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An Analysis of the ANERR Coastal Resources Management Training Market

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Prepared for:

The Apalachicola National Estuarine Research Reserve (ANERR)

Prepared by:

The Great Lakes Environmental Finance Center Maxine Goodman Levin College of Urban Affairs Cleveland State University

An Analysis of the ANERR Coastal Resources Management Training Market

October 2004



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ACKNOWLEDGMENTS

We would like to extend our thanks and appreciation to the individuals and organizations that assisted the GLEFC in conducting this project, especially to the members of the Apalachicola National Estuarine Research Reserve (ANERR) Coastal Training Program Steering Committee:

- Rosalyn Kilcollins, CTP Coordinator, Apalachicola National Estuarine Research Reserve
- Seth Blitch, Reserve Manager, Apalachicola National Estuarine Research Reserve
- Lee Edmiston, Research Coordinator, Apalachicola National Estuarine Research Reserve
- Mark Harwell, Environmental Sciences Institute, Florida A&M University
- Erik Lovestrand, Education Coordinator, Apalachicola National Estuarine Research Reserve
- Bill Mahan, Marine Extension Agent, Florida Sea Grant
- Roy Ogles, Stewardship Coordinator, Apalachicola National Estuarine Research Reserve

Our special thanks to the individuals, agencies, organizations, and private businesses that participated in the interview and survey processes.

The contributors and project staff within the Great Lakes Environmental Finance Center (GLEFC) and the Levin College of Urban Affairs at Cleveland State University involved in this project are Kevin O'Brien, Executive Director; Claudette Robey, Assistant Director; Kirstin Toth, Project Manager; Daniel Baracskay, Ph.D., Research Associate; Michael McGoun, Research Assistant; and Michael Tevesz, Ph.D., Professor and Research Fellow. Any questions regarding this report should be directed to The Great Lakes Environmental Finance Center, (216) 687-2188.

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An Analysis of the ANERR Coastal Resources Management Training Market

EXECUTIVE SUMMARY

The market analysis for the Apalachicola National Estuarine Research Reserve revealed that there is a diverse body of coastal resources management training providers who offer training in the Florida Panhandle. These organizations are primarily either governmental agencies, or institutions of higher education. Most of them offer this training to various audiences as part of their missions, although a select few offer it as the sole purpose of their organizations.

The training environment is relatively diverse. The topic most frequently offered by providers of training is on water quantity and quality, followed by coastal wetlands, and estuaries. Conservation lands management, endangered and threatened species, invasive species, habitat restoration, and wildlife management are also popular topics for training.

The types of courses offered by providers are diverse, and are offered frequently over time. They most often last for several days, and are typically held in the afternoon. Providers extend their reaches for course offerings to the entire state of Florida, and predominantly enroll between 11 to 50 participants each time. Instructors most frequently use lectures, workshops, or field experience to disseminate information to their audiences. These instructors are most often inhouse staff members, who have either a master's or doctorate degree. Audiences of this training most frequently receive educational and training materials, skills for use in their professional development, or a certificate of participation. The fees for enrollment are usually low, with half of the courses being offered at no cost to participants. Training opportunities are funded primarily through organizational general operating budgets, or grants from public or private institutions.

Providers of training most often had non-profit organizational staff members, planning/zoning boards or staff, the scientific research community, or employees from national, state, or local governments enroll in their courses. They perceive a relatively high to medium need for additional training and education for these groups in the future.

Providers are also varied in the methods they employ to market their programs and training opportunities. Direct mail lists are most frequently utilized to inform potential participants of opportunities, followed by email lists, organizational newsletters, and organizational websites. The training providers are most often able to provide instructors/trainers, funding support, and marketing assistance to potential partners in the field.

There are several gaps in the coastal resources management training environment perceived by training providers, mainly identifying unmet training needs, audiences, and the need to increase attendance. There are also

perceptions that there is a need for additional information and communication on the types of organizations and programs that exist to provide training. Specifically, these gaps were identified as a lack of knowledge as to what training is being offered and who is providing it, a lack of interest on behalf of certain participant groups enrolling in training events (particularly local elected officials), the need for more special topic workshops, and the necessity to recruit qualified instructors to provide knowledge to participants. The providers also acknowledged the necessity of integrating scientific training into the approaches adopted by training providers.

