Narragansett Bay Watershed
COASTAL TRAINING PROGRAM

An Assessment of the Training, Education and Outreach Needs of Municipal Volunteers in Rhode Island and those Massachusetts Communities within the Narragansett Bay Watershed

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TABLE OF CONTENTS

APPENDICES:

TABLES

Executive Summary

The Narragansett Bay National Estuarine Research Reserve (NBNERR) of the Rhode Island Department of Environmental Management, Rhode Island Sea Grant at the University of Rhode Island Coastal Resources Center (RISG/CRC), and the Environmental Protection Agency Region 1 (EPA) have established a strong partnership to maintain and improve the quality of our region's natural and cultural resources within the Narragansett Bay watershed. The project team will achieve this goal through the Narragansett Bay Watershed Coastal Training Program (CTP). The CTP will provide coastal decision-makers within the Narragansett Bay watershed with the necessary capacity to make informed decisions about how to use and manage Narragansett Bay and its watershed. The CTP will also serve as a forum to enhance coordination and communication among trainers and educators who will provide coastal decision-makers with technical support on issues relating to the Bay and its watershed.

Because 60% of Narragansett Bay and its watershed is located in Massachusetts, the project team, made up of staff from NBNERR, RISG/CRC and EPA, focused an initial needs assessment on municipal volunteers and staff in all 39 Rhode Island municipalities and 42 Massachusetts communities located within the Narragansett Bay watershed (Appendix 1).

Using paper surveys as well as a web-based survey, the project team distributed 1,148 surveys to the target population and received 205 surveys in return – a 19.1% return rate.

This document presents: 1) the methodology used to collect the data from municipal volunteers and staff; 2) an analysis of the 205 survey respondents as one overall group; 3) analyses of the three sub-groups with the most responses - council members/selectmen, planning board members, and conservation commission members; and 4) recommendations for providing training, education, and/or outreach to municipal volunteers and staff so that they may make better decisions for Narragansett Bay and its watershed.

Survey results suggest that municipal volunteers are serving as volunteers because they perceive their commitment of time and energy is a worthwhile endeavor for maintaining the quality of community life while encouraging appropriate growth. Because of the high response rate the project team assumes that there is a great desire for additional training, education, and outreach on specific topics. In addition, this survey also identifies that generally there is a need for the municipal volunteers and staff to better understand the social, economic and environmental significance of Narragansett Bay and the entire watershed system.

The Narragansett Bay watershed CTP should implement training, education and outreach on the preferred topics identified by each sub-group (Appendix 2). In all cases, information and training on the preferred topics should focus on the legal and planning techniques that will assist volunteers and staff in improving the planning and management as they relate to Narragansett Bay and its watershed. Biological information

should also be included to provide a basic understanding of the natural processes. The preferred topics include the following. Other important topics and techniques are stated in Appendix 2.

- Provide municipal volunteers and staff with information on wetlands ecology, impact of invasive species, endangered species in the community, urban sprawl, recreation/tourism development, and planning town-wide greenways (as they affect the Bay).

- Provide councilmen and selectmen with information on water quality and supply and recreation/tourism development (as it affects the Bay).

- Provide planning board members with information on planning town-wide greenways and recreation/tourism development (as it affects the Bay).

- Provide conservation commissions with information on planning town-wide greenways (as it affects the Bay), wetland ecology, impact of invasive species, and endangered species in the community.

Introduction

The Narragansett Bay National Estuarine Research Reserve (NBNERR) of the Rhode Island Department of Environmental Management, Rhode Island Sea Grant at the University of Rhode Island Coastal Resources Center (RISG/CRC), and the Environmental Protection Agency Region 1 (EPA) have established a strong partnership to maintain and improve the quality of our region's natural and cultural resources within the Narragansett Bay watershed. The project team will achieve this goal through the Narragansett Bay Watershed Coastal Training Program (CTP). The CTP will provide coastal decision-makers within the Narragansett Bay watershed with the necessary capacity to make informed decisions about how to use and manage Narragansett Bay and its watershed. The CTP will also serve as a forum to enhance coordination and communication among trainers and educators who will provide coastal decision-makers with technical support on issues relating to the Bay and its watershed.

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Municipal volunteers are required to make decisions that directly impact the health of Narragansett Bay and its watershed. Their decisions ideally meet citizen needs and desires for social well-being, economic development and natural resource protection, while also preserving and enhancing the unique character of the community. Municipal staff are responsible for making decisions and providing the volunteer councils, boards and commissions with the necessary technical assistance to make educated decisions for their community.

Municipal volunteers are defined in this needs assessment as individuals serving on conservation and harbor commissions, planning, economic development and zoning boards, municipal land trusts, school committees, Rhode Island councils, and Massachusetts selectmen. Municipal staff are defined as paid employees including planners, conservation agents, town clerks and managers.

Key components for the needs assessment include: 1) identification of topics that with further information and/or training may help municipal volunteers make better decisions concerning Narragansett Bay and its watershed; 2) preferred delivery formats for the major municipal volunteer sub-groups (e.g. conservation commissions, planning board members, town councils); 3) access to training (where and when is most convenient); and 4) identification of valued community characteristics.

Analysis and recommendations from this needs assessment will primarily focus on topics that directly relate to the health and management of the Bay. Other topics that are preferred by municipal volunteers and staff that rank high in the analysis however are not directly related to the health and management of the Bay will be mentioned, but recommendations will not be made.

Narragansett Bay and Rhode Island Coastal Watersheds
EPA Watershed Initiative Proposal

Methodology

Needs assessment activities proceeded in the following sequence:

1) **Database development and sampling:** A database of 1,148 municipal volunteers (700 from Rhode Island and 448 from Massachusetts) including 211 key staff (120 from Rhode Island and 91 from Massachusetts) was developed, using information from the existing Rhode Island Sea Grant database by the Audubon Society of Rhode Island, municipal web sites and listings provided by town or city clerks. Because this survey was implemented during municipal elections, the project team made a special effort to update the database to include the newly appointed volunteers.

2) **Survey development:** The project team identified questions they would like answered by municipal volunteers and staff. The team then asked other institutions if they had any questions about issues they would like incorporated into the survey that were not necessarily a priority for the CTP. As an example, many wanted to know if there was an interest by municipal volunteers and staff on the topic of affordable housing. These were incorporated for the benefit of these institutions.

   Once these questions were identified, the project team reviewed other NBNERR needs assessment surveys as well as a needs assessment survey for Rhode Island municipal volunteers which had been successfully implemented (19% response) in 2000 by the University of Rhode Island Cooperative Extension and Grow Smart Rhode Island. Based on this information, the project team developed a 10-question, 4-page paper survey that will help the project team identify the preferred topics and issues from this target audience and how they would like to receive this information.

3) **Pre-test survey:** Once the survey was designed, the project team submitted 5 surveys (2 paper and 3 internet; 2 to Massachusetts residents and 3 to Rhode Islanders) to test the length and the question content. Revisions were made based on responses.

4) **Survey execution:** On November 26, 2002, surveys were mailed to municipal volunteers and staff in the 39 Rhode Island and the 42 Massachusetts municipalities within the Narragansett Bay watershed. Once elections were finalized, surveys were mailed to the newly appointed volunteers. A total of 1,148 surveys were mailed - 448 to Massachusetts and 700 to Rhode Island. The survey was sent U.S. Post with a letter of explanation, the 4-page survey and a business reply self-addressed stamped envelope (Appendices 3 and 4). This survey was then modified for the web-based survey tool, SurveyMonkey.com (Appendix 5). It was available on the Rhode Island Sea Grant web page.

   The project team e-mailed the survey to 87 volunteers and staff as a reminder to either take the survey online or to send in their paper surveys. Project staff also randomly called approximately 200 individuals to encourage them to submit their survey. Supporting organizations including the Rhode Island Association of Conservation Commissions and the Massachusetts Association of Conservation

Commissions sent e-mails to their members to fill out the surveys. The project team also advertised the survey in the Rhode Island Statewide Planning e-mail newsletter with a direct link to the survey through the Rhode Island Sea Grant web page. Rhode Island Sea Grant highlighted the survey and supplied as a direct link.

5) **Thanking the participants:** In order to encourage a high response rate, those who returned a completed survey were entered into a drawing for prizes including an evening cruise on Narragansett Bay (15 winners received 2 tickets), guided field tours on Prudence Island, and gift certificates for admission and the gift store at the Audubon Environmental Center in Bristol, Rhode Island.

