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## Surveying the Stakeholder: Understanding Public Perception of the New Hampshire Estuaries Project

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# Surveying the Stakeholder: Understanding Public Perception of the New Hampshire Estuaries Project

A Final Report of

The New Hampshire Estuaries Project

October 17, 2005

This report was funded by a grant from the New Hampshire Estuaries Project, as authorized by the U.S. Environmental Protection Agency pursuant to Section 320 of the Clean Water Act.



### **Table of Contents**

ummary	3
Survey to Planning Boards and Conservation Commissions	4
Results of Planning Board and Conservation Commissions Survey	6
Granite State Poll	.33
Granite State Poll Summary Sheet	80





University of New Hampshire Hewitt Annex, 54 College Road Durham, NH 03824-2601

#### **Summary**

The New Hampshire Estuaries Project (NHEP) commissioned The UNH Survey Center to conduct two surveys to assist in the implementation and evaluation of the 2004 NHEP Strategic Communication Plan. Both surveys were completed and the results are informing outreach activities. The attitudinal survey of the Planning Board members and Conservation Commissioners in coastal watershed communities suggested that there is moderate familiarity and awareness of the NHEP, with 57% of respondents expressing some level of familiarity with the NHEP. Respondents who live in Zone A seem to be much more likely to be familiar with the NHEP (13% are very familiar; 49% are somewhat familiar). Members of Conservation Commissions are also more likely to be aware of the NHEP (19% are very familiar and 45% are somewhat familiar). Awareness of the NHEP Management Plan is fairly low with 31% of respondents expressing some level of familiarity with the Plan. A majority of respondents have not seen the various materials sent to the planning boards and conservation commissions. Fifty-seven percent said they did not see the 2003 State of the Estuaries report and 61% did not see the impervious surface outreach package. Overall, 64% of respondents reported some degree of confidence (37% very confident, 27% somewhat confident) in the NHEP's reporting of the status of NH's estuaries. Out of the 622 board members or commissioners in coastal watersheds (323 on planning boards and 299 on conservation commissions), 152 returned the survey, a response rate of 24%. Surveys were received from 41 communities, Rollinsford was not represented.

Results of the Granite State poll indicated that 11% of respondents were able to correctly define an estuary as a place where fresh and salt water mix or by giving an example of an estuary. Three percent (3%) defined it as a coastal waterbody, while nineteen percent (19%) gave a general water-related response. Six percent (6%) of the respondents gave a nature-related response, but were unable to link the word to water resources. Although four (4) people gave incorrect answers, the survey reported that zero percent (0%) of the respondents were incorrect. Sixty-one percent (61%) of New Hampshire residents said that they could not define an estuary.

Both UNH surveys were intended to provide baseline information to evaluate progress of goals 2 and 3 of the 2004 NHEP Strategic Communication Plan, which are:

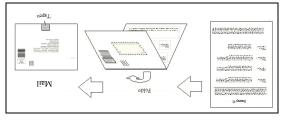
- 2. Realize CDM familiarity with the NHEP and its Management Plan
- 75% of the CDMs will report that they are familiar with the NHEP and the Management Plan by December 31, 2007.
- 3. Achieve confidence among CDMs that the NHEP is a credible source for reporting the environmental status of the state's estuaries.
- 75% of the CDMs will report that they are confident that the NHEP is a credible source for reporting on the environmental status of the state's estuaries by December 31, 2007.

#### **New Hampshire Estuaries Project Survey**

The New Hampshire Estuaries Project is interested in your opinions and knowledge of its organization. Project staff will use the results of this survey to design communication materials for coastal decision-makers. Your answers are confidential and will not be associated with your identity. Where appropriate, please circle the number that best represents your opinion. Please do not "look up" the answers, because we simply want to understand your current understanding of our organization. When completed, please fold the survey in half so that the address of the **University of New Hampshire Survey Center**, **Thompson Hall**, **Durham**, **NH 03824** is clearly displayed. Seal the folded survey using tape or the enclosed label. **Please complete and return the survey as soon as possible.** Contact Dave Kellam at 559-0022 if you have questions. Thank you for your cooperation.

2.	What is your level of familiarity with the New Hampshire Estuaries Project (NHEP)? (circle one)	1. Very Familiar 3. Somewhat Unfamiliar	<ol> <li>Somewhat Familiar</li> <li>Very Unfamiliar</li> <li>Don't Know/Not Sure</li> </ol>
3.	What is your level of familiarity with the NHEP Management Plan? (circle one)	1. Very Familiar 3. Somewhat Unfamiliar	<ol> <li>Somewhat Familiar</li> <li>Very Unfamiliar</li> <li>Don't Know/Not Sure</li> </ol>
4.	The NHEP is a collaborative program involving more that assist communities in the protection, enhancement are quality of the state's estuaries. In your experience as effective has the NHEP been in assisting your community	nd monitoring of the environmental a board/committee member, how	<ol> <li>Very Effective</li> <li>Somewhat Effective</li> <li>Somewhat Ineffective</li> <li>Very Ineffective</li> <li>Don't Know / Not Sure</li> </ol>
5.	The NHEP issues many grants in the coastal watershe any projects that you are aware of that were conduct		lease list the name and/or description o
6.	The NHEP sent the "2003 State of the Estuaries Report and conservation commissions in the coastal watershed report?		1. Yes 2. No 3. Not Sure
	and conservation commissions in the coastal watershed	d. Did you see the	2. No
7.	and conservation commissions in the coastal watershed report?	d. Did you see the  State of the Estuaries Report"?  surface outreach	2. No 3. Not Sure 1. Yes 2. No
7.	and conservation commissions in the coastal watershed report?  Have you used any information or data from the "2003  Last fall, the NHEP gave each community an impervious package that included laminated community maps and	d. Did you see the  State of the Estuaries Report"?  surface outreach	2. No 3. Not Sure  1. Yes 2. No 3. Not Sure  1. Yes 2. No 3. Not Sure  2. Somewhat Confident
<ul><li>7.</li><li>8.</li><li>9.</li></ul>	and conservation commissions in the coastal watershed report?  Have you used any information or data from the "2003  Last fall, the NHEP gave each community an impervious package that included laminated community maps and you see that outreach package?  How confident are you in the NHEP regarding its knowledge and authority concerning the environmental status of New Hampshire's estuaries?  What is your position on your board or commission?  1.	d. Did you see the  State of the Estuaries Report"?  surface outreach other resources. Did  1. Very Confident 3. Somewhat Unconfid  Planning Board Chair 2.	2. No 3. Not Sure  1. Yes 2. No 3. Not Sure  1. Yes 2. No 3. Not Sure  2. Somewhat Confident 4. Very Unconfident 5. Don't Know / Not Sure  Conservation Commission Chair Conservation Commission Member
7. 8. 9.	and conservation commissions in the coastal watershed report?  Have you used any information or data from the "2003  Last fall, the NHEP gave each community an impervious package that included laminated community maps and you see that outreach package?  How confident are you in the NHEP regarding its knowledge and authority concerning the environmental status of New Hampshire's estuaries?  What is your position on your board or commission?  1.	d. Did you see the  State of the Estuaries Report"?  surface outreach other resources. Did  1. Very Confident 3. Somewhat Unconfid  Planning Board Chair Planning Board Member 4. Other	2. No 3. Not Sure  1. Yes 2. No 3. Not Sure  1. Yes 2. No 3. Not Sure  2. Somewhat Confident 4. Very Unconfident 5. Don't Know / Not Sure  Conservation Commission Chair Conservation Commission Member





Return Mailing Instructions

Thank you for taking the time to complete and return this survey. Results from this survey will be compiled in May 2005 and will guide the design of outreach materials to coastal decision-makers. Please contact Dave Kellam at the Mew Hampshire Estuaries Project.

#### Thank You



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### **NEW HAMPSHIRE ESTUARIES PROJECT SURVEY**

prepared by:

Andrew E. Smith, Ph.D. Kevin Hutchins

University of New Hampshire Survey Center

August, 2005

### **Table of Contents**

Executive Summary
Appendix A: Charts
Appendix B: Detailed Tabular Results
Appendix C: Open-end Question Responses

#### New Hampshire Estuaries Project Survey Executive Summary

The New Hampshire Estuaries Project Survey was conducted by the University of New Hampshire Survey Center from April 2005 to August 2005. The major purposes of this survey were to investigate awareness of the role of the NHEP in the target areas, as well as investigating whether information from the NHEP is used and trusted.

The data for this survey were collected through mail. In April 2005, mailings were sent to the chairs of Conservation Commissions and Planning Boards in Great Bay Estuary and Watershed towns. The chairmen were asked to distribute the surveys to their board members at board meetings. Out of the 622 people on these boards (323 on planning boards and 299 on conservation commissions), 152 returned the survey, a response rate of 24%. Charts displaying survey findings can be found in Appendix A, more detailed tabular results are in Appendix B, and Appendix C contains verbatim responses to open-end questions.

The major findings of the survey include:

- Overall, there is moderate familiarity and awareness of the NHEP, with 57% of respondents expressing some level of familiarity with the Project (13% very familiar, 44% somewhat familiar), and 42% of respondents expressing unfamiliarity with the Project (13% somewhat unfamiliar, 23% very unfamiliar, 6% don't know) See Chart 1.
  - o Residents who live in Zone A are much more likely to have familiarity and awareness of the NHEP (13% are very familiar; 49% are somewhat familiar).
  - o Members of Conservation Commissions are also more likely to be aware of the NHEP (19% are very familiar and 45% are somewhat familiar).
- Awareness of the NHEP Management Plan is fairly low with 31% of respondents expressing some level of familiarity with the Plan (9% very familiar, 22% somewhat familiar), while the remaining 69% of respondents are generally unaware of the Plan (19% somewhat unfamiliar, 49% very unfamiliar, 11% don't know). See Chart 2.
  - Residents of Zone A are, again, more likely to have familiarity with the Management Plan (8% very familiar, 25% somewhat familiar).
- A majority of respondents have not seen the various materials sent to planning commissions. Fifty-seven
  percent said they did not see the 2003 State of the Estuaries report, and 61% did not see the impervious
  surface outreach package. In general, respondents who are members of Conservation Commissions are
  more likely to have seen materials sent by the NHEP to their community. See <a href="Chart 6">Chart 6</a>.
  - Sixty-one percent of Conservation Commission members saw the 2003 State of the Estuaries report, and 54% of Conservation Commission members saw the impervious surface outreach package sent to their community.
  - o In contrast, 50% of Planning Board members did not see the 2003 State of the Estuaries Report, and 54% of Planning Board members did not see the impervious surface outreach package.
- Overall, survey respondents expressed confidence in the NHEP's knowledge and authority regarding the status of New Hampshire's estuaries. 64% of respondents have some degree of confidence (37% very confident, 27% somewhat confident) while 10% do not have confidence in the NHEP's authority on this matter (9% somewhat unconfident, 1% very unconfident). However, 27% of respondents did not know or did not have an opinion, which may be linked to problems in general awareness of the NHEP. See Chart 7.

Appendix A

Charts

Q2: "What is your level of familiarity with the new Hampshire Estuaries Project?"

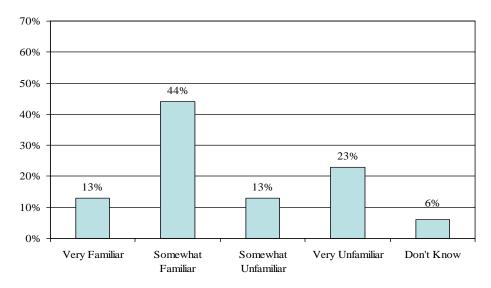
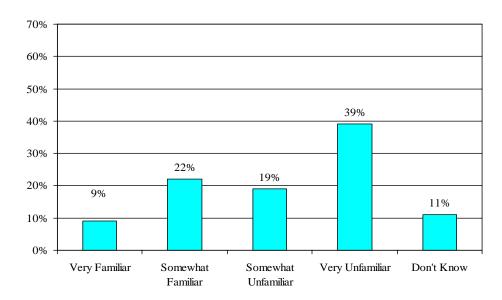


Chart 2

Q3: "What is your level of familiarity with the NHEP Management Plan?"



Q4: "[...] In your experience as a board/committee member, how effective has the NHEP been in assisting your community?"

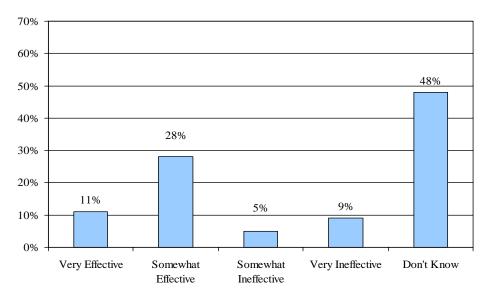
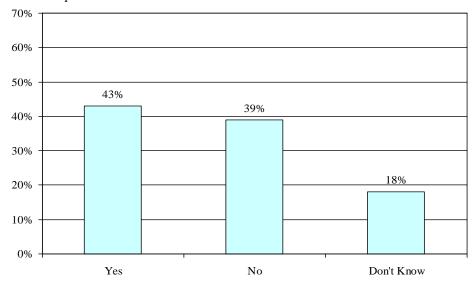
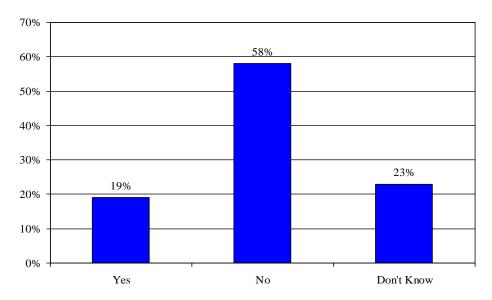


Chart 4

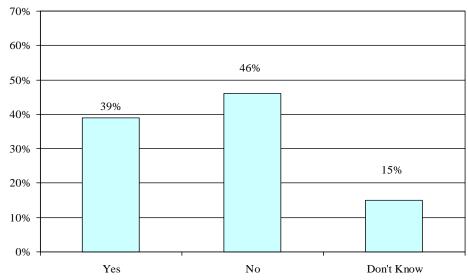
Q6: "The NHEP sent the "2003 State of the Estuaries Report" to all planning boards and conservation commissions in the coastal watershed. Did you see this report?"



