# An Assessment of the Training and Information Needs of Massachusetts Volunteer, Advocacy, and Other Non-Governmental Organizations with Regard to Coastal Issues

Duane Dale DFD Associates

June 1, 2004

A research study conducted under contract with the Massachusetts Coastal Training Program

This study was carried out under contract with the Massachusetts Coastal Training Program collaborating organizations:

Waquoit Bay National Estuarine Research Reserve Massachusetts Office of Coastal Zone Management Woods Hole Oceanographic Institution Sea Grant Program

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The Massachusetts Coastal Training Program website is at <u>www.coastaltraining.org</u>.

The national Coastal Training Program is a program of the National Oceanic and Atmospheric Administration, carried out with support from NOAA and the collaborating organizations.

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An Assessment of the Training and Information Needs of Massachusetts Volunteer, Advocacy, and Other Non-Governmental Organizations with Regard to Coastal Issues

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# Introduction

Three organizations are collaborating to create a Massachusetts Coastal Training Program (CTP): Waquoit Bay National Estuarine Research Reserve, Massachusetts Office of Coastal Zone Management, and Woods Hole Oceanographic Institution Sea Grant Program. These collaborators contracted with DFD Associates of Madison, New Hampshire, to conduct an assessment of the training needs of leaders in Massachusetts non-governmental organizations (NGOs), including volunteer and advocacy groups, with regard to coastal issues.

CTP is a nationwide program created and supported by the National Oceanic and Atmospheric Administration (NOAA). Coastal Training Programs across the country each involve one of the national estuarine research reserves as one of the collaborators. The purpose of the Massachusetts CTP is to provide in-depth science-based training for managers to make informed decisions affecting coastal resources in the Commonwealth.

The purpose of this NGO needs assessment is to provide information that will guide the Massachusetts program's activities and contribute to the organizations, communities, and coastal resources of the state. A key assumption that guided this study is that for volunteer, advocacy, and other non-governmental organizations, the primary audience for CTP activities would be staff and key volunteers, rather than their organizational memberships.

This study is similar to a prior needs assessment conducted by DFD Associates for the Massachusetts Coastal Training Program in 2002, which focused on the training needs of Massachusetts local officials regarding coastal issues. A two-page summary and full report of that study are available at the Massachusetts CTP web site, www.coastaltraining.org.

# The key questions for this needs assessment are:

Q: What types of Massachusetts organizations are included within the framework of volunteer, advocacy, and other non-governmental organizations that take an interest in coastal issues?

Q: Who are the people within those organizations who are potential participants in CTP activities?

Q: What topics related to coastal issues are important to them?

- Q: What topics related to skills and processes are important to them?
- Q: For each topic of interest, do they prefer information, training opportunities, or both?
- Q: What are their preferences with regard to timing, location, and other details?

The following additional questions are addressed in the course of this report:

Q: In what ways are the preferences of this potential audience different from the preferences identified in the local official study?

Q: At what points in planning and delivery of coastal training can the local official and NGO audiences be considered as one combined audience, and at what points should they be addressed separately?

# Needs assessment methodology

*Interview protocol and questionnaire.* This study utilized individual telephone interviews and an on-line questionnaire as its primary means of gathering information and opinions from respondents. The telephone interviews focused on open-ended questions about the respondent's organization, its issues, staff, training needs, and aspirations. The questions are listed in Appendix B.

The on-line questionnaire provided a delimited set of response options to questions training needs, delivery logistics, pricing, etc. The on-line questionnaire text is reproduced in Appendix C. The on-line questionnaire was developed based on the 2002 paper-and-pencil questionnaire used for the Massachusetts CTP. (Links to the summary and full report of that study are available at <u>www.coastaltraining.org/training\_needs/index.htm</u>). An on-line survey hosting service, surveymonkey.com, was used to host the questionnaire and store the responses for later download. After the survey, respondents were linked to the Massachusetts CTP home page at www.coastaltraining.org.

*Sample*. From the population of relevant organizations – volunteer, advocacy, and other non-governmental organizations with some connection to coastal issues – potential participants in the study were identified in several ways:

- solicitation of organizational and individual names from the collaborating organizations' key staff people;
- review of the collaborating organizations' databases;
- review of several directories of organizations involved in coastal and environmental issues.

Fifty individuals were identified as candidates for telephone interviews. An initial call was made by an assistant (Kristen Kimball) to schedule the interview and, whenever possible, to gather background information and to confirm information obtained from the organization's website. The actual interviews were conducted by Duane Dale, with two exceptions.

The interviewees were individuals in key staff roles in their respective NGO: director, issues director, specific site director, staff scientist, etc. Of the 50 potential interviewees,

40 were interviewed. No one declined to be interviewed; it was scheduling difficulties that prevented the remainder from participating. Interviewees were cooperative with the interview and forthcoming with information; they typically spent between 15 and 25 minutes on the phone. Findings from the interview shaped various sections of this report, and were the main source for Appendix C: Profiles of NGO Organizations by Category.

All interviewees were asked to respond to the questionnaire immediately following the interview and were given a web address that would link them to the online survey, was asked to complete the online survey and was provided the address for a specific page on the Massachusetts CTP website that automatically linked them to the questionnaire. Thirty-four of the 40 interviewees (85%) did so.

An additional 33 people completed the on-line survey – seven who were recommended by the interviewees and 26 (representing 19 different organizations) as a result of an email sent to an additional 34 organizations identified in the process described above. (Twenty-five other organizations were eliminated from the sample because a current, valid email address was not available.)

The distribution of study participants by region is shown in the Table 1. The Cape is strongly represented in the study, as it was in the lists of organizations and individuals from which the sample was derived.

|                | % of all     | % of all    | Combined |
|----------------|--------------|-------------|----------|
|                | interviewees | survey-only | %        |
| North Shore    | 22%          | 5%          | 16%      |
| Greater Boston | 11%          | 14%         | 12%      |
| South Shore    | 14%          | 14%         | 14%      |
| Southeast      | 8%           | 0%          | 5%       |
| Cape Cod       | 39%          | 52%         | 44%      |
| Islands        | 6%           | 14%         | 9%       |

### TABLE 1. RESPONDENTS BY REGION

A category scheme was developed for grouping the organizations involved in the study; see Table 2 on the next page. The categories, along with the number of participants in the study from each category, are reported in the following section.

# The Audience for Non-Governmental Organization (NGO) Training Regarding Coastal Issues

# Key Questions:

Q: What types of Massachusetts organizations are included within the framework of volunteer, advocacy, and other NGOs that take an interest in coastal issues? Q: Who are the people within those organizations who are potential participants in CTP activities?

The sample described in the previous section can be categorized according to the following major headings:

Environmental and Resource-Protection Organizations Governance, Planning, and Policy Organizations Research and Education Organizations Economic- and Recreational-Interest Organizations

Table 2, below, gives sub-categories for each of the categories above and indicates the number of individuals from each category of organization who participated in this study. A list of specific organizations included in the study is provided in Appendix A.

The interviewees and survey respondents included organizational directors and site directors, researchers, education coordinators, and other roles.

| Category   | Interviewed | All Respondents<br>(Interview +<br>Questionnaire) |
|--|-------------|---|
| Environmental and Resource-Protection Organizations<br>> Statewide (including state chapters of national | 22          | 38  |
| organizations)   |             |   |
| > Regional (sub-state)   |             |   |
| > Local  |             |   |
| > Bay and Estuary Organizations  |             |   |
| > River and Watershed Organizations  |             |   |
| > Lake and Pond Organizations  |             |   |
| > Land trusts, conservation trusts   |             |   |
| Governance, Planning, and Policy Organizations   | 6           | 8   |
| > Planning assistance (incl. RPAs)   |             |   |
| > Associations of municipal officials or volunteer boards  |             |   |
| and commissions  |             |   |
| > Voters', good gov't, & issues-education organizations  |             |   |
| > Community foundations  |             |   |
| Research & Education Organizations   | 1           | 6   |
| > Science centers, museums, etc.   |             |   |
| > Research & education projects  |             |   |
| > Water monitoring (1, plus others for which this is a   |             |   |
| secondary function)  |             |   |
| Economic- & Recreational-Interest Organizataions   | 2           | 7   |
| > Economic development organizations   |             |   |
| > Commercial & recreational fishers' organizations   |             |   |
| Miscellaneous  | 2           | 3   |

### Roles of the respondents' organizations with respect to coastal issues

Questionnaire respondents were asked:

2. How would you describe [your] organization's role regarding coastal issues?

Six response categories (including "other") were provided; multiple responses were allowed. The responses, in order of their frequency, are:

| ROLE  | #   | %     |
|---|-----|-------|
| Education                                       | 51  | 76.1% |
| Resource mngmt, protection, and/or preservation | 50  | 74.6% |
| Advocacy  | 44  | 65.7% |
| Policy development                              | 35  | 52.2% |
| Research  | 31  | 46.3% |
| Other   | 17  | 25.4% |
| TOTAL   | 228 |       |
| Average number of responses per person          | 3.4 |       |

TABLE 3. ORGANIZATION'S ROLES REGARDING COASTAL ISSUES

Those who checked "other" had the opportunity to provide explanatory text. Most of their response can be associated with one of the check-off options, as noted in parentheses below. Their responses were:

| Recreation using the water as the path (Ed*)    | Help enforce environmental regulations          |  |
|---|---|--|
| Land Conservation (res.prot.*)                  | (Resource Mgmt.*)                               |  |
| Streamflow                                      | Planning and technical services (Resource       |  |
| Macro-invertebrate assessment (Research*)       | management*)                                    |  |
| Erosion-sedimentation (Research*)               | Grant support                                   |  |
| Land Use (Resource mgmt/prot.*)                 | Public Health, Law Enforcement, (Resource       |  |
| Land use planning (Resource mgmt.*)             | mgmt. and prot.*)                               |  |
| Land preservation (Resource prot.*)             | Law Suit  |  |
| Protect, Educate, Restore.                      | Trade group-shellfish culture (Resource mgmt.*) |  |
| ("That's our byline!")(Ed, Res. Prot.*)         | Assist Barnstable Dept of NR in planting and    |  |
| Support research (Research*)                    | growing shellfish in Barnstable (Resource       |  |
| Monitoring (Research*)                          | mgmt.*)   |  |
| Promotion, (Advocacy*)                          | Permitting & enforcement (Resource mgmt.*)      |  |
| Recreation (Resource mgmt.*)                    | Interpretation of zoning bylaws (Resource       |  |
|   | mgmt. & Protection*)                            |  |
| * Assignment of response to check-off category. |   |  |

If the "Other" responses with assignments to check-off categories are added to the checked responses, the resulting revised version of Table 3 is shown here as Table 3A.

| ROLE  | #  | %     |
|---|----|-------|
| Education                                       | 53 | 22.6% |
| Resource mngmt, protection, and/or preservation | 63 | 27.9% |
| Advocacy  | 45 | 19.2% |
| Policy development                              | 35 | 15.0% |
| Research  | 35 | 15.0% |
| Other   | 3  | 1.2%  |

#### TABLE 3A. ORGANIZATION'S ROLES REGARDING COASTAL ISSUES WITH "OTHER" RESPONSES REALLOCATED

# Role of individual respondents regarding coastal issues

Participants in the on-line survey were also asked about their personal role:

| What is your role (if any) regarding information, education, or training |
|--|
| about coastal issues? (Check all that apply.)                            |
| □ Participant in training sessions                                       |
| User of informational materials  |
| □ Planner or coordinator of training events                              |
| Content provider (writer, teacher, lecturer, facilitator, etc.)          |
| □ Support staff  |
| $\Box$ None of the above   |
| □ Other (please specify):  |

On average, respondents checked 3.0 boxes. Responses were distributed as follows:

| ROLE   | #  | %     |
|--|----|-------|
| User of informational materials                                  | 51 | 76.1% |
| Content provider (writer, teacher, lecturer, facilitator, etc.)* | 41 | 61.2% |
| Participant in training sessions                                 | 39 | 58.2% |
| Planner or coordinator of training events*                       | 35 | 52.2% |
| Support staff  | 20 | 29.9% |
| Other  | 15 | 22.4% |
| None of the above  | 3  | 4.5%  |

Only 3 out of 67 responded, "None of the above." In other words, 95% of respondents identified themselves as having a role with respect to coastal issues information, education, or training. This is true despite the fact that coastal issues are not the primary focus for the respondents' organizations.

Two of the roles in the checklist are active roles that are central to providing information, education, or training opportunities for others: Content provider and Planner or coordinator of training events. (These are identified with asterisks in Table 4.) About 45% of the respondents identified themselves with both of these roles, 16% as content providers only, and 7% as planner or coordinator only (not content provider), for a total of 68% that identified themselves as either planners or content providers or both. In other

words, two-thirds of the participants in the study appear to be in a delivery mode with respect to information and training – which is to say that they are in a position to reach and influence others with informational materials or training opportunities that they might provide.

As with the previous question, those who checked "other" had the opportunity to provide explanatory text. Their responses were:

| We are an alliance. Our education sub-            | Executive Di  |
|---|---------------|
| committee is working on outreach to a variety     | Provide land  |
| of audiences. A pond monitoring project that      | Policy develo |
| we are developing will include training.          | Grant suppor  |
| Researcher  | Document Re   |
| Communications/facilitation                       | Volunteer     |
| Shore line surveyor and trash retriever and midge | Educate fello |
| larvae counter.                                   | Disseminate   |
| Task force member                                 | Consumer of   |
| President   | use in byla   |

Executive Director Provide land access programs, materials Policy development Grant support Document Research Volunteer Educate fellow shellfishers Disseminate this info to members Consumer of education & training materials for use in bylaw interpretation

# **Training Content**

*Key question:* 

Q: What topics related to coastal issues are important to the respondents?