The gaps identified by the providers are an indication that opportunities for additional training exist in the area of coastal resources management for the Apalachicola Reserve region. Opportunities are prevalent for collaborative training initiatives, redefining training content and delivery methods, and developing strategies to consistently coordinate and implement training to decision-makers, policymakers, and even providers.

INTRODUCTION

The Great Lakes Environmental Finance Center (GLEFC) was engaged by the Apalachicola National Estuarine Research Reserve (ANERR) to conduct a market analysis to identify providers of coastal training and education programs within the ANERR geographic area. The market analysis provides an inventory and analysis of the range, scope, and delivery systems of the current coastal training opportunities within the ANERR market. The market analysis identifies the suppliers of coastal training activities and opportunities within the ANERR geographic area, discusses the gaps currently existing in this area, and offers suggestions on how to address the gaps identified in the current training market.

Professionals involved in the coastal resources management arena are expected to formulate effective strategies and apply interdisciplinary approaches to solving problems and policy issues impacting the environments of coastal regions. Individuals undertaking tasks that may affect coastal management include elected officials, state and federal agency staff, planning professions, project managers, regulatory personnel, coastal managers, agricultural and fisheries interests, volunteer boards, contractors, consultants, and nonprofit agencies and organizations, and others. Potential policy issues facing these individuals are loss of habitat, commercial fishing, pollution and the degradation of surface and ground water quality, coastal development activities, shoreline construction and erosion (especially in light of the recent hurricane damage sustained by the area), and coastal hazards.

The primary mission of the ANERR's CTP focuses on providing coastal decision-makers within the Apalachicola Bay watershed and adjacent watersheds in the region, with the science-based information and skills that will enable them to increase understanding of the environmental, social, and economic consequences of human activities and decisions on coastal ecosystems. This is achieved through education and training, which provides information and resources to various stakeholders throughout the Reserve's communities. The ANERR is currently developing a coastal training program for coastal decision-makers and policy-makers that would provide comprehensive, science-based training on managing coastal environmental and policy issues. The ANERR seeks to develop training activities that build upon the existing capacity of the Reserve's training initiatives and collaborations. The coastal training program will be designed to assist coastal decision-makers and policy-makers in developing the skills that are needed to make and implement better informed decisions about how to use, manage, and protect the important coastal resources.

This report details the findings from the survey of training providers of coastal resources management programs, including their perceptions on the administration and implementation of training within the Reserve's geographic

area. Certain terms are defined as a basis for the survey process and for consistency throughout the market study process. These terms are:

- Coastal Resources Management Coastal Resources Management is defined as the overall practice of coastal decision-makers to make and implement informed decisions affecting the human, economic, function, geography, and health of coastal ecosystems and coastal resources.
- Coastal Decision-maker An individual who makes decisions regarding coastal resources on a regular basis in a professional or volunteer capacity. Coastal decision-makers include elected officials, land use planners, regulatory personnel, coastal managers, agricultural and fisheries interests, volunteer boards, contractors, consultants, nonprofit agencies and organizations, and others.
- 3. Training Training includes instruction and learning experiences that expand the understanding of coastal decision-makers and allow them to better understand the context of Coastal Resources Management. Training enhances the base of knowledge and skills of coastal decision-makers by allowing them to interact with experts in the field while networking with other professionals well versed on coastal management issues and tools.
- 4. **Course** A non-degree seeking program, formal or non-formal, that may include special information days for elected officials, seminars, workshops, and other formats, which may or may not provide certification or credit.

The report is organized into seven sections, which are described below:

- 1. **Executive Summary** The Executive Summary consolidates the overall findings and relates these findings in summary format.
- 2. **Introduction** The Introduction discusses the purpose of the ANERR report, and provides definitions of terms.
- Geographic Scope of the Coastal Training Market The geographic market area of the ANERR is discussed and described within this section of the report.
- 4. **Methodology** The Methodology section describes the approaches and processes applied by the GLEFC in developing the survey and analyzing the results.
- 5. **Survey Results** This section of the report relates the findings of the survey conducted among coastal training providers in detail. Charts and tables provide visual depictions of the data.

- 6. **Coastal Training Opportunities** This section discusses the perceived gaps identified by training providers in the market survey.
- 7. Appendices The report contains six appendices that were used to implement the survey of coastal training providers, including a cover letter and the general format for the survey. An appendix also includes the names and descriptions of the courses provided by the respondents, a list of organizational missions provided by respondents, and a list of gaps identified by training providers.



