Policy Staff	0%	50%	100%	50%	100%	0%	0%	2

Q6C: Select no more than THREE of the following TYPES OF INFORMATION that would best help you to address your most important coastal hazard issues over the next five years. (Multiple responses possible. Percentages sum to more than 100%.)

- 1 Access, retrieval and analysis of data
- 2 Design standards for shoreline management technologies.
- 3 Socio-economic impact assessments
- 4 State-of-knowledge reports/case studies
- 5 Geomorphologic studies
- 6 Spatial and temporal demographics
- More geospatial data for GIS (elevation maps, land cover and use, etc)
- 8 Other

	1	2	3	4	5	6	7	8	Count
All Gulf of Maine Respondents	44%	50%	44%	22%	22%	17%	61%	6%	18
Country									
United States	42%	50%	42%	17%	17%	17%	58%	8%	12
Canada	50%	50%	50%	33%	33%	17%	67%	0%	6
State									
MA	43%	57%	43%	14%	0%	29%	29%	14%	7
ME	40%	40%	40%	20%	40%	0%	100%	0%	5
NS	67%	33%	67%	33%	0%	33%	67%	0%	3
NB	33%	67%	33%	33%	67%	0%	67%	0%	3
Program									
Coastal Mgmt	25%	50%	50%	25%	33%	17%	58%	8%	12
NERR	100%	0%	0%	0%	0%	0%	100%	0%	1
ASFPM	100%	100%	0%	0%	0%	0%	100%	0%	2
ASWM	0%	100%	100%	0%	0%	0%	0%	0%	1
Other	100%	0%	50%	50%	0%	50%	50%	0%	2
Location									
HQ / Main Office	47%	47%	41%	24%	24%	18%	59%	6%	17
Field Office	0%	100%	100%	0%	0%	0%	100%	0%	1
Position									
Program Manager	63%	50%	38%	25%	13%	13%	75%	0%	8
Management Staff	0%	0%	100%	100%	0%	0%	0%	0%	1
Technical Staff	29%	57%	43%	0%	29%	29%	57%	14%	7
Policy Staff	50%	50%	50%	50%	50%	0%	50%	0%	2

Q6D: Select ANY of the following CONTINUOUS OBSERVATION AND MONITORING VARIABLES that you consider necessary to help you address your most important coastal hazard issues over the next five years. (Multiple responses possible. Percentages sum to more than 100%.)

1	Sea level						9		Organio	matter	
2	Surface and/or	subsurfac	e curre	nts			10)	-		ganic nutrient
3	Surface waves						11		Dissolv	red oxyge	en
4	Surface winds						12	!	Zooplar	nkton spe	cies
5	Surface salinit	У					13	1	Phytop	Lankton s	pecies
6	Surface tempera	ture					14		Ocean o	color	
7	Light penetrati	.on					15	i	Aerial	satellit/	e imagery
8	Bathymetry/bott	om type					16	i	Other		
		1	2	3	4	6	8	15	16	Count	
All Gulf of Maine	Respondents	83%	50%	78%	61%	11%	39%	50%	11%	18	
Country											
United State	S	83%	50%	83%	50%	0%	50%	50%	17%	12	
Canada		83%	50%	67%	83%	33%	17%	50%	0%	6	
State											
MA		100%	43%	100%	57%	0%	43%	43%	0%	7	
ME		60%	60%	60%	40%	0%	60%	60%	40%	5	
NS		100%	67%	67%	100%	67%	33%	33%	0%	3	
NB		67%	33%	67%	67%	0%	0%	67%	0%	3	
Program											
Coastal Mgmt		100%	67%	83%	75%	8%	50%	42%	17%	12	
NERR		0%	0%	0%	0%	0%	0%	100%	0%	1	
ASFPM		50%	0%	50%	0%	0%	50%	100%	0%	2	
ASWM		100%	0%	100%	0%	0%	0%	0%	0%	1	
Other		50%	50%	100%	100%	50%	0%	50%	0%	2	
Location											
HQ / Main Of	fice	82%	47%	76%	59%	12%	35%	47%	12%	17	
Field Office		100%	100%	100%	100%	0%	100%	100%	0%	1	
Position											
Program Mana	ger	88%	38%	75%	38%	25%	25%	38%	0%	8	
Management S	taff	100%	100%	100%	100%	0%	0%	0%	0%	1	
Technical St	aff	86%	71%	86%	86%	0%	71%	71%	29%	7	
Policy Staff		50%	0%	50%	50%	0%	0%	50%	0%	2	

Q6E: Select no more than THREE of the following IMPROVED TECHNOLOGIES that would best help you to address your most important coastal hazard issues over the next five years.

- 1 Improved models that simulate and predict
- 2 Impact zone identification
- 3 Alternative shoreline protection technologies
- 4 Advanced detection and/or warning technologies
- 5 Other