Q: What topics related to skills and processes are important to them?

Understanding the training and information needs of this potential audience is a central purpose of this study. It was explored in the interviews, and two items (4 and 8) in the on-line survey addressed it. The survey items provided a list of content topics and of "process" topics, respectively. Respondents were asked to rate the importance of additional information or training on each item to their organization, using a 1-to-5 scale, and also to indicate whether they needed information, training, or both, where...

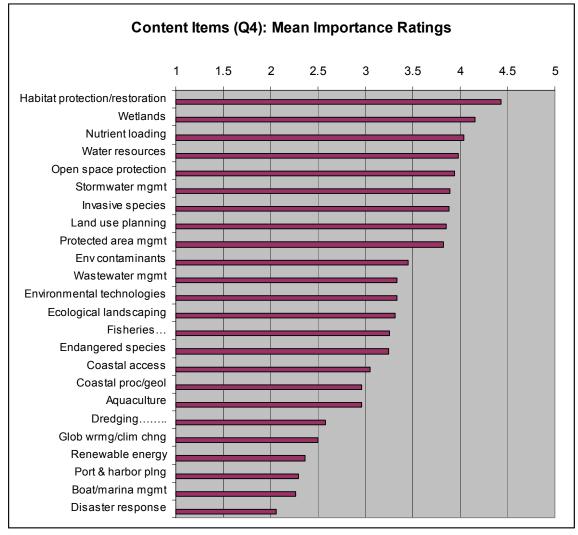
INFORMATION refers to factsheets or web-based information that describes the process and how to do it successfully.

TRAINING refers to workshops or other scheduled face-to-face activities.

The full wording of the question and the topics can be found in Appendix B, item 4.

### Content items

The graph on the following page compares the mean importance ratings on the 24 content items.



### CHART 1. CONTENT ITEMS: MEAN IMPORTANCE RATINGS

The top 13 items in the ratings could be reconceptualized in the following integrated grouping, which may be the most straightforward and productive way to consider the topics.

Mean ratings for each different category of organization – presented later – can be understood as different emphases within this framework

| Key resources:                                |
|---|
| Habitat                                       |
| Wetlands                                      |
| Open space                                    |
| Protected areas                               |
| Water resources (supply, quality)             |
| Threats and challenges to those resources:    |
| Nutrient loading                              |
| Stormwater                                    |
| Invasive species                              |
| Environmental contaminants                    |
| Approaches to address threats and challenges: |
| Habitat protection and restoration            |
| Open space protection                         |
| Land use planning                             |
| Water resources [management]                  |
| Stormwater management                         |
| Wastewater management                         |
| Environmental technologies                    |
| Ecological landscaping                        |
|   |

### TABLE 5. FRAMEWORK FOR THE TOP 13 CONTENT ITEMS

### Notes regarding the framework above:

Some words from an item's wording the questionnaire have been relegated to square brackets to keep the focus on the aspect of the item that is relevant to the proposed category heading – for example, "Habitat [protection and restoration]."

One item, water resource *management*, has been added as an expansion of "water resources," consistent with other items such as habitat protection and restoration, open space protection, and protected areas management.

# Skill and process items

A similarly-formatted group of questions addressed some of the skills and processes that non-governmental organization leaders might consider important. The on-line survey item was worded as follows:

8. This group of topics has to do with skills or processes that may be related to addressing coastal issues. As with the previous question regarding topics, for each topic please select a number from the first pull-down box to indicate how important it would be to your organization to have access to information or training that goes beyond what is currently available. Then select a word from the second pull-down box to indicate what would be most useful -- information, training, or both. INFORMATION refers to factsheets or web-based information that describes the process and how to do it successfully. TRAINING refers to workshops or other scheduled face-to-face activities.

As before, skipped items will be interpreted as being of low importance to your organization.

The results are shown in Chart 2.

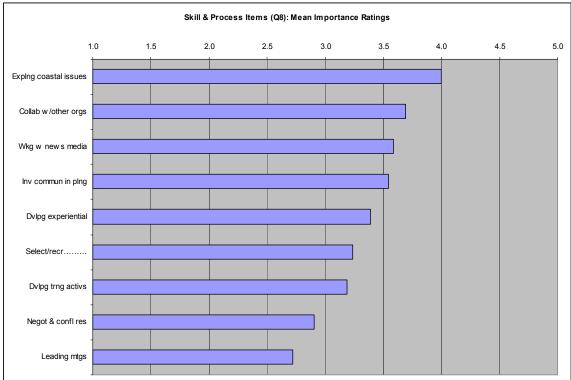


CHART 2. SKILL & PROCESS ITEMS: MEAN IMPORTANCE RATINGS

# Ratings of content and skill/process topics, grouped by tier

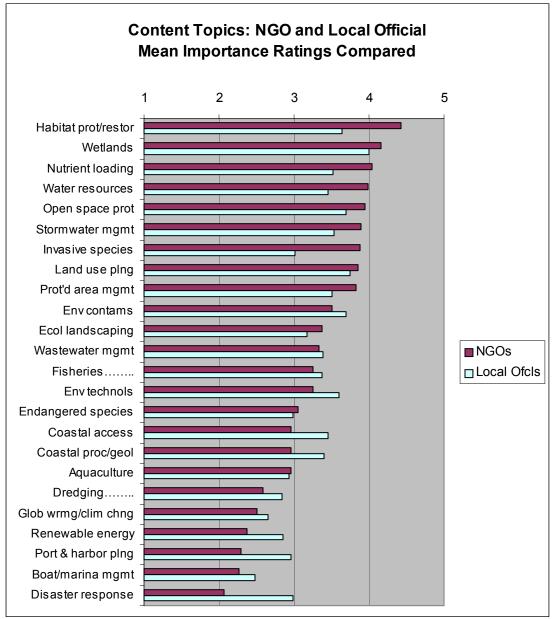
As with the local official study, there are "stair-steps" in the graphical representation of the content ratings, and also of the skill and process ratings. As with that earlier study, an analysis of confidence intervals for the mean ratings (bracketing  $\pm 1$  or  $\pm 2$  standard errors of the mean on either side of the mean ratings) provides some degree of support for clustering the items into tiers. The proposed tiers for this study of NGO leaders are shown in Table 6.

| Level of interest<br>(1 = low, 5 = high)                         | Content Topics   | Skill & Process Topics  |
|--|--|---|
| <b>Tier 1</b><br>(Mean ranking > 4.25)                           | Habitat protection and restoration   | -   |
| <b>Tier 2</b><br>(3.75 – 4.25)<br><b>Tier 3</b><br>(2.75 – 3.75) | WetlandsNutrient loadingWater resourcesOpen space protectionStorm water managementInvasive speciesLand use planningProtected area managementEnvironmental contaminantsWastewater managementEnvironmental technologiesEcological landscapingFisheriesEndangered speciesCoastal accessCoastal processes & geologyAquaculture | Explaining coastal issues to a<br>community or an individual citizenCollaborating: Ways to work<br>together with other organizations<br>concerned with coastal issuesWorking with the news media<br>Processes for involving the<br>community in planningDeveloping experiential learning<br>activities re specific coastal issuesSelecting & recruiting expert<br>presenters and facilitators for<br>training activitiesDeveloping an approp. set of<br>training and informational activitiesProcesses for negotiation & conflict<br>resolution |
| <b>Tier 4</b><br>(<2.75)   | Dredging<br>Global warming & climate change<br>Renewable energy<br>Port & harbor planning<br>Boat & marina mngmt.<br>Disaster response   | Leading meetings  |

### TABLE 6. CONTENT AND SKILL & PROCESS TOPICS BY TIER

### NGO and local official ratings, compared

Most of the content items in this study were identical to items rated by the local officials in the needs assessment conducted in 2002. The ratings were similar on some items but quite different on others. See the graph on the next page. Overall, the NGO sample showed a wider spread in their ratings (a higher variance) – perhaps related to the fact that there are local officials who have formal responsibility for addressing most of the issues on the list.



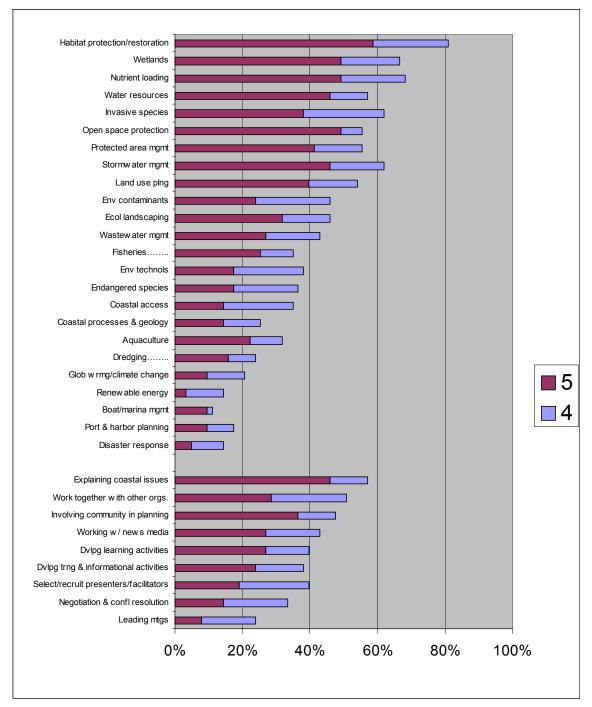
### CHART 3. CONTENT TOPICS: NGO AND LOCAL OFFICIALS' MEAN IMPORTANCE RATINGS COMPARED

# "4" and "5" Ratings

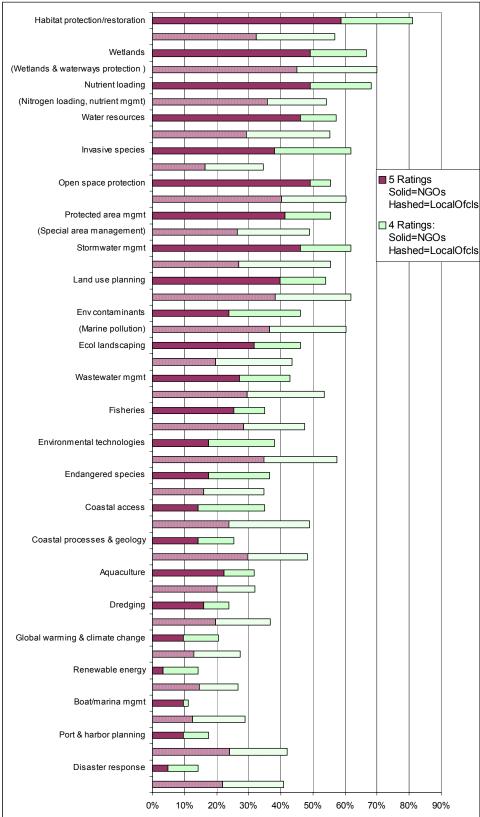
As an alternative perspective on the rankings, the "4" and "5" rankings for each item (above the mid-point of 3) were tallied, converted to percentages, and graphed below. This graph of "above mid-point" levels of interest is offered to provide some indication of the fraction of individuals who would be favorably disposed toward participation, if the scheduling, location, cost, and other features were acceptable.

Within each group of items (Content items A-X and Process or skill items AA - II), the items are arranged according to the mean for all respondents in the current (NGO) study.

The use of "4" and "5" ratings generally provides a confirmation of that ranking, but serves as a reminder that even for a highly-ranked item, not all of the sample (nor of the population of potential participants) would be enthusiastic about participation.



### CHART 4. CONTENT & SKILL/PROCESS TOPICS: PERCENT OF RESPONDENTS RANKING ITEM 4 OR 5



# CHART 5. CONTENT TOPICS: "5" & "4" RATINGS OF NGOS AND LOCAL OFFICALS COMPARED

Chart 5 on the preceding page repeats the content-topic information of the Chart 4 ("Content & Process Topics: Percent of respondents ranking item 4 or 5...") but intersperses the corresponding results from the Local Officials needs assessment of 2002. The Local Official bars are immediately below the corresponding NGO bar and are distinguished by vertical and diagonal hash marks. All NGO bars are labeled with the topic (in the left margin); the local officials' bars are only labeled if the wording was different; such labels are in parentheses.

It has already been noted that there is a greater range in the *mean* NGO responses of these content items than there was among the local officials. Not surprisingly, the same holds true for the 4 and 5 ratings: in general, the local officials gave lower ratings to the top half of the chart and higher ratings to the bottom half.

What may be more important from a practical perspective is that there is that every topic on the list finds some interested audience, large or small, among both the NGO staff and the local officials. If events can be designed that will appeal to both of these audiences, the attendance will almost certainly be larger than if events focus on either NGO staff or local officials but not both. There would also be the possibility of fruitful interchange between local officials and NGO leaders. The challenge will be to design sessions that succeed in meeting the specific needs of diverse participants. To accomplish this, further data-gathering will be useful – such as questions about desired content within the sign-up form and/or phone conversations with a sample of the enrollees for a particular event, as well as feedback forms at the end of sessions.

