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**Elkhorn Slough National Estuarine Research Reserve
Coastal Training Program
Market Assessment and Analysis
Final Report**

**Prepared by Harder+Company Community Research
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EXECUTIVE SUMMARY

The Elkhorn Slough National Estuarine Research Reserve (ESNERR) works to ensure the health of the Elkhorn Slough and surrounding areas through research, education and land stewardship. As mandated by National Oceanic and Atmospheric Administration (NOAA), ESNERR and the 25 other National Estuarine Research Reserves around the United States are currently developing a Coastal Training Program (CTP). The purpose of this program is to provide in-depth science-based training for local managers and decision-makers whose work impacts the coastal environment.

An integral part of establishing this program is conducting a market assessment and analysis of current training audiences and programs, respectively. To this end, ESNERR contracted with Harder+Company Community Research, a San Francisco-based private social research firm, to conduct this market assessment and analysis. The broad purposes of this project were to:

- Identify which audiences are currently receiving training from existing providers;
- Identify which specific audiences need additional training;
- Develop an inventory of coastal and related training providers in the Monterey Bay region; and
- Identify gaps in the provision of training.

This information will help CTP develop a comprehensive education program that can best serve the educational and training needs of natural resource managers and decision-makers in the Monterey Bay Region.

This report presents findings from a survey of coastal training providers conducted in April and May of 2002. Of the 109 individuals who completed the survey, 33 met the criteria of providing training and/or education to coastal management professionals outside their organizations in the Monterey Bay area. This report analyzes the data from those 33 respondents. For the purpose of this survey, training was defined as including formal and informal settings, such as workshops, seminars, demonstrations, technology modeling and/or a lecture series.

The findings from this market analysis and assessment point to a clear need for the ESNERR Coastal Training Program. The findings identify a number of niches for this program, with respect to training topics, potential audiences, additional types of support and potential partnerships. As with all assessments of this nature, these findings should be interpreted with care; they are meant to serve as guidelines that can identify potential directions for CTP as it formulates this exciting program. However, in order to be useful, these findings must be considered within the context of additional important factors, particularly CTP's internal resources, its areas of expertise, and actual demand for education and training, with respect to both training topics and potential audiences.

The survey findings reveal that the audiences most likely to be served by the coastal training providers responding to this survey are nonprofit organizations, water resources agencies and enforcement and regulatory personnel. Conversely, very few of the respondents have provided training for realtors and real estate developers, nor for health and safety departments or boards. Other audiences which are less served by survey respondents include the marine industry, landscapers and nurseries, harbor masters and harbor commission members and analytical labs. According to the survey respondents, groups with the highest need for additional training and education on coastal issues are the agricultural sector, state and/or federal legislators, nonprofit organization staff and/or board members, county boards of supervisors and city council members and planning and zoning boards or staff.

The areas in which survey respondents felt there was the greatest need for additional training and education varied within the five principal training areas—habitat issues, coastal issues, water quality issues, planning and regulation and resource management. Overall, respondents indicated that the greatest needs for training and education were within two principal training areas, habitat issues and water quality issues.

Regarding habitat issues, survey respondents perceive the highest need for training in wetlands and waterways protection (90%), invasive species (85%), endangered or threatened species (74%) and habitat buffers (70%).

The areas of perceived greatest need for additional training on water quality issues include ground water issues, which 88% of the respondents perceive a high need for, non-point source pollution (84%) and sedimentation (83%).

The coastal issues for which the respondents perceive the highest need for additional training and education are saltwater intrusion (74%), coastal erosion and accretion (68%) and coastal public access (56%).

The main areas of need for additional training and education with regard to planning and regulation are regulatory compliance and understanding (83%), interagency coordination (80%), conservation land planning (69%) and sustainable building, development and/or industries (69%).

The principal areas in which the respondents see a high need for additional training and education with respect to resource management are agricultural issues and practices (82%), conservation technologies, environmental monitoring and erosion control (all 81%).

Survey responses also offer suggestions regarding the most effective ways to structure and market CTP. In terms of training methods, field exercises and demonstrations are by far considered the most effective training tools. Regarding outreach, co-sponsorships and partnerships, word-of-mouth and email were cited as the three most effective marketing methods.

The vast majority of respondents report partnering with other organizations to provide education or training during the past two years. This indicates a high likelihood of potential interest in partnering with CTP in the provision of coastal education and training for

professionals in the Monterey Bay area. Furthermore, survey respondents stated a high level of interest in organizational development support from CTP, including assistance in partnering with other organizations, outreach and interagency coordination. Overall, these findings indicate that there is a strong need, support and role for CTP. The data gathered through this market assessment and analysis will be used to shape this new program.

SECTION 1: INTRODUCTION

The Elkhorn Slough National Estuarine Research Reserve (ESNERR) works to ensure the health of the Elkhorn Slough and surrounding areas through research, education and land stewardship. ESNERR is owned and managed by the California Department of Fish and Game and operates in partnership with the National Oceanic and Atmospheric Administration (NOAA) and the Elkhorn Slough Foundation. As mandated by NOAA, ESNERR and the 25 other National Estuarine Research Reserves are currently developing a Coastal Training Program (CTP). The purpose of this program is to provide in-depth science-based training for local managers and decision-makers whose work impacts the coastal environment.

An integral part of establishing this program is conducting a market assessment and analysis of current training audiences and programs, respectively. To this end, ESNERR contracted with Harder+Company Community Research, a San Francisco-based private social research firm, to conduct this market assessment and analysis. The broad purposes of this project were to:

- Identify which audiences are currently receiving training from existing providers;
- Identify which specific audiences need additional training;
- Develop an inventory of coastal and related training providers in the Monterey Bay region; and
- Identify gaps in the provision of training.

This information will help CTP develop a comprehensive education program that can best serve the educational and training needs of natural resource managers and decision-makers in the Monterey Bay Region.

In order to ensure that the project remained useful and focused in its approach, ESNERR established a CTP Advisory Committee, comprised of local coastal management and academic professionals (see Appendix for list of CTP Advisory Committee members). The CTP Advisory Committee was engaged in all aspects of this project.

SECTION 2: METHODOLOGY

This report presents findings from a survey of coastal training providers conducted in April and May of 2002. The survey was designed to seek detailed information from coastal training providers who met the following criteria:

- Those who provide training and/or education regarding the coastal environment, including science-based information, outreach and/or educational materials;
- Those who provide training and/or education in the Monterey Bay area; and
- Those who offer training and/or education to professionals outside of their organization who work in coastal management (i.e., those who train groups other than the general public).

For the purpose of this survey, training was defined as including formal and informal settings, such as workshops, seminars, demonstrations, technology modeling and/or a lecture series.