6) **Data analysis and reporting:** The survey was closed on January 15, 2003 with a total of 205 completed surveys (19.1% response rate), 144 from Rhode Island, 54 from Massachusetts and 7 unknown. 19.5% of those who responded (40) used the web based survey, while the remaining 165 were mailed or faxed back.

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The Results

Background

Most non-urban communities within the Narragansett Bay watershed and coastal Rhode Island increased their population during the past 10 years (Grow Smart Rhode Island, 1999 and Massachusetts News, 2001). This population growth has heightened pressures on schools, roads and other public utilities as well as the region's natural resources.

It is the responsibility of the municipal volunteers and staff to meet the needs and desires of this growing population while still upholding the goals and objectives of their community legal documents as well as state and federal laws and regulations. Usually these goals and objectives state the need to maintain the unique character and cultural, natural and social resources of the place and encourage compatible economic development.

Municipal volunteers are not required to receive training. Unless their professional lives are in the fields of land use planning, natural resources management or economic development, volunteers are often making land use, economic, social and environmental decisions for their community with minimal to average amounts of expertise on these issues. Expertise has been gained by trial and error during their tenure on the board or commission on which they sit.

Based on the survey responses, there is a demand for training, education and outreach in the categories of economic development/growth, planning/management, science, and public administration. This strong response from municipal volunteers and staff informs the project team that there is a demand and desire to receive training and information on many issues that will assist these volunteers in making better decisions for their communities.

Findings and recommendations

The following are recommendations for providing municipal volunteers and staff with future information and/or training to help them make better decisions concerning their community and region. The recommendations are based on the analyses of the survey results. Analysis and recommendations from this needs assessment will primarily focus on topics that directly relate to the health and management of the Bay. Other topics that are preferred by municipal volunteers and staff that rank high in the analysis however are not directly related to the health and management of the Bay will be mentioned, but recommendations will not be made.

The project team will first present the recommendations and findings for the overall group of 205. Findings and recommendations will then be presented for the three major survey sub-groups: 1) councilmen and selectmen; 2) planning boards; and 3) conservation commissions. Please see Appendix 6 for a breakdown of survey respondents.

The Overall Respondent Group

Overall group

The 205 respondents for this survey have dedicated a significant amount of time to uphold what they perceive as the vision of their community. Overall, the average length of service for Rhode respondents is 6.2 years and for Massachusetts 7.3 years (Table 1). In Rhode Island, planning board members constituted the group with the highest average of service years, dedicating an average of 8.5 years. On average, Massachusetts board and commission members have dedicated 7.3 years to public service. In Massachusetts, conservation commission members constituted the group with the highest average of service years, dedicating an average of 11 years.

Table 1. Length of service – overall (years).

Survey question: *How long have you served on your board or commission?*

Major Sub-groups	RI (avg. years)	MA (avg. years)
Councils/Selectmen	**5.9**	**5.7**
Planning Boards	**8.5**	**5.8**
Conservation Commissions	**6.2**	**11**
Other	**4.1**	**6.6**
Overall	**6.2**	**7.3**

**90.2% response rate*

Most respondents for the survey (RI: 115; MA: 42) represent non-urban communities (Table 2). Non-urban communities are characterized by low-gross density and slow population growth, while urban communities are characterized by high-gross density and no population growth (Bolioli, 2001).

Table 2. Response profile – overall (%).

Major Sub-groups	RI (144)		MA (54)	
	Non-urban	Urban	Non-urban	Urban
Councils/Selectmen	**22.9**	**5.9**	**12.5**	**8.9**
Planning Boards	**22.9**	**2.2**	**25**	**3.6**
Conservation Commissions	**18.8**	**4.2**	**2.9**	**22.9**
Other	**19.9**	**4.2**	**3.7**	**22.9**

**93.2% response rate*

According to the survey, most planning board members have received training (MA: 78.6%; RI: 55.6%), while only about half of the councils/selectmen have received training (MA: 14.3%; RI: 13.3%) (Table 3). Survey respondents indicate that universities, non-profits and state agencies have organized most of the trainings

(Appendix 7). The survey does not ask the quality, duration or usefulness of these trainings.

Table 3. Training received - overall (%).

Survey question: *Have you participated in training for your position in the past?*

Major Sub-groups	Received Training		No Training	
	MA	RI	MA	RI
Councils/ Selectmen	**14.3**	**13.3**	**8.9**	**15.6**
Planning Boards	**25**	**19.3**	**5.3**	**5.9**
Conservation Commissions	**23.2**	**14.1**	**3.6**	**8.9**
Other	**16.1**	**8.9**	**3.6**	**14**
Total	**78.6**	**55.6**	**21.4**	**44**

**83.4% response rate*

Recommendations for overall group

1. Link all training, education and outreach efforts to enhancement of community assets.

Preserving or enhancing community assets plays a major role in motivating volunteers and municipal staff to dedicate time and energy towards their communities. This motivation factor needs to figure highly when developing all future training, education and outreach efforts.

Valued community assets include rural character (43.5%), amount of open space (43.5%) and strong sense of community (34.5%) (Table 4). Rhode Islanders rank both amount of open space (46.3%) and rural character (44%) as their first and second responses. The third and fourth preferred responses for Rhode Islanders are strong sense of community (33.6%) and access to Narragansett Bay (31.1%). Massachusetts survey takers also identify rural character (45.3%) and amount of open space (39.6%) as two of their top four responses. Access to highways (47.2%), safe neighborhoods (43.4%) and strong sense of communities (39.6%) are the other high-ranked responses for Massachusetts.

According to the survey question about the value of waterbodies (Table 5), Rhode Islanders consider Narragansett Bay important (60%). The Taunton River (35.7%) is the most important waterbody for Massachusetts respondents. Specific waterbodies should be considered an important asset and used as a motivation to encourage people to attend events or learn about an issue.

Table 4. Valued community assets - overall (%).

Survey question: *What do you consider to be the three greatest assets of your community?*

Community Assets	RI	MA	Overall
Access to highways	**11.9**	**47.2**	**21.5**
Safe neighborhoods	**29.9**	**43.4**	**33**
Rural character	**44**	**45.3**	**43.5**
Amount of open space	**46.3**	**39.6**	**43.5**
Good schools	**26.1**	**32.1**	**27.2**
Access to Narragansett Bay	**31.1**	**11.3**	**25.1**
Access to rivers	**7.5**	**13.2**	**8.9**
Recreational opportunities	**29.9**	**11.3**	**24**
Strong sense of communities	**33.6**	**39.6**	**34.5**
Responsible local officials	**27.6**	**22.6**	**25.6**
Low taxes	**9.7**	**9.4**	**9.4**
Closeness to employment centers	**8.2**	**13.2**	**9.4**
Public transportation	**2.2**	**22.6**	**7.8**
Public services	**11.9**	**20.8**	**14.1**
Other (Appendix 8)	**6**	**3.8**	**5.2**

** 93.2% response rate*

Table 5. Waterbodies - overall (%).

Survey question: *Using the scale below, please rank how important these bodies of water are to you and your community in terms of contributing to the economic development and character of your community (Note: the scale ranks least important =1, somewhat important = 2, important = 3, very important = 4, and extremely important = 5)*

Waterbodies	RI	MA
Narrow River (RI)	**17.7**	**5.3**
Kickemuit River (RI)	**5.9**	**8.9**
Saugatucket River (RI)	**8.9**	**5.3**
Mt. Hope Bay (MA)	**25.9**	**17.8**
Blackstone River (RI/MA)	**9.6**	**17.8**
Taunton River (RI/MA)	**7.4**	**35.7**
Narragansett Bay (RI)	**60**	**25**
Woonasquatucket River (RI)	**3.7**	**5.3**
Rhode Island Salt Ponds (RI)	**34.1**	**5.3**
Pawtuxet River (RI)	**9.6**	**3.5**
Wood-Pawcatuck River (RI)	**25.1**	**3.5**
Ten-mile River (MA)	**5.2**	**12.5**

**93.2% response rate*

Note: The results were calculated by adding up the number of responses for each choice for extremely important, very important, and important and then a percentage was determined from the number of people who responded to this question.