# Training vs. information

### Key question:

Q: For each topic of interest, do prospective participants prefer information, training opportunities, or both?

For each content and process item, questionnaire respondents were asked to rate not only its importance to them but also to ...

... select a word from the second pull-down box to indicate what would be most useful – information, training, or both.

Information and training were defined in the questionnaire, as follows:

For the content items:

INFORMATION includes factsheets, web-based information, or access to experts

TRAINING means scheduled events designed to convey knowledge and skills to a group of participants, such as workshops, roundtable discussions, or field experiences.

For the process items:

INFORMATION refers to factsheets or web-based information that describes the process and how to do it successfully. TRAINING refers to workshops or other scheduled face-to-face activities.

Summing across all content items (A-X) and across all process items (AA-II), the total preferences expressed were as follows:

|                   | Information | Training | Both  | Training + Both |
|-------------------|-------------|----------|-------|-----------------|
| All content items | 54.1%       | 4.0%     | 42.0% | 46.0%           |
| All process items | 38.8%       | 6.9%     | 54.4% | 61.2%           |

TABLE 7. PREFERENCES FOR INFORMATION, TRAINING, OR BOTH

It is clear from the responses that for most respondents, training without information is not an appealing choice. It may actually have been difficult to imagine training that did not include factsheets or other informational approaches to support it. Also, not surprisingly, training (or information + training) is valued more highly for process items than for content items.

When the content items are sequenced according to their mean importance ratings (as in the "Tiers" table, above), a strong pattern emerges: the top 11 items (and only one other) received higher than the mean rating for "Both" (information + training) whereas 12 of the 13 items ranked lowest on importance received a higher-than-average frequency of "Information" preferences. This is indicated by the boldface percentages in Table 8.

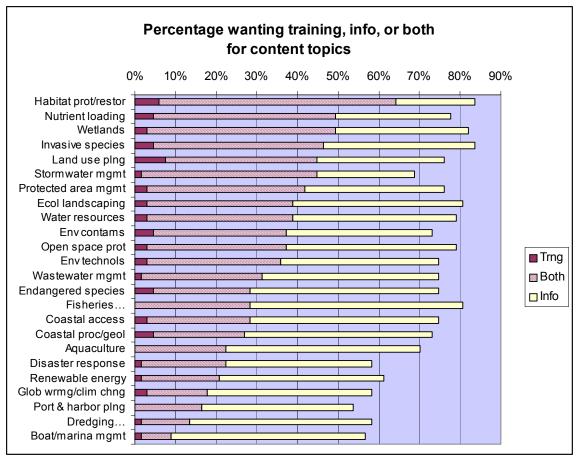
Apparently, if a topic is of high importance, "any means available" (both information and training) should be used, but if the topic is considered less important, information-only will suffice.

|   |                                  | Percentage of respondents preferring |          |       |
|---|----------------------------------|--------------------------------------|----------|-------|
|   | Торіс                            | Information                          | Training | Both  |
| G | Habitat protection & restoration | 23.2%                                | 7.1%     | 69.6% |
| Е | Wetlands                         | 40.0%                                | 3.6%     | 56.4% |
| Р | Nutrient loading                 | 36.5%                                | 5.8%     | 57.7% |
| Ν | Water resources                  | 50.9%                                | 3.8%     | 45.3% |
| В | Invasive species                 | 44.6%                                | 5.4%     | 50.0% |
| I | Open space protection            | 52.8%                                | 3.8%     | 43.4% |
| J | Protected area management        | 45.1%                                | 3.9%     | 51.0% |
| Q | Stormwater mgmt                  | 34.8%                                | 2.2%     | 63.0% |
| Н | Land use planning                | 41.2%                                | 9.8%     | 49.0% |
| Μ | Environmental contaminants       | 49.0%                                | 6.1%     | 44.9% |
| L | Ecological landscaping           | 51.9%                                | 3.7%     | 44.4% |
| 0 | Wastewater management            | 58.0%                                | 2.0%     | 40.0% |
| С | Fisheries                        | 64.8%                                | 0.0%     | 35.2% |
| U | Environmental technologies       | 52.0%                                | 4.0%     | 44.0% |
| А | Endangered species               | 62.0%                                | 6.0%     | 32.0% |
| K | Coastal access                   | 62.0%                                | 4.0%     | 34.0% |
| F | Coastal processes & geology      | 63.3%                                | 6.1%     | 30.6% |
| D | Aquaculture                      | 68.1%                                | 0.0%     | 31.9% |
| S | Dredging                         | 76.9%                                | 2.6%     | 20.5% |
| W | Global warming/climate change    | 69.2%                                | 5.1%     | 25.6% |
| V | Renewable energy                 | 65.9%                                | 2.4%     | 31.7% |
| Т | Boat/marina management           | 84.2%                                | 2.6%     | 13.2% |
| R | Port & harbor planning           | 69.4%                                | 0.0%     | 30.6% |
| Х | Disaster response                | 61.5%                                | 2.6%     | 35.9% |

# TABLE 8. PREFERENCES FOR INFORMATION, TRAINING, OR BOTHFOR CONTENT TOPICS

Note: Boldface type indicates higher-than-average scores within each column, for "Information" and "Both" columns).

#### CHART 6. PERCENTAGE WANTING TRAINING, INFORMATION, OR BOTH FOR CONTENT TOPICS



Percents are of all 67 respondents.

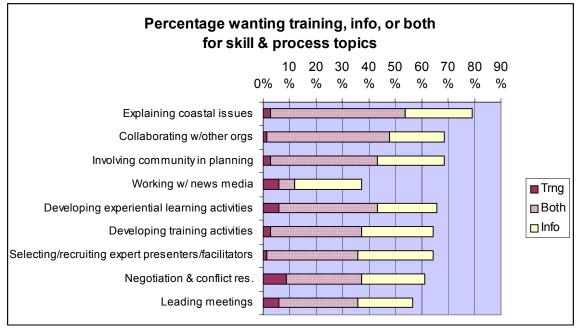
For the process items, the pattern is similar although with more exceptions and therefore not as dramatic. As before, boldface is used to indicate higher-than-median percentages within the "Info" and "Both" columns.

| Item                          | Info  | Training | Both  |
|-------------------------------|-------|----------|-------|
| Explaining coastal issues     | 32.1% | 3.8%     | 64.2% |
| Collaboration w/other orgs    | 30.4% | 2.2%     | 67.4% |
| Involving the community       |       |          |       |
| in planning                   | 37.0% | 4.3%     | 58.7% |
| Working w news media          | 68.0% | 16.0%    | 16.0% |
| Developing experiential       |       |          |       |
| learning activities           | 34.1% | 9.1%     | 56.8% |
| Developing training           |       |          |       |
| Activities                    | 41.9% | 4.7%     | 53.5% |
| Selecting & recruiting expert |       |          |       |
| presenters & facilitators     | 44.2% | 2.3%     | 53.5% |
| Negotiation & conflict        |       |          |       |
| Resolution                    | 39.0% | 14.6%    | 46.3% |
| Leading meetings              | 36.8% | 10.5%    | 52.6% |
| ALL SKILL & PROCESS ITEMS     | 38.8% | 6.9%     | 54.4% |

TABLE 9. PREFERENCES FOR INFORMATION, TRAINING, OR BOTH: SKILL AND PROCESS ITEMS

Note: Boldface type indicates higher-than-average scores within each column, for "Information" and "Both" columns).

### CHART 7: PERCENTAGE WANTING TRAINING, INFORMATION, OR BOTH FOR SKILL AND PROCESS ITEMS



# Logistics

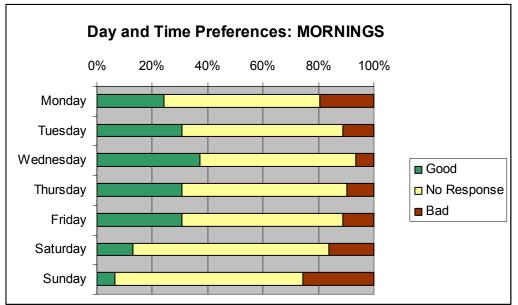
# Timing and location

# Key question:

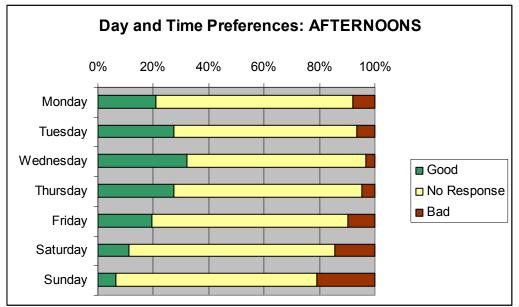
Q: What are the respondents' preferences with regard to timing, location, and other details?

# Days of the week and time of day

- The best days of the week for training events are Tuesday, Wednesday, and Thursday.
- For half-day sessions, there is no clear preference between mornings and afternoons.
- (For the local official study, there was a preference for mornings.)
- For any given topic, consider whether a half-day session will suffice, because full-day weekday sessions are bad for about 20% of this study's respondents, whereas half-day sessions are bad for 10% or fewer.
- Evenings are to be avoided with this audience.
- Weekends are not as good as weekdays. If weekend sessions need to be held (for example, to bring together paid staff with volunteers (who may have weekday jobs), Saturdays appear to be slightly better than Sundays. There is no strong preference between morning and afternoons, but full weekend days and weekend evenings are to be avoided; they are bad for nearly half of the respondents in this study.

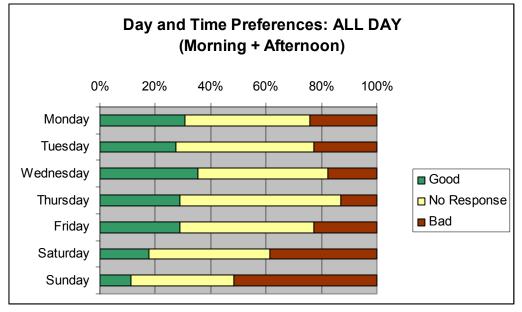


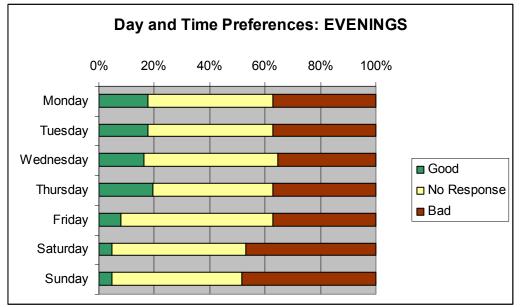
# CHART 8. DAY AND TIME PREFERENCES: MORNINGS



#### **CHART 9. DAY AND TIME PREFERENCES: AFTERNOONS**







### CHART 11. DAY AND TIME PREFERENCES: EVENINGS

# Months of the year

A single item asked participants to use checkmarks to "indicate which months (if any) are especially good or bad for you to attend training ... by putting a checkmark next to as many months as you like" (one column for "especially good" and another for "especially bad"). The next graph below shows the results.

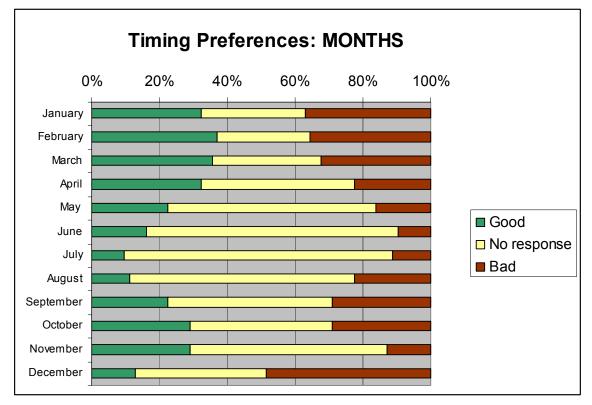


CHART 12. TIMING PREFERENCES: MONTHS

- November may be the best month for training sessions for this audience. It is not the month with the highest percentage of "good" ratings (January through April have higher percentages of "good" ratings), but it has one of the lowest percentages of "bad" ratings.
- April, May, and October deserve consideration as well: although they don't have the highest "good" percentages, they may provide an optimal compromise in that they have only moderate levels of "bad" ratings.
- Even June and July might be workable: despite low percentages of "good" ratings, they also have low percentages of "bad" ratings. (This is different from the local official study, which concluded "avoid June, July, and August (unless a program's content actually requires it)." If June or July activities are tried, this should be done "experimentally," with attention to response rates but that is good practice whatever the timing.
- January, February, and March are risky in that their high proportion of "good" ratings are balanced by high percentages of "bad" ratings. This is at odds with the local official study; for that audience, January, February, and March are the prime months for training
- December is definitely to be avoided. (This may reflect on mid- to late-December; early December might be possible.)

# Preferences regarding multi-day training

If two or more days are required, schedule consecutive days or one week apart, but not further apart. (If more than two days are required, one week apart may be the better approach.) This finding was similar to the local official study's finding.

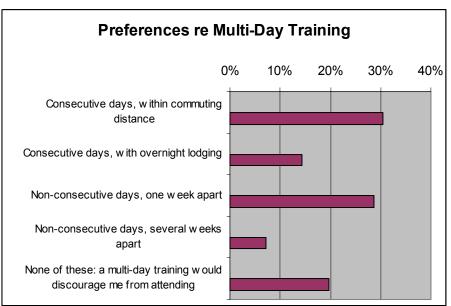


CHART 13. PREFERENCES REGARDING MULTI-DAY TRAINING

Percents shown are of the 56 respondents who answered this question.