These providers were then asked to respond to questions to assess:

- The audiences whom the respondents' organizations had trained in the past two years;
- The topics on which respondents' organizations had offered training in the past two years;
- Respondents' perceptions of various groups' need for additional training and education;
- Respondents' perceptions of the need for additional training and education on specific topics;
- Respondents' perceptions of the effectiveness of their various training methods;
- Respondents' perceptions of the effectiveness of their marketing tools;
- Additional non-training professional resources offered, such as reference materials or website assistance; and
- Respondents' interest in possible types of support CTP could offer them.

Additionally, respondents were asked to give basic organizational information, including:

- Type of organization;
- The importance of coastal training and education to the individual organization;
- The organization's experience partnering with other organizations; and
- Basic contact information.

The survey was designed with input from the CTP Advisory Committee and was based on surveys utilized by other National Estuarine Research Reserves. The survey was piloted twice with coastal management professionals and researchers. The final version of this survey (see Appendix) reflects the feedback from those two pilots.

Potential survey respondents—both organizations and individual contacts—were identified through various methods including: culling existing ESNERR lists and databases of individuals and organizations with whom ESNERR has worked in the past; suggestions from the CTP Advisory Committee; internet research to identify additional training providers; a review of the California Coastal Commission’s *Marine, Coastal and Watershed Resource Directory*; and a brief web-based survey to coastal training providers and trainees to obtain additional names of training organizations and/or individuals. A preliminary list of potential survey respondents was thus identified. This preliminary list was then refined to eliminate any duplication within a specific program (i.e., to ensure that two individuals from the same program were not asked to respond.). Additionally, the list was modified based on feedback from the CTP Advisory Committee. Lastly, to the greatest extent possible, efforts were made to verify that the names and contact information were correct by establishing phone contact with individual organizations.

In total, the survey was emailed to 263 potential respondents. Respondents received a cover letter explaining the purpose of the survey and requesting their participation; the email included a link to the online survey. ESNERR requested that recipients who felt that they were not the appropriate contact person within their program or organization forward the email to the appropriate person.¹ Respondents were asked to complete the survey within two weeks, and received reminder phone calls and emails requesting that they fill out the survey. In all, 109 individuals completed the survey, representing a high response rate of 41%. This high response rate is indicative of the high levels of interest and support for CTP. Of the 109 respondents, 33 met the criteria of providing training and/or education to coastal management professionals outside their organizations in the Monterey Bay area; the majority of findings presented in this report are based on the responses of those respondents.

¹ The number of respondents who forwarded the email to other colleagues was not tracked.

SECTION 3: FINDINGS

Of the 109 individuals who completed the survey, 33 met the criteria of providing training and/or education to coastal management professionals outside their organizations in the Monterey Bay area; the following sections analyze data from those 33 respondents.

OVERVIEW OF COASTAL TRAINING PROVIDERS

The survey respondents represent twenty-nine distinct organizations in the Monterey Bay region. Of those, twelve (41%) are nonprofit organizations, eleven (38%) are governmental agencies, and five (17%) are universities (one organization did not specify which sector they belong to). Thirteen (45%) of the organizations report that education and training are “very central” to their mission and five (17%) report that it is “somewhat central” to their mission, while three (10%) report that education and training are “somewhat peripheral” to their mission and two (7%) feel that it is “very peripheral” (five organizations (21%) did not specify the importance of education and training with respect to their mission). Twenty-three (79%) of the organizations report providing training and education in partnership with other organizations during the past two years, while six (21%) did not respond to that question.

Overview of Respondent Coastal Training Providers in the Monterey Bay Area			
Organization and Program	Type of Organization	Importance of Education and Training Relative to Mission	Have offered trainings or education in partnership with other organizations
Aptos Chamber of Commerce	Nonprofit	Very central	Yes
Beahrs Environmental Leadership Program	University	Somewhat central	Yes
California Department of Fish and Game, Central Coast Region	Governmental	Very central	Yes
California Department of Forestry and Fire Protection	Governmental	Very peripheral	Yes
California State Parks	Governmental	Very central	Yes
Carmel River Watershed Conservancy	Nonprofit	Somewhat peripheral	Yes
Coastal Conservancy	Governmental	Very peripheral	Yes
Coastal Watershed Council	Nonprofit	Very central	Yes
Community Alliance with Family Farmers	Nonprofit	Somewhat central	Yes
CSUMB, Seafloor Mapping Lab	University	Very central	Yes
Elkhorn Slough National Estuarine Research Reserve	Governmental	Very central	Yes
Monterey Bay Aquarium,	Nonprofit	Very central	Yes

Overview of Respondent Coastal Training Providers in the Monterey Bay Area

Organization and Program	Type of Organization	Importance of Education and Training Relative to Mission	Have offered trainings or education in partnership with other organizations
COMPASS			
Monterey Bay Aquarium, Interpretive Programs	Nonprofit	Very central	Yes
Monterey County Agricultural Commissioner	Governmental	Somewhat central	Yes
Monterey County Department of Planning and Building Inspection	Governmental	Very central	Yes
Monterey County Health Department	Governmental	—no response—	—no response—
Monterey County Planning Department	Governmental	Very central	Yes
Monterey County Water Resources Agency	Governmental	—no response—	—no response—
Monterey Peninsula College	University	—no response—	—no response—
National Weather Service	Governmental	Very central	Yes
NOAA, Monterey Bay National Marine Sanctuary, Administration	Governmental	Somewhat central	Yes
NOAA, Monterey Bay National Marine Sanctuary, Water Quality	Governmental	Very central	Yes
RCD of Monterey County	Nonprofit	Very central	Yes
Reef Environment Education Foundation	Nonprofit	—no response—	—no response—
River of Words	Nonprofit	Somewhat central	Yes
Sanctuary Cruises	—no response—	—no response—	—no response—
Sustainable Conservation	Nonprofit	Somewhat central	Yes
The Coastal Society	Nonprofit	—no response—	—no response—
The Marine Mammal Center	Nonprofit	Somewhat peripheral	Yes
University of California Cooperative Extension Water Education Foundation	University	Very central	Yes
Watershed Institute	University	Somewhat peripheral	Yes
Watershed Institute	University	Very central	Yes

TRAINING AUDIENCES

The providers offer trainings to a broad range of audiences. As seen in the following table, the audiences *most likely* to have received trainings during the past two years are staff and board members of nonprofit organizations working on environmental and coastal issues, to whom 79% of respondents report having offered trainings. That is followed by water resource agencies (63%), enforcement and regulatory personnel (63%) and citizen-based watershed

councils (61%). Other audiences receiving training include beach watch groups, landowners, ranching associations and weather spotters.

Conversely, the groups *least likely* to have received coastal management training during the past two years are realtors and developers, to whom only 7% of the respondents report offering education or training during the past two years, health and safety departments and boards (8%), industry members (19%), landscapers or nurseries (21%), harbormasters and harbor commission members (21%) and analytical labs (22%).