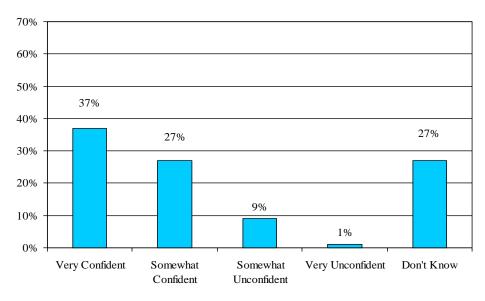
Q7: "Have you used any information or data from the "2003 State of the Estuaries Report"?



Q8: "Last fall, the NHEP gave each community an impervious surface outreach package that included laminated community maps and other resources. Did you see that outreach package?"

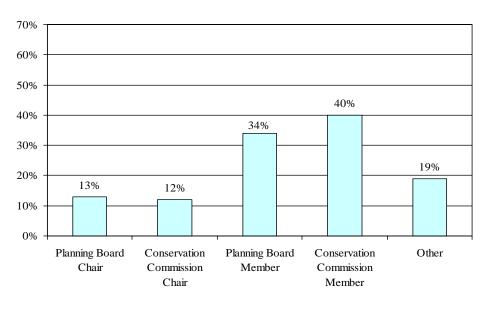


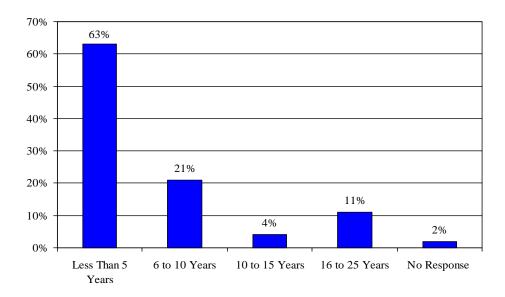
Q9: "How confident are you in the NHEP regarding its knowledge and authority concerning the environmental status of New Hampshire's estuaries?"



#### Chart 8

Multiple Response Question; May sum to more than 100%





**Table 1: Summary of Question 12**41 Communities Represented (Rollinsford was not represented)

	Total # of		Total # of
Town	Responses	Town	Responses
Barrington	7	Middleton	2
Brentwood	6	Milton	3
Brookfield	2	New Castle	5
Candia	8	New Durham	1
Chester	5	Newfields	5
Danville	1	Newington	4
Deerfield	3	Newmarket	3
Dover	5	North Hampton	1
Durham	9	Northwood	4
East Kingston	3	Nottingham	7
Epping	2	Portsmouth	6
Exeter	1	Raymond	2
Farmington	1	Rochester	2
Fremont	3	Rye	6
Greenland	4	Sandown	1
Hampton	6	Seabrook	4
Hampton Falls	5	Somersworth	6
Kensington	1	Strafford	1
Kingston	2	Stratham	6
Lee	1	Wakefield	2
Madbury	2		

#### APPENDIX B

TABULAR RESULTS

Q2: What is your level of familiarity with the New Hampshire Estuaries Project (NHEP)?

	Very	Somewhat	Somewhat	Very	Don't	Number	
	Familiar	Familiar	Unfamiliar	Unfamiliar	Know	Responding	
All Respondents	13%	44%	13%	23%	6%	151	_
Geographic Area							
Zone A - Estuary	13	49	15	20	3	79	
Zone B - Watershed	13 25	38 50	10 25	28	10	68	
NA/Refused	25	50	25	0	0	4	
Years on Board							
Less than 5 Years	7	45	12	27	8	95	
6 to 10 Years	26	45 39	12 19	13	3	31	
11 to 15 Years	33	33	17	17	0	6	
16 to 26 Years	19	44	17 13	25	0	16	
No Response	0	100	0	0	0	3	
Position on Board							
Planning Board	7	42	13	30	7	69	
Conservation Commission	19	45	13 17	14	4	77	
Other Position	10	45 55	7	17	10	29	
Planning Commission							
Rockingham Planning Commission	12	43	17	20	8	76	
Strafford Planning Commission	12	49	7	26	5	57	
Southern NH Planning Commission	22	33	17	28	0	18	
			= '		· ·	10	

Q3: What is your level of familiarity with the NHEP Management Plan?

	Very Familiar	Somewhat Familiar	Somewhat Unfamiliar	Very Unfamiliar	Don't Know	Number Responding
	ramiliai	ramiliai	Ulliamilliai	Ullamiiiai	Idiow	Responding
All Respondents	9%	22%	19%	39%	11%	152
Geographic Area						
Zone A - Estuary	8	25	23	39	6	80
Zone B - Watershed	10	19	13	41	16	68
NA/Refused	25	0	50	25	0	4
Years on Board						
Less than 5 Years	7	19	18	43	13	95
6 to 10 Years	13	22	25	31	9	32
11 to 15 Years	17	33	17	33	0	6
16 to 26 Years	13	31	19	38	0	16
No Response	0	33	0	33	33	3
Position on Board						
Planning Board	4	17	26	39	14	70
Conservation Commission	13	29	17	34	8	77
Other Position	10	24	14	38	14	29
Planning Commission						
Rockingham Planning Commission	9	20	22	38	11	76
Strafford Planning Commission	9	24	16	43	9	58
Southern NH Planning Commission	11	22	17	33	17	18
9						

Q4: [...] In your experience as a board/committee member, how effective has the NHEP been in assisting your community?

	Very Somewhat		Somewhat Very		Don't	Number
	Effective	Effective	Ineffective	Ineffective	Know	Responding
All Respondents	11%	28%	5%	9%	48%	149
Geographic Area						
Zone A - Estuary	8	32 24	8	13	40	78
Zone B - Watershed	13 25		1	4	57	67
NA/Refused	25	0	0	0	75	4
Years on Board						
Less than 5 Years	9	26	4	3	58	92
6 to 10 Years	13	26 25	9	16	38	32
11 to 15 Years	33	0	0	17	50	6
16 to 26 Years	6	44	0	25	25	16
No Response	33	67	0	0	0	3
Position on Board						
Planning Board	7	26	7	10	49	69
Conservation Commission	15	31	3	8	44	75
Other Position	3	34	3	3	55	29
Planning Commission						
Rockingham Planning Commission	8	28	5	7	51	74
Strafford Planning Commission	12	26	5	12	44	57
Southern NH Planning Commission	17	26 28	0		50	18

Q6: The NHEP sent the "2003 State of the Estuaries Report" to all planning boards and conservation commissions in the coastal watershed. Did you see the report?

	Yes	No	Don't Know	Number Responding	
All Respondents	43%	39%	18%	150	
Geographic Area					
Zone A - Estuary	36	46	18	78	
Zone B - Watershed	50	31	19	68	
NA/Refused	75	25	0	4	
Years on Board					
Less than 5 Years	34	44	22	95	
5 to 10 Years	53	30	17	30	
11 to 15 Years	83	17	0	6	
16 to 26 Years	63	31 33	6	16 3	
No Response	67	33	0	3	
Position on Board					
Planning Board	26	50	24	70	
Conservation Commission	61	23	16	75	
Other Position	31	52	17	29	
Planning Commission	3.0	40	1.2	7.4	
Rockingham Planning Commission	39	49	12	74	
Strafford Planning Commission	41 67	33 17	26 17	58 18	
Southern NH Planning Commission	0 /	17	17	10	

Q7: Have you used any information or data from the "2003 State of the Estuaries Report"?

	Yes	No	Don't Know	Number Responding	
All Respondents	19%	58%	23%	150	
Geographic Area					
Zone A - Estuary	15	66	19	79	
Zone B - Watershed	25	51	24	67	
NA/Refused	0	25	75	4	
Years on Board					
Less than 5 Years	15	61	24	93	
6 to 10 Years	25	53	22	32	
11 to 15 Years	33	33	33	6	
16 to 26 Years	19	63	19	16	
No Response	67	33	0	3	
Position on Board					
Planning Board	9	69	23	70	
Conservation Commission	28	47	25	76	
Other Position	22	59	19	27	
Planning Commission					
Rockingham Planning Commission	15	59	26	74	
Strafford Planning Commission	24	60	16	58	
Southern NH Planning Commission	22	44	33	18	

Q8: Last fall, the NHEP gave each community and impervious surface outreach package that included laminated community maps and other resources. Did you see that outreach package?

Yes	No	Don't Know	Number Responding	
39%	46%	15%	150	
	42	18		
		13	68	
50	50	0	4	
31	52	18	95	
		13	32	
		0	6	
21	64	14	14	
67	33	0	3	
28	52	20	69	
54	33	13	76	
28	55	17	29	
33	50	17	76	
	39			
	39%  40 37 50  31 59 83 21 67	39%  40 40 37 50 50 50  31 52 59 28 83 17 21 64 67 33  28 52 54 33 28 55  33 43	39%     46%     15%       40     42     18       37     50     13       50     50     0       31     52     18       59     28     13       83     17     0       21     64     14       67     33     0       28     52     20       54     33     13       28     55     17       33     55     17       33     43     14	39%     46%     15%     150       40     42     18     78       37     50     13     68       50     0     4       31     52     18     95       59     28     13     32       83     17     0     6       21     64     14     14       67     33     0     3       28     52     20     69       54     33     13     76       28     55     17     29       33     50     17     76       43     43     14     56

Q9: How confident are you in the NHEP regarding its knowledge and authority concerning the environmental status of New Hampshire's estuaries?

	Very Confident	Somewhat Confident	Somewhat Unconfident	Very Unconfident	Don't Know	Number Responding
All Respondents	37%	27%	9%	1%	27%	150
Geographic Area						
Zone A - Estuary	35	24	13	1	27	78
Zone B - Watershed	40	29	3	0	28	68
NA/Refused	25	29 25	50	0	0	4
Years on Board		0.5				
Less than 5 Years	34	25	11	0	30	93
6 to 10 Years	31	34	6	0	28	32
11 to 15 Years	83	0	0	0	17	6
16 to 26 Years	44	31	6	6	13	16
No Response	33	33	33	0	0	3
Position on Board						
Planning Board	29	20	10	1	39	69
Conservation Commission	47	28	9	0	16	76
Other Position	28	31	14	0	28	29
001101 1 00101011	20	31		Ŭ	20	27
Planning Commission						
Rockingham Planning Commission	35	30	11	1	23	74
Strafford Planning Commission	33	22	10	0	34	58
Southern NH Planning Commission	56	28	0	0	17	18

POSIT: Planning Commission Positions Held

	Planning Board Chair	Conservation Commission Chair	Planning Board Member	Conservation Commission Member	Other	Number Responding
All Respondents	13%	12%	34%	40%	19%	151
Geographic Area						
Zone A - Estuary	13	11	41	35	20	79
Zone B - Watershed	13	11 13	26	43	19	68
NA/Refused	0	0	25	75	0	4
Years on Board						
Less than 5 Years	7	4	44	41	17	95
6 to 10 Years	19	35	16	29	26	31
11 to 15 Years	17	17	17	50	17	6
16 to 26 Years	31	13	13	50	13	16
No Response	0	0	33	33	67	3
Planning Commission						
Rockingham Planning Commission	11	8	37	33	23	75
Strafford Planning Commission	16	12	33	48	12	58
Southern NH Planning Commission	11	28	22	39	28	18

YOB: Years Spent on Planning Board

	Less than 5 Years	6 to 10 Years	10 to 15 Years	16 to 25 Years or More	No Response	Number Responding
All Respondents	63%	21%	4%	11%	2%	152
Geographic Area						
Zone A - Estuary	63	23	4	10	1	80
Zone B - Watershed	63	21	4	9	3	68
NA/Refused	50	0	0	50	0	4
Position on Board						
Planning Board	70	16	3	10	1	70
Conservation Commission	56	26	5	12	1	77
Other Position	55	28	3	7	7	29
Planning Commission						
Rockingham Planning Commission	70	16	4	9	1	76
Strafford Planning Commission	60	24	2	10	3	58
Southern NH Planning Commission	39	33	11	17	0	18

#### APPENDIX C

OPEN END RESPONSES

Q1 Open Ended Responses – 'Please write your definition of an estuary (if you don't know, write 'DK')

	# of resp.	%
Correct Answer ( freshwater mixes with saltwater	116	78%
Nearly Correct (saltwater or freshwater reference only)	9	6%
Water Related (mention of water resource)	5	3%
<b>Incorrect</b> (no mention of water resources)	3	2%
Don't Know	16	11%

The area where fresh water meets salt water, usually an area of salt marshes, etc.

ok

a body of water surrounded on 3 sides by land and fed usually by river(s) or stream(s), and outletting into a river, bay or ocean.

An estuary is a wetland area, including rivers and streams, that drain into the ocean and act as a filtering system for pollutants. Some of the estuary contains brackish water.

An estuary is an inland body of water that is tidal with bays, rivers, and salt marshes.

Environment formed at the mouth of rivers where fresh water and saltwater mix.

The term estuary refers to the tidal portion of a river where the river flows into a larger tidal body of water-like an ocean.

The term estuary refers to the tidal portion of a river where the river flows into a larger tidal body of water-like an ocean.

The system of wetlands and waterways that extend inland from the sea.

A body of water between the ocean and freshwater

A saltwater bay feeking a river that connects to the ocean

More of less like a tidal pool shore saltwater backs into it and away from it with the tides.

Marine coastal area influenced by saltwater, shallow mixture of freshwater and saltwater.