Country United States
Country United States 83% 50% 83% 42% 8% 12 Canada 86% 71% 43% 57% 0% 7 State MA 86% 57% 71% 14% 14% 7 ME 80% 40% 100% 80% 0% 5 NS 75% 75% 75% 25% 50% 0% 4 NB 100% 67% 67% 67% 0% 3 Program Coastal Mgmt 85% 62% 62% 38% 8% 13 NERR 0% 100% 100% 100% 0% 1 ASFPM 100% 50% 100% 50% 100% 50% 0% 2 ASWM 100% 50% 100% 50% 100% 0% 1 Other 100% 50% 50% 100% 0% 100% 0% 1 Other
United States 83% 50% 83% 42% 88% 12 Canada 86% 71% 43% 57% 0% 7 State MA 86% 57% 71% 14% 14% 7 ME 80% 40% 100% 80% 0% 5 NS 75% 75% 25% 50% 0% 4 NB 100% 67% 67% 67% 67% 0% 3 Program Coastal Mgmt 85% 62% 62% 38% 8% 13 NERR 0% 100% 50% 100% 50% 0% 1 ASFPM 100% 50% 100% 50% 0% 0% 1 ASSPM 100% 50% 100% 50% 0% 0% 1 Other 100% 50% 50% 50% 100% 0% 0% 1 Other 100% 50% 50% 100% 0% 0% 2
United States 83% 50% 83% 42% 88% 12 Canada 86% 71% 43% 57% 0% 7 State MA 86% 57% 71% 14% 14% 7 ME 80% 40% 100% 80% 0% 55 NS 75% 75% 75% 25% 50% 0% 4 NB 100% 67% 67% 67% 67% 0% 3 Program Coastal Mgmt 85% 62% 62% 38% 88% 13 NERR 0% 100% 50% 100% 100% 0% 1 ASFPM 100% 50% 100% 50% 100% 50% 0% 2 ASWM 100% 0% 100% 50% 100% 0% 0% 1 Other 100% 50% 50% 50% 100% 0% 0% 2 Location
State MA 86% 71% 43% 57% 0% 7 MA 86% 57% 71% 14% 14% 7 ME 80% 40% 100% 80% 0% 5 NS 75% 75% 25% 50% 0% 4 NB 100% 67% 67% 67% 0% 3 Program Coastal Mgmt 85% 62% 62% 38% 8% 13 NERR 0% 100% 100% 0% 0 1 ASFPM 100% 50% 100% 50% 0% 2 ASWM 100% 0% 100% 0% 0% 1 Other 100% 50% 50% 100% 0% 0 2 Location 100 50% 50% 100% 0% 0 0 0 0 0 0 0 0
MA 86% 57% 71% 14% 14% 7 ME 80% 40% 100% 80% 0% 5 NS 75% 75% 25% 50% 0% 4 NB 100% 67% 67% 67% 67% 0% 3 Program Coastal Mgmt 85% 62% 62% 38% 8% 13 NERR 0% 100% 100% 100% 0% 1 ASFPM 100% 50% 100% 50% 0% 2 ASWM 100% 0% 100% 0% 0% 10 Other 100% 50% 50% 50% 10% 0% 2
MA 86% 57% 71% 14% 14% 7 ME 80% 40% 100% 80% 0% 5 NS 75% 75% 25% 50% 0% 4 NB 100% 67% 67% 67% 67% 0% 3 Program Coastal Mgmt 85% 62% 62% 38% 8% 13 NERR 0% 100% 100% 100% 0% 1 ASFPM 100% 50% 100% 50% 0% 2 ASWM 100% 0% 100% 0% 0% 10 Other 100% 50% 50% 50% 0% 2
ME 80% 40% 100% 80% 0% 5 NS 75% 75% 25% 50% 0% 4 NB 100% 67% 67% 67% 0% 3 Program Coastal Mgmt 85% 62% 62% 38% 8% 13 NERR 0% 100% 100% 0% 1 ASFPM 100% 50% 100% 50% 0% 2 ASWM 100% 0% 100% 0% 0% 1 Other 100% 50% 50% 100% 0% 2
NS 75% 75% 25% 50% 0% 4 NB 100% 67% 67% 67% 67% 0% 3 Program Coastal Mgmt 85% 62% 62% 38% 8% 13 NERR 0% 100% 100% 100% 0% 1 ASFPM 100% 50% 100% 50% 0% 2 ASWM 100% 0% 100% 0% 0% 1 Other 100% 50% 50% 100% 0% 2
NB 100% 67% 67% 67% 0% 3 Program Coastal Mgmt 85% 62% 62% 38% 8% 13 NERR 0% 100% 100% 100% 0% 1 ASFPM 100% 50% 100% 50% 0% 2 ASWM 100% 0% 100% 0% 0% 1 Other 100% 50% 50% 100% 0% 2
Program Coastal Mgmt 85% 62% 62% 38% 8% 13 NERR 0% 100% 100% 0% 1 ASFPM 100% 50% 100% 50% 0% 2 ASWM 100% 0% 100% 0% 0% 1 Other 100% 50% 50% 100% 0% 0% 2
Coastal Mgmt 85% 62% 62% 38% 8% 13 NERR 0% 100% 100% 100% 0% 1 ASFPM 100% 50% 100% 50% 0% 2 ASWM 100% 0% 100% 0% 0% 1 Other 100% 50% 50% 100% 0% 2 Location
NERR 0% 100% 100% 100% 0% 1 ASFPM 100% 50% 100% 50% 0% 2 ASWM 100% 0% 100% 0% 0% 1 Other 100% 50% 50% 100% 0% 2 Location
ASFPM 100% 50% 100% 50% 0% 2 ASWM 100% 0% 100% 0% 0% 1 Other 100% 50% 50% 100% 0% 2
ASWM 100% 0% 100% 0% 0% 1 Other 100% 50% 50% 100% 0% 2 Location
Other 100% 50% 50% 100% 0% 2 Location
Location
Field Office 100% 100% 0% 100% 0% 1
Position
Program Manager 100% 50% 88% 38% 0% 8
Management Staff 100% 0% 0% 0% 100% 1
Technical Staff 63% 75% 63% 50% 0% 8
Policy Staff 100% 50% 50% 100% 0% 2

Q7: How important will issues related to SEDIMENT MANAGEMENT be to your program over the next five years?

	Very important	Important	Not very	Not important at	Not relevant	Count
			important	all		
ll Gulf of Maine Respondents	11%	32%	49%	2%	6 %	63
Country						
United States	13%	34%	50%	3%	0%	38
Canada	8%	28%	48%	0%	16%	25
tate						
MA	6%	44%	50%	0%	0%	16
ME	18%	29%	47%	6%	0%	17
NH	20%	20%	60%	0%	0%	5
NS	7%	21%	50%	0%	21%	14
NB	9%	36%	45%	0%	9%	11
cogram						
Coastal Mgmt	15%	24%	52%	0%	9%	33
NERR	20%	60%	0%	20%	0%	5
NEP	0%	0%	100%	0%	0%	6
ASFPM	0%	50%	50%	0%	0%	2
ASWM	50%	50%	0%	0%	0%	2
ASIWPCA	0%	0%	100%	0%	0%	1
IFMC	0%	33%	67%	0%	0%	3
Other	0%	55%	36%	0%	9%	11
ocation						
HQ / Main Office	13%	34%	45%	2%	6%	53
Field Office	0%	20%	70%	0%	10%	10
osition						
Program Manager	0%	28%	72%	0%	0%	18
Management Staff	17%	33%	17%	17%	17%	6
Technical Staff	19%	30%	41%	0%	11%	27
Policy Staff	20%	20%	60%	0%	0%	5
Advisory Committee	0%	75%	25%	0%	0%	4
Other	0%	33%	67%	0%	0%	3

Q7A: Select no more than THREE of the following SEDIMENT MANAGEMENT ISSUES that you consider most important to address over the next five years. (Multiple responses possible. Percentages sum to more than 100%.)