Audiences Receiving Coastal Education or Training During Past Two Years	
Audience	% (n)
Nonprofit organization staff and/or board members including land trusts, environmental organizations and watershed organizations	79% (22)
Water resource agencies	68% (17)
Enforcement/regulatory personnel (including law enforcement permits)	63% (17)
Citizen-based watershed councils	61% (17)
County board of supervisors or city council members	60% (15)
Media professionals	60% (15)
Academic community members including academic extension programs	57% (16)
Agricultural sector (e.g. farmers agricultural organizations)	56% (15)
Business community members and/or organizations including the Chamber of Commerce and Rotary Club	52% (14)
Conservation commissions and/or staff (i.e. Coastal Commission)	50% (13)
Ecotour operators and/or coastal recreation businesses (e.g. kayak shops dive instructors etc.)	50% (13)
Public works officials and/or staff	48% (12)
Engineers/technicians	46% (12)
Environmental consultants (private)	46% (12)
State and/or federal legislators	42% (10)
Planning/zoning boards and/or staff	42% (10)
Sewage treatment/waste water management employees	32% (8)
Neighborhood/homeowner associations	29% (8)
City managers	28% (7)
Fishing organizations or individuals (recreational or commercial)	25% (7)
Analytical labs including soil and water technicians	22% (6)
Harbormasters and harbor commission members	21% (5)
Landscapers and/or nurseries	21% (5)
Industry including marine industry	19% (5)
Health and safety department or boards	8% (2)
Realtors and/or real estate developers/architects	7% (2)

PERCEIVED NEED FOR TRAINING BY AUDIENCE

The survey respondents were asked to provide their perceptions regarding the need for training for the above-mentioned audiences. As seen in the following exhibit, the groups perceived as having the greatest need for additional training on coastal management issues are the agricultural sector, which 81% of respondents feel have a high need for additional training and education around coastal issues, state and federal legislators (80% perceived high need), nonprofit organizations² (74%), board of supervisor or city council members (70%) and planning/zoning boards and staff (68%).

Need for Additional Training and Education by Audience			
Audience	Perceived Need for Additional Training and Education		
	High	Medium	Low
Agricultural sector (e.g. farmers, agricultural organizations)	81% (17)	19% (4)	0% (0)
State and/or federal legislators	80% (16)	20% (4)	0% (0)
Nonprofit organization staff and/or board members including land trusts environmental organizations and watershed organizations	74% (17)	17% (4)	9% (2)
County board of supervisors or city council members	70% (16)	30% (7)	0% (0)
Planning/zoning boards and/or staff	68% (13)	32% (6)	0% (0)
Fishing organizations or individuals (recreational or commercial)	65% (13)	35% (7)	0% (0)
Public works officials and/or staff	65% (13)	35% (7)	0% (0)
Realtors and/or real estate developers/architects	65% (11)	24% (4)	12% (2)
Media professionals	59% (13)	41% (9)	0% (0)
Neighborhood/homeowner associations	58% (11)	42% (8)	0% (0)
Industry including marine industry	53% (10)	47% (9)	0% (0)
Citizen-based watershed councils	52% (11)	29% (6)	19% (4)
Ecotour operators and/or coastal recreation businesses (e.g. kayak shops, dive instructors etc.)	52% (11)	43% (9)	5% (1)
Landscapers and/or nurseries	50% (9)	44% (8)	6% (1)
Water resource agencies	48% (10)	43% (9)	10% (2)
City managers	47% (9)	53% (10)	0% (0)
Harbormasters and harbor commission members	47% (9)	42% (8)	11% (2)
Business community members and/or organizations including the Chamber of Commerce and Rotary Club	43% (9)	52% (11)	5% (1)
Health and safety department or boards	41% (7)	35% (6)	24% (4)
Sewage treatment/waste water management employees	41% (7)	41% (7)	18% (3)
Enforcement/regulatory personnel (including law enforcement permits)	36% (8)	59% (13)	5% (1)
Conservation commissions and/or staff (i.e. Coastal Commission)	35% (7)	45% (9)	20% (4)
Engineers/technicians	30% (6)	50% (10)	20% (4)
Academic community members including academic extension programs	25% (5)	45% (9)	30% (6)

² Interestingly, nonprofits were perceived to have a high need for additional training, despite the fact that 79% of the respondents have provided training to nonprofits during the past two years.

Need for Additional Training and Education by Audience			
Audience	Perceived Need for Additional Training and Education		
	High	Medium	Low
Analytical labs including soil and water technicians	21% (4)	47% (9)	32% (6)
Environmental consultants (private)	21% (4)	74% (14)	5% (1)

SUPPLY AND DEMAND FOR COASTAL TRAINING AND EDUCATION

The survey respondents offer education and training in a broad range of areas relating to coastal management. For the purposes of this analysis, the training topics were classified into five broad categories: habitat issues, coastal issues, water quality issues, planning and regulation and resource management. (See Appendix for perceived need for coastal training and education across all categories.)

Habitat Issues

A majority of the respondents have provided education and training on topics including wetlands and waterways protection (70%), habitat restoration (67%), invasive species (62%), endangered or threatened species (59%) and native plants (57%). Most respondents report offering one to three trainings in those areas in the past two years, however some have offered as many as seven or more. Conversely, the principal areas in which the majority of respondents have *never* offered trainings are fire management (80%), wildlife corridors (68%) and habitat buffers (57%).

Habitat Issues: Number of Trainings Offered in Past 2 Years				
	Never	1-3 Times	4-6 Times	7+ Times
Wetlands and waterways protection	30% (7)	48% (11)	13% (3)	9% (2)
Habitat restoration	33% (7)	57% (12)	5% (1)	5% (1)
Invasive species	38% (8)	52% (11)	0% (0)	10% (2)
Endangered or threatened species	41% (9)	45% (10)	9% (2)	5% (1)
Native plants	43% (9)	52% (11)	0% (0)	5% (1)
Protected area management	50% (10)	40% (8)	10% (2)	0% (0)
Habitat buffers	57% (12)	38% (8)	5% (1)	0% (0)
Wildlife corridors	68% (13)	32% (6)	0% (0)	0% (0)
Fire management	80% (16)	20% (4)	0% (0)	0% (0)

As the following table indicates, the survey respondents perceive the highest need for training in the areas of wetlands and waterways protection (90%), invasive species (85%), endangered or threatened species (74%) and habitat buffers (70%).

Habitat Issues: Need for Additional Training and Education			
	High Need	Medium Need	Low Need
Wetlands and waterways protection	90% (18)	5% (1)	5% (1)
Invasive species	85% (17)	15% (3)	0% (0)
Endangered or threatened species	74% (14)	21% (4)	5% (1)
Habitat buffers	70% (14)	25% (5)	5% (1)

Habitat Issues: Need for Additional Training and Education

	High Need	Medium Need	Low Need
Habitat restoration	68% (13)	21% (4)	11% (2)
Wildlife corridors	58% (11)	26% (5)	16% (3)
Protected area management	55% (11)	30% (6)	15% (3)
Native plants	53% (10)	47% (9)	0% (0)
Fire management	37% (7)	53% (10)	11% (2)

Coastal Issues

A majority of respondents report offering *no* training or education in the coastal issues areas listed. Trainings most likely to be offered include coastal erosion and accretion, which has been offered by 43% of the respondents during the past two years, disaster response (42%) and coastal and oceanographic responses (41%).