Boundry between river and atlantic

A boundry between fresh and saltwater

A coastal area consisting of open water and land suitable for nesting sites

A mixture of fresh and saltwater that forms a boundary between rivers and streams and the ocean: Great Bay for example.

Section in a river where the tidal water mixes with fresh river water

salt H2o rivers, inlets, bays

Tidal mouth of a river

Inland area inundated by tidal flow usually near mouth of a river or stream

Coastal area with varying mix of fresh and salt water: sheltered from open ocean

fresh and salt water meet

An estuary is a transition zone between ruverine and marine habitats. It is affected by tidal changes and contains brackish water. It is home to may important species of fish, mollusks, etc...

salt and fresh H2O meet, supports variety of plant and animal life

Broad area where tide meets the river.

Where a river meets the ocean

A river or river system in its coastal area.

An estuary is an inlet of the ocean located at the end of the river

Body of water where the tide itseld comes in contact with a river currents.

Interface of a river or stream with the ocean

A transitional water body connecting fresh and salt water

The body of water where water from a river (fresh water) starts to mix with water from the ocean (salt water)

The area where "Fresh Water" meets. "Salt Water" It includes all the surrounding area.

Shallow water area between river and ocean

Where a link in the chain of life begins

#### Where a river meets the sea

An esturary is an area where salt and fresh water sometimes mix. It is an ideal place for wildlife habitat. Tides can affect them.

Intertidal region fed by runoff after highly diverse biota and in recent times highly developed and polluted.

Any marsh, wetlands, stream, river, that runs into the ocean

An estuary is an enclosed body of water wher freshwater discharges from tributary streams, mix with saltwater, from the ocean, under the influence of tidal action.

Interface of marine and freshwaters-low end salinity areas where rivers join marine. serving as a spawing ground/nursery for may species.

A watery area that has come from the ocean or river where there is vegetation and wildlife

DK

DK

An ecosystem where freshwater discharges to saltwater. Plant and animal species are alternately subject to either predominately freshwater or saltwater conditions.

DK

River(s) meeting ocean

An estuary is where fresh water meets salt water. Like the marshes around Hampton Beach I imagine.

The intertidal zone, including bays, salt marsh, etc.

Tidal waters

The convergence of streams and rivers into a body of water that is also connected to salt water.

Something to do with coastal watersheds

A zone of intermixing fresh and saltwater-usually a river mouth and/or bays. This zone is biologically rich and somewhat fragile.

A river up to the 1st dam from the sea

Where a river meets the sea and salt water mingles with fresh water- usually has a draed mouth with shallow depth for aquatic breeding

Estuary: Areas where rivers meet the ocean

The mouth of a creek or river that flows into the ocean. Has brackish water.

DK

An estuary is where a fresh water area meets with and is impacted by tidal waters.

Where a river sysytem meets a bag in the ocean

System of coastal water ways (river, marshes etc)

DK

coast brackish tidal bay-;the interface between ocean and river waters. The "nursery" of the ocean food chain, extremely productive because of shallow waters and high levels of transfer of energy from sunlight into biomass.

An embayment of a mix of salt water and fresh water. Fresh water comes from rivers, salt water from the ocean. An estuary is tidal, however protected from the full force by the land that surrounds portions of it. Concentration of salt varies, depends on amount of precipitation, flow rate of rivers, etc.

A partly enclosed body of water on the coast where salt water meets freshwater.

A partial embayment where fresh water from rivers and salt water from the ocean meet and mix

A salt or brackish water inlet. A bay where fresh river and salt water meet.

A body of water that receives daily influx of tidal water and has a lower ability than open ocean water

Where a fresh water river meets the ocean and the two bodies mix and provide nutrients/habitat for wildlife

An estuary is a transitional area from water to land, usually from a large saltwater body, where the water is filtered to fresh water. The land mass supports different vegetation and harbors animals such as shellfish that assists in recharging and cleaning the waters

where fresh water meets salt water.

birthplace and growing place for many organisms

A place where salt water and fresh water meet.

The tidal mouth of a river, typically where fresh and salt water meet.

A tidal waterbody where fresh water from inland sources mixes salt water from the ocean.

The bays, Salt marshes, shellfish beds, etc. found in the intertidal zone.

Wetland area where fresh and salt waters meet. Unique floal and fuana in these areas.

a body of H2o where fresh water and salt water mix- resulting in a very productive ecosystem.

The resulting habitat where fresh water and salt water intermingles.

I see it as the place where the ocean meets the fresh water coming from inland creating a unique environment.

An area between the ocean and land, usually

An area between the ocean and land, usually inundated with brackish water, and often located near the mouth of a fresh water river or stream.

The portion of a river or stream near its outlet that has been flooded due to sea level rise. Estuaries contain a mix of salt and fresh water and are offered by tides.

Tidal wetland associated with high productivity for many spp. Not sure if salinity is a requirement - I think it can also be tidal-fresh.

The tidal area where fresh and salt water meet

A body of water (brackish) where the ocean meets a river. A very productive environment with major human impacts that degrades these precious resources.

A surface water area where fresh water mixes with salty sea water, tidal, typically a river mouth and associated bays

A coastal area characterized by a mixture of fresh and saltwater. Dure to the proximity to development and the embayed nature of these systems they are highly susceptible to pollution.

salt and fresh water combine-surrounding tidal area

A body of water where salt and fresh water mix. More specifically a body of water with fresh water entering from rivers and salt water entering from the ocean and mixing due to tidaly rise and fall creating currents.

The interface of the freshwater and marine environments where salt water mixes with sweet and much of life from both reals pass through a portion of their life cycles.

A tidal water body where fresh and salt water meet

DK

coastal waters where salt and fresh water mix

DK

Wide bay or inlet where overflowing rivers meet incoming tides from the ocean and by extension all the variable shore areas adjacent.

A body of water with an outlet to the ocean along with surrounding water shed

DK

Fresh water and salt water meet and mix

I think where fresh water meets salt water

outlet of river or tidal wetlands including brackish water where a river enters or flows into the sea

Where fresh water from a river mingles with salt water

The spot where a river meets the sea.

Coastal area wetland

where the ocean & rivers meet

environmentally sensitive area that contributes to either watershed protection and/or habitat sanctuary

a stream that runs into the sea

The area where any fresh water river meets the tidal waters

The area between the high tide limit and open ocean where fresh water and salt water mix to create a unique ecological community.

tidal area where fresh water meets and mixes with ocean water

Marshland / conservation land not to be built upon.

A salt water branch of the ocean fed by some fesh water and considerable areas of marsh effected by tidal movements

Dk

where salt water and fresh water mix.

A body of water that is relatively protected and is where fresh and salt water meet.

Area of interaction where a river meets the ocean, where there is mixing of coastal and river waters.

Outlet of a river or stream, into the ocean, or bay.

place for birds to nest

An estuary is a brackish, relatively quiet water region where freshwater streams discharge to the ocean. Estuaries are characterized by mud flats and saltmarsh species of plants.

The end of a river that meets the ocean tides.

tidal interface between fresh and salt water systems

mix of fresh and salt water

area where river meets sea and tides meet river

A tidal zone incorporating surrounding land areas that have impact (environmental) on the tidal area.

tidal wet land area

Estuaries are where rivers meet the ocean.

dk

a place in the land where salt water and fresh water mingle (like a stream or river that runs towards th ocean). it's a place of convergence btw the two water stystems.

Water quality for marine life

An often large, relatively shallow body of brackish water.

a habitat where rivers meet salt water.

An estuary is a geographic area in which tidal (salt) waters and fresh water meet to form a land area that is a mixture of the 2 waters and provides a breeding ground for all levels of acquatic life. It is typically characterized by large area of marshes, wetlands, tidal flats, some open water and is greatly influenced by tidal action. It is a prime habitat for all types of migrating birds such as ducks and geese.

Where a fresh water river meets the ocean. A brackish body of water that rises and falls with the tide that supports a variety of plant and wildlife. One of it's most important functions is to act as a filtering system.

where the many streams, brooks, rivers, end at the bay/ocean

DK

DK

DK

wetlands and associated wildlife preserve

DK

Wetland area around a saltwater marsh

A part of a water course where water is retained or detained or joins another water course.

Inland tidal area with grass.

a body of water that contains both fresh and salt water due to tidal flows; a critical and unique wildlife habitat

convergence of fresh and salt water where many species of animals breed

the point in a river where it meets the ocean

tidal marsh that provides habitat for many saltwater species

sea and river confluence

DK

a coastal salt marsh under tidal influence

<u>Q5 Open Ended Reponses</u> – 'The NHEP issues many grants in the coastal watershed that fund a variety of projects. Please list the name and/or description of any projects that you are aware of that were conducted of funded by the NHEP'

None in EK

wetlands survey by Blue Moon Environmental by a DES Estuary Grant managed by Moose Mtn Regional Greenway for the Town of Brookfield

The grant to Candia in support of the well water survey and the open space committee work to educate the public.

NHEP worked with NHDES to create storm sewer maps, for the Great Bay watershed. NHEP funds mussel tissue monitoring, they are studying pollutants and water quality

none

well water survey, open space workshops, open space newletters

well water survey, open space workshops, open space newletters

funding candia's open space committee's outreach efforts- funding Bear Paw projects(communications plan?)

Not aware of any

Read about some projects but don't remember specifics

dk

not aware of any

Survey Center August, 2005 know of none don't know ? none newsletters, public speakers A sam removal project on Great Bay 1. well protection seminar 2. school education/poster contest Both done for Stratham eel grass study, crab study, water qualtiy Taylor River project for towns of Hampton and Hampton Falls support of NHDES shellfish program support of NHFG Oyster Disease testing support of research on clam resource abundance decline DK NOne DK Land conservation education and outreach Dover conducted the NROC program in 2001. NHEP participated in and sponsored this "project" None I think they were involved with us when we did an NROC project with our Master Plan. Cains Brook Watershed, RT 1-A storm water study We received a grant from NHEP for a study of Bull Toad's Pond and other marshes in NewCastle. Name "Assessment and Recommendations for Bull Toad's Pons at Great Island Common." Can't think of one off the top of my head Jackson Lab and Sandy Point Discovery Center programs (no specifics) Probably the Great Bay Estuary. I remember a very expensive and elegant report and thought the Project must be fortunate in federal grants. wetlands evaluation project I have and refence "Like in NH Salt Marshes" that Jen Drociak produced. I have attended may workshops that NHEP sponsored with Seacoast land Trust-familiar with Report on Impervious Surfaces. Fremont needs NROC desperately. Application denied. NHEP funds organization that in turn give grants to communities, etc. Examples of organizations that have received funds from NHEP would be NROC, Center for Land Conservation, RPC... Rockingham Planning Commission. Recommendations of sites for wetland mitigation Impervious cover increase 1990-200 and goal of 10% Comparative analysis of tidal wetlands in Durham well water survey workshops in Dover in 2002; updated maps in Dover in 2004; public outreach in Dover in 2004; wetlands eval in Northern Strafford/Souther Carroll county; wetlands eval in all coastal comunities; public outreach/education in Northern Strafford/Southern Carroll counties; boat rides.

NHEP supported MMRG to hire Blue Moon Environmental Inc. to do a study of the significant wetlands in 6 towns including mine. Thank-you!

None

Great bay Estuary project

Oxford are sever installations, stormwater mapping projet, illicit discharge detection, water use study

too many to list

Little River Salt Marsh, North Hampton

I should know many but cannot recall any specific projects right now.

The current prime wetland study in Hampton/Hampton Falls; various salt marsh restoration projects in Rye, North Hampton and Greenland; Inventory of Wetlands Restoration and Migration opportunites by West Environmental.

DK

I would have to look that up-

NH Estuaries Project- Hampton/Hampton Falls

Candia water resource awareness project

Regionally, the Moose Mountain Regional Greenway conducted a prime wetland study that included New Durham. Beginning this April, New Durham will participate in the Natural Resoure Outreach Coalition. The Moose Mountain Regional Greenway organized educational workshops("Balancing Growth, Taxes and Open Space" "Estate Planning")in the Town of New Durham using NHEP funding

Natural resources outreach coalition for the Somersworth Nh Conservation Commission

I believe NHEP funds have supported the Gundalow project, a management plan for Great Bog, Land transaction assistance and a report that gave information on wetland mitigation potential site in each town and great bay.

DK

septic system education workshops Cocheco Rivers/Follwts Brook study by TNC Outreach to Coastal Decision Makers Impervious Surface Study

Invasive Aquatic Spelles Fund 10/04 Tanglewood Research

several around great bay. I think I need to revisit these materials.

Hampton Falls/Hampton Drakeside Road Hampton

None

Drainage Mapping; Illicit Discharge Detection & Elimination

Cocheco River Watershed Analysis

Great Bog management plan, SLT/Greenland mapping, salt marsh restoration

salt marsh grass restoration

Dredging Rye harbor?

mapping projects, one specifically here in Greenland monitoring the health of the Great Bay salt marsh restoration Great Bog restoration

educational boat trip up the Pisquataqua River to Little Bay Accepted a grant request for Kensington Conservation Commission, to conserve land on Great Brook, although deal fell through.