- 1 Managing the reuse of material
- 2 Identifying disposal options
- 3 Implementing confinement techniques
- 4 Managing sediment resources regionally
- 5 Identifying sediment transport patterns
- 6 Identifying compatible sources for beach nourishment
- 7 Other

	1	2	3	4	5	6	7	Count
All Gulf of Maine Respondents	40%	52%	24%	48%	64%	36%	12%	25
Country								
United States	41%	47%	18%	53%	59%	47%	12%	17
Canada	38%	63%	38%	38%	75%	13%	13%	8
State								
MA.	57%	57%	14%	14%	57%	57%	29%	7
ME	38%	38%	13%	888	50%	38%	0%	8
NH	0%	50%	50%	50%	100%	50%	0%	2
NS	0%	0%	67%	67%	67%	0%	33%	3
NB	60%	100%	20%	20%	80%	20%	0%	5
Program								
Coastal Mgmt	36%	55%	27%	45 %	64%	27%	27%	11
NERR	0%	0%	25%	75%	50%	50%	0%	4
ASFPM	100%	0%	0%	0%	100%	100%	0%	1
ASWM	50%	50%	0%	50%	100%	50%	0%	2
IFMC	100%	100%	0%	0%	0%	100%	0%	1
Other	50%	83%	33%	50%	67%	17%	0%	6
Location								
HQ / Main Office	39%	48%	26%	48%	65%	35%	13%	23
Field Office	50%	100%	0%	50%	50%	50%	0%	2
Position								
Program Manager	60%	60%	0%	40%	60%	40%	0%	5
Management Staff	33%	67%	0%	100%	33%	33%	33%	3
Technical Staff	27%	36%	36%	55%	73%	45%	9%	11
Policy Staff	100%	100%	0%	0%	50%	50%	0%	2
Advisory Committee	33%	33%	33%	33%	67%	0%	33%	3
Other	0%	100%	100%	0%	100%	0%	0%	1

Q7B: Select no more than THREE of the following RESEARCH ACTIVITIES that would best help you to address your most important sediment management issues over the next five years. (Multiple responses possible. Percentages sum to more than 100%.)

- 1 Cost-benefit analysis
- 2 Test and validate assessment techniques
- 3 Effectiveness of confinement techniques
- 4 Improved beneficial uses
- 5 Prioritize restoration/protection based on max benefit for cost
- 6 Effects from dredging
- 7 Analysis of impacts of engineering solutions (e.g., jetties)
- 8 Other

	1	2	3	4	5	6	7	8	Count
All Gulf of Maine Respondents	35%	15%	23%	19%	35%	65%	54%	8%	26
Country									
United States	47%	12%	12%	24%	41%	65%	59%	6%	17
Canada	11%	22%	44%	11%	22%	67%	44%	11%	9
State									
MA	43%	0%	14%	29%	43%	57%	43%	14%	7
ME	50%	25%	13%	25%	38%	63%	63%	0%	8
NH	50%	0%	0%	0%	50%	100%	100%	0%	2
NS	0%	25%	50%	0%	50%	50%	25%	25%	4
NB	20%	20%	40%	20%	0%	80%	60%	0%	5
Program									
Coastal Mgmt	42%	8%	17%	25%	33%	50%	50%	17%	12
NERR	0%	0%	25%	0%	75%	100%	75%	0%	4
ASFPM	100%	0%	0%	0%	0%	100%	100%	0%	1
ASWM	0%	0%	0%	50%	50%	50%	50%	0%	2
IFMC	100%	0%	0%	0%	100%	100%	0%	0%	1
Other	33%	50%	50%	17%	0%	67%	50%	0%	6
Location									
HQ / Main Office	33%	13%	25%	21%	33%	67%	58%	8%	24
Field Office	50%	50%	25° 0%	0%	50%	50%	0%	0%	24
rield Office	30%	50%	0%	0.8	30%	50%	0-5	0%	2
Position									
Program Manager	60%	0%	20%	40%	20%	60%	40%	0%	5
Management Staff	33%	33%	0%	33%	33%	67%	67%	33%	3
Technical Staff	25%	17%	25%	8%	50%	67%	50%	8%	12
Policy Staff	50%	0%	50%	0%	0%	100%	50%	0%	2
Advisory Committee	0%	33%	33%	33%	33%	33%	67%	0%	3
Other	100%	0%	0%	0%	0%	100%	100%	0%	1
-	100%		0%	0%	0%	100%	100%	0%	

Q7C: Select no more than THREE of the following TYPES OF INFORMATION that would best help you to address your most important sediment management issues over the next five years. (Multiple responses possible. Percentages sum to more than 100%.)

- 1 Access, retrieval and analysis of data
- 2 Sediment transport patterns
- 3 Beach profile data
- 4 Shoreline characterizations
- 5 State-of-knowledge reports/case studies
- 6 Improved methods and models for quantifying sediment budgets
- 7 Geospatial data for GIS
- 8 Other

	1	2	3	4	5	6	7	8	Count
All Gulf of Maine Respondents	25%	63%	38%	42%	17%	54%	33%	13%	24
Country									
United States	12%	71%	47%	41%	12%	53%	24%	18%	17
Canada	57%	43%	14%	43%	29%	57%	57%	0%	7
State									
MA	0%	57%	57%	57%	0%	29%	0%	43%	7
ME	25%	75%	50%	38%	25%	63%	25%	0%	8
NH	0%	100%	0%	0%	0%	100%	100%	0%	2
NS	50%	50%	0%	50%	50%	50%	50%	0%	2
NB	60%	40%	20%	40%	20%	60%	60%	0%	5
Program									
Coastal Mgmt	10%	80%	20%	30%	10%	50%	40%	20%	10
NERR	25%	50%	75%	75%	0%	50%	25%	0%	4
ASFPM	0%	100%	100%	100%	0%	0%	0%	0%	1
ASWM	0%	50%	50%	50%	0%	100%	50%	0%	2
IFMC	0%	100%	100%	0%	0%	0%	0%	100%	1
Other	67%	33%	17%	33%	50%	67%	33%	0%	6
Location									
HQ / Main Office	23%	64%	36%	45%	18%	55%	32%	9%	22
Field Office	50%	50%	50%	0%	0%	50%	50%	50%	2
Position									
Program Manager	20%	40%	60%	100%	0%	60%	0%	0%	5
Management Staff	0%	67%	0%	0%	33%	67%	33%	33%	3
Technical Staff	18%	73%	55%	36%	9%	36%	45%	18%	11
Policy Staff	50%	100%	0%	0%	50%	50%	50%	0%	2
Advisory Committee	100%	0%	0%	50%	50%	100%	0%	0%	2
Other	0%	100%	0%	0%	0%	100%	100%	0%	1