GEOGRAPHIC SCOPE OF THE ANERR COASTAL TRAINING MARKET

Spanning more than 246,000 total acres in a 19,000 square mile drainage basin, the ANERR is located in the Florida Panhandle within the Apalachicola-Chattahoochee-Flint Watershed, and includes areas of Franklin, Gulf, Calhoun, and Liberty counties. The ANERR received its designation as a Reserve in 1979, and is a federal/state partnership with the Florida Department of Environmental Protection and The National Oceanic and Atmospheric Administration (NOAA). The major cities in the Reserve include Apalachicola, Eastpoint, and Wewahitchaka.

The geography for the market analysis was expanded beyond the Reserve's territory to include the coastal and inland counties located within the Apalachicola River and Bay watershed and adjacent coastal watersheds. The survey of coastal training providers was conducted within the geographic scope defined by the ANERR CTP coordinator and Steering Committee, namely the following 19 counties:

- Bay County
- Calhoun County
- Citrus County
- Dixie County
- Franklin County
- Gadsden County
- Gilchrist County
- Gulf County
- Holmes County
- Jackson County

- Jefferson County
- Lafayette County
- Leon County
- Levy County
- Liberty County
- Madison County
- Taylor County
- Wakulla County
- Washington County

The map below (Figure #1) provides a visual depiction of the geographic scope of the market study area.

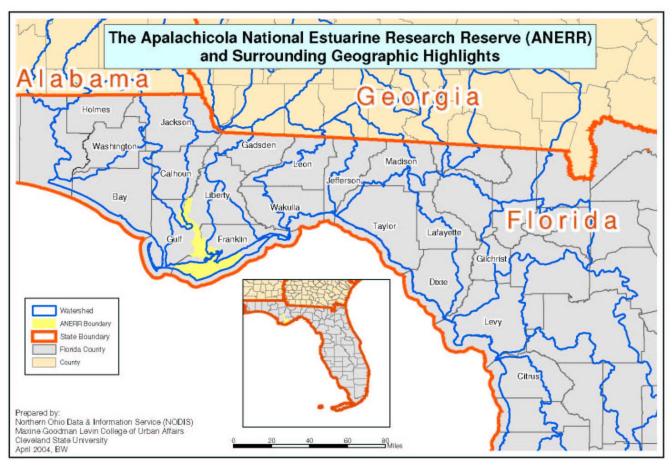


Figure #1

METHODOLOGY

The GLEFC formulated a research design that was best suited for the data collection and analysis of training providers and topics offered in the ANERR region. The focus of the market analysis was to identify training providers and generate background information on their organizations, training topics, methods for delivery, and other pertinent details that could be incorporated into a generalized scan of the current training environment. A questionnaire that employed open- and closed-ended questions was used to collect the data.

Approach to Data Collection

The GLEFC developed the survey questionnaire to collect data for the market analysis, and proceeded through several draft iterations in consultation with the ANERR (Appendix B). The survey was an in-depth and manageable tool for gathering information on training providers. We assumed that the information being measured was not time sensitive and would remain relatively constant over a period of time. For instance, significant changes to the organizational location, mission, course offerings, and other information most likely would not occur in the short-term.

A cover letter from the GLEFC accompanied the survey questionnaire and was designed to summarize the project, discuss the importance of the study, and outline the survey process. The letter also clarified several terms used in the survey that could have potentially resulted in misinterpretation. A copy of the cover letter accompanying the questionnaire is contained in Appendix A.

A final database of 357 potential training providers was developed through research and consultation with the ANERR CTP coordinator. Email addresses were assembled with the intent of using email as a viable channel of communicating the survey questionnaire. The survey was primarily administered through the Internet and by fax, and supplemented through email distribution. For web-based responses, a link to the survey website was embedded in the email letter that would automatically link the participant to the survey. The first question on the survey probed whether or not the respondent's organization provided training on coastal and/or environmental topics. This provided an opportunity for quick identification of providers and non-providers of training. Upon completion, respondents selected the "submit" option, which sent the results directly into a GLEFC database for analysis.