Conversely, the training topics least likely to have been offered during the past two years are marina/harbor planning and/or management, offered by only 6% of the respondents during the past two years, dredging and filling (16%), recreational use (32%) and coastal public access (34%).

Coastal Issues: Number of Trainings Offered in Past 2 Years

	Never	1-3 Times	4-6 Times	7+ Times
Coastal erosion and accretion	57% (12)	38% (8)	0% (0)	5% (1)
Disaster response	58% (11)	21% (4)	11% (2)	11% (2)
Coastal and oceanographic processes	59% (13)	23% (5)	9% (2)	9% (2)
Saltwater intrusion	63% (12)	32% (6)	0% (0)	5% (1)
Coastal public access	67% (14)	29% (6)	0% (0)	5% (1)
Recreational use	68% (13)	16% (3)	5% (1)	11% (2)
Dredging and filling	84% (16)	16% (3)	0% (0)	0% (0)
Marina/harbor planning and/or management	94% (17)	6% (1)	0% (0)	0% (0)

The coastal issues for which the respondents perceive the highest need for additional training and education are saltwater intrusion (74%), coastal erosion and accretion (68%) and coastal public access (56%).

Coastal Issues: Need for Additional Training and Education

	High Need	Medium Need	Low Need
Saltwater intrusion	74% (14)	26% (5)	0% (0)
Coastal erosion and accretion	68% (13)	32% (6)	0% (0)
Coastal public access	56% (9)	38% (6)	6% (1)
Dredging and filling	50% (8)	31% (5)	19% (3)
Recreational use	44% (8)	56% (10)	0% (0)
Disaster response	37% (7)	47% (9)	16% (3)
Coastal and oceanographic processes	35% (7)	50% (10)	15% (3)
Marina/harbor planning and/or management	31% (5)	56% (9)	12% (2)

Water Quality Issues

With respect to water quality issues, 81% of respondents have offered trainings in non-point source pollution, 79% have provided training on sedimentation and 61% have provided training on water resources.

Conversely, *none* of the respondents have offered trainings on eutrophication, while 89% have not offered trainings on septic system issues, 71% have provided no training on waste water management and 68% have not offered any training or education on point source pollution during the past two years.

Water Quality Issues: Number of Trainings Offered in Past 2 Years				
	Never	1-3 Times	4-6 Times	7+ Times
Non-point source pollution	19% (4)	52% (11)	10% (2)	19% (4)
Sedimentation	21% (4)	63% (12)	5% (1)	11% (2)
Water resources	39% (7)	56% (10)	0% (0)	6% (1)
Ground water issues	55% (11)	35% (7)	5% (1)	5% (1)
Nitrogen loading	56% (10)	33% (6)	6% (1)	6% (1)
Point source pollution	68% (13)	26% (5)	0% (0)	5% (1)
Waste water management	71% (12)	29% (5)	0% (0)	0% (0)
Septic system issues	89% (16)	11% (2)	0% (0)	0% (0)
Eutrophication	100% (17)	0% (0)	0% (0)	0% (0)

The areas of perceived greatest need for additional training on water quality issues include ground water issues, which 88% of the respondents perceive a high need for, non-point source pollution (84%) and sedimentation (83%).

Water Quality Issues: Need for Additional Training and Education			
	High Need	Medium Need	Low Need
Ground water issues	88% (15)	12% (2)	0% (0)
Non-point source pollution	84% (16)	16% (3)	0% (0)
Sedimentation	83% (15)	17% (3)	0% (0)
Water resources	71% (12)	29% (5)	0% (0)
Nitrogen loading	67% (10)	27% (4)	7% (1)
Point source pollution	56% (10)	33% (6)	11% (2)
Septic system issues	50% (8)	38% (6)	12% (2)
Waste water management	44% (7)	44% (7)	12% (2)
Eutrophication	29% (4)	50% (7)	21% (3)

Planning and Regulation

Over half of the respondents have offered planning and regulation training on issues including regulatory enforcement (53%), GIS (53%) and regulatory compliance and understanding (55%). Conversely, a majority has not offered any training or education in the areas of sustainable building or development (81%), environmental legislation (75%) and conservation and planning (53%) during the past two years.

Planning and Regulation: Number of Trainings Offered in Past 2 Years				
	Never	1-3 Times	4-6 Times	7+ Times
Interagency coordination	28% (5)	50% (9)	11% (2)	11% (2)
Regulatory compliance and understanding	44% (8)	33% (6)	11% (2)	11% (2)
GIS (geographical information systems)	47% (9)	37% (7)	5% (1)	11% (2)
Regulatory enforcement	47% (9)	32% (6)	16% (3)	5% (1)
General land planning	50% (10)	35% (7)	5% (1)	10% (2)
Conservation land planning	53% (9)	41% (7)	0% (0)	6% (1)
Environmental legislation	75% (12)	19% (3)	0% (0)	6% (1)
Sustainable building development and/or industries	81% (13)	19% (3)	0% (0)	0% (0)

The main areas of perceived need for additional training and education with regard to planning and regulation are regulatory compliance and understanding (83%), interagency coordination (80%), conservation land planning (69%) and sustainable building, development and /or industries (69%).

Planning and Regulation: Need for Additional Training and Education			
	High Need	Medium Need	Low Need
Regulatory compliance and understanding	83% (15)	17% (3)	0% (0)
Interagency coordination	80% (16)	15% (3)	5% (1)
Conservation land planning	69% (11)	31% (5)	0% (0)
Sustainable building development and/or industries	69% (11)	25% (4)	6% (1)
Regulatory enforcement	61% (11)	33% (6)	6% (1)
Environmental legislation	53% (8)	40% (6)	7% (1)
General land planning	47% (8)	41% (7)	12% (2)
GIS (geographical information systems)	44% (7)	56% (9)	0% (0)

Resource Management and Other Issues

The principal areas in which the respondents have provided training on resource management and other issues are environmental education (87%), erosion control (67%), conservation technologies (65%), environmental monitoring (63%) and agricultural issues and practices (60%). These are also the topic areas with the most respondents reporting multiple trainings during the past two years. As seen, 35% of the respondents have provided seven or more trainings on environmental education during the past two years, which is true for 24% of the respondents regarding conservation technologies and 22% regarding erosion control.

The areas in which most providers have not offered any trainings during the past two years include real estate issues, in which none (100%) have offered trainings, aquaculture/mariculture (93%), mineral, oil and natural gas extraction (88%), and renewable energy (82%).