Q7D: Select ANY of the following CONTINUOUS OBSERVATION AND MONITORING VARIABLES that you consider necessary to help you address your most important sediment management issues over the next five years. (Multiple responses possible. Percentages sum to more than 100%.)

	1	Sea level						9		Organic	matter								
	2	Surface and/or	subsurfac	e curre	nts			10		Dissolve			ıtrient	s					
	3	Surface waves						11		Dissolve		-							
	4	Surface winds						12		Zooplan									
	5	Surface salinit	t v					13		Phytopla	-								
	6	Surface tempera	-					14		Ocean co		•							
	7	Light penetrati						15		Aerial/		te image	erv						
	8	Bathymetry/bott						16		Other			•						
			1	2	3	4	5	6	7	8	9	10	11	12	13	15	16	Count	
All G	ulf of Maine	Respondents	43%	48%	48%	35%	4%	4%	9%	52%	26%	13%	4%	9%	13%	52%	17%	23	
Count	rv																		
	-, United State:	3	53%	60%	53%	33%	0%	0%	7%	60%	13%	0%	0%	7%	7%	60%	13%	15	
	Canada	_	25%	25%	38%	38%	13%	13%	13%	38%	50%	38%	13%	13%	25%	38%	25%	8	
State																			
	MA		71%	29%	57%	29%	0%	0%	0%	43%	0%	0%	0%	14%	14%	86%	0%	7	
	ME		50%	83%	50%	33%	0%	0%	17%	83%	33%	0%	0%	0%	0%	33%	33%	6	
	NH		0%	100%	50%	50%	0%	0%	0%	50%	0%	0%	0%	0%	0%	50%	0%	2	
	NS		33%	33%	33%	0%	0%	0%	0%	33%	67%	33%	0%	0%	0%	0%	33%	3	
	NB		20%	20%	40%	60%	20%	20%	20%	40%	40%	40%	20%	20%	40%	60%	20%	5	
Progr	am																		
	Coastal Mgmt		55%	55%	55%	36%	0%	0%	0%	55%	9%	0%	0%	0%	0%	36%	27%	11	
	NERR		50%	100%	50%	50%	0%	0%	0%	100%	50%	0%	0%	0%	0%	50%	0%	2	
	ASFPM		100%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	1	
	ASWM		50%	50%	0%	0%	0%	0%	0%	50%	0%	0%	0%	0%	0%	100%	0%	2	
	IFMC		100%	100%	100%	100%	0%	0%	0%	100%	0%	0%	0%	100%	100%	100%	0%	1	
	Other		0%	17%	33%	33%	17%	17%	33%	33%	67%	50%	17%	17%	33%	50%	17%	6	
Locat	ion																		
	HQ / Main Of:	fice	43%	48%	48%	33%	5%	5%	10%	52%	24%	10%	5%	0%	5%	52%	14%	21	
	Field Office		50%	50%	50%	50%	0%	0%	0%	50%	50%	50%	0%	100%	100%	50%	50%	2	
Posit	ion																		
	Program Manad	ger	100%	25%	75%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	75%	0%	4	
	Management S		0%	33%	0%	0%	0%	0%	33%	100%	33%	0%	0%	0%	0%	67%	0%	3	
	Technical Sta		50%	70%	50%	40%	0%	0%	0%	70%	30%	10%	0%	20%	20%	50%	30%	10	
	Policy Staff		50%	0%	50%	100%	0%	0%	0%	50%	0%	0%	0%	0%	0%	100%	0%	2	
	Advisory Com	nittee	0%	33%	33%	33%	33%	33%	33%	33%	67%	67%	33%	0%	33%	0%	33%	3	
	Other		0%	100%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1	
	001101		0 0	1000	1000	1000	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	1	

Q7E: Select no more than THREE of the following IMPROVED TECHNOLOGIES that would best help you to address your most important sediment management issues over the next five years. (Multiple responses possible. Percentages sum to more than 100%.)

- 1 Improved models that simulate and/or predict
- 2 Engineering solutions
- 3 Methods for quantifying sediment budgets
- 4 Containment and stabilization technologies
- 5 Treatment technologies
- 6 Remote sampling
- 7 Other

	1	2	3	4	5	6	Count	
All Gulf of Maine Respondents	68%	40%	52%	52%	28%	20%	25	
Country								
United States	65%	41%	47%	47%	29%	29%	17	
Canada	75%	38%	63%	63%	25%	0%	8	
State								
MA	57%	29%	29%	71%	29%	29%	7	
ME	63%	38%	63%	25%	38%	38%	8	
NH	100%	100%	50%	50%	0%	0%	2	
NS	33%	67%	0%	100%	33%	0%	3	
NB	100%	20%	100%	40%	20%	0%	5	
Program								
Coastal Mgmt	73%	55%	45%	36%	27%	27%	11	
NERR	25%	0%	50%	50%	25%	50%	4	
ASFPM	100%	100%	100%	0%	0%	0%	1	
ASWM	50%	50%	50%	100%	0%	0%	2	
IFMC	100%	0%	0%	100%	100%	0%	1	
Other	83%	33%	67%	67%	33%	0%	6	
Location								
HQ / Main Office	65%	43%	52%	52%	26%	22%	23	
Field Office	100%	0%	50%	50%	50%	0%	2	
Position								
Program Manager	60%	60%	60%	60%	20%	0%	5	
Management Staff	67%	67%	0%	67%	33%	33%	3	
Technical Staff	64%	18%	55%	45%	36%	36%	11	
Policy Staff	100%	50%	100%	0%	50%	0%	2	
Advisory Committee	67%	33%	33%	100%	0%	0%	3	
Other	100%	100%	100%	0%	0%	0%	1	

Q8: How important will issues related to OCEAN MANAGEMENT be to your program over the next five years?