Freshwater wetland mitigation inventory Newfields Open Space outreach program easement in Newfields Technical Characterization of Coastal and Estuarine NH Protection of freshwater wetlands - Purchase of Conservation

DK

Not aware of any projects. I do know that TNC is protecting Great Bay, but I do not know if this is related to NHEP.

all much farther east than us

where is Brentwood tidal area

ERLAC, Rockingham Land trust, Rockingham Planning Commission

**Exeter River Advisory Committee** 

Lamprey river estuary project

DK

DK

Don't know of any

DK

unaware

? Please send monies to Kingston as we are not included in your plans

None

I am aware of many, however, why does Kingston not get program \$, even though it's part of the project area? rehabbing salt marshes in Hampton, N. Hampton, Rye and small ponds in Portsmouth. opening up recreational clamming, storm drain marking, Taylor River programs

### Q10 Specified Open Ended Responses 'What is your position on your board or commission? (chose 'other')'

selectman					
open space committee member					
open space committee member(sub committee of conservation commission)					
open space committe member, secretary for board of director of Bear Paw Reg. Greenways					
PB Alernate					
Exeter River local advisory com					
chair, water resource board					
alternate					
city councilor					
alternate					
Rockingham Planning Commission					
open space chair					
Selectman					
Selectman rep					
Building inspector consultant with zoning and planning board					
conservation commission staff					
alternate					
planning board alternate					
Selectmen					
member Natural Heritage Committee					
staff					
Selectman					
health officer					
Selectman					
con comm alternate					
PBd Vice Chair, Open Space Cmte.					
not on board or commission, i am a planning dept employee					
Planning Director for the Town of Raymond					
Selectman					

### **GRANITE STATE POLL**

### **FOR**

### **NEW HAMPSHIRE ESTUARIES PROJECT**

### Prepared by:

Andrew E. Smith, Ph.D. Dennis M. Junius, M.A.

The Survey Center University of New Hampshire

July, 2004

#### The University of New Hampshire

#### **Survey Center**

The UNH Survey Center is an independent, non-partisan academic survey research organization and a division of the UNH Institute for Policy and Social Science Research.

The Survey Center conducts telephone, mail, e-mail, Internet, and self-administered surveys, as well as focus groups and other qualitative research for university researchers, government agencies, public non-profit organizations, private businesses, and media clients.

Our senior staff have more than 40 years experience in designing and conducting custom research on a broad range of political, social, health care, and other public policy issues.

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#### Contents

Executive Summary	1
Figure	
Open-ended responses	
•	
Technical Report	T - 1
Appendix A: Detailed Tabular Results	A - 1
Appendix B: Questionnaire & Codebook	

#### **EXECUTIVE SUMMARY**

The University of New Hampshire Survey Center included a question on its July 2004 Granite State Poll for the New Hampshire Estuaries Project. The major purposes of these questions were to assess the knowledge of New Hampshire residents concerning the meaning of an estuary. Five hundred and nine (509) New Hampshire adults were interviewed by telephone between July 6 and July 20, 2004. The margin of sampling error for survey is +/-4.4%. (See Technical Report below for a more detailed description of survey methods.) The following figures display survey results, detailed tabular results can be found in Appendix A & the questionnaire and codebook can be found in Appendix B.

The major findings of the survey include:

- Three-fifths (60%) of New Hampshire adults admit that they do not know the definition of an estuary, 11 percent gave the correct definition of an estuary, 19 percent gave a water-related definition, 6 percent gave a nature-related example of an estuary, and 3 percent gave an example of coastal water. *Figure 1*
- Those who have done postgraduate work and those who have lived in New Hampshire 2 years or less were most likely to have given the correct definition of an estuary.
- Eight percent of those who offered a definition of an estuary referred to birds and another 11 percent referred to protected lands. *Figures 2 & 3*

Figure 1

# **Knowledge of Estuary Definition**

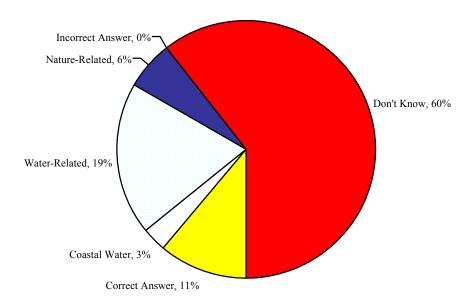
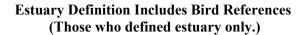


Figure 2



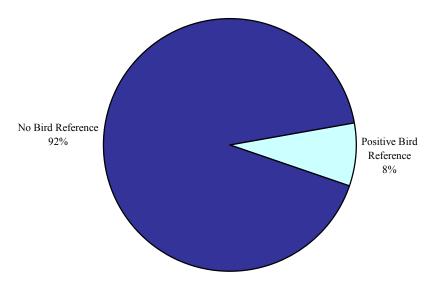
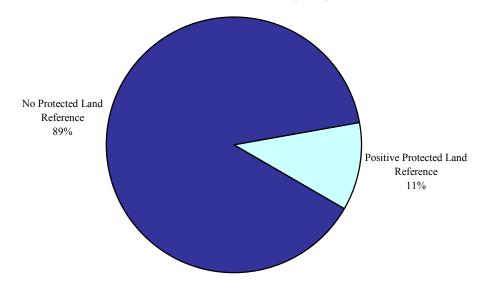


Figure 3

# Estuary Definition Includes Reference to Protected Land (Those who defined estuary only.)



# **Open-ended Responses**

NHEP1A: "In your own words, how would you define an estuary?"

- Where freshwater meets saltwater and the developing environment within/around it.
- A water habitat
- A river of some sort
- It's where the river meets the sea
- Stream,
- Kind of a wetland, uh, and I'm not sure if its freshwater or saltwater
- I want to say its something to do with water
- An area for wildlife, birds or something like that
- An inlet of water that flows into the sea
- A place where wildlife is a habitat where birds use the water
- It is a branch off of a river going to the coast
- Creeks from rivers
- Great bay is, connecting a body of water to an ocean
- A river
- Like a tributary
- A river, wetland.
- A bird sanctuary
- A watershed
- Small streams and habitat for wildlife where the streams enter the ocean
- Where water washed over sand and makes it very fine
- Branch of a river.
- Close to land
- Its just a water inlet
- Tide area along the seacoast where the tide comes and goes
- A small stream type of waterway
- The confluence of rivers or the area at the end of the river, more than one river often
- An off shoot of an river
- Body of water, title of water, preserve water, salt water and think we should protect them
- A body of water
- A tidal body of water, ecologically important and serving as a cleansing unit for the environment

- Think is place of birds,
- Um, that is something to do with the water ... if I remember correctly its something to do with a natural habitat of aquatic life
- Water system that is towards the end of a water system a swamp small streams of water
- Place for animals to live and for keep our nature in balance.
- Place of birds
- A body of water that is consigned
- It's a water source of branch leading to a river.
- A small body of water that flows like a river
- Its a river that rises and falls with the ocean tides
- A wetland that feed to ocean
- White habitat...
- A back way water area
- Like a canal or water way I believe commercial traffic travels on them, but i'm not sure
- Where oceans and fresh water come together in a tidal area
- It's a ...tributary of a river or a body of water
- A wildlife water land area, might even be a bird hatchery
- A protected wetland
- Its a wetland, seacoast wetlands
- Its a river
- An estuary is a marine zone where freshwater goes into land, its a wetland zone
- A waterway around the coast, interactive b/w salt and fresh
- The area where salt and freshwater meet
- An estuary is an ecological system where fresh water and salt water meet on the sea coast
- Water land
- Wild life birds
- It is some kind of wetlands, maybe saltwater
- Where a body of water heads towards the sea
- An area where salt water and fresh water mix, shallow water lots of plant life
- Small body of water feeds another body of water
- It is a tidal area between the ocean and the river
- A waterway
- Small river that empties into a body of water (it's the area around it).
- A protected area for wildlife.

- Little body of water that comes in further from the ocean or a river
- Place where has wet land, wood, a lot wild life live, birds
- Example is great bay, a large body that natures a young aquatic life
- A sanctuary for wildlife
- Waterway...that's inlike...
- Save haven, refuge area where animals come, and things are where they should be.
- A little water area such as a such bay
- A larger body of water that run off a larger body of water that is fresh water
- It's an area where water collects from other sources.
- Back water from the ocean great bay is an example of one
- Protective land for animal use
- A place of peace where human being and wild life exist in peace
- It's a place for birds and wildlife
- Water I am not really sure, I think that it is water that is backed up for wild life
- A place in nature, mostly wet, a breeding ground.
- Body of water where the ocean meets the freshwater, and there's a lot of marine biology w/in that meeting place
- It is ending of the river, where the river meets the sea
- Where a river and ocean meet, used for fish and shell fish
- Any navigable river way or channel that are tidal.
- An area where fresh and sea water meet
- The mouth of a river where one river comes into another or a bigger body of water
- Where a river goes into the ocean, and the marsh that surrounds it.
- Water dwelling adjacent to rivers and ponds
- An area where there is freshwater and saltwater.
- The mouth of a river that divides and spills in tot he ocean
- I guess a wetland that provides haven and home for different species
- A body of water that connect the ocean water to the rivers
- Waterways
- A sanctuary for Audubon society.
- When water comes into the land
- Isn't it a protected, not a protected...a border where land meets water and water meets land type of thing
- A body of water that goes off the ocean and has its own living ecosystems within it.
- An estuary is a watershed, a body of water that a number of rivers and streams flow in to, such as the Piscataqua River Estuary.

- It's a body of water connected to the ocean
- A piece of water that connects an ocean and a river
- A natural outlet for water.
- Something about a river, ah, not sure, branches of a river, yes
- A salt water inlet, marshy area
- An physical land area that is filled with small water bodies, and rivers and things like that, on the fringe of a coastal area
- A water in the grass land surrounding the shoreline for example the great bay
- Has to do with water, it is a passage between two bodies of water.
- A river that flows into the ocean, the area of the river that flows into the ocean, where ships can travel
- A preserve for wildlife
- A balanced water ecosystem that has got the support of supunding public and land
- Put birds.... gvt land,
- It has to do with nature and birds.
- Stream
- A waterway
- Like river flow, streams, etc.
- A marshy area where salt and freshwater met
- Small river
- I would say...it's probably having to do with our water table, almost like an underground river that covers a huge are of our state and that H2O travels and joins with other water and ends up in the ocean, almost like a bloodline of our earth...like the everglades
- A tract of land that's set aside for non-development and kept in a natural state and is protected
- Some sort of a...outdoor...life preserve type thing
- Habitat for wildlife
- Small body of water
- A meeting fresh and salt water body
- A protected saltwater area where there's wildlife. I don't really know.
- A body of water, river that meets the ocean
- A wetland at a mouth of a river where it meets the ocean
- A preserved wetland
- A body of water where birds go
- Location where fresh and salt water meet.
- Something do with birds

- A dead letting from where the sea, that fresh and salt water mix
- It is a body of water that is marshy or reedy in value and has a lot of and has many homes for water fowl and mammals
- A water shed where migrating birds go to reproduce
- An ecologically sensitive area that needs protection immediately.
- Wetland
- A raised place in the landscape where glaciers deposited? causing a raised area.
- Conservation of water and so forth.
- A protected wetland.
- Something to do with water
- An estuary is a body of water, very much like the great bay, composed of a combination of salt and fresh water. Important for the nurturing of fish and biological life.
- Ocean coming in to land
- Rivers and brooks running into Great Bay and places like that
- Large amt where h20 is
- Waterway sort of undeveloped water area
- A wildlife preserve
- Branch of water, salt and fresh water coming together.
- The marshy area near the ocean
- Something with insurance or with math
- Wild life wet land thing
- An inlet like a bay
- Freshwater and salt water mix.. area
- Where fresh water spills out into the ocean
- A river coming into a part of the ocean, most coastal rivers empty into the ocean
- Were nature takes care of its self
- A area in an environment that is a niche or home to animals
- Its an area of wetland that is protected.
- An estuary is where two bodies of water merge together.
- Land set aside for non commercial/non-residential use,
- A tidal basin.
- An estuary is a part of the sea that extends inward to meet the mouth of the river
- Branch in a river
- A protected piece of land.

- Where the river meets the sea
- A body of water that comes in from the ocean where there is fishing and bird life
- Wetland- where river feeds into ocean
- The meeting of fresh and salt waters
- The area that the river meets the ocean,?
- It has something to do with sanctuaries for birds and fish and other wildlife.
- It's where land is protected so the natural vegetation and wildlife can function w/o human intervention
- I think it is where two rivers meet.
- Water wet land for wild life
- A group of property of open land use for nature natural flowing rivers that head to the sea.
- An area where salt water and freshwater come together
- A natural habitat of animals.
- It's a body of water encompassing swampy areas tidal flats things of that nature
- A habitat for aquatic life
- A conservation term.
- Where they all gather and meet and go off into other things water
- A water that has gone into land and created a swampy area.
- A watershed
- A sanctuaries of some sort.
- An opening of a body of water into a bigger body of water
- Waterway coming out of a river
- The place where salt and freshwater meet along the coast.
- Branching off of something, like a stream from a river
- Area in which the river and the ocean connects
- Where fresh water and saltwater meet at an inlet where lots of wildlife likes to live
- Some kind of body of or spring, water supply
- Area where salt water and rivers meet like fish and whatever go there
- It is a fork in the river, a side shoot of the river
- Protected waterways and habitat for wildlife
- A waterway
- Body of water that has its own ecosystem that should be protected, and they're endangered in many places
- A waterway
- The special place at the end of a street
- A wetland drainage area, drains into the ocean, a tributary of another body of water

- A fresh body of water
- Small body of water to provide drinking water
- A safe place for animals, sanctuary, something like that.
- A delta of a river, a marshy area where there is a mix of sea water and freshwater
- Where the ocean and land come together it is a place for fish to be born
- Mudflood, it brings in grants to the university. Region of great variability of sality, it is a mixture of salt and freshwater
- A little stream that runs into a larger body
- A inlet of water along the seacoast where a lot of wildlife live.
- Water system that feeds into a larger one
- A region of a river or a marsh, which is affected by tides from the ocean
- A still body of water
- It's a bit of water that goes off a larger body of water, like the river below the dam.
- It is a place where freshwater and salt water meet
- A piece of land that is needed to protect wildlife
- Were the food chain begins, like great bay at the sea coast
- The place where freshwater meets salt and where a lot animal and plant life is born and grow into adults
- It is a wet land near a river or along the sea
- Tidal portion of a river

#### TECHNICAL REPORT

# How the Sample Was Selected

The July, 2004 Granite State Poll was a survey of randomly selected adults in the state of New Hampshire. This survey was conducted using a procedure called Random Digit Dialing (RDD) which is described below.