Resource Management and Other Issues: Number of Trainings Offered in Past 2 Years				
	Never	1-3 Times	4-6 Times	7+ Times
Environmental education	13% (3)	39% (9)	13% (3)	35% (8)
Erosion control	33% (6)	39% (7)	6% (1)	22% (4)
Conservation technologies	35% (6)	41% (7)	0% (0)	24% (4)
Environmental monitoring	37% (7)	32% (6)	21% (4)	11% (2)
Agricultural issues and practices	40% (8)	30% (6)	10% (2)	20% (4)
Estuarine ecology	50% (8)	31% (5)	12% (2)	6% (1)
Forestry issues	62% (10)	38% (6)	0% (0)	0% (0)
Critical area delineation and management	71% (12)	24% (4)	6% (1)	0% (0)
Fisheries and fishery law	75% (12)	19% (3)	6% (1)	0% (0)
Global climate change and/or sea level rise	75% (12)	19% (3)	6% (1)	0% (0)
Land trusts and conservation acquisitions	76% (13)	24% (4)	0% (0)	0% (0)
Ecological landscaping	78% (14)	17% (3)	0% (0)	6% (1)
Fisheries and by-catch issues	78% (14)	11% (2)	6% (1)	6% (1)
Renewable energy	82% (14)	6% (1)	6% (1)	6% (1)
Mineral, oil and natural gas extraction	88% (14)	12% (2)	0% (0)	0% (0)
Aquaculture/mariculture	93% (14)	7% (1)	0% (0)	0% (0)
Real estate issues	100% (16)	0% (0)	0% (0)	0% (0)

The principal areas in which the respondents see a high need for additional training and education with respect to resource management are agricultural issues and practices (82%), conservation technologies, environmental monitoring and erosion control (all 81%).

Resource Management and Other Issues: Need for Additional Training and Education			
	High Need	Medium Need	Low Need
Agricultural issues and practices	82% (14)	18% (3)	0% (0)
Conservation technologies	81% (13)	19% (3)	0% (0)
Environmental monitoring	81% (13)	19% (3)	0% (0)
Erosion control	81% (13)	12% (2)	6% (1)
Critical area delineation and management	73% (11)	20% (3)	7% (1)
Fisheries and by-catch issues	71% (12)	24% (4)	6% (1)
Fisheries and fishery law	67% (10)	27% (4)	7% (1)
Environmental education	65% (13)	20% (4)	15% (3)
Estuarine ecology	60% (9)	40% (6)	0% (0)
Renewable energy	60% (9)	27% (4)	13% (2)
Ecological landscaping	56% (9)	38% (6)	6% (1)
Land trusts and conservation acquisitions	44% (7)	50% (8)	6% (1)
Real estate issues	43% (6)	43% (6)	14% (2)
Global climate change and/or sea level rise	40% (6)	40% (6)	20% (3)
Forestry issues	38% (6)	38% (6)	25% (4)
Aquaculture/mariculture	29% (4)	43% (6)	29% (4)
Mineral, oil and natural gas extraction	21% (3)	29% (4)	50% (7)

In addition to the above, other areas in which the respondents have offered training and education include the following:

- Collaborative problem solving within an environmental context;
- Composting;
- Fish passage barriers;

Fisheries of the Central Coast of California;
 Freshwater systems;
 Geology;
 GPS mapping;
 Grant and other funding program opportunities;
 How to get through the permit requirement morass;
 Invasive species;
 Marine habitat mapping;
 Marine mammal issues: stranding response, coexisting with marine mammals, basic marine mammal natural history, laws/regulations—safe distances in approaching marine mammals;
 Marine Reserves and Marine Protected Areas-Marine Conservation;
 Pitch canker;
 Road and crossing assessment for erosion control;
 Slough system ecologies;
 Snag creation for cavity nesting birds;
 Sudden Oak Death;
 Tax and other incentives for volunteer participation by landowners in conservation projects;
 Urban wildlife conflict training; and
 Water quality.

RESOURCES PROVIDED IN ADDITION TO TRAINING

In addition to training and education, the survey respondents offer a number of other resources, such as reference materials (68%), brochures (64%) and website assistance and information (46%).

Resources Provided in Addition to Training	
Resource	Percent Providing Resource
Reference materials	68% (15)
Brochures	64% (14)
Website assistance or information	45% (10)
Library	32% (7)
Assistance with regulatory compliance	27% (6)
Other	32% (7)

Other resources provided in addition to training include:

Funding;
 Informal consultations;
 Interdisciplinary approach to natural resource management; and
 Technical assistance regarding coastal management issues.

EFFECTIVENESS OF TRAINING METHODS

The survey respondents were also asked to comment on the use and effectiveness of the different training methods employed. The training methods most frequently utilized are seminars and lectures, used by 88% of the respondents, field exercises and demonstrations (cited by 85% of the respondents), and conferences (used by 74% of the survey respondents). The training methods *least* used are distance learning, which 76% do not use, online training (not used by 59%) and courses (not used by 52%).

Of the respondents employing the various training methods, the method considered most effective is by far field exercises and demonstrations, which 96% of those using rated very effective, followed by roundtable discussions, rated very effective by 67% of respondents utilizing that method. Conversely, 60% of those using distance learning as a training and education tool felt that it was not very effective, while 22% felt that online training was not very effective.³

Effectiveness of Training Methods				
	Very Effective	Somewhat Effective	Not Very Effective	N/A—Do Not Use
Field exercises/demonstrations	96% (22)	4% (1)	0% (0)	15% (4)
Roundtable discussions	67% (12)	33% (6)	0% (0)	31% (8)
Courses	45% (5)	55% (6)	0% (0)	52% (12)
Panel discussions	38% (6)	63% (10)	0% (0)	36% (9)
Conferences	35% (6)	65% (11)	0% (0)	26% (6)
Seminars/lectures	35% (8)	65% (15)	0% (0)	12% (3)
Online training	11% (1)	67% (6)	22% (2)	59% (13)
Distance learning	0% (0)	40% (2)	60% (3)	76% (16)

Other training and education methods that survey respondents report finding effective include:

- Agricultural Expos;
- Breakfast and lunch meetings;
- Newsletters;
- One-on-one site visits, training and assistance; and
- Peer training and information sharing.

EFFECTIVENESS OF MARKETING TOOLS

The most effective tools the respondents have found for promoting their training and education programs are co-sponsorships/partnerships (rated as most effective by 67% of

³ Given the small number of respondents using those methods, these findings should be interpreted with caution.

respondents), word-of-mouth (52%) and email (41%). On the other hand, posters on community bulletin boards and television were not cited as effective marketing tools by any of the respondents.⁴

Most Effective Marketing Tools	
Marketing Tool	Percent Rating Most Effective
Co-sponsorships/partnerships	67% (18)
Word-of-mouth	52% (14)
Email	41% (11)
Direct mail	26% (7)
Press releases	26% (7)
Website	22% (6)
Newsletters	19% (5)
News articles	11% (3)
Radio	11% (3)
Advertising in newspapers	7% (2)
Public service announcements	7% (2)
Fax	4% (1)
Phone solicitations	4% (1)
Posters on community bulletin boards	0% (0)
Television	0% (0)

MECHANISMS FOR SUPPORTING TRAINING PROVIDERS

The survey respondents were asked to rate their interest in a variety of ways that CTP could support them. Potential forms of assistance were presented according to several categories, including natural resource management, conservation methods and technology, education and training and organizational development. (See Appendix for interest in support across all categories.)