	Very important	Important	Not very	Not important at	Not relevant	Count
ll Gulf of Maine Respondents	35%	33%	27%	3%	2%	63
ountry						
United States	21%	37%	37%	3%	3%	38
Canada	56%	28%	12%	4%	0%	25
ate						
MA	38%	44%	19%	0%	0%	16
ME	12%	41%	35%	6%	6%	17
NH	0%	0%	100%	0%	0%	5
NS	43%	29%	21%	7%	0%	14
NB	73%	27%	0%	0%	0%	11
ogram						
Coastal Mgmt	45%	36%	15%	3%	0%	33
NERR	0%	40%	40%	0%	20%	5
NEP	0%	17%	83%	0%	0%	6
ASFPM	0%	50%	50%	0%	0%	2
ASWM	0%	50%	50%	0%	0%	2
ASIWPCA	0%	100%	0%	0%	0%	1
IFMC	67%	33%	0%	0%	0%	3
Other	45%	18%	27%	9%	0%	11
cation						
HQ / Main Office	30%	34%	30%	4%	2%	53
Field Office	60%	30%	10%	0%	0%	10
sition						
Program Manager	33%	28%	39%	0%	0%	18
Management Staff	33%	17%	50%	0%	0%	6
Technical Staff	41%	37%	11%	7%	4%	27
Policy Staff	40%	60%	0%	0%	0%	5
Advisory Committee	25%	50%	25%	0%	0%	4
Other	0%	0%	100%	0%	0%	3

Q8A: Select no more than THREE of the following OCEAN MANAGEMENT ISSUES that you consider most important to address over the next five years. (Multiple responses possible. Percentages sum to more than 100%.)

- 1 Reconciling conflicting uses
- 2 Loss of habitat or biodiversity
- 3 Design and implement Marine Managed Areas
- 4 Accommodating compatible economic activities (resource extraction, whale watching, etc)
- 5 Permitting of emerging uses such as transportation/transmission corridors (pipelines, cables), aquaculture, energy production, etc.
- 6 Accommodating National security/law enforcement activities
- 7 Other

	1	2	3	4	5	6	7	Count
ll Gulf of Maine Respondents	74%	63%	37%	33%	47%	5%	9%	43
ountry								
United States	68%	68%	36%	23%	50%	9%	14%	22
Canada	81%	57%	38%	43%	43%	0%	5%	21
tate								
MA	69%	77%	38%	23%	46%	8%	15%	13
ME	67%	56%	33%	22%	56%	11%	11%	9
NS	70%	60%	30%	40%	30%	0%	10%	10
NB	91%	55%	45 %	45%	55%	0%	0%	11
rogram								
Coastal Mgmt	74%	63%	30%	33%	48%	4%	11%	27
NERR	50%	100%	50%	0%	0%	0%	0%	2
NEP	100%	100%	100%	0%	0%	0%	0%	1
ASFPM	100%	0%	0%	0%	100%	100%	0%	1
ASWM	100%	0%	100%	0%	100%	0%	0%	1
ASIWPCA	0%	100%	0%	0%	0%	0%	100%	1
IFMC	67%	67%	67%	67%	33%	0%	0%	3
Other	86%	57%	43%	43%	57%	0%	0%	7
ocation								
HQ / Main Office	74%	62%	32%	35%	47%	6%	6%	34
Field Office	78%	67%	56%	22%	44%	0%	22%	9
osition								
Program Manager	82%	55%	64%	27%	45%	9%	0%	11
Management Staff	100%	67%	33%	0%	33%	0%	33%	3
Technical Staff	62%	76%	33%	24%	48%	5%	14%	21
Policy Staff	100%	20%	0%	80%	80%	0%	0%	5
Advisory Committee	67%	67%	33%	67%	0%	0%	0%	3

Q8B: Select no more than THREE of the following RESEARCH ACTIVITIES that would best help you to address your most important ocean management issues over the next five years. (Multiple responses possible. Percentages sum to more than 100%.)

- Effects of changes in community composition on historic use and values.
- 2 Cumulative impact assessments
- 3 Economic assessments
- 4 Ecological characterizations
- 5 Marine Managed Area effectiveness
- 6 Feasibility of alternative energy sources
- 7 Identifying migration routes (fish, marine mammals, birds, etc.)
- 8 State-of-knowledge reports/case studies
- 9 Risk assessments
- 10 Other

		1	2	3	4	5	6	7	8	9	10	Count
	Gulf of Maine Respondents	37%	49%	30%	70%	26%	14%	35%	16%	16%	2%	43
AII	Guir or Maine Respondents	3/8	498	30%	70%	20%	14%	33*	10%	16%	28	43
Cou	ntry											
	United States	36%	45%	27%	82%	23%	23%	41%	9%	5%	5%	22
	Canada	38%	52%	33%	57%	29%	5%	29%	24%	29%	0%	21
Sta	ce											
	MA	23%	46%	23%	100%	31%	23%	38%	8%	0%	8%	13
	ME	56%	44%	33%	56%	11%	22%	44%	11%	11%	0%	9
	NS	40%	40%	40%	60%	20%	0%	20%	30%	40%	0%	10
	NB	36%	64%	27%	55%	36%	9%	36%	18%	18%	0%	11
Pro	gram											
	Coastal Mgmt	44%	56%	30%	63%	19%	7 %	30%	22%	22%	4%	27
	NERR	50%	0%	0%	100%	0%	50%	100%	0%	0%	0%	2
	NEP	0%	0%	0%	100%	100%	0%	100%	0%	0%	0%	1
	ASFPM	100%	0%	0%	0%	0%	0%	0%	0%	100%	0%	1
	ASWM	0%	0%	0%	100%	100%	100%	0%	0%	0%	0%	1
	ASIWPCA	0%	100%	100%	100%	0%	0%	0%	0%	0%	0%	1
	IFMC	33%	33%	33%	100%	0%	33%	67%	0%	0%	0%	3
	Other	14%	57%	43%	71%	57%	14%	29%	14%	0%	0%	7
Loca	ation											
	HQ / Main Office	35%	50%	26%	68%	29%	15%	32%	18%	18%	3%	34
	Field Office	44%	44%	44%	78%	11%	11%	44%	11%	11%	0%	9
Pos:	tion											
	Program Manager	45%	45%	27%	64%	36%	9%	27%	18%	18%	0%	11
	Management Staff	0%	0%	33%	100%	33%	0%	67%	33%	0%	33%	3
	Technical Staff	33%	48%	29%	71%	19%	24%	38%	19%	14%	0%	21
	Policy Staff	60%	80%	40%	40%	20%	0%	40%	0%	20%	0%	5
	Advisory Committee	33%	67%	33%	100%	33%	0%	0%	0%	33%	0%	3