A sample of households in the area was selected by a procedure known as random digit dialing. The way this works is as follows. First, with the aid of the computer, one of the three-digit telephone exchanges that are currently used in the area (e.g., 772) is randomly selected. The computer then randomly selects one of the "working blocks"-the first two of the last four numbers in a telephone number (e.g., 64)--and attaches it to the randomly selected exchange. Finally, the computer program then generates a two-digit random number between 00 and 99 (e.g., 57) which is attached to the previously selected prefix (772), and the previously selected working block (64) resulting in a complete telephone number -- i.e., 772-6457. This procedure is then repeated numerous times by the computer to generate more random numbers, so that we have a sufficient quantity to conduct the survey. The end result is that each household in the area in which there is a telephone has an equally likely chance of being selected into the sample.

The random sample used in the Granite State Poll was purchased from Marketing Systems Group, Fort Washington, Pennsylvania. MSG screens each selected telephone number to eliminate non-working numbers, disconnected numbers, and business numbers to improve the efficiency of the sample, reducing the amount of time interviewers spend calling non-usable numbers.

Each of these randomly generated telephone numbers is called by one of our interviewers from a centrally supervised facility at the UNH Survey Center. If the number called is found not to be a residential one, it is discarded and another random number is called. (Approximately forty-five percent of the numbers were discarded because they are found to be businesses, institutions, or not assigned.) If it is a residential number, the interviewer then randomly selects a member of the household by asking to speak with the adult currently living in the household who has had the most recent birthday. This selection process ensures that every adult (18 years of age or older) in the household has an equally likely chance of being included in the survey. No substitutions are allowed. If, for example, the randomly selected adult is not at home when the household is first contacted, the interviewer cannot substitute by selecting someone else who just happens to be there at the time. Instead, he or she must make an appointment to call back when the randomly selected adult is at home. In this way, respondent selection bias is minimized.

# When the Interviewing Was Done

New Hampshire adults in the Granite State Poll were interviewed between July 6 and July 20, 2004. Each selected respondent was called by a professional UNH Survey Center interviewer from a centrally supervised facility at the UNH Survey Center. Telephone calls during the field period were made between 10:00 AM and 9:00 PM.

# Response Rates

Attempts were made to contact four thousand nine hundred eighty-two (4,982) New Hampshire adults in the RDD survey. Table 1 shows the percentage of these contacts in the first survey which resulted in completed interviews (10%), refusals (18%), failures to interview because the telephone was busy, the phone was not answered, the telephone was answered by an answering machine, appointments were broken, or the respondent was away on business, vacation, or was otherwise unavailable during the interviewing period (48%). Failure to interview because the number was changed, disconnected, or was a business (23%).

TABLE 1

Response Rates for the April, 2004 G	Response Rates for the April, 2004 Granite State Poll						
	<b>NUMBER</b>	<b>PERCENTAGE</b>					
Completed Interviews	509	10.2%					
Refusals	913	18.3					
Unable to Interview (no answer, busy, answering machine, broken appointment, or the respondent was away on business, vacation, illness, etc.)	2401	48.2					
Disconnect, Changed Number, Business, Fax, Modem	1159	23.3					
TOTALS	4,982	100.0%					

# Sampling Error

The Granite State Poll, like all surveys, is subject to sampling error due to the fact that all residents in the area were not interviewed. For those questions asked of four hundred (500) or so respondents, the error is +/-4.4%. For those questions where fewer than 500 persons responded, the sampling error can be calculated as follows:

Sampling error = 
$$+/- (1.96) | \overline{P(1-P)} | N$$

Where P is the percentage of responses in the answer category being evaluated and N is the total number of persons answering the particular question.

For example, suppose you had the following distribution of answers to the question, "Should the state spend more money on road repair even if that means higher taxes?" Assume 1,000 respondents answered the question as follows:

The sampling error for the "YES" percentage of 47% would be

$$+/-(1.96)$$
  $|\overline{(47)(53)} = +/-3.1\%;$   $|1,000$ 

for the "NO" percentage of 48% it would be

$$+/-(1.96)$$
  $|\overline{(48)(52)} = +/-3.1\%;$   $|1,000$ 

and for the "DON'T KNOW" percentage of 5% it would be

$$+/-(1.96)$$
  $|\overline{(5)(95)} = +/-1.4\%;$   $|1,000$ 

In this case we would expect the <u>true</u> population figures to be within the following ranges:

# **APPENDIX A:**

# **DETAILED TABULAR RESULTS**

NHEP1: "Now, I'd like to ask you a question about estuaries. Do you think you could define, in your own words, what an estuary is?"

	Correct Answer	Coastal Water	Water- Related	Nature- Related	Incorrect Answer	Don't Know/ Not Sure	Number Responding	
All NH Adults	11%	3%	19%	6%	0%	60%	508	
Registered to Vote								
Registered Democrat	18	8	17	12	1	44	102	
Undeclared/Other	11	2	21	7	0	59	181	
Registered Republican	10	4	25	6	0	55	119	
Not registered	4	1	12	1	1	81	98	
Party Identification								
Democrat	14	4	15	8	1	58	223	
Independent	4	0	22	4	0	70	63	
Republican	10	4	23	6	Ō	57	201	
Sex of Respondent								
Male	13	3	22	6	0	55	246	
Female	9	4	16	6	Ö	64	262	
Age								
18 to 29	7	0	9	3	0	81	73	
30 to 39	9	2	20	8	0	62	82	
40 to 49	10	2	15	10	0	63	117	
50 to 59	13	6	27	8	0	46	109	
	17	7						
60 to 69			18	6	1	52	60	
70 or older	9	5	23	1	2	60	46	
Education								
High school or less	6	1	11	6	0	76	146	
Technical school/Some college	4	5	22	4	0	64	128	
College graduate	13	3	15	12	0	57	113	
Postgraduate work	23	6	31	5	1	35	110	
Income								
Less than \$30,000	8	4	8	6	0	74	55	
\$30,000 to \$44,999	7	1	18	8	2	64	65	
\$45,000 to \$59,999	14	6	21	5	0	54	70	
\$60,000 to \$74,999	6	i	16	10	Ö	67	58	
\$75,000 to \$99,999	13	6	26	6	Ö	49	69	
\$100,000 or more	24	1	19	8	Ö	48	63	
Marital Status								
Married	12	4	21	8	0	56	353	
Divorced/Separated	8	3	19	2	Ö	68	60	
Never married	7	3	14	6	0	71	84	
INC V GI INGILITEG	,	5	± ¬	0	O .	/ ±	0 3	

NHEP1: "Now, I'd like to ask you a question about estuaries. Do you think you could define, in your own words, what an estuary is?"

	Correct Answer	Coastal Water	Water- Related	Nature- Related	Incorrect Answer	Don't Know/ Not Sure	Number Responding	
All NH Adults	11%	3%	19%	6%	0%	60%	508	
Adults in Household								
One	8	4	19	5	2	61	61	
Two	12	4	17	8	0	59	290	
Three or more	9	2	25	4	0	59	149	
Children in Household								
No children	13	4	20	7	1	56	300	
One	7	0	15	9	0	69	78	
Two or more	9	3	20	5	0	62	119	
Religion								
Protestant	11	5	18	9	1	57	191	
Catholic	4	2	15	5	0	74	161	
Other	18	3	26	6	0	46	134	
Years Lived in NH								
2 years or less	24	0	20	0	0	56	25	
3 to 5 years	13	3	14	7	0	63	38	
6 to 10 years	8	1	21	7	0	63	42	
11 to 20 years	8	2 5	22	5	0	63	105	
20 or more years	11	5	18	8	1	58	280	
Zone								
Zone A	19	7	22	12	0	41	76	
Zone B	4	9	30	8	0	49	26	
Zone C	10	2	18	5	0	64	406	
Region								
Northern NH	11	3	26	6	0	53	68	
Western NH	10	2	6	5	0	76	48	
Central/Lakes	7	2	20	7	1	62	80	
Hillsborough County	11	2	21	5	ī	60	154	
Seacoast Councy	13	5	18	8	0	56	159	
Executive Council Districts								
1st District	12	2	20	9	0	57	107	
2nd District	7	5	20	3	1	65	105	
3rd District	18	6	20	11	0	45	92	
4th District	7	2	18	5	1	67	104	
5th District	13	2	17	5	0	64	94	

BIRDS:Definition include a reference to birds? (Those who defined estuary only.)

	No Bird Reference	Positive Bird Reference	Number Responding	
All NH Adults	92%	8%	205	
Registered to Vote		_		
Registered Democrat	95	. 5	57	
Undeclared/Other	89	11	73	
Registered Republican	88 97	12 3	53 19	
Not registered	97	3	19	
Party Identification				
Democrat	90	10	93	
Independent	96	4	19	
Republican	91	9	87	
Sex of Respondent				
Male	92	8	112	
Female	91	9	93	
Age				
18 to 29	100	0	14	
30 to 39	96	4	31	
40 to 49	84	16	43	
50 to 59	90	10	59	
60 to 69	93	7	29	
70 or older	97	3	18	
Education				
High school or less	75	25	34	
Technical school/Some college	99	1	46	
College graduate	95	5	48	
Postgraduate work	92	8	72	
Income				
Less than \$30,000	100	0	15	
\$30,000 to \$44,999	88	12	23	
\$45,000 to \$59,999	90	10	32	
\$60,000 to \$74,999	85	15	19	
\$75,000 to \$99,999	100	0	35	
\$100,000 or more	88	12	33	
Marital Status				
Married	91	9	156	
Divorced/Separated	96	4	20	
Never married	89	11	25	

BIRDS:Definition include a reference to birds? (Those who defined estuary only.)

	No Bird Reference	Positive Bird Reference	Number Responding	
All NH Adults	92%	8%	205	
Adults in Household				
One	89	11	24	
Two	92	8 8	119	
Three or more	92	8	60	
Children in Household				
No children	92	8	133	
One	83	17	24	
Two or more	95	5	45	
Religion				
Protestant	93	7	83	
Catholic	90	10	42	
Other	90	10	72	
Years Lived in NH				
2 years or less	100	0	11	
3 to 5 years	92	8	14	
6 to 10 years	80	20	16	
11 to 20 years	90	10	40	
20 or more years	93	7	116	
Zone				
Zone A	88	12	45	
Zone B	88	12	13	
Zone C	93	7	147	
Region				
Northern NH	99	1	32	
Western NH	94	6	11	
Central/Lakes	89	11	30	
Hillsborough County	92	8	62	
Seacoast	88	12	70	
Executive Council Districts				
1st District	95	5	46	
2nd District	97	3	37	
3rd District	87	13	51	
4th District	85	15	34	
5th District	94	6	34	

PRESERV:Definition include a reference to protected land? (Those who defined estuary only.)

	NO Protected Land Reference	Positive Protected Land Reference	Number Responding	
All NH Adults	89%	11%	205	
Registered to Vote				
Registered Democrat	88	12	57	
Undeclared/Other	86	14	73	
Registered Republican	90	10	53	
Not registered	93	7	19	
Party Identification				
Democrat	91	9	93	
Independent	82	18	19	
Republican	88	12	87	
Sex of Respondent				
Male	91	9	112	
Female	85	15	93	
Age				
18 to 29	75	25	14	
30 to 39	89	11	31	
40 to 49	90	10	43	
50 to 59	85	15	59	
60 to 69	95	5	29	
70 or older	100	0	18	
Education				
High school or less	89	11	34	
Technical school/Some college	83	17	46	
College graduate	90	10	48	
Postgraduate work	92	8	72	
Income				
Less than \$30,000	67	33	15	
\$30,000 to \$44,999	86	14	23	
\$45,000 to \$59,999	95	5	32	
\$60,000 to \$74,999	92	8	19	
\$75,000 to \$99,999	94	6	35	
\$100,000 or more	93	7	33	
Marital Status				
Married	89	11	156	
Divorced/Separated	89	11	20	
Never married	83	17	25	

PRESERV:Definition include a reference to protected land? (Those who defined estuary only.)

	NO Protected Land	Positive Protected	Number	
	Reference	Land Reference	Responding	
All NH Adults	89%	11%	205	
Adults in Household				
One	91	9	24	
Two	87	13	119	
Three or more	90	10	60	
Children in Household				
No children	89	11	133	
One	84	16	24	
Two or more	91	9	45	
Religion				
Protestant	86	14	83	
Catholic	90	10	42	
Other	90	10	72	
Years Lived in NH				
2 years or less	88	12	11	
3 to 5 years	81	19	14	
6 to 10 years	92	8	16	
11 to 20 years	94	6	40	
20 or more years	88	12	116	
Zone				
Zone A	89	11	45	
Zone B	92	8	45 13	
Zone C	88	12	147	
Region				
Northern NH	91	9	32	
Western NH	81	19	11	
Central/Lakes	96	4		
Hillsborough County	84	16	30 62	
Seacoast	90	10	70	
Executive Council Districts				
1st District	90	10	46	
2nd District	93	7	37	
3rd District	91	9	51	
4th District	78	22	34	
	78 89	11	34	
5th District	89	ΤŢ	34	

# **APPENDIX B:**

# **QUESTIONNAIRE AND CODEBOOK**

This appendix contains the questionnaire used in the Winter 2004 Granite State Poll. It also includes the following information about the data:

- 1. The numeric codes used to categorize the answers given by survey respondents.
- 2. A code indicating the sponsor of the question.
- 3. The variable names and numbers of the variables in the SPSS file of the data.
- 4. The missing data codes used in the SPSS file (indicated by an asterisk [\*])

3. 9.