Rankings of the same items in the local government study were identical, except that fewer respondents chose the last option ("none of these..."). For the local government study, employees and volunteers were identified and had different preferences: employees were more strongly in favor of the first option ("consecutive days, within commuting distance") whereas the volunteers' first choice was "non-consecutive days, one week apart."

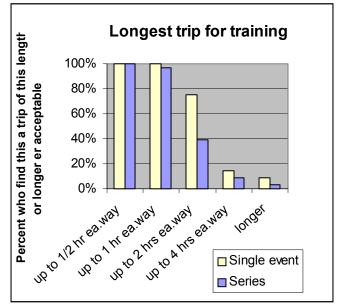
# Acceptable travel times for training

Predictably, people will travel longer for a single event than for the multiple trips that would be required for a series of events. The study provides specifics regarding travel times:

Whenever possible, locate events so that no more than one hour's travel (each way) is required, especially if there are multiple sessions. Up to two hours may be workable for a single event. (This finding is similar to that from the local official study.)

- For a single event, up to two hours of travel each way is acceptable to 75% of these respondents.
- For a series of events with multiple trips, two hours each way would be acceptable to 40% which is to say, too long for 60%. One hour each way would be acceptable to 96%.

Unfortunately, what this means is that the more contact hours a program planner wishes to provide (assuming enough contact hours to require multiple trips), the more important it becomes to offer the activities at multiple locations in order to reduce the travel time required of participants.



### CHART 14. LONGEST TRIP FOR TRAINING

N=56 for the "series" question, 57 for the "single event" question. Percents shown are of that number of respondents.

# Pricing

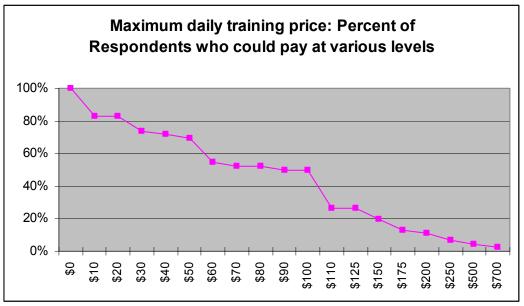
Participants were asked:

What is the maximum total amount you believe would be paid – by you personally and/or by your organization – for you to participate in a one-day training session of good quality? \$\_\_\_\_\_

The mean response was \$104.02 and the median was \$100. This is higher than the comparable response in the local official study (mean, \$81.80; median \$75). However, there are more individuals in this sample who indicated a low price: to be acceptable to 80% of these individuals, the price for one day of training would need to be \$25 or less. It is noteworthy that 12 individuals left this item blank or indicated "?" or "don't know" – a much higher non-response rate than for most other items.

(In the local official study, a \$50 fee was acceptable to 82% of employees and 78% of volunteers; \$35 was acceptable to 90% of employees; \$27 was acceptable to 90% of volunteers.)

#### CHART 15. MAXIMUM DAILY TRAINING PRICE



Note: n=46. (Three other respondents replied "?" and two replied "don't know." The remainder were blank, with unclear implications.)

- If possible, charge \$50 or less for a one-day training session. There were a few respondents for whom several hundred dollars would be an acceptable rate, but even \$60 would be unacceptable to about half of the prospective participants.
- Because \$50 is acceptable to only about 2/3 of this sample, provide some type of scholarship or "reduced rate" approach. \$20 would be acceptable to about 82%, but there is still a percent for whom even \$10 would be too much. This study found a wider range of acceptable pricing than did the local official study. The suggestion from that study was a basic rate of \$50/day, but also "a reduced rate of \$35 for one-day training sessions for those volunteers who are paying from personal funds and do next expect to be reimbursed."
- This recommendation from the local official study may be relevant:
- Consider similar discounts [a reduced rate of \$35] for three or more sign-ups from the same community [or organization] (to encourage developing a "critical mass" of participants) and multi-event sign-ups by a single person. Develop ways to manage this that do not encourage delaying sign-ups until the critical number have committed: "Please register ASAP to guarantee a place; if two others from your community register, you will receive a partial refund."

# **Review of Recommendations**

This study has implications for training content, format, and logistics.

### Recommendations regarding training content

The ratings of content and process topics provide an initial indication of the topics that will receive the highest interest. Repeating the upper two tiers of Table 6:

| Level of interest Content Topics<br>(1 = low, 5 = high) |  | Skill & Process Topics  |  |  |
|---|--|---|--|--|
| <b>Tier 1</b> (Mean ranking > 4.25)                     | Habitat protection and restoration   | -   |  |  |
| <b>Tier 2</b><br>(3.75 – 4.25)                          | Wetlands<br>Nutrient loading<br>Water resources<br>Open space protection<br>Storm water management<br>Invasive species<br>Land use planning<br>Protected area management | Explaining coastal issues to a community or an individual citizen |  |  |

TABLE 10. CONTENT AND SKILL & PROCESS TOPICS BY TIER: TIERS 1 AND 2

Table 10 repeats the top two tiers of Table 6.

The study combined several categories of NGOs; the top content items for each category are listed in the course of Appendix D.

Chart 4, which shows the percent of respondents who ranked each item "4" or "5", provides further basis for anticipating the level of interest and response to particular topics.

Topics that appear lower on the rankings are, for the most part, more specialized, but they nonetheless have their audiences – a smaller number of people who would rate the topic "4" or "5" on a five-point scale. Again, refer to Chart 4.

The challenge for CTP and its chosen presenters and materials developers is not simply to select high-demand topics and deliver on them; there will be a need for a more integrated approach. To that end, the conceptual framework shown in Table 5 may provide a basis for integrating across topics. The basic point of the framework is that topics can be associated with one or more of these three themes:

- Key resources
- Threats and challenges to such resources
- Approaches to address threats and challenges

An implication of this framework is that it may be important to consider both the threats and challenges to a particular resource and also the approaches to address those threats and challenges.

If the starting point for a particular training offering is one type of resource – such as habitat, wetlands, open space, water resources, or protected areas – it will be plausible to include both an assessment of the threats and challenges to that resources, but also the approaches available to manage or otherwise address those threats and challenges. This would involve a unified look at a resource, the current situation pertaining to that resource (particularly threats and challenges), and the action options that could address the threats and challenge. Within such a framework, the findings of this needs assessment provide a way to select specific examples that will find a wide audience and stimulate the highest level of interest.

However, a particular training offering could find its focus in several other ways:

- by focusing on a particular category of threats or challenges (for one type of resource or several) and/or
- by focusing on particular approaches to address the threats and challenges.

### Recommendations regarding formats: information vs. training

 $\Box$  For some of the topics considered in the study, there is broad enough interest in the topic and sufficient interest in a training format (as distinct from "information only") to support training. For other topics, there is a lower level of interest in the topic and/or a low level of interest in a training format; such topics are likely to be unsuccessful as training offerings. Regarding level of interest in each topic, see Chart 4, which shows the "4" and "5" for each topic. Regarding level of interest in training for each topic, see Tables 8 and 9 and the corresponding charts, 6 and 7.

□ High-quality informational materials will be important for any topic that CTP chooses to address, whether training sessions are offered or not. When asked to indicate whether information, training, or both would be most helpful, more than half chose "information" or "both" for every content topic and almost every skill/process topic. For 18 of the 24 content topics, more than two-thirds chose "information" or "both."

 $\Box$  This study did not attempt to distinguish preferences for specific training formats, but the format preferences that emerged from the local official study provide some indication of what this audience's format preferences may be. Quoting from that report (bullets and italics added):

- *Workshops* are the preferred format of two-thirds of the respondents for addressing the topics that they are interested in. Workshops can mean many different things; the respondents' ratings of other "in-person" formats suggest which specific workshop formats will be more or less acceptable.
- *Seminars, case studies,* and *panel discussions* each were favored by about half of the respondents.

- *Hands-on approaches, problem solving* regarding important local issues, and *roundtable discussions (with peers)* were rated slightly lower (but simulations were substantially lower, with some specific comments about dislike for role plays).
- *Lectures* were favored by only about one-fourth of the respondents.

### Recommendations regarding timing and travel distances

For this audience,

□ Offer training activities mostly on Tuesday, Wednesday, and Thursday.

□ For half-day sessions, there is no clear preference between mornings and afternoons. (For the local official study, there was a preference for mornings.)

 $\Box$  For any given topic, consider whether a half-day session will suffice, because full-day weekday sessions are bad for about 20% of this study's respondents, whereas half-day sessions are bad for 10% or fewer.

Evenings are to be avoided with this audience.

□ Weekends are not as good as weekdays. If weekend sessions need to be held (for example, to bring together paid staff with volunteers (who may have weekday jobs), Saturdays appear to be slightly better than Sundays. There is no strong preference between morning and afternoons, but full weekend days and weekend evenings are to be avoided; they are bad for nearly half of the respondents in this study.

□ November may be the best month for training sessions for this audience. It is not the month with the highest percentage of "good" ratings (January through April have higher percentages of "good" ratings), but it has one of the lowest percentages of "bad" ratings. April, May, and October deserve consideration as well: although they don't have the highest "good" percentages, they may provide an optimal compromise in that they have only moderate levels of "bad" ratings.

□ Even June and July might be workable: despite low percentages of "good" ratings, they also have low percentages of "bad" ratings. (This is different from the local official study, which concluded "avoid June, July, and August (unless a program's content actually requires it)." If June or July activities are tried, it should be done

"experimentally," with attention to response rates – but that is good practice whatever the timing.

□ January, February, and March are risky in that their high proportion of "good" ratings are balanced by high percentages of "bad" ratings. This is at odds with the local official study which indicated that for that audience, January, February, and March are the prime months for training

□ December is definitely to be avoided. (This may reflect on mid- to late-December; early December might be possible.)

 $\Box$  If two or more days are required, schedule consecutive days or one week apart, but not further apart. (If more than two days are required, one week apart may be the better approach.) This finding was similar to the local official study's finding.

Whenever possible, locate events so that no more than one hour's travel (each way) is required, especially if there are multiple sessions. Up to two hours may be workable for a single event. (This finding is similar to that from the local official study.)

# **Recommendations regarding pricing**

 $\Box$  If possible, charge \$50 or less for a one-day training session. There are a few for whom several hundred dollars would be an acceptable rate, but even \$60 would be unacceptable to about half of the prospective participants.

 $\Box$  Because \$50 is acceptable to only about 2/3 of this sample, provide some type of scholarship or "reduced rate" approach. \$20 would be acceptable to about 82%, but there is still a percent for whom even \$10 would be too much. This study found a wider range of acceptable pricing than did the local official study. The suggestion from that study was a basic rate of \$50/day, but also "a reduced rate of \$35 for one-day training sessions for those volunteers who are paying from personal funds and do next expect to be reimbursed."

□ This recommendation from the local official study may be relevant:

Consider similar discounts [a reduced rate of \$35] for three or more sign-ups from the same community [or organization] (to encourage developing a "critical mass" of participants) and multi-event sign-ups by a single person. Develop ways to manage this that do not encourage delaying sign-ups until the critical number have committed: "Please register ASAP to guarantee a place; if two others from your community register, you will receive a partial refund."

# Appendices

Appendix A: Organizations Represented in the Sample Appendix B: Interview Questions Appendix C: On-line Questionnaire Appendix D: Profiles of NGO Organizations by Category

### Appendix A: Organizations represented in the sample (interview and/or survey)

American Planning Association, Mass. Chapter Association to Preserve Cape Cod Barnstable Association of Recreational Shellfishing (BARS) Barnstable Land Trust Cape Cod Chamber of Commerce Cape Cod Commercial Hook Fishermen's Assoc. Cape Cod Cooperative Extension Cape Cod Cranberry Growers' Association Cape Cod League of Women Voters Center for Student Coastal Research The Coalition for Buzzards Bay Coastal Conservation Association of Mass. Community Foundation of Cape Cod The Compact of Cape Cod Conservation Trusts Eel River Watershed Association, Ltd. Eight Towns and the Bay Fore River Watershed Association Friends & Fishers of Edgartown Great Pond The Friends of Pleasant Bay, Inc. GreenCAPE The Gulf Association, Inc. League of Women Voters (several chapters) Long Pond Watershed Association Manomet Center for Conservation Sciences Maria Mitchell Association Martha's Vineyard Shellfish Group Inc Mashpee Environmental Coalition Mass Audubon (several locations)

Mass Bays Program Mass. Aquaculture Association Mass. Association of Conservation Commissions Mass. Bays Program Massachusetts Audubon Society Massachusetts Bays Program Massachusetts Shellfish Officers Association MassBays Program Merrimack Valley Planning Commission Metropolitan Area Planning Council Nantucket Conservation Foundation, Inc. Neponset River Watershed Association North and South Rivers Watershed Association First Herring Brook Watershed Initiative Orleans Pond Coalition Salem Sound Coastwatch Saugus River Watershed Council Save the Harbor/Save the Bay Straits Pond Watershed Association Thornton W. Burgess Society The 300 Committee Tisbury Waterways Inc. The Trustees of Reservations Urban Harbors Institute Weir River Estuary Park Committee Weir River Watershed Association Westport Fishermen's Assoc. Westport River watershed Alliance Wildlands Trust of Southeastern Mass.