2. Provide municipal volunteers and staff with information on wetlands ecology, impact of invasive species, endangered species in the community, urban sprawl, recreation/tourism development, and planning town-wide greenways (as they affect the Bay). Information should focus on the preferred legal and planning techniques that will assist volunteers and staff in improving the planning and management as they relate to Narragansett Bay and its watershed. Biological information should be included to provide a basic understanding of the natural processes.

Preferred Topics

The interest in wetlands ecology (overall: 55.8%; RI: 55.6%; MA: 66.3%), endangered species (overall: 43.1%; RI: 43.7%; MA: 46.9%), and impact of invasive species (overall: 46.8%; RI: 46.7%; MA: 53.1%) likely reflects that municipal volunteers and staff are frequently called upon to make decisions about these issues (Table 6). Recreation/tourism development (overall: 49.8%, RI: 54.2%; MA: 39.3%), urban sprawl (overall: 41.8%; RI: 40.1%; MA: 45.9%) and planning town-wide greenways (overall: 56.2%; RI: 53.5%; MA: 62.3%) are also topics that rank high (Table 7). Integrating affordable housing also ranks high (overall: 52%, RI: 50%; MA: 57.4%).

Table 6. Preferred scientific topics - overall (%).

***Survey question**: Mark the scientific topics for which you would be interested in receiving information and/or training.*

Scientific topics	RI	MA	Overall
Wetlands ecology	**55.6**	**63.3**	**55.8**
Impact of invasive species	**46.7**	**53.1**	**46.8**
Endangered species in the community	**43.7**	**46.9**	**43.1**
Nutrient loading	**36.3**	**40.8**	**36.3**
Riverine ecology	**26.7**	**46.9**	**31**
Habitat fragmentation	**28.1**	**42.9**	**31**
Renewable energy	**34.1**	**28.6**	**31.5**
Upland ecology	**21.5**	**34.7**	**24.2**
Beach and nearshore ecology	**34.1**	**18.4**	**28.9**
Natural hazards	**27.4**	**28.6**	**26.8**
Coastal processes	**29.6**	**20.4**	**26.3**
Estuarine ecology	**24.4**	**26.5**	**24.2**
Biodiversity	**20.7**	**28.6**	**22.1**
Global climate change	**15.6**	**8.2**	**13.1**
Offshore marine ecology	**9.6**	**8.2**	**8.9**
Other (Appendix 8)	**3.7**	**6.1**	**4.2**

**92.7% response rate*

Table 7. Preferred economic development/growth topics - overall (%).

***Survey question**: Mark the economic development/growth topics for which you would be interested in receiving information and/or training.*

Economic Development/Growth Topics	RI	MA	Overall
Recreation/Tourism development	**54.2**	**39.3**	**49.8**
Integrating affordable housing	**50**	**57.4**	**52**
Planning town-wide greenways	**53.5**	**62.3**	**56.2**
Urban sprawl	**40.1**	**45.9**	**41.8**
Brownfields development	**31**	**34.4**	**32**
Marina development and impacts	**33.1**	**18**	**28.5**
Dredging	**27.5**	**24.6**	**26.6**
Dredge disposal	**25.4**	**16.4**	**22.6**
Aquaculture development	**26.8**	**16.4**	**23.6**
Agriculture	**19.7**	**29.5**	**22.6**
Fisheries management	**17.6**	**16.4**	**17.4**
Port development	**16.9**	**9.8**	**14.7**
Other (Appendix 8)	**9.2**	**8.2**	**8.9**

**99% response rate*

Preferred Legal Techniques

Legal information provided to municipal volunteers and staff on the preferred topics listed above should consider focussing on the techniques ranked highest by this group. These techniques include extent of municipal authority under state-enabling legislation (60.6%), environmental laws and regulations – content and municipal use (59.5%), and making decisions based on comprehensive plan goals (55.5%) (Table 8). This reflects the respondent's interest in making good decisions within legal confines.

Table 8. Preferred public administration topics - overall (%).

Survey question: *Mark the public administration topics for which you would be interested in receiving information and/or training.*

Public Administration Topics	RI	MA	Overall
Extent of municipal authority under State enabling legislation	**63.6**	**56.4**	**60.6**
Environmental laws and regulations	**63.6**	**52.7**	**59.5**
Making decisions based on comprehensive plan goals	**60**	**47.3**	**55.5**
What municipalities can do to control construction and disturbance in wetland/shoreline buffers	**52.1**	**47.3**	**49**
Enforcement compliance	**49.3**	**56.4**	**50.5**
Strengthening wellhead and groundwater protection ordinances	**40**	**38.2**	**38.4**
Developing consistent land use goals and standards across town boundaries	**40.7**	**43.6**	**40.9**
Commercial/industrial environmental performance standards	**40**	**38.2**	**38.8**
What municipalities can do to better manage onsite wastewater treatment systems	**34.3**	**27.3**	**31.8**
Reading basic subdivision plans	**23.6**	**29.1**	**24.7**
Other (Appendix 8)	**3.6**	**5.5**	**4.0**

**96.6% response rate*

Preferred Planning Techniques

Planning information provided to municipal volunteers and staff on the preferred topics listed above should consider focussing on the planning techniques ranked highest by this sub-group. Preferred techniques for the overall group include analyzing natural features to develop or protect them (57.1%) (Table 9), and planning town-wide greenways (56.2%) (Table 7).

Table 9. Preferred planning/management topics - overall (%).

***Survey question**: Mark the planning/management topics for which you would be interested in receiving information and/or training.*

Planning/Management Topics	RI	MA	Overall
Analyzing natural features to develop or protect	**53.8**	**60.4**	**57.1**
How to incorporate water quality and supply issues into the planning process	**52.4**	**57.6**	**53.7**
Knowing what to ask to make sure design fits into landscape and neighborhood	**49**	**54.2**	**50.2**
Techniques to ensure habitat protection and restoration plans	**50.3**	**47.5**	**49.2**
Analyzing various design options in the earliest stages of review	**44.8**	**45.8**	**44.8**
Reducing impervious surfaces in a design	**42**	**49.2**	**43.8**
Watershed management	**39.2**	**47.5**	**41.4**
Storm water management	**42**	**62.7**	**47.8**
Ecological landscaping	**42.7**	**35.6**	**40.4**
Understanding the natural features of the site from maps and plans	**39.9**	**42.4**	**40.4**
Non-point source pollution	**31.5**	**33.9**	**32**
Incorporating public/coastal access in developments	**34.3**	**22**	**30.5**
Coastal zone management	**30.8**	**13.6**	**25.6**
Septic systems	**37.1**	**35.6**	**36.4**
Disaster response to natural hazards	**18.9**	**18.6**	**18.7**
Special area management	**9.8**	**13.6**	**10.8**
Other (Appendix 8)	**3.5**	**5.1**	**3.9**

**99% response rate*

Preferred Delivery Format

Rhode Island and Massachusetts respondents prefer to receive information through the following formats: fact sheets (RI: 78.3%; MA: 88.1%), workshops (RI: 74.1%; MA: 69.5%), web sites (RI: 67.1%; MA: 76.3%), and seminars (RI: 72.7%; MA: 67.8%) (Table 20).

Respondents prefer workshops to be held from 6:00 p.m. – 7:00 p.m. with a light meal on Tuesday and Thursdays (Table 11).

Table 10. Preferred delivery format - overall (%).

***Survey question**: Using the scale below, please rank how likely you are to make use of information offered in the following formats?*

Possible Delivery Formats	RI	MA
Fact Sheet	**78.3**	**88.1**
Web Site	**67.1**	**76.3**
Workshop	**74.1**	**69.5**
Pamphlet/Brochure	**69.9**	**69.5**
Demonstration	**67.1**	**57.6**
CD_ROMs	**48.3**	**55.9**
Seminar	**72.7**	**67.8**
Conference	**60.1**	**62.7**
Field Exercise	**58**	**50.8**
Video Tape	**51**	**37.3**
Distance Learning	**22.4**	**22**
Semester Course	**23.1**	**30.5**
Other (Appendix 8)	**4.9**	**6.8**

**99% response rate*
Note: The results were calculated by adding up the number of responses for each choice for extremely likely, very likely and likely and then a percentage was determined from the number of people who responded to this question.

Table 11. Time preference - overall.