**REFUSED** 

# **The Granite State Poll #13** UNH Survey Center Summer 2004

D ITT O		
INTRO		FRODUCTION: "This is the University of New Hampshire. My name is and
	I'm	calling for the Granite State Poll from the University of New Hampshire Survey Center. This month,
		University is conducting a very short, <u>confidential</u> study of public opinion in New Hampshire, and we'd lly appreciate your help and cooperation."
	rear	ny appreciate your heip and cooperation.
SEAS		
	"D	o you live at this residence all year round or are you on vacation in New Hampshire?"
		1 LIVE IN NH YEAR ROUND
		2 SEASONAL, JUST VACATIONING → "Thank you very much, we are only
		interviewing year round residents."
	*	9 REFUSED
DID 1		
BIR1	"In	order to determine who to interview, could you tell me, of the adults aged 18 or older who currently live
		your household including yourself who had the most recent birthday? I don't mean who is the
	you	ingest, but rather, who had the most recent birthday?"
	1.	INFORMANT SKIP TO SEX
	2.	SOMEONE ELSE (SPECIFY):SKIP TO INT2
	3.	DON'T KNOW ALL BIRTHDAYS, ONLY SOME CONTINUE WITH BIR2 BELOW
	4	DONE WHOM AND DIDENDAYS OTHER THAN OWN. SWIR TO SEV
	4.	DON'T KNOW ANY BIRTHDAYS OTHER THAN OWN SKIP TO SEX
*	9.	REFUSED ENTER NON-RESPONSE INFORMATION
BIR2		
DIKZ	"Of	f the ones that you do know, who had the most recent birthday?"
	1.	INFORMANT SKIP TO SEX
	2.	SOMEONE ELSE (SPECIFY): GO TO INT2
	3.	PERSON NOT AVAILABLE

## INT2

# ASK TO SPEAK TO THAT PERSON

"Hello, this is \_\_\_\_\_ calling for the Granite State Poll from the University of New Hampshire. This month the University is conducting a <u>confidential</u> study of public opinion in New Hampshire, and we'd really appreciate your help and cooperation. You have been identified as the adult in your household who had the most recent birthday. Is this correct?"

- 1 YES
- 2 APPOINTMENT
- \* 9 REFUSAL

# SEX

"Thank you very much for helping us with this important study. We really appreciate your help. Before we begin I want to assure you that all of your answers are strictly confidential. They will be combined with answers from other people from across the state. Your telephone number was randomly selected from all families in New Hampshire. This call may be monitored for quality assurance."

"The survey will take about 10 minutes to complete. Participation is voluntary. If you decide to participate, you may decline to answer any question or end the interview at any time."

#### RECORD SEX OF RESPONDENT

- 1 MALE
- 2 FEMALE
- \* 99 NA

# **TOWN**

"First, in what town do you live?" ENTER NUMBER OF TOWN FROM SHEET.

- 997 OTHER TYPE IN
- 998 DK DO NOT PROBE
- \* 999 NA / REFUSED

#### PRESAPP:

"Let's begin with some questions about the President."

"GENERALLY SPEAKING, do you approve or disapprove of the way President Bush is handling his job as president?"

(IF APPROVE): "Would you say that you STRONGLY approve of the way he is handling his job as president, or that you approve only SOMEWHAT?"

(IF DISAPPROVE): "Would you say that you STRONGLY disapprove of the way he is handling his job as president, or that you disapprove only SOMEWHAT?"

(IF NEITHER, NOT SURE, DK): "Would you say that you lean a little more toward APPROVING or DISAPPROVING of the way he is handling his job as president?"

- 1 STRONGLY APPROVE
- 2 APPROVE SOMEWHAT
- 3 LEAN TOWARD APPROVING
- 4 NEITHER, NOT SURE, DK
- 5 LEAN TOWARD DISAPPROVING
- 6 DISAPPROVE SOMEWHAT
- 7 STRONGLY DISAPPROVE
- \* 99 NA

#### ROTATE FORAPP AND ECONAPP

#### FORAPP:

"GENERALLY SPEAKING, do you approve or disapprove of the way President Bush is handling FOREIGN AFFAIRS?"

(IF APPROVE): "Would you say you STRONGLY approve of the way he is handling foreign affairs, or that you approve only SOMEWHAT?"

(IF DISAPPROVE): "Would you say you STRONGLY disapprove of the way he is handling foreign affairs, or that you disapprove only SOMEWHAT?"

(IF NEITHER, NOT SURE, DK): "Would you say you lean a little more toward APPROVING or DISAPPROVING of the way he is handling foreign affairs?"

- 1 STRONGLY APPROVE
- 2 APPROVE SOMEWHAT
- 3 LEAN TOWARD APPROVING
- 4 NEITHER, NOT SURE, DK
- 5 LEAN TOWARD DISAPPROVING
- 6 DISAPPROVE SOMEWHAT
- 7 STRONGLY DISAPPROVE
- \* 99 NA

#### **ECONAPP**

"GENERALLY SPEAKING, do you approve or disapprove of the way President Bush is handling THE ECONOMY?"

(IF APPROVE): "Would you say you STRONGLY approve of the way he is handling the economy, or that you approve only SOMEWHAT?"

(IF DISAPPROVE): "Would you say you STRONGLY disapprove of the way he is handling the economy, or that you disapprove only SOMEWHAT?"

(IF NEITHER, NOT SURE, DK): "Would you say you lean a little more toward APPROVING or DISAPPROVING of the way he is handling the economy?"

- 1 STRONGLY APPROVE
- 2 APPROVE SOMEWHAT
- 3 LEAN TOWARD APPROVING
- 4 NEITHER, NOT SURE, DK
- 5 LEAN TOWARD DISAPPROVING
- 6 DISAPPROVE SOMEWHAT
- 7 STRONGLY DISAPPROVE
- \* 99 NA

#### IRAQ1:

"Do you approve or disapprove of the way George W. Bush is handling the situation with Iraq?"

(IF APPROVE): "Would you say you STRONGLY approve of the way he is handling the situation with Iraq, or that you approve only SOMEWHAT?"

(IF DISAPPROVE): "Would you say you STRONGLY disapprove of the way he is handling the situation with Iraq, or that you disapprove only SOMEWHAT?"

(IF NEITHER, NOT SURE, DK): "Would you say you lean a little more toward APPROVING or DISAPPROVING of the way he is handling the situation with Iraq?"

- 1 STRONGLY APPROVE
- 2 APPROVE SOMEWHAT
- 3 LEAN TOWARD APPROVING
- 4 NEITHER, NOT SURE, DK
- 5 LEAN TOWARD DISAPPROVING
- 6 DISAPPROVE SOMEWHAT
- 7 STRONGLY DISAPPROVE
- \* 99 NA

#### IRAO2:

"Do you support or oppose the United States having gone to war with Iraq?"

(IF SUPPORT): "Do you strongly support this or just somewhat?" (IF OPPOSE): "Do you strongly oppose this or just somewhat

- 1 STRONGLY SUPPORT
- 2 SUPPORT SOMEWHAT
- 3 NEITHER, NOT SURE, DK
- 4 OPPOSE SOMEWHAT
- 5 STRONGLY OPPOSE

\* 99 NA

#### CCON1

"On another topic, we are interested in how people are getting along financially these days. Would you say that you and your family living there are BETTER OFF or WORSE OFF financially than you were a year ago?"

- 1 BETTER OFF
- 2 ABOUT THE SAME (VOLUNTEERED)
- 3 WORSE OFF
- 98 DON'T KNOW / NOT SURE
- \* 99 NA / REFUSED

#### CCON2

"Now, looking ahead -- do you think that a year from now you and your family will be better off financially ... or worse off ... or just about the same?"

- 1 BETTER OFF FINANCIALLY
- 2 WORSE OFF
- 3 JUST ABOUT THE SAME (VOLUNTEERED)
- 98 DK (PROBE: REPEAT QUESTION)
- \* 99 NA

#### CCON3NH

"What about business conditions in the New Hampshire as a whole --do you think that during the next twelve months we'll have good times financially, or bad times, or what?"

- 1 GOOD TIMES
- 2 GOOD, WITH QUALIFICATIONS
- 3 PRO-CON, SOME GOOD SOME BAD
- 4 BAD, WITH QUALIFICATIONS
- 5 BAD TIMES
- 98 DK, UNCERTAIN (PROBE: REPEAT QUESTION)
- \* 99 NA

### CCON3US

"Now turning to business conditions in the country as a whole --do you think that during the next twelve months we'll have good times financially, or bad times, or what?"

- 1 GOOD TIMES
- 2 GOOD, WITH QUALIFICATIONS
- 3 PRO-CON, SOME GOOD SOME BAD
- 4 BAD, WITH QUALIFICATIONS
- 5 BAD TIMES
- 98 DK, UNCERTAIN (PROBE: REPEAT QUESTION)
- \* 99 NA

#### **UNHSC**

#### CCON4

"Looking ahead, which would you say is more likely – that in the country as a whole we will have continuous GOOD TIMES during the next FIVE YEARS or so, or that we will have periods of WIDESPREAD UNEMPLOYMENT or DEPRESSION, or what?"

- 1 CONTINUOUS GOOD TIMES
- 2 MIXED
- 3 WIDESPREAD UNEMPLOYMENT/DEPRESSION
- 98 DK, UNCERTAIN
- \* 99 NA / REFUSED

#### CCON5

"Now thinking about the big things people buy for their home -- such as furniture, a refrigerator, a stove, televisions and things like that. Generally speaking, do you think now is a GOOD or BAD time for people to buy MAJOR HOUSEHOLD ITEMS?"

- 1 GOOD TIME
- 2 PRO-CON
- 3 BAD TIME
- 98 DK (PROBE: REPEAT QUESTION)
- \* 99 NA

# **TRACKUS**

"Do you think things in this country are generally going in the right direction or are they seriously off on the wrong track?"

- 1 RIGHT DIRECTION
- 2 WRONG TRACK
- 98 DK (PROBE: REPEAT QUESTION)
- \* 99 NA

### MIP

"Let's turn to the State of New Hampshire ... There are many problems facing the STATE OF NEW HAMPSHIRE today. In general, what do you think is the most IMPORTANT problem facing the STATE OF NEW HAMPSHIRE today?" (PROBE: "Could you be more SPECIFIC or give me an example?")

RECORD:			

- 98 DK / NOT SURE PROBE: REREAD QUESTION
- \* 99 NA / REFUSED

#### **GOVAPP**

"GENERALLY SPEAKING, do you approve or disapprove of the way Governor Benson is handling his job as governor?"

(IF APPROVE): "Would you say that you STRONGLY approve of the way he is handling his job as governor, or that you approve only SOMEWHAT?"

(IF DISAPPROVE): "Would you say that you STRONGLY disapprove of the way he is handling his job as governor, or that you disapprove only SOMEWHAT?"

(IF NEITHER, NOT SURE, DK): "Would you say that you lean a little more toward APPROVING or DISAPPROVING of the way he is handling his job as governor?"

- 1 STRONGLY APPROVE
- 2 APPROVE SOMEWHAT
- 3 LEAN TOWARD APPROVING
- 4 NEITHER, NOT SURE, DK
- 5 LEAN TOWARD DISAPPROVING
- 6 DISAPPROVE SOMEWHAT
- 7 STRONGLY DISAPPROVE
- \* 99 NA

#### **TRACKNH**

"Do you think things in New Hampshire are generally going in the right direction or are they seriously off on the wrong track?"

- 1 RIGHT DIRECTION
- 2 WRONG TRACK
- 98 DK (PROBE: REPEAT QUESTION)
- \* 99 NA

#### **NHEP**

#### NHEP1

"Now I'd like to ask you a question about estuaries. Do you think you could define, in your own words, what an estuary is?" IF YES: "How would you define an estuary?"

RECORD:			

- 98 DK / NOT SURE PROBE: REREAD QUESTION
- \* 99 NA / REFUSED

#### SB1

"Now we're going to talk about a different subject – child safety seats and seat belts in cars. Recently, a law was passed in New Hampshire that raised the age that required children to ride in child safety seats to 6 years old. Do you definitely remember hearing or reading about this ... do you vaguely recall hearing about this ... or have you never heard about this before?"

- 1 DEFINITELY REMEMBER HEARING
- 2 VAGUELY RECALL HEARING
- NEVER HEARD BEFORE → SKIPTO SB3 3
- DON'T KNOW DO NOT PROBE → SKIPTO SB3 98
- 99 NA / REFUSED → SKIPTO SB3

#### SB2

"Where have you heard about or seen this new law?" "Anywhere else?"

# DO NOT READ LIST. CLICK ALL THAT APPLY

- 1 TV
- 2 **RADIO**
- 3 **NEWSPAPER**
- 4 **MAGAZINE**
- 5 **NEWSLETTER**
- 6 SCHOOL / CHILD CARE CENTER
- 7 DOCTORS OFFICE / CLINIC
- 8 FRIEND / RELATIVE / CO-WORKER / NEIGHBOR
- 9 AT A STORE
- AT THE LIBRARY 10
- 11 OTHER (SPECIFY)
- 98 DK / NOT SURE
- 99 NA / REFUSED

# SB3

"Current New Hampshire law ONLY requires the use of seat belts by occupants until the age of 18. Would you favor or oppose a law requiring that ALL vehicle occupants use seat belts, if the vehicle has them?"

IF FAVOR, ASK: "Is that strongly, or somewhat?" IF OPPOSE, ASK: "Is that strongly, or somewhat?"

- STRONGLY FAVOR 1
- 2 SOMEWHAT FAVOR
- 3 NEUTRAL – VOLUNTEERED
- 4 OPPOSE SOMEWHAT
- 5 OPPOSE STRONGLY
- 98 DON'T KNOW
- 99 **REFUSED**

#### **NHFAV**

"Next, I'd like to get your overall opinion of some people in the news. As I read each name, please say if you have a favorable or unfavorable opinion of this person -- or if you have never heard of him or her. First, ... how about...