The tables of organizations within Appendix D, below, show the assignment of these organizations to the categories used in this study.

### **Appendix B: Interview Questions**

### Part 1: Questions for the initial interview

(usually asked by the assistant)

1) What are your organization's main issues or focus areas?

(Preliminary answers to this question were obtained from the organization's web site, where available)

2) What is the geographic scope of your organization's activities?

(single community, larger, smaller?)

3) Who are the constituents or members of [your organization]?

(individuals? families? organizations? etc.)

4) How do you provide those people [those various interests] with information?

(Ex. [if needed]: factsheets? Classes? Workshops?)

5) Do you offer training or educational programs?

### Part 2: Questions usually part of the main interview

(usually asked by the principal researcher)

1) What is your role with respect to education or training?

2) Do staff or volunteers of your organization go to training activities offered by other organizations?

3) How do you view training and information exchange as being useful for your organization?

4) What is your organizations level of involvement in training?

5) How do you find out about training?

6) Do you collaborate with other organizations to plan training? To deliver it? To recruit participants for it?

Are you open to exploring collaboration for training in the future?

### Added to explore this theme:

7) Would you be receptive to the idea of "thinner boundaries" between organizations with respect to training – meaning greater sharing of information about training opportunities, making training opportunities more available through and to other organizations, etc.?

### Added to assess an emerging theme:

8) Would ou be interested in a series of facilitated discussions about how to create an "environmental ethic" or a broader environmental awareness and consciousness among the public?

#### **Appendix C: On-line Questionnaire**

#### COASTAL ISSUES QUESTIONNAIRE

#### I. Introduction

This survey – for representatives of Massachusetts organizations involved in coastal issues – is designed to gather information about the training needs that arise as organizations attempt to address the issues and problems that face our coastal areas.

As you complete this survey, we would like you to respond <u>on behalf of</u> <u>your organization</u>, rather than answering as an individual.

We appreciate the time you are giving to this study. We expect to use the results to shape programs that will benefit the participating organizations and the coastal areas of Massachusetts.

#### TO MOVE THROUGH THIS SURVEY, click the word "Next" (or "Back") at the bottom of each screen-page, <u>not</u> your browser's forward and back buttons. You may need to scroll down the page to see "Next" and "Back."

This study is sponsored by the Massachusetts Coastal Training Program ("CTP"), a joint effort of Waquoit Bay National Estuarine Research Reserve in Falmouth, the Woods Hole Oceanographic Institution's Sea Grant Program, and Massachusetts Coastal Zone Management, with funding from NOAA (the National Oceanographic and Atmospheric Administration). Contact CTP at 508-457-0495 or visit coastaltraining.org.

The study is being carried out by DFD Associates of Amherst, Mass. If you have questions or comments, or if you would prefer to complete a paper-and-pencil version of this survey, contact Duane Dale at DFD: ddale@DFDassociates.com or by phone, toll free, at 877-777-7084.

#### **II. Your organization and your role**

1. COASTAL ISSUES include a wide variety of topics that affect coastal communities. For example, coastal issues include topics related to marine waters, shorelines, land use, pollution, and shellfish.

What organization are you involved with that addresses coastal issues in some way? (If more than one organization, which one are you most involved with?)

<sup>2.</sup> How would you describe that organization's role regarding coastal issues? (Check all that apply.)

<sup>□</sup> Education

<sup>□</sup> Research

<sup>□</sup> Policy development

<sup>□</sup> Advocacy

<sup>□</sup> Resource management, protection, and/or preservation

<sup>□</sup> Other (please specify):

3. What is your role (if any) regarding information, education, or training about coastal issues? (Check all that apply.)

□ Participant in training sessions

User of informational materials

□ Planner or coordinator of training events

Content provider (writer, teacher, lecturer, facilitator, etc.)

□ Support staff

 $\Box$  None of the above

□ Other (please specify): \_\_\_\_\_

# **III.** Topics

4. The table below contains a list of possible topics for training or information. For each topic, please indicate how helpful you think it would be to your organization if additional information or training were available to staff or volunteers within your organization (beyond anything currently available).

Do so by selecting a number in the first pull-down box where one is low and five is high. ALSO, for each topic, use the second pull-down box to indicate what would be most helpful for that topic: information, training, or both.

INFORMATION includes factsheets, web-based information, or access to experts. TRAINING means scheduled events designed to convey knowledge and skills to a group of participants, such as workshops, roundtable discussions, or field experiences. Any skipped items will be interpreted as being of low importance to your organization.

|   | IMPORTANCE? | INFO OR TRAINING?      |
|---|-------------|------------------------|
| A: Endangered species   | 12345       | Info / Training / Both |
| B: Invasive species   | 12345       | Info / Training / Both |
| C: Fisheries  | 12345       | Info / Training / Both |
| D: Aquaculture (shellfish)                                    | 12345       | Info / Training / Both |
| E: Wetlands   | 12345       | Info / Training / Both |
| F: Coastal processes & geology                                | 12345       | Info / Training / Both |
| (shoreline changes, coastal engineering, etc.)                |             | · ·                    |
| G: Habitat protection and restoration                         | 12345       | Info / Training / Both |
| H: Land use planning  | 12345       | Info / Training / Both |
| I: Open space protection                                      | 12345       | Info / Training / Both |
| J: Protected Area Management                                  | 12345       | Info / Training / Both |
| (reserves, sanctuaries, ACECs)                                |             |                        |
| K: Coastal access   | 12345       | Info / Training / Both |
| L: Ecological landscaping                                     | 12345       | Info / Training / Both |
| (incl. native plants, drought-resistant landscaping, etc.)    |             |                        |
| M: Environmental contaminants (oil spills, chemicals, toxins) | 12345       | Info / Training / Both |
| N: Water resources (supply, quality)                          | 12345       | Info / Training / Both |
| O: Wastewater management                                      | 12345       | Info / Training / Both |
| P: Nutrient loading   | 12345       | Info / Training / Both |
| Q: Stormwater management                                      | 12345       | Info / Training / Both |
| R: Port and harbor planning                                   | 12345       | Info / Training / Both |
| S: Dredging   | 12345       | Info / Training / Both |

# IMPORTANCE? INFO OR TRAINING?

| T: Poot/marina management  | 12345 | Info / Training / Both |
|--|-------|------------------------|
| T: Boat/marina management  |       | <u> </u>               |
| U: Environmental technologies  | 12345 | Info / Training / Both |
| (ex.: septic, wastewater, erosion control, etc.)                                     |       |                        |
| V: Renewable energy  | 12345 | Info / Training / Both |
| W: Global warming and climate change<br>(incl. sea level rise & other local impacts) | 12345 | Info / Training / Both |
| X: Disaster response   | 12345 | Info / Training / Both |

5. Are there other topics that you would find useful?

| II so, please | name them here. |
|---------------|-----------------|
| Other #1:     |                 |
| Other #2:     |                 |
| Other #3:     |                 |

6. If you listed any "Other" items in the previous question, please rate them here.

| Other #1 | 12345 | Info / Training / Both |
|----------|-------|------------------------|
| Other #2 | 12345 | Info / Training / Both |
| Other #3 | 12345 | Info / Training / Both |

7. If you have any comments or suggestions about the topics in the previous questions, please enter them here. You are welcome to refer to the topics using the letters that precede them (A, B, C, ...) and to your "Other" topics by number (1, 2, 3).

# IV. Skills and Processes

8. This group of topics has to do with skills or processes that may be related to addressing coastal issues. As with the previous question regarding topics, for each topic please select a number from the first pull-down box to indicate how important it would be to your organization to have access to information or training that goes beyond what is currently available. Then select a word from the second pull-down box to indicate what would be most useful -- information, training, or both.

INFORMATION refers to factsheets or web-based information that describes the process and how to do it successfully.

TRAINING refers to workshops or other scheduled face-to-face activities.

As before, skipped items will be interpreted as being of low importance to your organization.

|   | IMPORTANCE? | INFO OR TRAINING?      |
|---|-------------|------------------------|
| AA: Explaining coastal issues to a community          | 12345       | Info / Training / Both |
| or an individual citizen                              |             |                        |
| BB: Working with the news media                       | 12345       | Info / Training / Both |
| CC: Leading meetings                                  | 12345       | Info / Training / Both |
| DD: Processes for involving the community in planning | 12345       | Info / Training / Both |
| EE: Processes for negotiation & conflict resolution   | 12345       | Info / Training / Both |
| FF: Ways to work together with other organizations    | 12345       | Info / Training / Both |
| concerned with coastal issues                         |             |                        |
| GG: Developing an appropriate set of training and     | 12345       | Info / Training / Both |

| informational activities for my organization.      |       |                        |
|--|-------|------------------------|
| HH: Developing hands-on, "experiential" learning   | 12345 | Info / Training / Both |
| activities regarding specific coastal issues.      |       |                        |
| II: Selecting and recruiting expert presenters and | 12345 | Info / Training / Both |
| facilitators for training activities.              |       |                        |

9. If you have any additional process-skill topics to suggest, please list them here.

Other #1: \_\_\_\_\_\_ Other #2: \_\_\_\_\_\_ Other #3:

10. If you've added any "Other" process-skill topics in the previous question, please rate them here.

| Other #1 | 12345 | Info / Training / Both |
|----------|-------|------------------------|
| Other #2 | 12345 | Info / Training / Both |
| Other #3 | 12345 | Info / Training / Both |

11. If you have any comments or suggestions about the process-skill items, please type them here. You are welcome to refer to them by their letter-code (AA, BB, CC) or by the number of any "Other" items (1, 2, 3).

### **V. Time Preferences**

12. GOOD TIMES: Please indicate times during a typical week that are especially good for you to attend training activities. Do so by checking as many boxes as you want in the matrix below.

|            |         |           | Full Day      |         |
|------------|---------|-----------|---------------|---------|
| GOOD TIMES | Morning | Afternoon | (morn.+ Aft.) | Evening |
| Monday     |         |           |               |         |
| Tuesday    |         |           |               |         |
| Wednesday  |         |           |               |         |
| Thursday   |         |           |               |         |
| Friday     |         |           |               |         |
| Saturday   |         |           |               |         |
| Sunday     |         |           |               |         |

13. BAD TIMES: Please indicate which times during a typical week are especially bad or impossible for you to attend training activities. Do so by checking as many boxes as you like in the matrix below.

|            |         |           | Full Day      |         |
|------------|---------|-----------|---------------|---------|
| GOOD TIMES | Morning | Afternoon | (morn.+ Aft.) | Evening |
| Monday     |         |           |               |         |
| Tuesday    |         |           |               |         |
| Wednesday  |         |           |               |         |
| Thursday   |         |           |               |         |
| Friday     |         |           |               |         |
| Saturday   |         |           |               |         |
| Sunday     |         |           |               |         |

14. GOOD AND BAD MONTHS: Please indicate which months (if any) are especially good or bad for you to attend training. Do so by putting a checkmark next to as many months as you like.

Months with no checkmark will be considered "acceptable."

|           | Especially | Especially |
|-----------|------------|------------|
|           | Good       | bad        |
| January   |            |            |
| February  |            |            |
| March     |            |            |
| April     |            |            |
| May       |            |            |
| June      |            |            |
| July      |            |            |
| August    |            |            |
| September |            |            |
| October   |            |            |
| November  |            |            |
| December  |            |            |

# VI. Logistics & Pricing

15. If a training topic requires more than one day of training, what would your preferred schedule be? Check only one.

O consecutive days, within commuting distance

O consecutive days, with overnight lodging

O non-consecutive days, one week apart

O non-consecutive days, several weeks apart

O none of these: a multi-day training would discourage me from attending

16. What is the longest trip you would be willing to make for relevant, useful training that involves multiple trips (for each session of a series)? Check only one.

O up to 1/2 hour each way O up to 1 hour each way O up to 2 hours each way O up to 4 hours each way O longer

17. What is the longest trip you would be willing to make for relevant, useful training -- for a single event (NOT multiple trips)? Check only one.

O up to 1/2 hour each way O up to 1 hour each way O up to 2 hours each way O up to 4 hours each way O longer

18. What is the maximum total amount you believe would be paid -- by you personally and/or by your organization -- for you to participate in a one-day training session of good quality? \$\_\_\_\_\_

### **VII. Final Questions**

19. We may want to contact you with follow-up questions, to share the study's results, or to let you know about CTP activities that result from this study, so we would appreciate if you would provide your name, phone number, and/or email address. Thanks.

| Name                        |  |
|-----------------------------|--|
| Phone number with area code |  |
| E-mail address              |  |

20. Are there other individuals within your organization -- either staff or volunteers -- who are also involved in coastal issues, with whom we should be in contact regarding this survey?

If so, please list their name(s) here. Also, if it's convenient to do so, please provide their email address(es).

21. If you collaborate with other organizations on coastal issues, please list key staff or key volunteer(s), along with their organization's name, so that we may contact them.

22. Do you have other comments or suggestions regarding information, education, or training about coastal issues, or about this survey? If so, please type them here.

This completes the survey questions. Thanks for participating!

CTP looks forward to finding ways to collaborate with you and your organization. Don't hesitate to be in touch.

Clicking "DONE" will take you to CTP's website, which you can bookmark if you like. You'll be free to browse or to leave at any time.