***Survey question**: When would be the best time(s) for you to attend training programs? If sessions were held in the evening(s), which would be the best evenings to meet? What would be the best time(s) to start an evening sessions?*

Time Preference	RI	MA	Overall
Best time to attend programs **90.2% response rate*	**Two- to three-hour evening sessions**	**Two- to three-hour evening sessions**	**Two- to three-hour evening sessions**
Best evenings to meet **78.5% response rate*	**Tuesday/Thursday**	**Tuesday/Wednesday/ Thursday**	**Tuesday/Thursday**
Best time to start evening session **78% response rate*	**6:00 p.m. (w/ light meal)**	**6:00 p.m. (w/ light meal)**	**6:00 p.m. (w/ light meal)**

Councilmen and Selectmen

Local Legislators and Policy Makers

Councilmen/selectmen

Rhode Island councilmen and Massachusetts selectmen have the ultimate authority and responsibility to make decisions for the municipality they represent. These elected officials are responsible for making many of the most difficult decisions within their community, including ensuring the budget is balanced and that the social, economic and environmental needs of their communities are addressed. They consider advice from boards, commissions and professional staff, but ultimately make the final decisions.

Although most are awarded a stipend for their services, the project team considers these individuals volunteers due to the amount of time and effort most dedicate to their position compared to the stipend they receive. Of the 205 respondents, 20.9% (43 surveys) are either councilmen (32 surveys) or selectmen (11 surveys). Most of the respondents represent non-urban communities (32 communities) (Table 12) and have served for an average of 5.8 years (Table 13).

Table 12. Councilmen/selectmen response profile.

RI	MA	Urban	Non-urban
32	11	10	32

Table 13. Councilmen/selectmen average length of service.

RI	MA	Overall
5.9	5.7	5.8

The council and selectmen have identified rural character (47.5%), amount of open space (42.5%), responsible local officials (40%), and strong sense of community (40%) as the most important assets of their community. Rhode Islanders rank rural character (52%), responsible local officials (52%), and amount of open space (41%) as their top three choices, while Massachusetts ranks access to highways (55%), strong sense of community (45%), and amount of open space (45%).

When asked to rank waterbodies, 64.5% of Rhode Islanders indicate that Narragansett Bay is important, very important or extremely important to them, whereas 50% of the Massachusetts respondents state it is important to them (Table 15). The top response for Massachusetts is the Taunton River (87.5%).

Table 14. Community assets - councilmen/selectmen (%).

***Survey question**: What do you consider to be the three (3) greatest assets of your community?*

Community Assets	RI	MA	Overall
Amount of open space	**41**	**45**	**42.5**
Rural character	**52**	**36**	**47.5**
Safe neighborhoods	**31**	**36**	**32.5**
Access to Narragansett Bay	**14**	**9**	**12.5**
Strong sense of community	**38**	**45**	**40**
Recreational opportunities	**27.5**	**-**	**20**
Good schools	**34**	**18**	**30**
Responsible local officials	**52**	**9**	**40**
Low taxes	**3**	**27**	**10**
Closeness to employment centers	**7**	**9**	**7.5**
Access to highways	**34**	**55**	**40**
Access to river	**10**	**9**	**10**
Public services	**21**	**27**	**22.5**
Public transportation	**3.4**	**27.3**	**10**
Other	**-**	**-**	**-**

**93% response rate*

Table 15. Waterbodies - councilmen/selectmen (%).

***Survey question**: Rank how important these bodies of water are to you and your community in terms of contributing to the economic development and character of your community.*

Waterbodies	RI	MA
Narrow River (RI)	**19.3**	**25**
Kickemuit River (RI)	**19.3**	**37.5**
Saugatucket River (RI)	**12.9**	**25**
Mt. Hope Bay (MA)	**38.7**	**50**
Blackstone River (RI/MA)	**25.8**	**37.5**
Taunton River (MA)	**22.5**	**87.5**
Narragansett Bay (RI/MA)	**64.5**	**50**
Woonasquatucket River (RI)	**16.1**	**12.5**
Rhode Island Salt Ponds (RI)	**35.4**	**12.5**
Pawtuxet River (RI)	**25.8**	**12.5**
Wood-Pawcatuck River (RI)	**41..9**	**12.5**
Ten-mile River (MA)	**12.9**	**25**

** 90.7% response rate*

Note: The results were calculated by adding up the number of responses for each choice for extremely important, very important and important and then a percentage was determined from the number of people who responded to this question.

<u>Recommendations for council members and selectmen</u>

1. **Provide councilmen and selectmen with information on water quality and supply, and recreation/tourism development (as it affects the Bay). Information should focus on the legal and planning techniques that will assist volunteers and staff in improving the planning and management as they relate to Narragansett**

Bay and its watershed. Biological information should also be included to provide a basic understanding of the natural processes.

Council members and selectmen identify recreation/tourism development (overall: 74.4%; RI: 78%; MA: 64%) (Table 16) and water quality and supply issues (overall: 53.1%; RI: 53% MA: 73%) as important topics (Table 19).

Recreation/tourism development is a very general topic and could include a range of issues including promoting nature or heritage-based tourism to planning bike paths and ball fields. This sub-group ranks their desire to receive information or training on marina development and impacts very low overall (27.9%). Before any information or training is created on this topic, there must be a better understanding about specifically what information they desire.

As with the overall group, elected officials are requesting assistance on how to most effectively integrate affordable housing into their community (overall: 62.7%; RI: 53%; MA: 91%). The program team recognizes the importance of this topic, however suggests that another institution provide this information.

Selectmen and council members have some interest in learning about wetlands ecology (45%), however compared to topics concerning economic development and growth (62.7% for integrating affordable housing and 74.4% for recreation/tourism development), these scientific topics rank low (Table 17). It is therefore suggested that when presenting information on recreation and tourism development or other development topics, information on scientific topics, especially wetlands ecology and endangered species in the community, should be incorporated.

Table 16. Preferred economic development/growth topics -council/selectmen (%).

***Survey question**: Mark the economic development/growth topics for which you would be interested in receiving information and/or training.*

Economic Development/Growth Topics	RI	MA	Overall
Recreation/tourism development	**78**	**64**	**74.4**
Integrating affordable housing	**53**	**91**	**62.7**
Brownfields redevelopment	**38**	**27.3**	**34.8**
Planning town-wide greenways	**38**	**55**	**41.8**
Urban sprawl	**34.4**	**45**	**37.2**
Fisheries management	**9.4**	**9**	**9.3**
Marina development and impacts	**34.4**	**9**	**27.9**
Aquaculture development	**18.8**	**-**	**13.9**
Agriculture	**12.5**	**9**	**11.6**
Port development	**15.6**	**9**	**13.9**
Dredging	**18.8**	**36.4**	**23.2**
Dredge disposal	**21.9**	**27.3**	**23.3**
Other (Appendix 8)	**6.3**	**-**	**4.6**

**100% response rate*

Table 17. Preferred scientific topics - councilmen/selectmen (%).

***Survey question**: Mark the scientific topics for which you would be interested in receiving information and/or training.*

Scientific Topics	RI	MA	Overall
Wetlands ecology	**42**	**56**	**45**
Impact of invasive species	**38.7**	**33.3**	**37.5**
Endangered species in the community	**29**	**56**	**35**
Nutrient loading	**16.1**	**44**	**22.5**
Riverine ecology	**32.3**	**44**	**35**
Renewable energy	**34.5**	**44**	**37.5**
Habitat fragmentation	**9.7**	**33.3**	**15**
Upland ecology	**19.4**	**22.2**	**20**
Beach and nearshore ecology	**25.8**	**11**	**22.5**
Natural hazards	**29**	**11**	**27.5**
Coastal processes	**25.8**	**22.2**	**22.5**
Estuarine ecology	**16**	**11**	**15**
Biodiversity	**-**	**33.3**	**7.5**
Global climate change	**9.7**	**-**	**7.5**
Offshore marine ecology	**-**	**-**	**-**
Other (Appendix 8)	**3.2**	**-**	**2.5**

** 93% response rate*

Preferred Legal Techniques

Legal information provided to councilmen and selectmen on the preferred topics listed above should consider focussing on the techniques ranked highest by this group. These techniques include the extent of municipal authority under State enabling legislation (overall: 75.6%; RI: 81%; MA: 60%), environmental laws and regulations (63.4%), and making decisions based on comprehensive plan goals (60.9%) (Table 18).

Table 18. Preferred public administration topics - councilmen/selectmen (%).