#### **ROTATE NHFAV1 TO NHFAV14**

#### NHFAV1

"New Hampshire Congressman Charlie Bass." (READ IF NECESSARY) "Would you say you have a favorable or unfavorable opinion of him?"

- 1 FAVORABLE
- 2 NEITHER FAVORABLE OR UNFAVORABLE VOLUNTEERED
- 3 UNFAVORABLE
- 98 DK / NEVER HEARD OF / KNOW TOO LITTLE TO SAY
- \* 99 NA / REFUSED

NHFAV2	"Governor	Craig	Benson."
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NHFAV3 "President George W. Bush."

NHFAV4 "New Hampshire Senator Judd Gregg."

NHFAV5 "New Hampshire Congressman Jeb Bradley."

NHFAV6 "New Hampshire Senator John E. Sununu."

NHFAV7 "Dublin activist Doris Haddock."

NHFAV8 "Concord Attorney Paul Hodes."

NHFAV9 "State Representative Paul McEachern."

NHFAV10 "Massachusetts Senator John Kerry."

NHFAV11 "Hopkinton Businessman John Lynch."

NHFAV12 "Portsmouth Attorney Justin Nadeau."

NHFAV13 "State Representative Mark Brady."

NHFAV14 "Consumer activist Ralph Nader."

#### **REGVOTE**

"Are you registered to vote at your current address?" IF YES: "Are you registered as a Democrat, Independent, Republican or something else?"

- 1 REGISTERED DEMOCRAT
- 2 REGISTERED INDEPENDENT / UNAFFILIATED
- 3 REGISTERED REPUBLICAN
- 4 REGISTERED OTHER
- 8 NOT REGISTERED / DK (DO NOT PROBE)
- \* 9 NA / REFUSED

#### **NOVINT**

"As you know, the election for President is being held in November, 2004. How interested would you say you are in the November Presidential election ... extremely interested ... very interested ... somewhat interested ... or not very interested?"

- 1 EXTREMELY INTERESTED
- 2 VERY INTERESTED
- 3 SOMEWHAT INTERESTED
- 4 NOT VERY INTERESTED
- 98 DK (DO NOT PROBE)
- \* 99 NA

#### P3

"Which of the following statements best describes you ... (READ NUMBERS 1 TO 5)

- 1 I will probably NOT vote in the 2004 Presidential election,
- 2 I MAY vote in the Presidential election,
- 3 Unless some emergency comes up, I WILL vote in the Presidential election,
- 4 I will DEFINITELY vote in the 2004 Presidential election, or
- 5 I just don't know at this time." -- SKIP TO PRESUS
- \* 99 NA/REFUSED

# PRESUS1

"Now, suppose the 2004 presidential election was being held TODAY. If you had to choose between George W. Bush, the Republican and John Kerry, the Democrat, whom would you vote for? ROTATE CANDIDATES

- 1 GEORGE W. BUSH
- 2 JOHN KERRY
- 3 RALPH NADER (VOLUNTEERED)
- 4 OTHER
- 5 WILL NOT VOTE (VOLUNTEERED)
- 98 DK / UNSURE (PROBE: REPEAT QUESTION)
- \* 99 NA / REFUSED

#### PRESUS2

"Now, suppose the 2004 presidential election was being held TODAY and the candidates were George W. Bush, the Republican ... John Kerry, the Democrat ... and Ralph Nader, the Independent, whom would you vote for? ROTATE CANDIDATES

- 1 GEORGE W. BUSH 2 JOHN KERRY 3 RALPH NADER 4 **OTHER** 5 WILL NOT VOTE (VOLUNTEERED)
- 98 DK / UNSURE (PROBE: REPEAT QUESTION)
- 99 NA / REFUSED

#### WINNER

"Regardless of whom you plan to vote for, who do you think will win the election: George W. Bush or John Kerry?" **ROTATE CANDIDATES** 

- 1 GEORGE W. BUSH
- 2 JOHN KERRY
- 3 **OTHER**
- 4 WILL NOT VOTE
- 98 DK / UNSURE (PROBE: REPEAT QUESTION)
- 99 NA / REFUSED

#### **MIPUS**

"Of the following list, which one of these will be the single most important issue in your vote for president this year: the U.S. campaign against terrorism, the war in Iraq, the economy and jobs, education health care, Medicare and prescription drugs, Social Security or something else?"

- THE ECONOMY AND JOBS 1
- 2 IRAO
- 3 CAMPAIGN AGAINST TERRORISM
- 4 EDUCATION
- 5 HEALTH CARE
- 6 MEDICARE AND PRESCRIPTION DRUGS
- 7 SOCIAL SECURITY
- 8 OTHER (SPECIFY)
- 98 DK /NOT SURE (PROBE: REPEAT QUESTION)
- 99 NA/REFUSED

#### **VICEP**

"As you may know, John Kerry recently named North Carolina Senator John Edwards as his running mate. Are you more likely or less likely to vote for Kerry now that Edwards is the Democratic candidate for Vice President?"

- 1 MORE LIKELY
- 2 LESS LIKELY
- 98 DK /NOT SURE (PROBE: REPEAT QUESTION)
- 99 NA/REFUSED

# **ROTATE GOV1 AND GOV2**

# GOV1

"Now, suppose the 2004 New Hampshire gubernatorial election was being held TODAY and the candidates were Craig Benson, the Republican and John Lynch, the Democrat. Who would you vote for ... Craig Benson or John Lynch?" ROTATE CANDIDATES

- 1 CRAIG BENSON
- 2 JOHN LYNCH
- 3 OTHER
- 4 WILL NOT VOTE (VOLUNTEERED)
- 98 DK / UNSURE (PROBE)
- 99 NA / REFUSED

#### GOV2

"And suppose the 2004 New Hampshire gubernatorial election was being held TODAY and the candidates were Craig Benson, the Republican and Paul McEachern the Democrat. Who would you vote for ... Craig Benson or Paul McEachern?" ROTATE CANDIDATES

- 1 CRAIG BENSON
- 2 PAUL MCEACHERN
- 3 OTHER
- 4 WILL NOT VOTE (VOLUNTEERED)
- 98 DK / UNSURE (PROBE: REPEAT QUESTION)
- \* 99 NA / REFUSED

# ROTATE GOV3 AND GOV4 GOV3

"And as you may know, Paul McEachern favors a state income tax and Craig Benson opposes an income tax. Knowing this ... who would you vote for ... Craig Benson, the Republican or Paul McEachern, the Democrat?" ROTATE CANDIDATES

- 1 CRAIG BENSON
- 2 PAUL MCEACHERN
- 3 OTHER
- 4 WILL NOT VOTE (VOLUNTEERED)
- 98 DK / UNSURE (PROBE: REPEAT QUESTION)
- \* 99 NA / REFUSED

# GOV4

"And as you may know, John Lynch opposes a state income tax and Craig Benson opposes an income tax. Knowing this ... who would you vote for ... Craig Benson, the Republican or John Lynch, the Democrat?" ROTATE CANDIDATES

- 1 CRAIG BENSON
- 2 JOHN LYNCH
- 3 OTHER
- 4 WILL NOT VOTE (VOLUNTEERED)
- 98 DK / UNSURE (PROBE: REPEAT QUESTION)
- \* 99 NA / REFUSED

#### **SENUS**

"Now, suppose the 2004 election for U.S. Senator for New Hampshire was being held TODAY. If you had to choose between Judd Gregg, the Republican or Doris Haddock, the Democrat, whom would you vote for? ROTATE CANDIDATES

- 1 JUDD GREGG
- 2 DORIS HADDOCK
- 3 OTHER
- 4 WILL NOT VOTE (VOLUNTEERED)
- 98 DK / UNSURE (PROBE: REPEAT QUESTION)
- \* 99 NA / REFUSED

# CONGONE (1<sup>st</sup> District)

"Now, suppose the 2004 election for the U.S. House of Representatives from the FIRST DISTRICT was being held TODAY. If you had to choose between Jeb Bradley, the Republican or Justin Nadeau, the Democrat, whom would you vote for?" ROTATE CANDIDATES

- 1 JEB BRADLEY 2 JUSTIN NADEAU
- 3 **OTHER**
- 4 WILL NOT VOTE (VOLUNTEERED)
- DK / UNSURE (PROBE: REPEAT QUESTION) 98
- 99 NA / REFUSED

# CONGTWO (2<sup>nd</sup> District)

"Now, suppose the 2004 election for the U.S. House of Representatives from the SECOND DISTRICT was being held TODAY. If you had to choose between Charlie Bass, the Republican or Paul Hodes, the Democrat, whom would you vote for?" ROTATE CANDIDATES

- 1 **CHARLIE BASS**
- 2 **PAUL HODES**
- 3 **OTHER**
- 4 WILL NOT VOTE (VOLUNTEERED)
- 98 DK / UNSURE (PROBE: REPEAT QUESTION)
- 99 NA / REFUSED

# PL1

"Which of the following statements best describes you ... I never vote in elections for local political offices ... I sometimes vote in local elections ... I usually vote in local elections ... or I always vote in local elections."

- 1 NEVER VOTE IN LOCAL ELECTIONS
- 2 SOMETIMES VOTE IN LOCAL ELECTIONS
- USUALLY VOTE IN LOCAL ELECTIONS 3
- 4 ALWAYS VOTE IN LOCAL ELECTIONS
- 7 NOT REGISTERED TO VOTE (VOLUNTEERED)
- 98 DON'T KNOW (DO NOT PROBE)
- 99 NA / REFUSED

#### PL2

"I'd like to ask you some questions about the 2004 New Hampshire primary. Some people don't pay much attention to political campaigns. Others pay more attention. How about you? How much attention did you to pay to the 2004 New Hampshire primary campaign -- a lot, some, not much, or none at all?

- 1 A LOT
- 2 SOME
- 3 NOT MUCH
- 4 NONE AT ALL
- 98 DON'T KNOW PROBE: REREAD QUESTION
- 99 NA/REFUSED

# PL3

"As you know, there are many ways in which the candidates attempt to win the support of voters. We would like to know if you had any of the following contacts with candidates during the primary campaign."

"Did you personally attend a rally, speech, or other event on behalf of any of the presidential candidates during the primary campaign?"

- 1 YES
- 2 NO
- 98 DON'T KNOW / DON'T REMEMBER (DO NOT PROBE)
- 99 NA/REFUSED

# PL4

"Did you personally shake hands with any of the presidential candidates during the primary campaign?"

- 1 YES
- 2 NO
- 98 DON'T KNOW / DON'T REMEMBER (DO NOT PROBE)
- 99 NA / REFUSED

### PL5

"Did you personally make a campaign contribution to any of the presidential candidates during the primary campaign?"

- 1 YES
- 2 NO
- 98 DON'T KNOW / DON'T REMEMBER (DO NOT PROBE)
- 99 NA / REFUSED

# PL6

"Did you watch any of the presidential debates held in New Hampshire during primary campaign?"

- 1 YES
- 2 NO
- 98 DON'T KNOW / DON'T REMEMBER - (DO NOT PROBE)
- 99 NA / REFUSED

#### PL7

"How important do you think the New Hampshire Primary is to the State of New Hampshire ... very important ... somewhat important ... not too important ... or not important at all?"

- 1 VERY IMPORTANT
- 2 SOMEWHAT IMPORTANT
- 3 NOT TOO IMPORTANT
- 4 NOT IMPORTANT AT ALL
- DON'T KNOW PROBE: REREAD QUESTION 98
- 99 NA / REFUSED

# PL8

"How important do you think the New Hampshire Primary is to you personally ... very important ... somewhat important ... not too important ... or not important at all?"

- 1 **VERY IMPORTANT**
- 2 SOMEWHAT IMPORTANT
- 3 NOT TOO IMPORTANT
- 4 NOT IMPORTANT AT ALL
- 98 DON'T KNOW - PROBE: REREAD QUESTION
- 99 NA / REFUSED

#### PL9

"What is the MOST IMPORTANT benefit of the New Hampshire primary for the State of New Hampshire?"

- 1 **BRINGS IN MONEY**
- 2 STATE ON NATIONAL TV NEWS / VISIBILITY FOR STATE
- 3 GET TO SEE CANDIDATES
- 4 INCREASES POLITICAL INTEREST / VOTE TURNOUT
- 5 GET "PORK" FROM CANDIDATES
- 6 CREATES JOBS, BRINGS IN MONEY TO STATE
- 7 CIVICS LESSON / TEACHES KIDS ABOUT ELECTIONS & GOVT
- 8 NH HAS INFLUENCE ON CHOICE OF PRESIDENT
- 90 OTHER {SPECIFY}
- 98 DON'T KNOW - PROBE: "In general ..."
- 99 NA / REFUSED

#### PL10

"There has been some talk recently about changing the primary election system in the United States. If New Hampshire does NOT vote first, how much impact do you think that will have on the State of New Hampshire ... a great impact ... a moderate impact ... little impact ... or no impact at all?"

- **GREAT IMPACT** 1
- 2 MODERATE IMPACT
- 3 LITTLE IMPACT
- 4 NO IMPACT
- 98 DON'T KNOW - PROBE: REREAD QUESTION
- 99 NA / REFUSED

# PL11

"In 2004, the presidential primaries were held earlier in the year and closer together. This is called 'front-loading'. In your opinion, how has front-loading affected the process of nominating presidential candidates ... has it had a very positive impact on the presidential selection process ... a somewhat positive impact ... no impact at all ... a somewhat negative impact ... a very negative impact ... or do you know too little about this to say?"