Natural Resource Management Support

The principal types of support that survey respondents would find most helpful with respect to natural resource management are watershed planning and using science to identify ecological threats, in which 59% of respondents would be very interested, and habitat restoration, which would be of high interest to 52% of the respondents.

⁴ Given space limitations, the survey did not ask respondents to indicate which marketing tools they had used. As such, television may not be rated an effective marketing tool because of its inaccessibility due to cost, rather than its lack of effectiveness as a marketing tool.

Natural Resource Management Support: Interest in Support				
	Very Interested	Somewhat Interested	Not Very Interested	N/A
Using science to identify ecological threats	59% (13)	27% (6)	5% (1)	9% (2)
Watershed planning	59% (13)	32% (7)	5% (1)	5% (1)
Habitat restoration	52% (12)	39% (9)	0% (0)	9% (2)
Cumulative impacts of watershed development to the coast	50% (12)	33% (8)	12% (3)	4% (1)
Invasive species monitoring	50% (11)	32% (7)	5% (1)	14% (3)
Agricultural Best Management Practices	45% (10)	18% (4)	9% (2)	27% (6)
Water quality data and analysis	43% (10)	48% (11)	0% (0)	9% (2)
Development of resource management plans	36% (8)	36% (8)	18% (4)	9% (2)
Economic valuation of coastal resources	36% (8)	36% (8)	18% (4)	9% (2)
Marine protected areas delineation	29% (6)	38% (8)	14% (3)	19% (4)

Conservation Methods and Technology

There was no single conservation methods and technology category in which a majority of respondents would be “very interested.” Nonetheless, the areas of greatest interest in that category are conservation biology and GIS as a planning tool (with 40% high interest in both) and land acquisition and land planning (both 38% high interest).

Conservation Methods and Technology: Interest in Support				
	Very Interested	Somewhat Interested	Not Very Interested	N/A
Conservation biology	40% (8)	50% (10)	0% (0)	10% (2)
GIS as a planning tool	40% (8)	45% (9)	5% (1)	10% (2)
Land acquisition	38% (8)	24% (5)	14% (3)	24% (5)
Land planning	38% (8)	29% (6)	14% (3)	19% (4)
Environmental research	35% (7)	60% (12)	0% (0)	5% (1)
Easement and leasing of public trust lands	33% (7)	38% (8)	10% (2)	19% (4)

Education and Training

The areas of greatest interest with respect to education and training activities are support for community incentives for protecting watersheds (63% very interested), conservation education strategies (58%) and involving volunteers in environmental monitoring (46%).

Education and Training: Interest in Support				
	Very Interested	Somewhat Interested	Not Very Interested	N/A
Community incentives for protecting watersheds	63% (15)	21% (5)	4% (1)	12% (3)
Conservation education strategies	58% (14)	33% (8)	0% (0)	8% (2)
Involving volunteers in environmental monitoring	46% (11)	42% (10)	8% (2)	4% (1)
Audience and issue identification	43% (10)	43% (10)	0% (0)	13% (3)
Regulatory interpretation	36% (8)	27% (6)	23% (5)	14% (3)
Training curriculum development	36% (8)	45% (10)	0% (0)	18% (4)

Organizational Development

Overall, the surveys respondents expressed the highest levels of interest in organizational development support and assistance: 71% indicated they were very interested in support for building partnerships, 70% were very interested in assistance regarding public outreach and 67% were very interested in assistance regarding enhanced interagency coordination.

Organizational Development: Interest in Support				
	Very Interested	Somewhat Interested	Not Very Interested	N/A
Building partnerships	71% (17)	25% (6)	0% (0)	4% (1)
Public outreach	70% (16)	22% (5)	0% (0)	9% (2)
Enhanced interagency coordination	67% (16)	29% (7)	0% (0)	4% (1)
Funding development	58% (14)	25% (6)	8% (2)	8% (2)
Team building	52% (12)	30% (7)	9% (2)	9% (2)
Grant-writing	41% (9)	32% (7)	14% (3)	14% (3)
Leadership development	41% (9)	45% (10)	5% (1)	9% (2)

SECTION 4: CONCLUSIONS AND RECOMMENDATIONS

The findings from this market analysis and assessment point to a clear need for the ESNERR Coastal Training Program. The survey data identify a number of niches for this program, with respect to training topics, potential audiences, additional types of support and potential partnerships. As with all assessments of this nature, these findings should be interpreted with care; they are meant to serve as guidelines that can identify potential directions for CTP as it formulates this exciting program. However, in order to be useful, these findings must be considered within the context of additional factors, particularly CTP's internal resources, its areas of expertise, and actual demand for education and training, with respect to both training topics and potential audiences.

POTENTIAL AUDIENCES

The coastal training providers responding to this survey serve a broad range of audiences, ranging from members of the academic community to water resource agencies. The findings reveal that the audiences most likely to be served by these providers are nonprofit organizations, water resources agencies and enforcement and regulatory personnel. Conversely, very few of the respondents have provided training for realtors and real estate developers, or health and safety departments or boards. In addition, less than one-fourth have provided training or education for the marine industry, landscapers and nurseries, harbor masters and harbor commission members and analytical labs.

Nonetheless, it is important to note that a lack of provision of training is not synonymous with a need for training. According to the survey respondents, groups with the highest need for additional training and education on coastal issues are the agricultural sector, state and/or federal legislators, nonprofit organization staff and/or board members, county board of supervisors and city council members and planning and zoning boards or staff.

NEED FOR ADDITIONAL TRAININGS

Although this market analysis has identified topics on which few organizations have offered education and training during the past two years, survey limitations precluded the possibility of assessing reasons for not offering those trainings, including a lack of resources, lack of expertise and/or lack of demand on the part of training audiences. As such, respondent perceptions regarding the need for additional education and training is probably a better indicator of need than the percentage of organizations providing training in a specific area. Additionally, these findings should be complemented with additional needs assessment data reflecting the actual demand for training on the part of coastal management professionals in the region.

As seen, the trainings were classified into five principal areas: habitat issues, coastal issues, water quality issues, planning and regulation and resource management. This section provides a summary of the training topics least offered by the survey respondents.

Habitat Issues: The principal areas in which the majority of respondents have *never* offered trainings are fire management (80% have not offered these training), wildlife corridors (68%) and habitat buffers (57%). Survey respondents perceive the highest need for training in wetlands and waterways protection (90%), invasive species (85%), endangered or threatened species (74%) and habitat buffers (70%).

Coastal Issues: The coastal training topics least likely to have been offered during the past two years are marina/harbor planning and/or management (not offered by 94% of the respondents during the past two years), dredging and filling (84%), recreational use (68%) and coastal public access (67%). The coastal issues for which the respondents perceive the highest need for additional training and education are saltwater intrusion (74%), coastal erosion and accretion (68%) and coastal public access (56%).