### Appendix D: Profiles of NGO Organizations by Category

Appendix C presents a compilation of information derived primarily from the interviews for each sub-category of non-governmental organization. In other words, these are not intended to be thorough and complete profiles, but rather a representation of the information obtained in the interviews, organized so as to help the CTP partner organizations understand the nature of the clusters of organizations that they may choose to assist or collaborate with.

The categories and sub-categories used here are the same ones introduced in Table 2 at the start of this report:

# ENVIRONMENTAL AND RESOURCE-PROTECTION ORGANIZATIONS > Statewide (including state chapters of national organizations) (3) > Regional (sub-state) (1) > Local (2) > Bay and Estuary Organizations (13) > River and Watershed Organizations (9) > Lake and Pond Organizations (7) > Land trusts, conservation trusts (5) GOVERNANCE, PLANNING, AND POLICY ORGANIZATIONS > Planning assistance (incl. Regional Planning Agencies) (3) > Associations of municipal officials or volunteer boards & commissions (2) > Voters', good government, & issues-education organizations (2) > Community foundations (1) **RESEARCH & EDUCATION** > Science centers, museums, etc. (2) > Research & education projects (1) > Water monitoring (1, plus several with this as a secondary focus) ECONOMIC- & RECREATIONAL- INTEREST ORGANIZATIONS > Economic development organizations (1) > Commercial & recreational fishers' organizations (6) OTHER ORGANIZATIONS

Each profile addresses most of these topics:

| Sample issues of concern within this category | Training they conduct          |
|---|--------------------------------|
| Sample programmatic approaches                | Training interests             |
| Public education modes                        | Expertise needed (on occasion) |
| Primary target audience                       | Information sources            |
| Possible emerging issues or approaches        | Expertise to share             |
| Procedural issues                             | Organizational models          |
| Collaborators and resource groups for these   | Staffing variations            |
| organizations                                 | Procedural variations          |

#### ENVIRONMENTAL AND RESOURCE-PROTECTION ORGANIZATIONS

| Content items that were top-ranked by | Mean for these | Mean      | Rank for all |
|---------------------------------------|----------------|-----------|--------------|
| respondents from environmental and    | organizations  | for all   | respondents  |
| resource-protection organizations     | r              | espondent | S            |
| Habitat protection / restoration      | 4.56           | 4.43      | 1            |
| Stormwater mgmt                       | 4.23           | 3.89      | 6            |
| Nutrient loading                      | 4.23           | 4.04      | 3            |
| Wetlands                              | 4.16           | 4.16      | 2            |
| Water resources                       | 4.03           | 3.98      | 4            |
| Land use planning                     | 4.00           | 3.85      | 8            |
| Open space protection                 | 3.80           | 3.95      | 5            |
| Invasive species                      | 3.73           | 3.88      | 7            |
| Environmental contaminants            | 3.58           | 3.51      | 10           |
| Protected area management             | 3.55           | 3.82      | 9            |
| Wastewater management                 | 3.48           | 3.33      | 12           |
| Ecological landscaping                | 3.39           | 3.37      | 11           |
| Environmental technologies            | 3.37           | 3.25      | 14           |

Note that respondents from environmental and resource-protection organizations make up 57% of all respondents, so it is not surprising that the rankings for all respondents would be relatively similar to the rankings for these participants.

# **Statewide Environmental Organizations**

| Included in the sample       | Other examples |
|------------------------------|----------------|
| Mass. Audubon Society*       |                |
| Sierra Club (Mass. Chapter)* |                |

\* = Someone from this organization was interviewed for this study.

Others in the left-hand column participated only by means of the on-line survey.

*Sample issues from this category:* habitat protection and restoration, anadromous fish, salt marsh restoration; environmental awareness, public access, non-point-source runoff and nutrient loading, dredging; growth, sprawl, open space, zoning. Both organizations have much broader agenda than coastal issues. One has new marine and coastal committee, with a temporary chair; not sure how much of an organizational priority it will become; an early list of potential issues leans toward ocean issues but includes coastal armoring.

*Sample programmatic approaches:* Research; education; advocacy; property owernship/management; speaking (ex.: to planning board or ConComm), assistance to municipalities (ex.: to develop a river and stream restoration plan); rally (re Community Preservation Act); school education ("Saltwater Science", curriculum for state education frameworks in science and math using saltmarshes as focus).

*Public education modes:* workshops, conferences (ex.: State of \_\_\_\_\_ Harbor), newsletters, factsheets, handouts, follow-up suggestions

Primary target audiences: general public, volunteers, local officials

*Possible emerging issues or approaches:*  $CO_2$  from transportation as contributor to global warming and therefore to sea-level rise.

*Procedural issues:* Location for workshops regarding controversial issues: "Find that we have to take our sessions to the central point of the controversy." Challenge of moving from work with one individual or one board to community-level interest and support for action.

*Collaborators and resource groups for these organizations:* Great Marsh Initiative; Mass. CZM; Ocean Conservancy (regarding U.S. Coastal Commission), Conservation Law Foundation, Mass. Audubon, Harvard University (study of national-level organization), state low impact development committee, Essex County Smart Growth, Green Neighborhoods. Division of Marine Fisheries (TA re anadromous fish)

*Training they conduct:* water quality monitoring, identification of invasive species, vernal pool workshops; extensive professional development at various locations (for their staff and others)

*Professional development:* One respondent said "largely through coalition and collaboration work ... stimulation from professional colleagues."

*Organizational models:* Paid staff and multiple facilities; grassroots and largely volunteer, dependent on the initiative of volunteers. Both are state-level manifestations of national organizations; both have sub-state regional efforts that take on their own unique profile.

*Staffing variations:* Wide variance in staffing levels, facilities. One organization has coastal ecologist, conservation scientists, salt marsh scientist, advocacy program staff.

# Regional environmental, conservation, and preservation organizations

| Included in the sample              | Other examples                     |
|-------------------------------------|------------------------------------|
| Association to Preserve Cape Cod*   | Trout Unlimited, Cape Cod Chapter  |
| Essex County Greenbelt Association* | Friends of Cape Cod Nat'l Seashore |
| (also functions as a land trust)    |                                    |
| Green Futures*                      |                                    |
| Pleasant Bay Resource Management    |                                    |
| Alliance*                           |                                    |

\* = Someone from this organization was interviewed for this study.

Others in the left-hand column participated only by means of the on-line survey.

*Sample issues from this category:* Preserve water resources, open space, and other natural resources; coordination of multi-town efforts, implementation of ACEC plan, greenbelt planning and implementation, N loading, wastewater treatment, salt marsh ecology,

environmental awareness (including cape, salt marshes, etc.), environmental ethic, sustainable futures.

*Sample programmatic approaches:* planning, assistance to towns, workshops for teachers, land ownership/management, salt marsh monitoring and restoration (opening culverts, restoring flow, etc.), education, advocacy, creation of Southeastern Mass. Bioreserve (first in state), major landfill near municipal water supply, LNG port location

*Public education modes:* Speeches, sustainability fair, forums (ex. Forum: liveable cities incl. Sustainability, greenways, and environmental justice); newsletter or pamphlet on watershed issues, summary report on water quality data, media presence, web site, annual report, books, newsletters, workshops, classes, factsheets

Primary target audiences: general public, towns, teachers & students,

*Possible emerging issues or approaches:* training volunteer community advocates (but might become more than they could handle or support; might want to draw on external resources e.g. Sierra Club's weekend-long training for community advocates

*Collaborators and resource groups for these organizations:* Mass. CZM, WBNERR, MBL (contact with scientists, lease a property to MBL for research station), Mass. Audubon, Sierra Club, APCC, National Seashore, SEMCO (WHOI Sea Grant–sponsored listserv), Clean Water Action, Mass. Fisheries & Wildlife (Urban Rivers program – cosponsored an event on how to turn rivers into an economic resource), Toxics Action, Local Council of Churches, Save the Bay (RI), Coalition for Buzzards Bay

*Training they conduct:* water quality monitoring, identification of invasive species, salt marsh monitoring, how local government works

Professional development: Development director training

*Expertise needed (on occasion):* regret the loss of the watershed coordinators; would like telephone access to expertise and a way to figure out who to go to for particular questions, guidance re dangers and safety issues related to LNG transport

*Their expertise (potentially to share):* water quality monitoring; build-out analyses, analysis of development potential within watershed; guidelines for docks, piers, stairways;

*Organizational models:* multi-town coordinating committees and work groups; single staff person coordinating various committees and work-groups; board– committees–staff–volunteers

*Staffing variations:* all-volunteer and ranging up to seven staff, varying numbers of active volunteers, some use of interns, and as many as 5500 member/constituents.

# Local environmental groups

| Included in the sample          | Other examples                           |
|---------------------------------|--|
| GreenCAPE                       | Eastham Forum                            |
| Mashpee Environmental Coalition | Environmental League of Massachusetts    |
| The 300 Committee               | Orleans Supporters of Open Space         |
|                                 | Responsible Environmental Protection for |
|                                 | Sandwich                                 |
|                                 | Quincy Environmental Network             |

Note: On-line survey respondents but no interviewees in this category.

# **Estuary & Bay Organizations**

| Included in the sample             | Other examples                             |
|------------------------------------|--|
| The Coalition for Buzzards Bay*    | Citizens for the Protection of Waquoit Bay |
| Eight Towns and the Bay*           | Three Bays Preservation, Inc               |
| The Friends of Pleasant Bay, Inc.* | Friends of Chatham Waterways               |
| The Gulf Association, Inc.*        |  |
| Massachusetts Bays Program*        |  |
| Salem Sound Coastwatch*            |  |
| Save the Harbor / Save the Bay     |  |
| Tisbury Waterways Inc.*            |  |

\* = Someone from this organization was interviewed for this study. Others in the left-hand column participated only by means of the on-line survey.

# Sample issues from this category:

"Coastal watershed protection"; sprawl and its impact, land development and use in the watershed, Ch. 40B housing development proposals, stormwater and its impact on lakes and beaches, nitrogen pollution, esp. lawn fertilizer and its impact on fish populations, other water quality measures and issues (dissolved oxygen, clarity, temperature), beach closings, shellfish bed closings (motivators), bay quality restoration ("restore water quality to 1950s levels"); making link between coastal (salt) waters and nearby land and fresh water, land conservation, pollution from under-performing septic systems.

# Sample programmatic approaches:

Water monitoring, education, assistance to municipalities, linkage between "levels" (ex.: Mass. Bays Program and local governments)

Land conservation, technical assistance to local land trusts

Designation of Areas of Critical Environmental Concern (ACECs)

Advocacy, support, encouragement for various efforts

*Public education modes:* Newsletter, lecture series, State of the Bay conference, program for teachers and students (high school and middle school), brochures (ex.: phosphates) Comment: Specific topics are the best draw; broader awareness needs to get slid in.

# Primary target audiences:

Local government officials, including mayor, DPW, Planning, ConComm, High school and middle school teachers (Friends of Pleasant Bay) Summer residents "who don't understand septic systems and don't have environmental consciousness"

### Possible emerging issues or approaches:

Stormwater mitigation, stormwater districts (Chicopee, Mass. as example)

### Procedural issues:

Training and quality assurance for water quality monitoring program – important in order to have data considered in proceedings; how to engage with towns regarding sustainability issues; training for golf course superintendents, real estate professionals; education for general public via newsletters, lecture series; database compatibility with other organizations (ex.: municipal offices and state agencies)

### Collaborators and resource groups for these organizations:

Mass. CZM, Mass. Audubon, Trustees of Reservations, regional planning agencies, Essex County Greenbelt Association, UMass (Dartmouth), Cooperative Extension, local open space committees, other watershed associations, WBNERR, APCC, national Seashore, UMass Boston's Urban Harbors Institute, Coastal Monitoring Forum

*Training they conduct:* water quality monitoring, identification of invasive species. One interviewee's comment: Not sure how to train, other than to "throw them into the fire."

### Training interests:

Water quality, state of the bay. Participate in training as time and funding permit.

### Expertise needed (on occasion):

Coastal processes, coastal issues, relation to coastal environment [ability to put specific issues into broader context of understanding], turf management (would call Extension)

#### Information sources:

One organization monitors publications of similar but larger organizations ("Gulf of Maine Times," Chesapeake Bay, etc.)

# Their expertise (potentially to share):

Management of volunteer monitoring program (Coalition for Buzzards Bay) Land conservation, focusing on watershed level, build-out analyses, development potential within a watershed, guidelines for docks/piers/stairways, coastal processes, relationship to coastal environment

*Organizational models:* membership organization (donations from individuals), multitown collaboration with town representatives (Ex: Eight Town & the Bay, Pleasant Bay Resource Management Alliance),

*Staffing variations:* Staff size ranging from one to at least five; some all-volunteer; larger staff may include people assigned to issues & policy, water quality, land protection, communication and outreach, water quality, research; one organization has a coordinating committee that tries for one municipal official and one environmental activist from each participating community.

*Procedural variations:* Working groups that bring in experts, study groups that "try to educate one another", sessions to identify where we are and where we want to be.

#### **River & Watershed Organizations**

| Included in the sample                   | Other examples |
|--|----------------|
| Coonamessett River Park Coalition        |                |
| Eel River Watershed Association, Ltd.*   |                |
| Fore River Watershed Association         |                |
| Neponset River Watershed Association*    |                |
| North & South Rivers Watershed Assoc.*   |                |
| First Herring Brook Watershed Initiative |                |
| Saugus River Watershed Council*          |                |
| Weir River Watershed Association         |                |
| Weir River Estuary Park Committee        |                |
| Westport River Watershed Alliance*       |                |

\* = Someone from this organization was interviewed for this study.