Q8C: Select no more than THREE of the following TYPES OF INFORMATION that would best help you to address your most important ocean management issues over the next five years. (Multiple responses possible. Percentages sum to more than 100%.)

- 1 More geospatial data for GIS (i.e., benthic maps, jurisdictional boundaries, etc)
- 2 Anecdotal/traditional use data
- 3 Access, retrieval and analysis of data
- 4 State-of-knowledge reports/case studies
- 5 Other

		1	2	3	4	5	Count
All Gulf of	f Maine Respondents	88%	51%	63%	41%	12%	41
Country							
United	d States	86%	45%	64%	27%	14%	22
Canada	a	89%	58%	63%	58%	11%	19
State							
MA		77%	38%	54%	31%	15%	13
ME		100%	56%	78%	22%	11%	9
NS		88%	38%	75%	100%	0%	8
NB		91%	73%	55%	27%	18%	11
			- 7	/	-	- 1	-
Program							
Coasta	al Mgmt	96%	52%	60%	40%	16%	25
NERR		100%	50%	100%	0%	0%	2
NEP		100%	0%	0%	0%	0%	1
ASFPM		100%	0%	100%	0%	0%	1
ASWM		0%	0%	0%	100%	0%	1
ASIWPO	CA	100%	0%	100%	100%	0%	1
IFMC		67%	100%	67%	33%	0%	3
Other		71%	57%	71%	57%	14%	7
Location							
	Main Office	91%	50%	59%	38%	13%	32
	Office	78%	56%	78%	56%	11%	9
Position							
	am Manager	91%	36%	73%	18%	9%	11
_	ement Staff	100%	67%	67%	33%	9° 0%	3
-	ical Staff	85%	45%	60%	50%	20%	20
	/ Staff	100%	80%	40%	60%	0%	5
_	ory Committee	50%	100%	100%	50%	0%	2
1141150	ory committees	300	1000	1000	300	•	-

Q8D: Select ANY of the following CONTINUOUS OBSERVATION AND MONITORING VARIABLES that you consider necessary to help you address your most important ocean management issues over the next five years. (Multiple responses possible. Percentages sum to more than 100%.)

1	Sea level						9		Organic	matter								
2	Surface and/or	subsurface	curren	its			10		-			utrients	3					
3	Surface waves						11		Dissolve		-							
4	Surface winds						12		Zooplanl									
5	Surface salinity	у					13		Phytopla	ankton	species							
6	Surface tempera	ture					14		Ocean co	olor	_							
7	Light penetration	on					15		Aerial/s	satelli	te imag	ery						
8	Bathymetry/bott	om type					16		Other									
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Count
All Gulf of Mair	a Decreadente	31%	38%	21%	21%	18%	26%	23%	51%	26%	31%	28%	36%	38%	13%	69%	18%	39
II GUII OI MAII	le Respondents	31%	30%	21%	21%	10%	20%	25%	31%	20%	31%	20%	30%	30%	13%	05-6	10%	39
ountry																		
United Stat	ces	19%	33%	19%	14%	19%	29%	19%	62%	10%	24%	29%	33%	33%	5%	67%	14%	21
Canada		44%	44%	22%	28%	17%	22%	28%	39%	44%	39%	28%	39%	44%	22%	72%	22%	18
tate																		
MA		23%	31%	15%	15%	23%	38%	23%	69%	15%	31%	46%	38%	38%	8%	69%	15%	13
ME		13%	38%	25%	13%	13%	13%	13%	50%	0%	13%	0%	25%	25%	0%	63%	13%	8
NS		50%	38%	38%	50%	25%	38%	38%	38%	25%	50%	38%	38%	38%	25%	75%	13%	8
NB		40%	50%	10%	10%	10%	10%	20%	40%	60%	30%	20%	40%	50%	20%	70%	30%	10
rogram																		
Coastal Mgm	nt	33%	50%	29%	29%	21%	25%	25%	63%	25%	29%	17%	38%	33%	17%	71%	17%	24
NERR		100%	0%	0%	0%	0%	50%	0%	50%	0%	50%	50%	50%	100%	0%	100%	0%	2
NEP		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	1
ASFPM		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	1
ASWM		0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	1
ASIWPCA		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	100%	100%	1
IFMC		33%	33%	0%	0%	33%	33%	33%	67%	0%	0%	0%	67%	67%	0%	67%	33%	3
Other		17%	33%	17%	17%	17%	33%	33%	17%	67%	67%	67%	33%	50%	17%	67%	17%	6
ocation																		
HQ / Main (Office	29%	35%	19%	19%	16%	26%	19%	48%	23%	29%	29%	29%	32%	10%	68%	10%	31
Field Offic	e	38%	50%	25%	25%	25%	25%	38%	63%	38%	38%	25%	63%	63%	25%	75%	50%	8
osition																		
Program Mar	nager	27%	18%	0%	9%	9%	9%	9%	45%	9%	9%	9%	27%	27%	18%	55%	27%	11
Management	-	67%	67%	67%	67%	33%	33%	33%	100%	33%	33%	33%	33%	33%	33%	67%	0%	3
Technical S		37%	42%	26%	21%	21%	32%	26%	58%	26%	37%	32%	47%	47%	11%	74%	21%	19
Policy Staf		0%	50%	25%	25%	25%	25%	25%	25%	50%	25%	25%	25%	25%	0%	100%	0%	4

Q8E: Select no more than THREE of the following IMPROVED TECHNOLOGIES that would best help you to address your most important ocean management issues over the next five years. (Multiple responses possible. Percentages sum to more than 100%.)