The survey was administered in staggered waves. The first wave was conducted in early June 2004 and involved emailing the cover letter to all potential training providers within the database with an email address. A second wave,

conducted in later June 2004, distributed the survey questionnaire by fax to those in the database without email addresses. Concurrently, a reminder was also sent to those contacted in the first wave by the GLEFC and by the ANERR CTP coordinator encouraging them to return the survey. The web-based survey remained available to respondents until the end of July 2004. A third wave was also conducted through the month of July, involving telephone interviews with the ANERR CTP Steering Committee members. Individuals within the database who had not yet responded to the survey were also contacted by telephone at this time in an effort to bolster participation, and were offered the opportunity to respond either by telephone interview, Internet survey, or by fax. This strategy was employed given the inherent difficulties experienced in administering the survey to the market. Many respondents were difficult to reach because they did not have Internet or email access. Others were only sporadically in their offices, and did not reply to our messages. This required diligence in following up with respondents numerous times. Despite this, several were still unreachable.

The data collected from the survey responses were entered into a database that was used to create descriptive statistics, graphs, and tables to aid in the analysis of the project.

Overview of the Survey Questionnaire Design

The questionnaire utilized a combination of open- and closed-ended questions. This allowed the respondents the opportunity to elaborate on their responses and add relevant information at designated points in the process, as well as provide brief answers. The mix of open- and closed-ended questions also allowed for aggregating responses for examination. The closed-ended questions were coded so that descriptive statistics could be generated, along with graphs and tables. A portion of the open-ended questions were recorded in their original format to maintain the accuracy of reporting, while others were collapsed into broad categories for comparative analysis.

The first section of the questionnaire was designed to gather background information on the provider organizations. This data allowed the GLEFC to understand the character of the respondent organizations, their missions, and the types of organizations responding. The second section was devoted to asking respondents to identify topics covered through the coastal resources management training offered at their organizations. A list of 61 topics and an "other" category covered the spectrum of potential training offerings, thus allowing the GLEFC to identify those that are most and least covered within the Reserve's territory.

Section three contained questions on specific examples and titles of courses that were well attended in the last year by the organization. Respondents could list up to three courses with questions probing the number of times the course was offered, the length of the course, the time it was offered, and the

location at which it was held. This section asked the number of participants typically enrolled in the training activity, who instructed the course, the level of education possessed by instructors, what participants received upon completion, and the primary costs incurred by the providers. Section three also contained a question asking respondents if their organization provided training to a list of various professional groups, and as to how they perceived the need for additional training and education for these groups.

The fourth section asked the providers how training opportunities are funded at their organizations. Section five asked providers what types of audiences are targeted for training. Section six concluded the questionnaire by asking respondents about perceived gaps in the training environment, the types of assistance offered to other organizations, and the types of assistance most likely preferred by the providers. The survey was concluded with a request that respondents mail any coastal resources management training information to the GLEFC.



SURVEY RESULTS

The database consisted of 357 potential training providers as possible contacts for participating in the survey. This was the master list utilized by the GLEFC. Many on the list were either designated as unreachable because of dated contact information, or neglected to respond to our communications or inquiries. As a result, the three waves of the survey generated 175 total responses, of which 33 identified themselves as actual training providers and responded to the entire survey (see Appendix C). This was approximately 19 percent (33/175) of the total number who responded. The table below summarizes this frequency distribution.

Table 1

BREAKDOWN OF SURVEY RESPONSES				
Group	Number	Percentage		
Total number on the contact list	357	100%		
Number responding to inquiries / survey	175 / 357	49%		
Number of actual training providers	33 / 175	19%		

The Survey Questionnaire

Section 1: Organizational Background

The first section of the survey was designed to assist the GLEFC in assembling a database of training providers in the ANERR geographic area. The survey candidates were asked to supply information such as the name of the organization; contact information including the official address, telephone number, website and email address; the name, title, and telephone number of the person responsible for overseeing training offered by the provider; and the name, title, and telephone number of the person responding to the survey on behalf of the organization. An additional question asked respondents to record the number of individuals employed at the organization. The data revealed a minimum of two employees at one organization and a maximum of 3,500 at another, with a median of 24.

The Organization's Mission

The survey candidates were asked to briefly write in the specific missions of their organizations. The responses were broad in scope, but are distributed across eight categories, as outlined in Figure #2 below. The actual mission descriptions provided by respondents are shown in Appendix E.