***Survey question**: Mark the public administration topics for which you would be interested in receiving information and/or training.*

Public Administration Topics	RI	MA	Overall
Extent of municipal authority under state enabling legislation	**81**	**60**	**75.6**
Environmental laws and regulations	**68**	**50**	**63.4**
Making decisions based on comprehensive plan goals	**68**	**40**	**60.9**
Enforcement compliance	**48**	**40**	**46.3**
Commercial/Industrial environmental performance standards	**48**	**20**	**41.4**
What municipalities can do to control construction and disturbance in wetlands/shoreline buffers	**48**	**70**	**53.6**
Strengthening wellhead and groundwater protection ordinances	**35.5**	**70**	**43.9**
What municipalities can do to better manage onsite wastewater treatment systems	**32.3**	**50**	**36.5**
Cooperating to develop consistent land use goals and standards across town boundaries	**38.7**	**40**	**39**
Reading basic subdivision plans	**19.4**	**30**	**21.9**
Other	**-**	**-**	**-**

** 95.3% response rate*

Preferred Planning Techniques

Planning information provided to elected officials on the preferred topics listed above should consider focussing on the planning techniques ranked highest by this group. Analyzing natural features to develop and protect (overall: 58.1%; RI: 56%; MA: 64%), knowing what to ask to make sure design fits into landscape and neighborhood (overall: 55.8%; RI: 56%; MA: 55%), and how to incorporate water quality and supply issues into the planning process (overall: 53.1%; RI: 53%; MA: 73%), which are techniques of interest to this sub-group (Table 19).

Table 19. Preferred planning/management topics - councilmen/selectmen (%).

***Survey question**: Mark the planning/management topics for which you would be interested in receiving information and/or training.*

Planning/Management Topics	RI	MA	Overall
Knowing what to ask to make sure design fits into landscape and neighborhood	**56**	**55**	**55.8**
Analyzing natural features to develop and protect	**56**	**64**	**58.1**
How to incorporate water quality and supply issues into the planning process	**53**	**73**	**53.1**
Analyzing various design options in the earliest stages of review	**50**	**27.3**	**44.1**
Understanding natural features of the site from maps and plans	**41**	**9**	**30.2**
Stormwater management	**41**	**36.4**	**39.5**
Watershed management	**34.4**	**64**	**41.8**
Techniques to ensure habitat protection and restoration plan	**37.5**	**27.3**	**34.8**
Incorporating public/coastal access in developments	**31.3**	**9**	**25.5**
Special area management	**6.3**	**-**	**4.6**
Coastal zone management	**21.9**	**9**	**18.6**
Septic systems	**34.4**	**27.3**	**32.5**
Non-point source pollution	**21.9**	**27.3**	**23.2**
Disaster response to natural hazards	**25**	**9**	**20.9**
Reducing impervious surfaces in a design	**21.9**	**27.3**	**23.2**
Ecological landscaping	**28.1**	**-**	**20.9**
Other	**-**	**-**	**-**

** 100% response rate*

Preferred Delivery Format

Rhode Island and Massachusetts respondents prefer to receive information through the following formats: fact sheets (RI: 87%; MA: 72.7%), web sites (RI: 64.5%; MA: 72.7%), workshops (RI: 64.6%; MA 81.8%), seminars (RI: 67.7%; MA: 72.7%), and pamphlets/brochures (RI: 80.6%; MA: 54.5%) (Table 20).

Respondents prefer workshops to be held for two to three–hour evening sessions on Tuesday and Thursdays (Table 21).

Table 20. Preferred delivery formats for councilmen/selectmen.

***Survey question**: Rank how likely you are to make use of information offered in the following formats.*

Preferred delivery formats	RI	MA
Field exercise	**48.3**	**36.3**
Web site	**64.5**	**72.7**
Pamphlet/brochures	**80.6**	**54.5**
Fact Sheets	**87**	**72.7**
Seminar	**67.7**	**72.7**
Workshop	**64.5**	**81.8**
Conference	**58**	**45.4**
Distance learning	**16.1**	**9**
Audio tape	**29**	**18.1**
Video tape	**58**	**36.3**
Posters	**19.3**	**0**
Semester course	**12.9**	**18.1**
CD-ROMs	**51.6**	**63.6**
Demonstration	**74.1**	**63.6**
Other	**-**	**-**

**90.7% response rate*

Note: The results were calculated by adding up the number of responses for each choice for extremely likely, very likely and likely and then a percentage was determined from the number of people who responded to this question.

Table 21. Time preference - councilmen/selectmen.

***Survey question**: When would be the best time(s) for you to attend training programs?*
If sessions were held in the evening(s), which would be the best evenings to meet?
What would be the best time(s) to start an evening sessions?

Time Preference	RI	MA	Overall
Best time to attend programs **86% response rate*	**Two- to three-hour evening sessions** **85.2%*	**Two- to three-hour evening sessions** **90%*	**Two- to three-hour evening sessions**
Best evenings to meet **76.7% response rate*	**Tuesday/Wednesday/ Thursday** **43.5%/47.8/43.5*	**Wednesday** **40%*	**Wednesday**
Best time to start evening session **74.4% response rate*	**6:00 pm (w/light meal)** **40.9%*	**5:30 pm (w/light meal)** **60%*	**5:30 or 6 pm (w/light meal)**

Planning Boards

Designers for the Municipality

Planning boards

Planning boards are responsible for: 1) developing, adopting, amending, administering, interpreting, and enforcing municipal subdivision regulations (reviewing projects); 2) preparing comprehensive plans or municipal master plans, their subsequent amendments and updates for council approval; 3) providing comprehensive plan/master plan consistency statements and recommendations to councils and zoning boards on specific proposal; and 4) undertaking various studies, plans, and annual reports.

Of the 205 survey respondents, 42 (20.5% of the total number of responses) represent planning board members from communities within the Narragansett Bay watershed and coastal Rhode Island. Most of these respondents represent non-urban communities (92.8%) (Table 22).

The average length of service for the planning board members who responded to this survey from Rhode Island is 8.5 years (Table 23). Respondents from Massachusetts have served an average of 5.8 years. During this time it is likely that the volunteer has accumulated a great deal of experience reviewing plans, upholding ordinances and experiencing the impact their decisions have had on their community. It is the project team's assumption that they are still serving as volunteers because they perceive their commitment of time and energy as a worthwhile endeavor for maintaining the quality of community life while encouraging appropriate growth. It is also likely that planning board members perceive that they are somehow protecting the community assets they consider important.

Table 22. Planning board response profile (%).

RI (% of PB Responses)	MA (% of PB Responses)	Non-urban (%)	Urban (%)
66.7	33.3	92.8	7.1

Table 23. Planning board length of service (years).

RI	MA
8.5	5.8

According to the survey results, overall planning board respondents value amount of open space (52.2%), rural character (45%), strong sense of community (35%), and safe neighborhoods (35%) (Table 24). Rhode Islanders and Massachusetts planning board members respond quite differently to this question. Rhode Islanders rank amount of open space (64%), rural character (48%), and strong sense of community 40%) as their top three choices. Massachusetts on the other hand, identifies safe neighborhoods (53%), good schools (47%), and rural character (40%).

Table 24. Community assets – planning boards (%).

***Survey question**: What do you consider to be the three greatest assets of your community?*

Community Assets	RI	MA	Overall
Amount of open space	**64**	**33**	**52.2**
Rural character	**48**	**40**	**45**
Safe neighborhoods	**24**	**53**	**35**
Access to Narragansett bay	**24**	**-**	**15**
Strong sense of community	**40**	**27**	**35**
Recreational opportunities	**20**	**13**	**17.5**
Good schools	**24**	**47**	**32.5**
Responsible local officials	**4**	**7**	**5**
Low taxes	**20**	**-**	**12.5**
Closeness to employment centers	**4**	**27**	**12.5**
Access to highways	**4**	**40**	**17.5**
Access to river	**4**	**13**	**7.5**
Public services	**8**	**13**	**10**
Public transportation	**-**	**26.7**	**10**
Other (Appendix 8)	**4**	**-**	**2.5**

** 95.2% response rate*

Recommendations for planning board

1. **Provide Planning Board members with information on planning town-wide greenways and recreation/tourism development as they relate to the Bay. Information should focus on the legal and planning techniques that will assist volunteers and staff in improving the planning and management as they relate to Narragansett Bay and its watershed.**

Planning town-wide greenways is the highest ranked response for this sub-group (64.2%) (Table 25). Both Massachusetts and Rhode Island rank this topic very high (RI: 63%; MA: 67%). Recreation/tourism development is also a preferred topic for this sub-group (57.1%).