- 1 VERY POSITIVE IMPACT
- 2 SOMEWHAT POSITIVE IMPACT
- 3 NEITHER POSITIVE OR NEGATIVE
- 4 SOMEWHAT NEGATIVE IMPACT
- 5 VERY NEGATIVE IMPACT
- 98 DON'T KNOW / KNOW TOO LITTLE TO SAY - (DO NOT PROBE)
- 99 NA / REFUSED

D1.

"Now, a few final questions . . ."

"Are you currently married, widowed, divorced, separated, or have you never been married?"

- 1 MARRIED (INCLUDE COMMON LAW MARRIAGE & SPOUSE AWAY IN MILITARY)
- 2 **WIDOWED**
- 3 **DIVORCED**
- 4 **SEPARATED**
- 5 NEVER MARRIED (INCLUDING ANNULMENTS)
- LIVING TOGETHER NOT MARRIED (VOLUNTEERED)
- 99 NA / REFUSED

D2.

"Are you or any other person in your household a member of a labor union?"

- 1 YES
- 2 NO

98 DK (DO NOT PROBE)

NA / REFUSED

D3.

"What is the highest grade in school, or level of education that you've completed and got credit for ..." [READ RESPONSES]

- 1 "Eighth grade or less,
- 2 Some high school,
- 3 High school graduate, (INCLUDES G.E.D.)
- 4 Technical school,
- Some college, 5
- College graduate, 6
- Or postgraduate work?" 7
- 98 DK (DO NOT PROBE)
- 99 NA / REFUSED

#### D4.

"GENERALLY SPEAKING, do you usually think of yourself as a Republican, a Democrat, an Independent or what?"

(IF REPUBLICAN): "Would you call yourself a STRONG Republican or a NOT VERY STRONG Republican?"

(IF DEMOCRAT): "Would you call yourself a STRONG Democrat or a NOT VERY STRONG Democrat?"

(IF INDEPENDENT, NO PREFERENCE, OR OTHER): "Do you think of yourself as closer to the Republican or to the Democratic party?"

- 1 STRONG DEMOCRAT
- 2 NOT VERY STRONG DEMOCRAT
- 3 INDEPENDENT, BUT CLOSER TO DEMOCRATS
- INDEPENDENT--CLOSER TO NEITHER 4
- INDEPENDENT, BUT CLOSER TO REPUBLICANS 5
- NOT VERY STRONG REPUBLICAN 6
- 7 STRONG REPUBLICAN
- 8 **OTHER PARTY**
- 99 DK / NA / REFUSED

#### D5

"Think back to the New Hampshire Primary election for President in 2004. Did you vote in the Republican Primary or the Democratic Primary in 2004 or did you skip that election?

IF VOTED in DEMOCRATIC PRIMARY: "Did you vote for Wesley Clark ... Howard Dean ... John Edwards ... John Kerry ... Joe Lieberman, or some other candidate?"

- 1 WESLEY CLARK
- 2 **HOWARD DEAN**
- 3 JOHN EDWARDS
- 4 JOHN KERRY
- 5 JOE LIEBERMAN
- 6 OTHER DEMOCRAT
- 7 **VOTED IN GOP PRIMARY**
- 9 DID NOT VOTE IN PRIMARY
- 98 DK / NOT SURE
- 99 NA / REFUSED

"We hear a lot of talk these days about liberals and conservatives. What about yourself--that is, in politics, do you generally think of yourself as a liberal, a moderate, or a conservative?" (PROBE: "In general . . .")

(IF LIBERAL): "Would you say you are EXTREMELY liberal, FAIRLY liberal, or just SOMEWHAT liberal?"

(IF CONSERVATIVE): "Would you say you are EXTREMELY conservative, FAIRLY conservative, or just SOMEWHAT conservative?"

(IF MODERATE MIDDLE OF THE ROAD): "Would you say that you LEAN a little more toward the LIBERAL side or the CONSERVATIVE side?"

- 1 EXTREMELY LIBERAL
- 2 FAIRLY LIBERAL
- 3 SOMEWHAT LIBERAL
- 4 MODERATE--LEANS LIBERAL
- 5 MODERATE--LEANS NEITHER
- MODERATE--LEANS CONSERVATIVE
- SOMEWHAT CONSERVATIVE
- 8 FAIRLY CONSERVATIVE
- **EXTREMELY CONSERVATIVE** 9
- 97 REFUSED
- 98 DK (PROBE: "In general . . . ")
- 99 NA / REFUSED

D7

"What is your religious preference? Is it Protestant, Catholic, Jewish, some other religion, or no religion?"

- 1 **PROTESTANT**
- 2 **CATHOLIC**
- 3 **JEWISH**
- 4 NONE, NO PREFERENCE
- 5 OTHER (SPECIFY)
- 7 **REFUSED**
- 98 DON'T KNOW / NOT SURE
- 99 NA

"How often do you attend religious services apart from occasional weddings, baptisms, or funerals ... more than once a week ... once a week ... once or twice a month ... a few times a year ... or never?"

- 1 MORE THAN ONCE A WEEK
- 2 ONCE A WEEK
- 3 ONCE OR TWICE A MONTH
- 4 A FEW TIMES A YEAR
- 5 **NEVER**
- 98 DK (DO NOT PROBE)
- 99 NA / REFUSED

"What is your current age?"

: : : (RECORD EXACT NUMBER OF YEARS OLD -- E.G., 45)

- 95 NINETY-FIVE YEARS OF AGE OR OLDER
- 97 **REFUSED**
- 98 DK
- NA 99

# D10

"How many years have you lived in the State of New Hampshire?"

IF "ALL MY LIFE" ASK – "About how many years is that?"

#### RECORD EXACT NUMBER OF YEARS OF RESIDENCE



- 1 ONE YEAR OR LESS
- 96 96 YEARS OF MORE
- 97 **REFUSED**
- 98 DK
- 99 NA

# D11

"How many of the persons who CURRENTLY live in your household are under 18 years of age, including babies and small children?"

- 0 **NONE**
- 1 ONE
- 2 TWO
- 3 **THREE**
- 4 **FOUR**
- 5 **FIVE**
- 6 SIX
- 7 SEVEN OR MORE
- 98 DK
- 99 NA / REFUSED

"Including yourself, how many adults CURRENTLY live in your household?"

- 1 **ONE**
- 2 TWO
- 3 **THREE**
- 4 **FOUR**
- 5 **FIVE**
- 6 SIX
- 7 SEVEN OR MORE
- 98 DK
- 99 NA / REFUSED

# D13

"Do you own or rent your home?"

- 1 **OWN**
- 2 **RENT**
- 98 DON'T KNOW -- DO NOT PROBE
- 99 NA / REFUSED

# D14

"How much TOTAL income did you and your family receive in 2003, not just from wages or salaries but from ALL sources -- that is, before taxes and other deductions were made? Was it ... " (READ CATEGORIES)

		ANNUAL	MONTHLY EQUIVALENT
	1	Less than \$15,000,	LESS THAN \$1,250
	2	\$15,000 - \$29,999,	\$1,250 - \$2,499
	3	\$30,000 - \$44,999,	\$2,500 - \$3,749
	4	\$45,000 - \$59,999,	\$3,750 - \$4,999
	5	\$60,000 - \$74,999,	\$5,000 - \$6,249
	6	\$75,000 - \$99,999, or	\$6,250 - \$8,333
	7	\$100,000 and over?"	\$8,334 AND OVER
	97	REFUSED	
	98	DK	
*	99	NA	

"Not counting business lines, extension phones, or cellular phones -- on how many different telephone NUMBERS can your household be reached?"

- 1 ONE
- 2 TWO
- 3 **THREE**
- 4 **FOUR**
- 5 **FIVE**
- 6 SIX
- 7 SEVEN OR MORE
- 98 DK
- 99 NA / REFUSED

# D16

"Finally, would you be willing to be interviewed by a reporter to discuss your reactions to some of the topics we've been talking about?"

- 1 YES--"Could I have just your first name in case a reporter wants to call you?"
- 2 NO / DK (DO NOT PROBE)
- 99 NA / REFUSED

<sup>&</sup>quot;Thank you for your time and participation. Your input has been very valuable. Goodbye."

# How Many People in New Hampshire Can Define the Word "Estuary"?



# **Answer: Eleven Percent (11%)**

### Why Is This Study Needed?

Many Action Plans in the New Hampshire Estuaries Project's (NHEP) Management Plan call for public outreach materials. A critical part of developing public outreach materials is understanding what the public knows about the organization. If a person has never heard of the NHEP before, his/her only clue as to what the NHEP does is the organization's name. Therefore, for the NHEP to develop effective public outreach materials it is important to know if the public understands its name - especially the word "Estuaries". In addition to developing better outreach materials for the NHEP, this study may also help other organizations that have the word "estuary" in their name, such as the National Estuary Program and the National Estuarine Research Reserve. Finally, this study provides baseline data that may be used to evaluate outreach activity.

# How Was This Study Conducted?

The University of New Hampshire's Survey Center conducts a quarterly poll of adults in the state of New Hampshire using Random Digit Dialing, which creates a list of randomly generated residential telephone numbers. These numbers are called by an interviewer from a centrally supervised facility. The interviewer randomly selects a household member by asking to speak with the adult currently living in the household who has had the most recent birthday. No substitutions are allowed. The survey included 76 questions on a broad range of topics. The "estuary" question appeared in the middle of the survey, after questions about state politics.

# What Question Was Asked In the Survey?

The interviewer asked "Now I'd like to ask you a question about estuaries. Do you think you could define, in your own words, what an estuary is?" If the respondent said yes, then the interviewer asked "How would you define an estuary?"

# Do People Know What an Estuary Is?

Eleven percent (11%) of respondents were able to correctly define an estuary as a place where fresh and salt water mix or by giving an example of an estuary. Three percent (3%) defined it as a coastal waterbody, while nineteen percent (19%) gave a general water-related response. Six percent (6%) of the respondents gave a nature-related response, but were unable to link

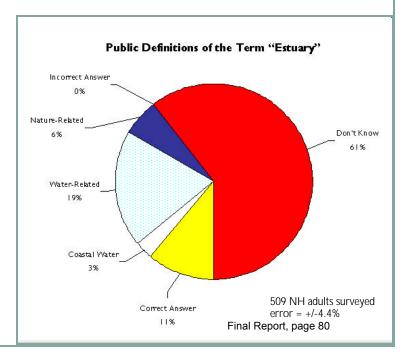
the word to water resources. Although four (4) people gave incorrect answers, the survey reported that zero percent (0%) of the respondents were incorrect. Sixty-one percent (61%) of New Hampshire residents said that they could not define an estuary.

# Who Was Most Likely to Know What an Estuary Is?

Respondents with postgraduate work and people who have lived in New Hampshire 2 years or less were most likely to have given the correct definition of an estuary.

# Who Was Least Likely to Know What an Estuary Is?

In general, younger adults that live furthest from the coast were least likely to know what an estuary is. A notable exception occurred in Zone B towns (see the back of this sheet).





#### When Was The Interviewing Done?

New Hampshire adults were interviewed between July 6 and July 20, 2004. Telephone calls during the field period were made between 10:00 AM and 9:00 PM.

# What Was The Response Rates and Margin of Error?

Attempts were made to contact four thousand nine hundred eighty-two (4,982) New Hampshire adults. Response rates were as follows: <u>completed</u> interviews (10%), refusals (18%), subject unavailable during interviewing period (48%), and invalid telephone number (23%). Five hundred and nine (509) people completed the survey and two hundred and four (204) people attempted to define the word "estuary". The margin for error in the study is +/- 4.4%.

# How Were the Responses Documented?

The responses were transcribed and coded by Survey Center personnel and validated by NHEP staff. Responses were coded into six categories: <u>Correct</u> (described as fresh and saltwater mixing and/or gave an estuarine example), <u>Coastal Water</u> (described as a waterway on the coast - no mention of fresh and salt water mixing), <u>Water-related</u>

(described water resources, such as a pond or wetland), <u>Nature-related</u> (described as a natural resource with no mention of water), <u>Incorrect</u>, and <u>Do Not Know/Refusal</u>.

# What Are Some Other Interesting Findings?

- Of the people who said that they could define an estuary, eleven percent (11%) referred to protected lands and eight percent (8%) of the people referred to birds, suggesting that some people confuse the term "estuary" with "sanctuary" or "aviary".
- The coastal watershed of New Hampshire is divided into two zones: Zone A with communities that boarder tidally-influenced waterways and Zone B that are located further up the watershed. As expected, the highest percentage of respondents able to correctly define an estuary came from Zone A towns (19%), however, people living in Zone B towns were much less likely to correctly define an estuary (4%) verses respondents from the rest of the state (10%).
- There is little difference in the ability of adults to correctly define the word "estuary" across geographic regions. Regional results for correct responses were northern (11%), Western (10%), Central (7%), South (11%), Seacoast (13%). Residents in the north were most likely to attempt a definition of estuary (47%), where as residents in the western part of the state were least likely to attempt a definition (24%).

#### What Are Some Conclusions?

If given only the name of the organization, the majority of the people in New Hampshire would not know what the NHEP does. This is especially significant in the Seacoast region where forty-three percent (43%) of the people did not attempt to give a definition of an estuary. This study suggests that public outreach efforts should initially be focused on Zone B communities, which only had 4% of the people correctly defining an estuary. Additionally, public outreach messages should emphasize the "freshwater meets saltwater" definition of an estuary and take care not to give the impression that estuaries are only related to birds or are already protected. Plans have been made to survey all Planning Board Members, Conservation Commissioners, and other local decision-makers in coastal watershed communities using this same survey question to better understand this key audience. Also, the study will be conducted again within the next two years to evaluate public outreach efforts.

# **Contact Information**

For more information about this study contact Dave Kellam, NHEP Principal Planner at 603-559-0022 or dkellam@des.state.nh.us. For more information about the NHEP go to www.nh.gov/nhep.



Final Report, page 81