Water Quality Issues: None (100%) of the respondents have offered trainings on eutrophication during the past two years, while 89% have not offered trainings on septic system issues, 71% have provided no training on waste water management and 68% have not offered training or education on point source pollution. The areas of perceived greatest need for additional training on water quality issues include ground water issues, which 88% of the respondents perceive a high need for, non-point source pollution (84%) and sedimentation (83%).

Planning and Regulation: 81% of respondents report not offering training or education on sustainable building or development during the past two years, which is also true of environmental legislation (75%) and conservation and planning (53%). The main areas of perceived need for additional training and education with regard to planning and regulation are regulatory compliance and understanding (83%), interagency coordination (80%), conservation land planning (69%) and sustainable building, development and/or industries (69%).

Resource Management: The main resource management areas in which most providers have not offered any trainings during the past two years include real estate issues, in which none of the respondents (100%) have offered trainings, aquaculture/mariculture (93%), mineral, oil and natural gas extraction (88%) and renewable energy (82%). The principal areas in which the respondents see a high need for additional training and education with respect to resource management are agricultural issues and practices (82%), conservation technologies, environmental monitoring and erosion control (all 81%).

ADDITIONAL RESOURCES CTP COULD CONSIDER PROVIDING

While approximately two-thirds of the respondents (68% and 64% respectively) provide reference materials and brochures, less than half (45%) provide website assistance, one-third (32%) have libraries, and only one-fourth (27%) provide assistance regarding regulatory compliance. Further research may be necessary to identify the actual demand for services such as website assistance, libraries and regulatory compliance assistance. In addition, respondent comments (see Appendix) identify a varied range of additional types of assistance CTP could provide.

TRAINING METHODS CTP SHOULD CONSIDER

As seen, field exercises and demonstrations are by far considered the most effective training tools and were rated very effective by 96% of the respondents using those methods. That is followed by roundtable discussions, rated very effective by 67% of those using that method. Distance and on-line learning are considered the least effective training tools, and were considered “not very effective” by 60% and 22% of respondents using those methods respectively.

MARKETING METHODS CTP SHOULD CONSIDER

Co-sponsorships and partnerships, word-of-mouth and email were cited as the three most effective marketing methods (by 67%, 52% and 41% of the respondents respectively). Advertising in newspapers, public service announcements, fax and phone solicitations were cited as effective marketing tools by less than ten percent of the respondents, while posters on community bulletin boards and television were not cited as effective marketing tools by any of the respondents.

POTENTIAL PARTNERSHIPS

Seventy-nine percent of the survey respondents report partnering with other organizations to provide education or training during the past two years. This indicates a high likelihood of potential interest in partnering with CTP in the provision of coastal education and training for professionals in the Monterey Bay area.

Appendices

CTP ADVISORY COMMITTEE MEMBERS

Carolyn Anderson—Citizen’s Oversight Committee for the Monterey County General Plan Update; Chair

Becky Christensen—Elkhorn Slough National Estuarine Research Reserve; Manager

Dawn Hayes—Monterey Bay National Marine Sanctuary; Education/Outreach Coordinator

Bill Head—California State University Monterey Bay; Earth Systems, Science and Policy; Faculty

Beth Inman—Elkhorn Slough National Estuarine Research Reserve, Coastal Training Program; Coordinator

Don Kohrs—Monterey Bay Aquarium COMPASS (Communication Partnership for Science and the Sea); Program Administrator

Charles Lester—California Coastal Commission, Central Coast District; Manager

Kenton Parker—Elkhorn Slough National Estuarine Research Reserve; Education Coordinator

Kerstin Wasson—Elkhorn Slough National Estuarine Research Reserve; Research Coordinator

NEED FOR TRAINING TOPICS: ALL CATEGORIES

The following table presents the data from Section 3 of this report, organized by the training topics for which there is the highest need.

General Training Category	Training Topic	High Need
Habitat Issues	Wetlands and waterways protection	90% (18)
Water Quality	Ground water issues	88% (15)
Habitat Issues	Invasive species	85% (17)
Water Quality	Non-point source pollution	84% (16)
Water Quality	Sedimentation	83% (15)
Planning and Regulation	Regulatory compliance and understanding	83% (15)
Resource Management and Other Issues	Agricultural issues and practices	82% (14)
Resource Management and Other Issues	Conservation technologies	81% (13)
Resource Management and Other Issues	Environmental monitoring	81% (13)
Resource Management and Other Issues	Erosion control	81% (13)
Planning and Regulation	Interagency coordination	80% (16)
Habitat Issues	Endangered or threatened species	74% (14)
Coastal Issues	Saltwater intrusion	74% (14)
Resource Management and Other Issues	Critical area delineation and management	73% (11)
Water Quality	Water resources	71% (12)
Resource Management and Other Issues	Fisheries and by-catch issues	71% (12)
Habitat Issues	Habitat buffers	70% (14)
Planning and Regulation	Conservation land planning	69% (11)
Planning and Regulation	Sustainable building development and/or industries	69% (11)
Habitat Issues	Habitat restoration	68% (13)
Coastal Issues	Coastal erosion and accretion	68% (13)
Water Quality	Nitrogen loading	67% (10)
Resource Management and Other Issues	Fisheries and fishery law	67% (10)
Resource Management and Other Issues	Environmental education	65% (13)
Planning and Regulation	Regulatory enforcement	61% (11)
Resource Management and Other Issues	Estuarine ecology	60% (9)
Resource Management and Other Issues	Renewable energy	60% (9)
Habitat Issues	Wildlife corridors	58% (11)
Coastal Issues	Coastal public access	56% (9)
Resource Management and Other Issues	Ecological landscaping	56% (9)
Water Quality	Point source pollution	56% (10)
Habitat Issues	Protected area management	55% (11)
Planning and Regulation	Environmental legislation	53% (8)
Habitat Issues	Native plants	53% (10)
Coastal Issues	Dredging and filling	50% (8)

General Training Category	Training Topic	High Need
Water Quality	Septic system issues	50% (8)
Planning and Regulation	General land planning	47% (8)
Coastal Issues	Recreational use	44% (8)
Water Quality	Waste water management	44% (7)
Planning and Regulation	GIS (geographical information systems)	44% (7)
Resource Management and Other Issues	Land trusts and conservation acquisitions	44% (7)
Resource Management and Other Issues	Real estate issues	43% (6)
Resource Management and Other Issues	Global climate change and/or sea level rise	40% (6)
Resource Management and Other Issues	Forestry issues	38% (6)
Habitat Issues	Fire management	37% (7)
Coastal Issues	Disaster response	37% (7)
Coastal Issues	Coastal and oceanographic processes	35% (7)
Coastal Issues	Marina/harbor planning and/or management	31% (5)
Water Quality	Eutrophication	29% (4)
Resource Management and Other Issues	Aquaculture/mariculture	29% (4)
Resource Management and Other Issues	Mineral oil and natural gas extraction	21% (3)

INTEREST IN TYPES OF SUPPORT: ALL CATEGORIES

The following table presents the data from Section 3 of this report, organized by the types of support for which there is the greatest interest.