Although not a priority topic for the CTP, the planning board respondents rank integrating affordable housing high at 61.9%. Both Massachusetts and Rhode Island respondents rank this as an important topic (RI: 59%; MA: 67%). With rapid development pressures, the demand for mansion development, and private sectors preference to invest in real estate versus the stock market, communities are struggling with balancing this high-level development with middle to affordable housing stock. Both states are better positioned to negotiate with future developers if they have secured or at least have adopted a plan to secure 10% of their housing stock as affordable housing.

Planning board members have interest in learning about wetlands ecology (51.4%), nutrient loading (48.5%) and impact of invasive species (45.7%).

Table 25. Preferred economic development/growth topics – planning boards (%).

***Survey question**: Mark the economic development/growth topics for which you would be interested in receiving information and/or training.*

Economic Development/Growth Topics	RI	MA	Overall
Planning town-wide greenways	**63**	**67**	**64.2**
Integrating affordable housing	**59**	**67**	**61.9**
Recreation/tourism development	**56**	**60**	**57.1**
Urban sprawl	**37**	**60**	**45.2**
Brownfields redevelopment	**37**	**20**	**30.9**
Fisheries management	**14.8**	**6.7**	**11.9**
Marina development and impacts	**33.3**	**6.7**	**23.8**
Aquaculture development	**29.6**	**13.3**	**23.8**
Agriculture	**25.9**	**33.3**	**28.5**
Port development	**18.5**	**6.7**	**14.2**
Dredging	**22.2**	**13.3**	**19**
Dredge disposal	**14.8**	**13.3**	**14.2**
Other (Appendix 8)	**7.4**	**-**	**4.7**

** 100% response rate*

Table 26. Preferred scientific topics – planning boards (%).

***Survey question**: Mark the scientific topics for which you would be interested in receiving information and/or training.*

Scientific topics	RI	MA	Overall
Wetlands ecology	**58.3**	**36.4**	**51.4**
Impact of invasive species	**45.8**	**45.5**	**45.7**
Endangered species in the community	**45.8**	**36.4**	**42.8**
Nutrient loading	**58.3**	**27.3**	**48.5**
Riverine ecology	**16.7**	**18.2**	**17.1**
Habitat fragmentation	**33.3**	**18.2**	**28.5**
Renewable energy	**33.3**	**36.4**	**34.2**
Upland ecology	**20.8**	**18.2**	**20**
Beach and nearshore ecology	**25**	**9.1**	**20**
Natural hazards	**33.3**	**36.4**	**34.2**
Coastal processes	**25**	**18.2**	**22.8**
Estuarine ecology	**12.5**	**9.1**	**11.4**
Biodiversity	**25**	**9.1**	**20**
Global climate change	**4.2**	**9.1**	**5.7**
Offshore marine ecology	**4.2**	**-**	**2.8**
Other (Appendix 8)	**4.2**	**-**	**2.8**

**100% response rate*

When asked which waterbodies are important to the respondent and their community, Rhode Islanders rank Narragansett Bay (80.8%), the Rhode Island Salt Ponds (57.7%), the Narrow River (42.3%), Mt. Hope Bay (42.3%), and the Wood-Pawcatuck River

(42.3%) high. Massachusetts respondents rank Taunton River (50%) and the Blackstone river (50%) high.

Table 27. Waterbodies – planning boards (%).

***Survey question**: Rank how important these bodies of water are to you and your community in terms of contributing to the economic development and character of your community.*

Waterbodies	RI	MA
Narrow River (RI)	**42.3**	**8.3**
Kickemuit River (RI)	**26.9**	**8.3**
Saugatucket River (RI)	**26.9**	**8.3**
Mt. Hope Bay (MA)	**42.3**	**16.7**
Blackstone River (RI/MA)	**30.8**	**50**
Taunton River (MA)	**30.8**	**50**
Narragansett Bay (RI/MA)	**80.8**	**33.3**
Woonasquatucket River (RI)	**19.2**	**8.3**
Rhode Island Salt Ponds (RI)	**57.7**	**16.7**
Pawtuxet River (RI)	**19.2**	**8.3**
Wood-Pawcatuck River (RI)	**42.3**	**8.3**
Ten-mile River (MA)	**15.4**	**25**

** 90.5% response rate*
Note: The results were calculated by adding up the number of responses for each choice for extremely important, very important, and important and then a percentage was determined from the number of people who responded to this question.

Preferred Legal Techniques

Legal information provided to municipal volunteers and staff on the preferred topics listed above should consider focussing on the techniques ranked highest by this group. Preferred techniques include extent of municipal authority under State enabling legislation (58.5%) and making decisions based on comprehensive plan goals (56%) (Table 28).

Table 28. Preferred public administration topics – planning boards (%).

***Survey question**: Mark the public administration topic for which you would be interested in receiving information and/or training.*

Public Administration Topics	RI	MA	Overall
Environmental laws and regulations	**62**	**26.7**	**48.7**
Making decisions based on comprehensive plan goals	**62**	**47**	**56**
Extent of municipal authority under State enabling legislation	**58**	**60**	**58.5**
Enforcement compliance	**54**	**26.7**	**43.9**
Developing consistent land use goals and standards across town boundaries	**38.5**	**47**	**41.4**
What municipalities can do to better manage onsite wastewater treatment systems	**42.3**	**26.7**	**36.5**
What municipalities can do to control construction and disturbance in wetland/shoreline buffers	**42.3**	**33.3**	**39**
Strengthening wellhead/groundwater protection ordinances	**42.3**	**20**	**31.4**
Reading basic subdivision plans	**23**	**26.7**	**24.3**
Commercial/industrial environmental performance standards	**77**	**40**	**31.7**
Other (Appendix 8)	**3.8**	**-**	**2.4**

** 97.6% response rate*

Preferred Planning Techniques

Planning information provided to planning board members on the preferred topics listed above should consider focussing on the planning techniques ranked highest by this group. Analyzing natural features to develop or protect (57.1%), how to incorporate water quality and supply issues into the planning process (54.7%), and knowing what to ask to make sure design fits into landscape and neighborhood (54.7%) are preferred planning techniques for this sub-group.

Compared to Rhode Islanders, the Massachusetts planning board members express a strong desire to focus their learning on this technique. Receiving information and training about analyzing natural features to develop or protect (87%) and knowing what to ask to make sure design fits into landscape and neighborhood (80%) and stormwater management and analyzing various design options in the earliest stage of review (both ranked at 60%) (Table 29). Rhode Island planning board members rank these much lower.

Table 29. Preferred planning/management topics – planning boards (%).

***Survey question**: Mark the planning/management topics for which you would be interested in receiving information and/or training.*

Planning/management topics	RI	MA	Overall
Analyzing natural features to develop or protect	**40.7**	**87**	**57.1**
How to incorporate water quality and supply issues into the planning process	**63**	**40**	**54.7**
Knowing what to ask to make sure design fits into landscape and neighborhood	**40.7**	**80**	**54.7**
Techniques to ensure habitat protection and restoration plans	**44**	**26.7**	**38**
Analyzing various design options in the earliest stages of review	**48**	**60**	**52.3**
Reducing impervious surfaces in a design	**52**	**40**	**47.6**
Watershed management	**44**	**26.7**	**38**
Storm water management	**40.7**	**60**	**47.6**
Ecological landscaping	**37**	**26.7**	**33.2**
Understanding the natural features of the site from maps and plans	**25.9**	**40**	**30.9**
Non-point source pollution	**33.3**	**13.3**	**26.1**
Incorporating public/coastal access in developments	**29.6**	**6.7**	**21.4**
Coastal zone management	**25.9**	**6.7**	**2.3**
Septic systems	**40.7**	**26.7**	**35.7**
Disaster response to natural hazards	**7.4**	**13.3**	**9.5**
Special area management	**3.7**	**13.3**	**7.1**
Other	**-**	**-**	**-**

** 100% response rate*

Preferred Delivery Format

Rhode Island and Massachusetts respondents prefer to receive information through the following formats: fact sheets (RI: 74.1%, MA: 86.7%), web sites (RI: 59.3%; MA: 73.3%), workshops (RI: 77.8%; MA 53.3%), seminars (RI: 70.4%; MA: 53.3%), and pamphlets/brochures (RI: 63%; MA: 73.3%) (Table 30). If workshops or other events are organized specifically for this sub-group, two- to three-hour evening sessions are the preferred time (Table 31).