Others in the left-hand column participated only by means of the on-line survey.

*Note:* These Massachusetts river or watershed associations vary widely in the degree to which the focus on the coastal, tidal, or brackish aspects of their river and watershed.

Sample issues from this category: maintaining habitat, including habitat for rare and listed species, and for anadromous fish; restoration and protection of waters and environment; maintaining water quality, esp. against N-pollution and sudden drastic drainages from sources such as golf courses; making the connection between land use and water quality; problems arising from state regulatory wrong action or inaction (including non-enforcement of regs); water conservation; seasonally dry rivers - town permits that allow taking more water than there is; advocating limiting withdrawals during critical times for fish; overcoming sense that environment is a luxury (more appropriate for the wealthier towns); water budget; river's role in water supply for multiple communities; water conservation; invasive aquatic plants; ecologically friendly landscaping; balancing the water budget; water futures and smart growth, shellfish bed re-openings, pollutant concentrations, DO esp. at mouth; antiquated storm drains; NPDES Phase 2 compliance re stormwater (and stormwater issues as opportunity to address quality issues); reducing illegal dumping; sewer overflows; sewer installation to solve immediate problem (or driven by fear of septic system failure) that then opens a larger area to development; fish ladder performance; wetland protection; protection of critical resources and sensitive areas; opposing a waste incinerator in an ACEC; expanding public access (through Ch. 91 process and by involvement and site management).

*Sample programmatic approaches:* public outreach, education, and advocacy; technical assessment of the river and its ecosystem; water quality monitoring; wetlands workshop (one co-sponsored with a developer); appeal of discharge permits; litigation; technical assistance to local governments re state or federal grants (ex.: non-point-source pollution); speakers who will address specific audiences within local government (planners, conversation, DPW, board of health, etc.), students; Riverways Program's "Adopt a Stream" program.

*Public education modes:* newsletter, generate coverage in local paper and on cable TV, series of workshops (involving municipal aids, garden clubs, etc.); biodiversity days; fish counts, water quality monitoring, and stream flow monitoring; teacher training; wildlife tracking; riparian buffer gardens water quality monitoring situation reports; speaker series; education around the theme: "Is the \_\_\_\_\_ River really threatened?"

*Primary target audiences:* general public, state agencies, local boards and commissions, developers, home builders, environmental activists; riverfront landowners; garden clubs

*Possible emerging issues or approaches:* inventory of wildflowers and other plants in watershed, Mass. Rivers Act setback requirements

*Procedural and organizational issues:* debt resulting from litigation they initiated; need for a small organization to stay focused and stay within its capabilities, how to build volunteer and member base, how to build a next-generation board (to replace aging board members); writing a QAPP plan for nutrient testing; volunteers include "those who like canoe trips" and "those concerned with policy and issues" – need to program for both groups.

*Collaborators and resource groups for these organizations:* Nature Conservancy (protection of coastal plain ponds), Essex Co. Community Foundation (esp. its Environmental Stewardship Initiative), Mass. Audubon, Trustees of Reservations, land trusts, Essex National Heritage Commission (smart growth activities), Great Marsh Coalition (North Shore), local land trusts, Mass. CZM (technical assistance and also support for expenses of a speaker series), Mass. Bays Program, Mass. Watershed Coalition (dealing with a lot of inland issues such as water draw-down; reduced from previous level of operation; web-site out of date); Mass. Watershed Action Alliance; working with water suppliers to fund a program on environmentally friendly landscaping (but their focus is quantitative, watershed association's is quality); Coalition for Buzzards Bay. Mass. Watershed Initiative *was* a tremendous resource. Model: Ipswich River Watershed Association, MIST (Mass. In-the-Streamflow Task Force), North Shore Coalition for Health and Environment.

*Training they conduct:* water quality monitoring, fish-count monitoring, identification of invasive species

*Training interests:* wetlands monitoring and restoration;training of board members; fund raising training; on-line training.

*Professional development participation:* Portland stormwater conference; participation limited because of minimal funding for travel; "almost nothing" (because of limited time and/or money).

*Expertise needed (on occasion):* hard data, and a Ph.D. to evaluate it; science accurately applied to assessment of specific water bodies; roadmap re how rules are made ("a civics course rather than a science course"), wastewater management (esp. on-site or near-site that avoid big-pipe transfer of water), package treatment, best management practices for watershed management; how to know whether water flow is adequate [for flushing, etc.]; need good ideas for interesting presentations that pull people in and cover topics they want/need; flood zone delineation (Rebecca Hamey, CZM); advocacy help; FEMA regulations re flood zones (mis-match between FEMA and contour maps); a request

outstanding to the Riverways Program for TA in implementing a "stream team" plan. Strategies for implementing the Wetlands Protection Act (works with ConComms to try to achieve this). Forums: How to move beyond the basic?

*Information sources:* an MIT prof (to evaluate data); Technical Development Center (Boston) runs workshops on management and development, also computer training; Guest speaker Karl Kehde, author of *Smarter Land Use: How to Enhance Proposed Project to Get Better Neighborhoods, Less Sprawl, and Fewer Lawsuits* (http://www.landuse.org/guidebook.html for hardcopy purchase or free download)

*Expertise (potentially to share):* laws, regs, & bylaws, including federal; testing, flow studies, community outreach.

Organizational and funding models: membership organization (up to 1200); grant and contract support.

*Staffing variations:* Paid staff range =  $0...1...2^{1/2}...4$  f.t. + 2 p.t. (plus volunteers). Roles include director, educator, volunteer coordinator, scientist, development director, workshop coordinator; one which had paid staff for most of a decade, lost it two years ago, so now volunteer president has become volunteer acting director

Procedural variations: at least one crosses state boundary (involves a RI town)

# Lake & Pond Organizations

| Included in the sample               | Other examples                        |
|--------------------------------------|---------------------------------------|
| Friends & Fishers of Edgartown Great | Friends of Meeting House Pond         |
| Pond                                 | Friends of Sengekontacket Pond        |
| Long Pond Watershed Association      | Lake Wequaquet Protective Association |
| Orleans Pond Coalition               |                                       |
| Straits Pond Watershed Association   | (and numerous others)                 |

Note: No interviewees in this category; less-directly involved in coastal issues.

### Land/Conservation Trusts

| Included in the sample                  | Other examples                              |
|---|---|
| Barnstable Land Trust                   | Bourne Conservation Trust                   |
| The Compact of Cape Cod Conservation    | Brewster Conservation Trust                 |
| Trusts, Inc.*                           | Chatham Conservation Foundation, Inc.       |
| Nantucket Conservation Foundation, Inc. | Cotuit: Mary Barton Land Conservation Trust |
| The Trustees of Reservations*           | Dennis Conservation Trust                   |
| Wildlands Trust of Southeastern Mass.   | Dartmouth Natural Resources Trust           |
| whatands Trust of Southeastern Mass.    | Eastham Conservation Foundation             |
|   | Falmouth: The 300 Committee, Inc            |
|   | Harwich Conservation Trust                  |
|   | Friends of Mashpee Nat. WL Refuge           |
|   | Mashpee Watershed & Land Trust, Inc.        |
|   | Nantucket Land Council                      |
|   | Orenda Wildlife Land Trust (Barnstable)     |
|   | Oyster Pond Environmental Land Trust        |
|   | (Woods Hole)                                |
|   | Provincetown Conservation Trust             |
|   | Salt Pond Areas Bird Sanctuaries            |
|   | Sandwich Conservation Trust                 |
|   | Truro Conservation Trust                    |
|   | Wellfleet Conservation Trust                |
|   | Yarmouth Conservation Trust                 |

\* = Someone from this organization was interviewed for this study. Others in the left-hand column participated only by means of the on-line survey.

Others in the fert hand column participated only by means of the on time survey.

*Sample issues from this category:* preservation of open space, including land that would help preserve important natural resources (habitat, water resources, etc.) as well as sites of scenic and historic value. Allocation of Land Bank funds.

*Sample programmatic approaches:* acquisition and management of open space; assessment and mapping of habitat; developing management plans; technical assistance (by an umbrella land trust association) to individual private land trusts, school programs that present a specific idea (predator–prey relationships or rare species) then go into the field to see.

*Primary target audiences:* individual land trusts; individual landowners, general public, schoolchildren

*Public education modes:* speaking; workshops (esp. for landowners, incl. potential land donors or sellers)

Possible emerging issues or approaches: reaching coastal waterfront property owners

*Procedural issues:* negotiating land acquisitions (donor/seller, financing, etc.); management of held lands (including coordination of volunteers willing to help with land maintenance); need for bottom-up buy-in and energy in order to succeed (for example, with a focus such as "coastal ponds")

*Collaborators and resource groups for these organizations:* Mass. CZM, Mass. Land Trust Coalition, National Land Trust Alliance (day-long workshops offered throughout

New England and elsewhere), AmeriCorps (helping keep track of property; atlases in book form and now in digital form), Cape Cod Community Foundation ("…as convener of events"), Mass Audubon (including joint staff training with Trustees of Reservations)

*Training they conduct:* water quality monitoring, identification of invasive species, Trustees of Reservations' Putnam Institute has diverse offerings.

*Expertise needed (on occasion):* Land management (What can we do to enhance habitat? ... to get rid of invasive species? Should we have trails?). (Town land mangers do or should share this interest – including highway, park, conservation, and natural resource personnel.)

Not always sure what to ask or what expertise is needed. (Ex.: a field may look better mowed, but why now? Or: when? Invertebrate specialist: hold off a couple months to allow for butterflies.)

Organizational models: confederation of land trusts

*Staffing variations:* most are membership organizations 9000 members total [on Cape Cod?] (but not the Compact). Staffing ranges from volunteer to 130+ fulltime employees (Trustees of Reservations).

# GOVERNANCE, PLANNING, AND POLICY ORGANIZATIONS

| Content items that were top-ranked by respondents from Governance, Planning, and | Mean for these organizations | Mean<br>for all | Rank for all respondents |
|--|------------------------------|-----------------|--------------------------|
| Policy Organizations   |                              | respondents     | 3                        |
| Habitat protection/restoration   | 4.14                         | 4.43            | 1                        |
| Stormwater mgmt  | 4.14                         | 3.89            | 6                        |
| Land use planning  | 4.00                         | 3.85            | 8                        |
| Water resources  | 3.86                         | 3.98            | 4                        |
| Wetlands   | 3.71                         | 4.16            | 2                        |
| Invasive species   | 3.57                         | 3.88            | 7                        |
| Open space protection  | 3.57                         | 3.95            | 5                        |
| Nutrient loading   | 3.57                         | 4.04            | 3                        |
| Aquaculture  | 3.29                         | 2.96            | 16                       |
| Endangered species   | 3.14                         | 3.05            | 15                       |
| Protected area mgmt  | 3.14                         | 3.82            | 9                        |
| Environmental contaminants   | 3.14                         | 3.51            | 10                       |
| Wastewater mgmt  | 3.14                         | 3.33            | 12                       |

#### **Planning Assistance**

| Included in the sample                 | Other examples |
|--|----------------|
| Cape Cod Commission                    |                |
| Merrimack Valley Planning Commission*  |                |
| Metropolitan Area Planning Council*    |                |
| Urban Harbors Institute, UMass Boston* |                |

\* = Someone from this organization was interviewed for this study. Others in the left-hand column participated only by means of the on-line survey.

*Sample issues from this category:* regional land use planning, including "a planning approach to coastal resources" and "land use along the coast"; economic development (including some aquaculture development), housing, zoning

*Sample programmatic approaches:* planning and technical services; plan review; assistance to local boards and commissions (planning, conservation) to research and establish projects; some work with citizen groups on restoration projects (ex.: salt marshes and herring runs); develop harbor plans and small-scale ecological assessments; GIS capability (ex.: Merrimack Valley Planning Commission does most of the mapping for its communities) ; workshops for specific audiences on land use, open space, water quality, etc.; identification of indicators of health of coastal areas (Merrimack Valley Planning Commission with Mass. Bays Program).

*Public outreach approaches:* Limited ed. programs for general public; some speaking engagements

*Primary target audiences:* decision makers (municipal government staff and volunteers, including planning board, ConComm, city council, town select boards); county commissioners (advisory role)

*Possible emerging issues or approaches:* Habitat health; losing salt marsh? Mass. Technology Collaborative (re wind turbine off the North Shore coast)

*Procedural issues:* promote regional coordination for habitat restoration and development projects

*Collaborators and resource groups for these organizations:* WBNERR, Mass. CZM, Mass. Bays Program; Mass. Audubon; County Coastal Resources Committee (= the local governance committee for Mass. Bays program), Center for Coastal Studies, Environmental Citizenship Academy, UMass McCormack Institute, Florida Atlantic University's Joint Center for the Environment and Urban Problems

Training they conduct: water quality monitoring, identification of invasive species,

Expertise to share: restoration, wetlands bylaw

*Organizational models:* towns as members of their regional planning agency; board consisting of town representatives (municipal and volunteer)

# Associations of Municipal Officials or Volunteer Boards and Commissions

| Included in the sample                         | Other examples |
|--|----------------|
| American Planning Association (Mass.           |                |
| Chapter)*                                      |                |
| Mass. Association of Health Boards*            |                |
| Mass. Association of Conservation              |                |
| Commissions*                                   |                |
| Massachusetts Shellfish Officers' Association* |                |

\* = Someone from this organization was interviewed for this study.