General Support Category	Type of Support	Very Interested
Organizational Development	Building partnerships	71% (17)
Organizational Development	Public outreach	70% (16)
Organizational Development	Enhanced interagency coordination	67% (16)
Education and Training	Community incentives for protecting watersheds	63% (15)
Natural Resource Management	Using science to identify ecological threats	59% (13)
Natural Resource Management	Watershed planning	59% (13)
Education and Training	Conservation education strategies	58% (14)
Organizational Development	Funding development	58% (14)
Natural Resource Management	Habitat restoration	52% (12)
Organizational Development	Team building	52% (12)
Natural Resource Management	Cumulative impacts of watershed development to the coast	50% (12)
Natural Resource Management	Invasive species monitoring	50% (11)
Education and Training	Involving volunteers in environmental monitoring	46% (11)
Natural Resource Management	Agricultural Best Management Practices	45% (10)
Natural Resource Management	Water quality data and analysis	43% (10)
Education and Training	Audience and issue identification	43% (10)
Organizational Development	Grant-writing	41% (9)
Organizational Development	Leadership development	41% (9)
Conservation Methods and Technology	Conservation biology	40% (8)
Conservation Methods and Technology	GIS as a planning tool	40% (8)
Conservation Methods and Technology	Land acquisition	38% (8)
Conservation Methods and Technology	Land planning	38% (8)
Natural Resource Management	Development of resource management plans	36% (8)
Natural Resource Management	Economic valuation of coastal resources	36% (8)
Education and Training	Regulatory interpretation	36% (8)
Education and Training	Training curriculum development	36% (8)
Conservation Methods and Technology	Environmental research	35% (7)
Conservation Methods and Technology	Easement and leasing of public trust lands	33% (7)
Natural Resource Management	Marine protected areas delineation	29% (6)

ADDITIONAL COMMENTS AND RECOMMENDATIONS FOR CTP

Help prevent sewage spills caused from old collapsed residential lateral lines by helping cities develop incentives/rebates for homeowners and businesses to replace them.

Develop partnerships with local environmental groups and agencies to pool resources for improved effectiveness.

Promote the use of recycled water for urban uses on the Monterey Peninsula: green belts, golf courses and athletic fields. This will reduce over-drafting of the Carmel Valley Aquifer and benefit the endangered Steelhead Trout populations.

I think signs should be posted in various languages (Spanish, Vietnamese, Korean, etc.) to inform new residents about tide-pool conservation regulations. Also consider residential mailings (or flyer drop-offs) in various languages.

As stated previously, economics need to be a factor.

Awareness of seawater intrusion and support for mitigation efforts.

Beach profile surveys are useful. You may also want to look at future harbor or marina planning and associated dredging.

Education programs at Monterey Bay Aquarium target K-12 classroom teachers. Each year we offer public forums addressing marine conservation issues that are directed to the general public. Education staff might be interested in participating in your trainings and disseminating some of the content through our teacher workshops.

Finding ways to partner on trainings would seem to leverage resources, expertise and experience. Involving regulatory agencies is important for cross training and because they have a huge intersection around BMP implementation. Involving non-regulatory public agencies such as NRCS and RCD is critical because they are often the direct link for educating and informing private landowners and because they are often the intermediary between regulators and private landowners. Involving legislators and staff is critical because they often have little on-the-ground understanding or knowledge about conservation and biology, yet pass laws or adopt policies that directly affect our natural resources.

Great need for oversight/communication between groups: projects in progress, in the pipeline etc.

How about, "How to create more effective web interface for volunteer recruitment?"

Have a budget to support speakers/teachers brought in from out of the area.

I certainly think that an emphasis on land-sea connections is important. A historical perspective of coastal diversity in the region would also be important information.

I think it is essential that county planners, coastal commissioners and coastal commission planners, county planning commissioners staff with RCD and NRCS and others who make decisions with coastal impacts be given extra training regarding coastal resources and sensitive/endangered species.

I think that this type of training would be valuable.

Information in your training programs about marine mammal strandings and proper response.

It would be good if some training could occur to get scientists and fishermen to work together on fish/habitat issues. It would be good if some training could occur to provide a

more balanced picture of the condition of our coast and bay... much of what we hear is negative/crisis when in fact there much to celebrate.

Keep local government needs in mind.

Modern urban cultural practices and the world-views of coastal residents should be included as a potent factor in affecting the ecology of the local system. Whether or not people learn is greatly affected by their belief in attitude toward and support of programs related to their culture.

If ESNERR eventually develops courses for the local community college (MPC), the MPC would give ESNERR money for each student to provide this training and college credit to the students.

Please keep the needs of farmers and ranchers in mind.

Tackle the hard issues first. Farming, real estate, elected officials and fishing interests should be focus of training first.

The big picture: interconnectedness between land and sea plants and mammals, rewards of stewardship.

The need for consideration of the protection of the Public Health through Integrated Vector Control employing Best Management Practices.

There are a lot of good training resources already out there. Whenever you can complement or leverage existing efforts that's probably most efficient.

There is definitely a need for this program in the Monterey Bay area and it is encouraging to see you taking on such an effort. The training program would be most effective if it included classes on local ecology, habitat management and the pertinent regulatory programs.

This sounds like a great program. I primarily work with children through environmental education, so that is where my experience is based. I feel very lucky to live in a community that is so environmentally aware and commend you for trying to develop a further connection through other venues. Thank you.

Walking/hiking activities are a low impact way for people to experience directly the coastal environment. We are working on the completion of the California Coastal trail and fully support the creation of the scenic trail proposed in Santa Cruz and Monterey as a link in the CCT. In our view the trail should have several alignments to accommodate different users. Identifying a beach route where possible for walkers is one of our goals.

We are directly involved in the design of Highway 1 Corridor Plan for the former Fort Ord areas and provide ongoing sustainability support for the jurisdictions impacted by the closure of Fort Ord, which includes a storm weather management effort and coordination with CA State Parks regarding the conservation practices on the Fort Ord Dunes State Beach.

We have completed numerous coastal engineering projects in the subject area for cities, counties and Harbor Districts. A good understanding of wave and sedimentation processes for the area should be part of the program.

We provide educational materials to youth via Save Our Shores and others in park settings. Information regarding Elkhorn Slough and visitors materials would be most welcome. We'd also like to be able to bring youth to Elkhorn for field trips.

We would like to emphasize the importance of agriculture and working with farmers on education about water quality issues. Flood control and water management issues relative to the Pajaro River are critical right now.

Work with the folks at Monterey Bay Aquarium. They would be a good resource.
Work/information to address storm water run-off containing trash; in particular, consumer-packaging plastics.