Table 30. Preferred delivery formats for planning boards (%).

***Survey question**: Rank how likely you are to make use of information offered in the following formats.*

Formats	RI	MA
Field exercise	**63**	**40**
Web site	**59.3**	**73.3**
Pamphlet/brochures	**63**	**73.3**
Fact sheets	**74.1**	**86.7**
Seminar	**70.4**	**53.3**
Workshop	**77.8**	**53.3**
Conference	**63**	**46.7**
Distance learning	**22.2**	**26.7**
Audio tape	**22.2**	**33.3**
Video tape	**48.1**	**60**
Posters	**22.2**	**26.7**
Semester course	**25.9**	**20**
CD-ROMs	**40.7**	**46.7**
Demonstration	**59.3**	**33.3**
Other	**-**	**-**

** 100% response rate*
Note: The results were calculated by adding up the number of responses for each choice for extremely likely, very likely and likely and then a percentage was determined from the number of people who responded to this question.

Table 31. Time preference – planning boards.

***Survey question**: When would be the best time(s) for you to attend training programs? If sessions were held in the evening(s), which would be the best evenings to meet? What would be the best time(s) to start an evening sessions?*

Time Preferences	RI	MA	Overall
Best time to attend programs *97.6% response rate	Two- to three-hour evening sessions **96.2%*	Two- to three-hour evening sessions **73.3%*	Two- to three-hour evening sessions
Best evenings to meet *85.7% response rate	Tuesday/Thursday **44%/*40%*	Tuesday **63.6%*	Tuesday
Best time to start evening session *83.3% response rate	6:00pm (w/light meal) **36%*	6:00pm (w/light meal) **50%*	6:00 p.m. (w/light meal)

Conservation Commissions

Advocates for the Natural Resources

Conservation commissions

Conservation commissions are local environmental agencies that are responsible for protecting the land, water and biological resources of their communities. In some communities, the opinion and decision provided by a conservation commission has great impact and authority on the future planning and development of a community (Cathal O'Brien, personal communication, 2003). In other communities, the purpose of the conservation commission is to advise and encourage council and to other municipal boards and agencies a program for the better promotion, development, utilization or preservation of open areas, streams, shores, wooded areas, roadsides, swamps, marshlands and natural aesthetic (South Kingstown web site, 2003). The authority or advice must be based on state or federal laws or municipal plans, ordinances or regulations.

Conservation commissions make up 18% (37 responses) of the total number of responses for the overall survey and is the smallest of the three sub-groups. Of the 37 conservation commission responses, 25 are from Rhode Island and 12 are from Massachusetts. 32 of these responses represent non-urban communities. The respondents from Rhode Island have served an average of 6.2 years, while the Massachusetts respondents have served 11 years (Table 33).

Table 32. Conservation commissions response profile.

RI	MA
25	12

Table 33. Conservation commissions length of service.

RI	MA
6.2	11

Conservation commission survey respondents answer similarly to the other sub-groups and overall group concerning the community assets they value (Table 34). Amount of open space (57.5%), rural character (50%), and safe neighborhoods (41.4%) are considered important aspects for Rhode Islanders. Amount of open space (50%), rural character (40%), safe neighborhoods (40%), good schools (40%), and access to highways (40%) are important to Massachusetts respondents.

Concerning assets, this sub-group ranks access to Narragansett Bay at 29.4% and access to the rivers at only 8.8% (Table 34). Rhode Islanders rank access to Narragansett Bay fourth (37.5%) and access to rivers at eleventh (8%). Massachusetts ranks access to Narragansett Bay and access to rivers both at 10%, tying for eleventh most important.

When asked which waterbodies are important to the respondents and their communities, Narragansett Bay ranks high for Rhode Island respondents (80%) and much lower for Massachusetts (27.3%). The Taunton River (63.6%) is the highest ranked waterbody for Massachusetts (Table 35).

Table 34. Community assets - conservation commissions (%).

***Survey question**: What do you consider to be the three greatest assets of your community?*

Community Assets	RI	MA	Overall
Amount of open space	**58**	**50**	**57.5**
Rural character	**54**	**40**	**50**
Safe neighborhoods	**42**	**40**	**41.1**
Access to Narragansett Bay	**37.5**	**10**	**29.4**
Strong sense of community	**33**	**20**	**29.4**
Recreational opportunities	**33**	**20**	**30.3**
Good schools	**21**	**40**	**26.4**
Responsible local officials	**17**	**20**	**17.6**
Low taxes	**17**	**-**	**11.7**
Closeness to employment centers	**12.5**	**10**	**11.7**
Access to highways	**8**	**40**	**17.6**
Access to river	**8**	**10**	**8.8**
Public services	**4**	**30**	**11.7**
Public transportation	**-**	**20**	**6**
Other (Appendix 8)	**8.3**	**-**	**5.8**

** 91.9% response rate*

Table 35. Waterbodies - conservation commissions (%).

***Survey question**: Rank how important these bodies of water are to you and your community in terms of contributing to the economic development and character of your community.*

Waterbodies	RI	MA
Narrow River (RI)	**32**	**-**
Kickemuit River (RI)	**24**	**9.1**
Saugatucket River (RI)	**24**	**-**
Mt. Hope Bay (MA)	**52**	**18.2**
Blackstone River (RI/MA)	**36**	**9.1**
Taunton River (MA)	**28**	**63.6**
Narragansett Bay (RI/MA)	**80**	**27.3**
Woonasquatucket River (RI)	**20**	**-**
Rhode Island Salt Ponds (RI)	**68**	**-**
Pawtuxet River (RI)	**24**	**-**
Wood-Pawcatuck River (RI)	**44**	**-**
Ten-mile River (MA)	**20**	**27.3**

** 97.3% response rate*

Note: The results were calculated by adding up the number of responses for each choice for extremely important, very important and important, and then a percentage was determined from the number of people who responded to this question.

Recommendations for conservation commissions

1. **Provide Rhode Island and Massachusetts Conservation Commissions with information on planning town-wide greenways (as it relates to the Bay), wetlands ecology, impacts of invasive species, and endangered species in the community. Provide information to Rhode Island Conservation Commissions on beach and nearshore ecology. Information should focus on the legal and planning techniques that will assist volunteers and staff in improving the planning and management as they relate to Narragansett Bay and its watershed. Biological information should also be included to provide a basic understanding of the natural processes.**

Out of all the topics, planning town-wide greenways is the highest ranked response for this sub-group (78%) (Table 36). Both Massachusetts and Rhode Island rank this topic very high (RI: 76%; MA: 83%).

Out of all the scientific topics, wetland ecology (75%) and endangered species in the community (63.8%) are the preferred topic (Table 37). Rhode Island respondents rank learning about beach and nearshore ecology (58%) and impact on invasive species (58%) high, while Massachusetts respondents rank riverine ecology (67%), impact of invasive species (58%), and habitat fragmentation (58%) as preferred topics.

Table 36. Economic development/growth topics - conservation commissions (%).

***Survey question**: Mark the economic development/growth topics for which you would be interested in receiving information and/or training.*

Economic Development/Growth Topics	RI	MA	Overall
Planning town-wide greenways	**76**	**83**	**78**
Integrating affordable housing	**40**	**50**	**43**
Urban sprawl	**48**	**42**	**43.2**
Fisheries management	**20**	**8.3**	**16.2**
Marina development and impacts	**32**	**16.7**	**27**
Aquaculture development	**24**	**16.7**	**21.6**
Agriculture	**12**	**25**	**16.2**
Port development	**8**	**8.3**	**8.1**
Dredging	**32**	**25**	**29.7**
Dredge disposal	**32**	**8.3**	**24.3**
Recreation/tourism development	**28**	**-**	**18.9**
Brownfields redevelopment	**28**	**41.7**	**32**
Other (Appendix 8)	**4**	**-**	**2.7**

** 100% response rate*

Table 37. Preferred scientific topics - conservation commissions (%).