- 1 Improved models that simulate and/or predict
- 2 Nondestructive bottom fishing gear
- 3 No-impact aquaculture techniques
- 4 Low-cost remote vessel tracking
- 5 Energy technology
- 6 Mapping and data acquisition
- 7 Other

	1	2	3	4	5	6	7	Count
All Gulf of Maine Respondents	46%	59%	49%	15%	24%	66%	15%	41
_								
Country								
United States	32%	50%	41%	23%	32%	68%	18%	22
Canada	63%	68%	58%	5%	16%	63%	11%	19
State								
MA	31%	62%	31%	23%	38%	62%	31%	13
ME	33%	33%	56%	22%	22%	78%	0%	9
NS	63%	75%	50%	13%	13%	63%	0%	8
NB	64%	64%	64%	0%	18%	64%	18%	11
Program								
Coastal Mgmt	48%	48%	48%	12%	16%	80%	20%	25
NERR	50%	50%	0%	50%	50%	50%	0%	2
NEP	0%	100%	100%	0%	100%	0%	0%	1
ASFPM	0%	0%	0%	0%	0%	100%	0%	1
ASWM	100%	100%	0%	0%	100%	0%	0%	1
ASIWPCA	100%	0%	0%	0%	0%	100%	100%	1
IFMC	0%	100%	67%	33%	33%	67%	0%	3
Other	57%	86%	71%	14%	29%	29%	0%	7
Location								
HQ / Main Office	50%	53%	47%	13%	28%	63%	16%	32
Field Office	33%	78%	56%	22%	11%	78%	11%	9
Position								
Program Manager	45%	55%	55%	0%	36%	73%	9%	11
Management Staff	33%	33%	33%	33%	0%	100%	33%	3
Technical Staff	40%	65%	40%	20%	20%	70%	20%	20
Policy Staff	60%	60%	80%	20%	20%	40%	0%	5
Advisory Committee	100%	50%	50%	0%	50%	0%	0%	2

Q9: How important will issues related to MARINE DEBRIS be to your program over the next five years?

	Very important	Important	Not very important	Not important at all	Not relevant	Count	
all Gulf of Maine Respondents	2%	13%	65%	13%	8%	63	
Country							
United States	0%	8%	68%	16%	8%	38	
Canada	4%	20%	60%	8%	8%	25	
tate							
MA	0%	6%	69%	19%	6%	16	
ME	0%	12%	59%	18%	12%	17	
NH	0%	0%	100%	0%	0%	5	
NS	0%	7%	71%	14%	7%	14	
NB	9%	36%	45%	0%	9%	11	
rogram							
Coastal Mgmt	3%	15%	64%	15%	3%	33	
NERR	0%	20%	40%	0%	40%	5	
NEP	0%	0%	83%	17%	0%	6	
ASFPM	0%	50%	0%	50%	0%	2	
ASWM	0%	0%	100%	0%	0%	2	
ASIWPCA	0%	0%	0%	0%	100%	1	
IFMC	0%	0%	100%	0%	0%	3	
Other	0%	9%	73%	9%	9%	11	
ocation							
HQ / Main Office	2%	13%	66%	13%	6%	53	
Field Office	0%	10%	60%	10%	20%	10	
osition							
Program Manager	0%	17%	78%	6%	0%	18	
Management Staff	17%	0%	33%	33%	17%	6	
Technical Staff	0%	7%	63%	15%	15%	27	
Policy Staff	0%	20%	80%	0%	0%	5	
Advisory Committee	0%	50%	50%	0%	0%	4	
Other	0%	0%	67%	33%	0%	3	

Q9A: Select no more than THREE of the following MARINE DEBRIS ISSUES that you consider most important to address over the next five years. (Multiple responses possible. Percentages sum to more than 100%.)

- 1 Source identification
- Wildlife entanglement or ingestion
- 3 Public health impacts
- 4 Aesthetic/habitat degradation
- 5 Hazard to navigation
- 6 Removal and disposal of retrieved debris
- 7 Other

		1	2	3	4	6	7	Count
All Gulf	of Maine Respondents	78%	56%	11%	67%	44%	11%	9
Country								
_	ed States	67%	67%	0%	33%	33%	33%	3
Canad		83%	50%	17%	83%	50%	0%	6
State								
MA		100%	100%	0%	0%	100%	0%	1
ME		50%	50%	0%	50%	0%	50%	2
NS		100%	100%	0%	0%	0%	0%	1
NB		80%	40%	20%	100%	60%	0%	5
Program								
Coas	tal Mgmt	80%	60%	20%	80%	60%	0%	5
NERR		100%	100%	0%	100%	0%	0%	1
ASFP	M	0%	0%	0%	0%	0%	100%	1
Othe	r	100%	50%	0%	50%	50%	0%	2
Location								
HQ /	Main Office	71%	43%	14%	71%	57%	14%	7
Field	d Office	100%	100%	0%	50%	0%	0%	2
Position								
Prog	ram Manager	67%	67%	0%	33%	33%	33%	3
Manad	gement Staff	100%	50%	0%	50%	50%	0%	2
Tech	nical Staff	100%	50%	50%	100%	0%	0%	2
Poli	cy Staff	0%	100%	0%	100%	100%	0%	1
7 4	sory Committee	100%	0%	0%	100%	100%	0%	1

Q9B: Select no more than THREE of the following RESEARCH ACTIVITIES that would best help you to address your most important marine debris issues over the next five years.