Others in the left-hand column participated only by means of the on-line survey.

Sample issues from this category: assuring foundational knowledge and skills among town officials and volunteer board/commission members (initial and advanced for health and conservation); natural resources (incl. shellfish), resource management, law enforcement, water quality, docks and piers; runoff, nitrate loading, sprawl; septic, Title V, drainage, and point-source pollution (ConComms only address issues within 1000 feet of a wetland; Boards of Health have no such restriction); local enforcement of DEP and DPH regulations (by Boards of Health);

*Sample programmatic approaches:* association meetings; professional development courses (in some cases, required, certification programs); volunteer development for board and commission members; speakers; printed notebook for certificate program, handbook for board or commission member, newsletters; sometimes, programs for boards or commissions other than their primary one (MACC).

*Public outreach approaches:* Shellfish Officers' Assoc. does some programming for general public; brochures;

*Primary target audiences:* current and new officials (Board of Health total: about 1100), secretaries can be important (first point of contact; often do triage of public's issues).

*Possible emerging issues or approaches:* Health Boards: moving to more on-line training program with a menu of modules (coastal health issues could be one); home study will replace primary certification. Public service announcements to promote public understanding of a board's role. Explaining Board of Health powers to environmental groups (potentially stronger mutual allies than they are now).

*Procedural issues:* How best to give input to state legislators? Three sites minimum for training (to reach Health Boards, statewide). Dislike keeping primary training (for new board members) separate from advanced training; rising and falling funding for Mass. Assoc. of Health Boards, due primarily to rising then declining funding from state tobacco money; some town administrators pushing for power to appoint, but they (and their appointees) don't always understand the boards and commissions (ex: Health). Understaffing, so often stretched into overtime to do what they do already; no slack for new projects, time is the key constraint. Could consider deputizing another organization to develop and deliver advanced certificate courses on particular topics (Health, MACC; ConComms themselves also under time/workload burden).

*Collaborators and resource groups for these organizations:* Mass. Division of Marine Fisheries; Mass. Dept. of Public Health; Food and Drug Administration; Interstate Shellfish Sanitation Council (sets standards for "read to eat" shellfish); Mass. Criminal Justice Program (component of shellfish constable training); WHOI Sea Grant; Cooperative Extension, Citizen Planner Training Collaborative (www.umass.edu/masscptc), Environmental Collaborative,

Training they conduct: training for new shellfish constables (two weeks)

*Expertise needed (on occasion):* CTP could help Mass. Assoc. of Health Boards develop an online training module regarding coastal issues. Best type of bank/beach stabilization.

*Expertise to share:* Needs and interests of their primary board or commission; how to reach them effectively.

*Organizational models:* Funding entirely from town dues; from professional dues; from such mix of sources including grants (and therefore subject to declines).

Staffing variations: All volunteer, one paid person, up to four.

# Voters' & Good Government Organizations, Issues Education

| Included in the sample | Other examples                           |
|------------------------|--|
| League of Women Voters | Eastham Forum                            |
| Falmouth Chapter*      | Environmental League of Massachusetts    |
| Cape Cod*              | GreenCAPE                                |
|                        | Mashpee Environmental Coalition          |
|                        | Orleans Supporters of Open Space         |
|                        | Responsible Environmental Protection for |
|                        | Sandwich                                 |

\* = Someone from this organization was interviewed for this study.

Others in the left-hand column participated only by means of the on-line survey.

*Sample issues from this category:* increasing participation in government and understanding of public policy issues;

*Sample programmatic approaches:* issue groups to study issues, develop informational materials, and decide whether to take a stand

Primary target audiences: general public (voters)

*Collaborators and resource groups for these organizations:* local environmental efforts (ex.: Falmouth Areas Concerned with Estuaries and Salt ponds, Coonamessett River Coalition), MBL, WHOI

Training they conduct: water quality monitoring, identification of invasive species,

*Expertise needed (on occasion):* A directory of coastal-related expertise would be helpful: experts you could email or call to ask a question.

#### **Community foundations**

| Included in the sample            | Other examples                    |
|-----------------------------------|-----------------------------------|
| Community Foundation of Cape Cod* | Essex County Community Foundation |

### **RESEARCH & EDUCATION ORGANIZATIONS**

| Content items that were              | Mean for these | Mean        | Rank for all |
|--------------------------------------|----------------|-------------|--------------|
| top-ranked by respondents from       | organizations  | for all     | respondents  |
| research and education organizations |                | respondents |              |
| Invasive species                     | 4.50           | 3.88        | 7            |
| Wetlands                             | 4.33           | 4.16        | 2            |
| Habitat protection/restoration       | 4.17           | 4.43        | 1            |
| Open space protection                | 4.17           | 3.95        | 5            |
| Protected area mgmt                  | 4.17           | 3.82        | 9            |
| Environmental contaminants           | 4.00           | 3.51        | 10           |
| Endangered species                   | 3.50           | 3.05        | 15           |
| Coastal proc/geol                    | 3.33           | 2.96        | 16           |
| Land use planning                    | 3.33           | 3.85        | 8            |
| Nutrient loading                     | 3.17           | 4.04        | 3            |
| Environmental technologies           | 3.17           | 3.25        | 14           |
| Fisheries                            | 3.00           | 3.25        | 13           |
| Aquaculture                          | 3.00           | 2.96        | 18           |
| Water resources                      | 3.00           | 3.98        | 4            |

#### Science Centers, Museums, etc.

| Included in the sample      | Other examples                          |
|-----------------------------|---|
| Maria Mitchell Association  | 4-H Farley Outdoor Education Center     |
| Thornton W. Burgess Society | South Shore YMCA Camps Outdoor Ed. Ctr. |

Note: No interviews from this sub-category.

# **Research & education projects**

| Included in the sample | Other examples                             |
|------------------------|--|
| Manomet Center*        | Ocean Arks Int'l Center for Restoration of |
|                        | Waters                                     |
|                        | Pleasant Bay Marine Ecology Project        |
|                        | Silent Spring Institute, Cape Cod Office   |
|                        | WHSTEP                                     |
|                        | Woods Hole Research Center                 |
|                        | W.H. Science & Tech Ed. Partnership        |

\* = Someone from this organization was interviewed for this study.

Others in the left-hand column participated only by means of the on-line survey.

*Sample issues from this category:* Resource conservation; Identifying science-based, cooperative solutions; marine fisheries, shorebird conservation, pesticide impacts, regional conservation planning, human dimensions of conservation planning

*Public outreach approaches:* workshops, environmental ed program for youth; stakeholder meetings for each program area that include training

*Primary target audiences:* General public, municipal planners and conservation professionals, conservation non-profits, land trusts, watershed groups

Training they conduct: water quality monitoring, identification of invasive species,

*Professional development they participate in:* Trustees of Reservations' Putnam Institute, MACC workshops, Mass. Land Trust training events.

### Water monitoring programs

| Included in the sample               | Other examples |
|--------------------------------------|----------------|
| Center for Student Coastal Research* |                |

\* = Someone from this organization was interviewed for this study. Others in the left-hand column participated only by means of the on-line survey.

Note: This is a secondary function for about ten other organizations in the sample.

*Sample issues from this category:* Water quality research and monitoring that serves municipal interests and guides decision making

*Sample programmatic approaches:* water quality monitoring (salinity, pH, N, DO, fecal coliform, etc.); training of the students who do it

*Primary target audiences:* municipal decision makers; participants in the water quality monitoring (capacity building and awareness)

*Possible emerging issues or approaches:* concept of a student coastal caucus (and data sharing), desire for direct access to expensive testing equipment; possible sharing of moderately-price equipment among several nearby groups

*Procedural issues:* standardizing data storage to facilitate comparisons across watersheds; role of student projects (ex.: supplying data that fills in times series or locations beyond what professional labs can do)

Training they conduct: water quality monitoring, identification of invasive species,

# ECONOMIC- & RECREATIONAL-INTEREST ORGANIZATIONS

| Content items that were top-ranked by respondents from organizations representing economic or recreational interests | Mean for these organizations | Mean<br>for all<br>respondents | Rank for all respondents |
|--|------------------------------|--------------------------------|--------------------------|
| Fisheries  | 3.57                         | 3.25                           | 13                       |
| Nutrient loading   | 3.57                         | 4.04                           | 3                        |
| Invasive species   | 3.29                         | 3.88                           | 7                        |
| Aquaculture  | 3.29                         | 2.96                           | 16                       |
| Wastewater mgmt  | 3.14                         | 3.33                           | 12                       |
| Habitat protection/restoration   | 3.00                         | 4.43                           | 1                        |
| Water resources  | 3.00                         | 3.98                           | 4                        |
| Coastal access   | 2.71                         | 2.96                           | 16                       |
| Environmental contaminants   | 2.57                         | 3.51                           | 10                       |
| Protected area mgmt  | 2.43                         | 3.82                           | 9                        |

#### **Economic development organizations**

| Included in the sample               | Other examples                    |
|--------------------------------------|-----------------------------------|
| Cape Cod Chamber of Commerce         | Self-Reliance Corporation         |
| Lower Cape Cod Community Development | Nantucket Sustainable Development |
| Corporation*                         | Corporation                       |

\* = Someone from this organization was interviewed for this study. Others in the left-hand column participated only by means of the on-line survey.

*Sample issues from this category:* Aquaculture and fishing, pier off-loading (locations that optimize "steaming time" = days at sea)

Sample programmatic approaches: small loans to small businesses

Primary target audiences: small businesses

*Possible emerging issues or approaches:* community awareness-building (including environment – economy interplay); internet-related economic development that makes location a non-issue and isn't taxing on the natural environment

Training they conduct: water quality monitoring, identification of invasive species,

| <b>Commercial &amp; Recreational Fish</b> | ners' Organizations |
|---|---------------------|
|---|---------------------|

| Included in the sample                    | Other examples                            |
|---|---|
| Barnstable Association of Recreational    | American Fisheries Society, S. NE Chapt.  |
| Shellfishing (BARS)*                      | Coastal Conservation Association of Mass. |
| Cape Cod Commercial Hook Fishermen's      |   |
| Association*                              |   |
| Friends & Fishers of Edgartown Great Pond |   |
| Martha's Vineyard Shellfish Group, Inc.*  |   |
| Mass Aquaculture Association              |   |
| Westport Fishermen's Association*         |   |

\* = Someone from this organization was interviewed for this study.

Others in the left-hand column participated only by means of the on-line survey.

*Sample issues from this category:* building sustainable fisheries; resource management to preserve and expand the shellfisheries. maintaining the economic viability of [long-line] hook fishing; water quality issues as they affect fishing, shellfishing, and/or aquaculture; fishing, shellfishing and/or aquaculture technologies; introducing newcomers to recreational shellfishing through shellfishing education, information, and "how-to's"; create a trained volunteer workforce to support local shellfish beds; enhance understanding of coastal issues among a group of interested citizens; maintaining good and neighborly practices in the industry

*Sample programmatic approaches:* advocacy, educational events, publications; volunteer training for cod tagging program

*Public outreach approaches:* fact sheets, newsletter, annual report, mass media (press releases, respond to media inquiries), speaking, brochures (want to do one on "what you do on your property and how it affects the shellfish beds")

*Primary target audiences:* local officials, state legislators, professional and recreational fishers, general public

*Possible emerging issues or approaches:* resource planning by a committee of fishing professionals, educating the public re the value of private aquaculture (as a management tool in maintaining the shellfish resource)

*Procedural issues:* How to involve larger *and* smaller players – including those who are reluctant to speak out; board of directors capacity-building;

*Collaborators and resource groups for these organizations:* Maine Fish Conservation Network, Mass. Fisheries Partnership, WBNERR

Training they conduct: water quality monitoring, identification of invasive species,

*Professional development interests of staff:* Team building, GIS, computer, conflict resolution

*Expertise needed (on occasion):* biological impacts of docks and piers; speakers on issues the public should know about such as green landscaping, low fertilizer use

*Expertise to share:* How to create a multi-function volunteer organization that can serve as volunteer workforce *and* knowledgeable citizens

*Organizational models:* widely varied within this category – a professional association with a staff team; a smaller staff with a governing board consisting of the relevant local officials from multiple towns; a volunteer organization with some coordination time from a local government employee.

*Staffing variations:* 1 part-time, seasonal staff person from town government; 6+ employees

### OTHER ORGANIZATIONS

| Included in the sample | Other examples |
|------------------------|----------------|
| AmeriCorps*            |                |

\* = Someone from this organization was interviewed for this study.

Sample issues from this category: environmental issues; disaster preparation

*Sample programmatic approaches:* full-time AmeriCorps volunteers providing assistance to various organizations including trail maintenance, beach erosion prevention, maintenance of plover nesting sites, community education, Cape Cod Commission's "Project Wet"; receive requests for presentations

Primary target audiences: Assistance to municipalities and other organizations

*Collaborators and resource groups for these organizations:* 

For training of AmeriCorps volunteers: WBNERR, Cape Cod National Seashore, town natural resource officers, Cape Cod Museum of Natural History, Mass. CZM

*Training they conduct:* water quality monitoring, identification of invasive species (for their volunteers)

*Training interests:* Skills as needed to carry out AmeriCorps roles; broader background understanding of the issues