***Survey question**: Mark the scientific topics for which you would be interested in receiving information and/or training.*

Scientific Topics	RI	MA	Overall
Wetland ecology	**75**	**75**	**75**
Endangered species in the community	**71**	**50**	**63.8**
Impact of invasive species	**58**	**58**	**58.3**
Beach and nearshore ecology	**58**	**-**	**38.8**
Habitat fragmentation	**54**	**58**	**55.5**
Estuarine ecology	**50**	**25**	**41.6**
Nutrient loading	**42**	**42**	**41.6**
Riverine ecology	**37.5**	**67**	**47.2**
Upland ecology	**37.5**	**50**	**25**
Renewable energy	**25**	**8.3**	**19.4**
Offshore marine ecology	**16.7**	**-**	**11.1**
Coastal processes	**33.3**	**16.7**	**27.7**
Natural hazards	**16.7**	**-**	**11.1**
Global warming/climate	**20.8**	**8.3**	**16.6**
Biodiversity	**29.2**	**33.3**	**29.7**
Other (Appendix 8)	**4.2**	**-**	**2.7**

** 97.3% response rate*

Preferred Legal Techniques

Legal information provided to conservation commissions on the preferred topics listed above should consider focussing on the techniques ranked highest by this group. Overall this sub-group prefers to learn about what municipalities can do to control construction and disturbance in wetland/shoreline buffers (72.2%), environmental laws and regulations (58.3%), enforcement compliance (55.5%), strengthening wellhead and groundwater protection ordinances (52.7%), and making decisions based on comprehensive plan goals (52.7%) (Table 38).

For Rhode Island these techniques include learning about what municipalities can do to control construction and disturbance in wetland/shoreline buffers as one of their highest ranked topics overall (80% tied for first). Rhode Islanders are also interested in strengthening wellhead and groundwater protection ordinances (68%), and making decisions based on comprehensive plan goals (64%), and environmental laws and regulations (60%). Massachusetts respondents techniques including enforcement compliance (67%), environmental laws and regulations (50%), what municipalities can do to control construction and disturbance in wetland/shoreline buffers (50%), and commercial/industrial environmental performance standards (50%) are preferred.

Table 38. Preferred public administration topics - conservation commissions (%).

***Survey question**: Mark the public administration topics for which you would be interested in receiving information and/or training.*

Public Administration Topics	RI	MA	Overall
What municipalities can to control construction and disturbance in wetland/shoreline buffers	**80**	**50**	**72.2**
Strengthening wellhead and groundwater protection ordinances	**68**	**18**	**52.7**
Making decisions based on comprehensive plan goals	**64**	**27**	**52.7**
Environmental laws and regulations	**60**	**50**	**58.3**
Extent of municipal authority under state enabling legislation	**52**	**36.4**	**47.2**
Enforcement compliance	**48**	**67**	**55.5**
Developing consistent land use goals and standards across town boundaries	**48**	**27**	**41.6**
What municipalities can do to better manage onsite wastewater treatment systems	**32**	**9.1**	**25**
Reading basic subdivision plans	**40**	**-**	**27.7**
Commercial/industrial environmental performance standards	**44**	**50**	**47.2**
Other (Appendix 8)	**8**	**-**	**5.5**

** 97.3% response rate*

Preferred Planning Techniques

Planning information provided to conservation commissions on the preferred topics listed above should consider focussing on the planning techniques ranked highest by this group. Preferred techniques include how to develop town-wide greenways (Table 36). In addition to planning town-wide greenways, several of the planning/management techniques rank high overall include techniques to ensure habitat protection and restoration plans (78%), reducing impervious surfaces in a design (64.8%), ecological landscaping (64.8%), and analyzing natural features to develop or protect (59.4%) are some of the highest ranked topics overall (Table 39).

Table 39. Preferred planning/management topics - conservation commissions (%).

***Survey question**: Mark the planning/management topics for which you would be interested in receiving information and/or training.*

Planning/Management Topics	RI	MA	Overall
Techniques to ensure habitat protection and restoration plans	**80**	**75**	**78**
Ecological landscaping	**72**	**50**	**64.8**
Analyzing natural features to develop or protect	**60**	**58**	**59.4**
Reducing impervious surfaces in a design	**60**	**75**	**64.8**
Watershed management	**56**	**50**	**37.8**
How to incorporate water quality and supply issues into the planning process	**56**	**50**	**54**
Knowing what to ask to make sure design fits into landscape and neighborhood	**56**	**25**	**45.9**
Understanding natural features of the site from maps and plans	**56**	**33.3**	**48.6**
Special area management	**12**	**-**	**8.1**
Coastal zone management	**48**	**-**	**32.4**
Septic systems	**28**	**16.7**	**24.3**
Non-point source pollution	**48**	**41.7**	**45.9**
Disaster response to natural hazards	**20**	**-**	**13.5**
Incorporating public/coastal access in developments	**36**	**16.7**	**29.7**
Analyze various design options in the earliest stages of review	**44**	**25**	**37.8**
Stormwater management	**44**	**58**	**48.6**
Other	**-**	**-**	**-**

** 100% response rate*

Preferred Delivery Format

Preferred delivery formats include: fact sheets (RI: 84%; MA: 83.5%), seminars (RI: 80%; MA: 83.3%), and workshops (RI: 76%; MA: 83.3%) (Table 40). Information should be provided using these formats. If workshops or other events are organized specifically for this sub-group, two- to three-hour evening sessions are the preferred time (Table 41).

Table 40. Preferred delivery formats for conservation commissions (%).

***Survey question**: Rank how likely you are to make use of information offered in the following formats?*

Delivery Formats	RI	MA
Field Exercise	**72**	**66.7**
Web Site	**76**	**50**
Pamphlet/Brochures	**76**	**66.7**
Fact Sheets	**84**	**83.3**
Seminar	**80**	**83.3**
Workshop	**76**	**83.3**
Conference	**56**	**75**
Distance Learning	**32**	**8.3**
Audio Tape	**40**	**8.3**
Video Tape	**76**	**33.3**
Posters	**68**	**41.7**
Semester Course	**24**	**16.7**
CD-ROMs	**56**	**41.7**
Demonstration	**64**	**58.3**
Other	-	-

** 100% response rate*
Note: The results were calculated by adding up the number of responses for each choice for extremely likely, very likely and likely and then a percentage was determined from the number of people who responded to this question.

Table 41. Time preference - conservation commissions.

Time Preference	RI	MA	Overall
Best time to attend programs *89.1% response rate*	**2-3 hour evening sessions** *(83.3%)*	**2-3 hour evening sessions or 2 sessions offered on Saturday** *(67%)*	**2-3 hour evening sessions** *(78%)*
Best evenings to meet *70.2% response rate*	**Tuesday/ Thursday** *(55%/60%)*	**Tuesday/ Wednesday** *(50%)*	**Tuesday** *(53%)*
Best time to start evening session *67.5% response rate*	**6 p.m. with light meal** *(45%)*	**6 p.m. or 7p.m.** *(40%)*	**6 p.m.** *(44%)*

Conclusion

This needs assessment identifies the major topics and techniques of interest, and preferred delivery formats for municipal council, board and commission members within coastal Rhode Island and the Massachusetts municipalities within the Narragansett Bay watershed.

Survey results suggest that municipal volunteers are serving as volunteers because they perceive their commitment of time and energy is a worthwhile endeavor for maintaining the quality of community life while encouraging appropriate growth. Because of the high response rate the project team assumes that there is a great desire for additional training, education, and outreach on specific topics.

The CTP should partner with other institutions identified in the accompanying market analysis to provide municipal volunteers especially councilmen, selectmen, planning board members, and conservation commission members with appropriate and best available science-based information, tools, and techniques to help them to better manage the natural resources of Narragansett Bay and its watershed. Volunteers from the harbor and economic development commissions, zoning board, and municipal land trust members should also be considered part of the audience, especially for efforts targeting all municipal volunteers and staff.

The CTP should focus on topics including wetlands ecology, impact of invasive species, endangered species in the community, urban sprawl, recreation/tourism development, planning town-wide greenways (as they affect the Bay), and water quality and supply. Other topics of importance that should be considered are listed in Appendix 2.

Using the results of this needs assessment and that of the companion market analysis, the project team will develop a strategy document to present how the project team plans to implement the CTP to provide these important coastal decision-makers with the necessary tools and information to help them to make better decisions concerning their community and region.

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