- 1 Source tracking
- 2 Biodegradable gear
- 3 Ecological impacts
- 4 Perceptions and behaviors linked to sources
- 5 Public education effectiveness
- 6 Transport of debris
- 7 Biodegradable products (e.g., packing materials)
- 8 Other

	1	2	3	4	5	6	7	Count
All Gulf of Maine Respondents	50%	20%	60%	40%	30%	20%	40%	10
Country								
United States	33%	33%	33%	67%	33%	0%	33%	3
Canada	57%	14%	71%	29%	29%	29%	43%	7
State								
MA	100%	0%	0%	100%	100%	0%	0%	1
ME	0%	50%	50%	50%	0%	0%	50%	2
NS	50%	0%	100%	0%	0%	50%	0%	2
NB	60%	20%	60%	40%	40%	20%	60%	5
Program								
Coastal Mgmt	50%	17%	50%	50%	50%	17%	33%	6
NERR	0%	100%	100%	0%	0%	0%	100%	1
ASFPM	0%	0%	0%	100%	0%	0%	0%	1
Other	100%	0%	100%	0%	0%	50%	50%	2
Location								
HQ / Main Office	38%	25%	50%	50%	38%	13%	38%	8
Field Office	100%	0%	100%	0%	0%	50%	50%	2
Position								
Program Manager	67%	0%	33%	67%	33%	0%	33%	3
Management Staff	100%	0%	50%	0%	50%	100%	0%	2
Technical Staff	0%	50%	100%	50%	50%	0%	50%	2
Policy Staff	0%	100%	0%	100%	0%	0%	100%	1
Advisory Committee	50%	0%	100%	0%	0%	0%	50%	2

Q9C: Select no more than THREE of the following INFORMATION ITEMS that would best help you to address your most important marine debris issues over the next five years.

- 1 Geospatial data for GIS
- 2 State-of-knowledge reports/success stories
- 3 Debris inventory
- 4 Public outreach and education
- 5 Other

	1	2	3	4	5	Count
All Gulf of Maine Respondent:	s 70%	30%	50%	100%	10%	10
All Gulf of Maine Respondents	s /0%	30%	50%	100%	10%	10
Country						
United States	67%	33%	100%	100%	0%	3
Canada	71%	29%	29%	100%	14%	7
State						
MA	0%	100%	100%	100%	0%	1
ME	100%	0%	100%	100%	0%	2
NS	50%	50%	0%	100%	0%	2
NB	80%	20%	40%	100%	20%	5
Program						
Coastal Mgmt	50%	33%	33%	100%	17%	6
NERR	100%	0%	100%	100%	0%	1
ASFPM	100%	0%	100%	100%	0%	1
Other	100%	50%	50%	100%	0%	2
Location						
HQ / Main Office	63%	25%	63%	100%	0%	8
Field Office	100%	50%	0%	100%	50%	2
Position						
	67%	33%	670	100%	33%	3
Program Manager	100%	33% 50%	67%	100%	33% 0%	
Management Staff Technical Staff	100%	50%	50% 50%	100%	0%	2
Policy Staff	100%	0%	0%	100%	0%	1
Advisory Committee	50%	0%	50%	100%	0%	2
Advisory Committee	50%	Uf	20%	T002	US	4

Q9D: Select ANY of the following CONTINUOUS OBSERVATION AND MONITORING VARIABLES that you consider necessary to help you address your most important marine debris issues over the next five years.

1 2 3 4 5 6 7 8	Sea level Surface and/or Surface waves Surface winds Surface salinit Surface tempera Light penetrati Bathymetry/bott	y ture on	e curre	nts			9 10 11 12 13 14 15	- ! ! !	Dissolv Dissolv Zooplan	ed oxyg kton sp ankton olor	ganic n en ecies species		s					
		1	2	3	4	5	6	7	8	9	10	11	12	13	15	16	Count	
All Gulf of Maine	Respondents	25%	63%	38%	38%	13%	13%	13%	13%	13%	13%	13%	13%	25%	38%	13%	8	
Country																		
United State: Canada	3	0% 40%	0% 100%	0% 60%	0% 60%	0% 20%	0% 20%	0% 20%	0% 20%	0% 20%	0% 20%	0% 20%	0% 20%	0% 40%	100%	0% 20%	3 5	
State																		
MA		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	1	
ME		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	2	
NB		40%	100%	60%	60%	20%	20%	20%	20%	20%	20%	20%	20%	40%	0%	20%	5	
Program																		
Coastal Mgmt		40%	80%	60%	60%	0%	0%	0%	20%	0%	0%	0%	20%	20%	20%	20%	5	
NERR		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	1	
ASFPM		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	1	
Other		0%	100%	0%	0%	100%	100%	100%	0%	100%	100%	100%	0%	100%	0%	0%	1	
Location																		
HQ / Main Of:	fice	14%	57%	29%	29%	14%	14%	14%	0%	14%	14%	14%	14%	29%	43%	0%	7	
Field Office		100%	100%	100%	100%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	100%	1	
Position																		
Program Mana	ger	33%	33%	33%	33%	0%	0%	0%	33%	0%	0%	0%	0%	0%	67%	33%	3	
Management St	taff	100%	100%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1	
Technical Sta	aff	0%	50%	50%	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%	2	
Policy Staff		0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	1	
Advisory Com	mittee	0%	100%	0%	0%	100%	100%	100%	0%	100%	100%	100%	0%	100%	0%	0%	1	

Q9E: Select no more than THREE of the following IMPROVED TECHNOLOGIES that would best help you to address your most important marine debris issues over the next five years.

- 1 Debris removal technology
- 2 GPS tracking systems for potential sources of debris (nets, containers,etc)
- 3 Gear modifications to make less harmful to non-target species and habitat
- 4 Disposal or reuse technologies
- 5 Other

		1	2	3	4	Count
Al:	Gulf of Maine Respondents	50%	100%	88%	63%	8
Cot	intry					
	United States	50%	100%	100%	50%	2
	Canada	50%	100%	83%	67%	6
Sta	ate					
	MA	100%	100%	100%	0%	1
	ME	0%	100%	100%	100%	1
	NS	0%	100%	100%	100%	1
	NB	60%	100%	80%	60%	5
Pro	ogram					
	Coastal Mgmt	60%	100%	80%	60%	5
	NERR	0%	100%	100%	100%	1
	Other	50%	100%	100%	50%	2
Loc	cation					
	HQ / Main Office	67%	100%	83%	50%	6
	Field Office	0%	100%	100%	100%	2
Do:	sition					
POS		50%	100%	100%	50%	2
	Program Manager Management Staff	50%	100%	50%	100%	2
	Management Staff Technical Staff	0%	100%	100%	100%	2
	Policy Staff	100%	100%	100%	0%	1
	Advisory Committee	100%	100%	100%	0%	1
	TAVISOLY COMMITTEE	1000	1000	1000	0.0	1