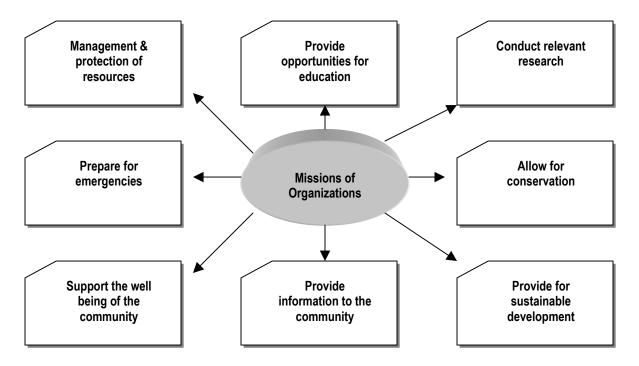


Figure #2

The survey respondents were asked to indicate where coastal resources management training fits into the mission of their organization. Specifically, whether:

- It is the only training provided and the sole purpose of the organization
- It is one area out of a series of topics for which training opportunities are provided
- It is not the focus of training, but a few courses are offered on the topic of coastal resources management

Thirty-three percent stated that coastal resources management training is one area out of a series of topics for which training is provided, with 33 percent responding that while it is not the focus of training, a few courses are offered on the topic. Nine percent of the providers responded that coastal resources management training is the only training provided and the sole purpose of the organization.

Twenty-five percent of the providers listed a mixture of other instances where coastal resources management training is included within the mission of their organization:

- Training on hurricane and flood preparedness
- Offerings for occasional public workshops
- Training to collaborate with partners or as part of another program

Training and Organizational Missions

The figure below shows the distribution of these responses (Figure #3).



Figure #3

Type of Organization

The survey asked whether the respondent's organization is governmental, private/for-profit, an institution of higher education, or a nonprofit organization. The majority of the respondents (55 percent) indicated that their organization is governmental in nature, followed by 27 percent that indicated their organization is an institution of higher education and 18 percent identified as nonprofit organizations. None of the respondents indicated that they were private/for-profit organizations. Figure #4 represents the breakdown on the types of organizations.

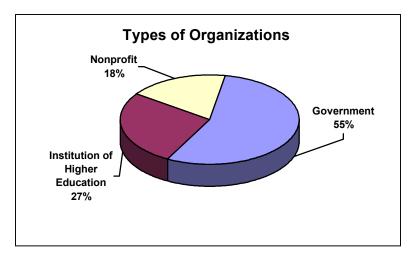


Figure #4

Section 2: Coastal Resources Management Training Information

Topics Covered by Providers

The respondents were asked to identify which topics, from a list of 61 topical areas, are covered in the coastal resources management training activities conducted at their organizations. The topics on the list received varying levels of responses, with the exception of shipping and shipping activities, which was not selected by any of the respondents. The most frequently covered topic was water quantity and quality. This was followed by topics on coastal wetlands, estuaries, invasive species, and conservation lands management. The 10 topical areas most covered and least covered (ranked according to responses) by respondents are shown in the table below (Table 2).

Table 2

10 TOPICS MOST COVERED BY PROVIDERS	10 TOPICS LEAST COVERED BY PROVIDERS
Water quantity and quality	Shipping and shipping activities
2. Coastal wetlands	2. Boating pump out
3. Estuaries	3. Home septic systems
4. Invasive species	4. Port facilities
5. Conservation lands management	5. Sewage outfalls/combined sewer overflow
6. Endangered and threatened species	6. Beach nourishment/sand availability
7. Cultural and historic resources	7. Clean Vessel Act and issues
8. Habitat restoration	8. Oil and gas drilling/mineral extraction
Sustainable economic and coastal development	9. Siltation management
10. Wildlife management	10. Wastewater treatment methods

To ensure an opportunity for respondents to fill in a topic not included on the list, an "other" category was added as an open-ended question. The respondents identified the following as topical areas of training offered by their organizations:

- Sea grasses
- Ecotourism
- CZMA requirements
- Timber harvest
- Forestry management
- Silva-culture

- Storm surge
- Waterfront revitalization
- Ethics
- Ecology
- Geospatial analysis

Section 3: Course Information

Training Courses and Locations

The respondents were asked to list specific courses or descriptions for the three most well attended coastal resources management training activities offered last year by their organizations. Appendix D lists the names and descriptions of these courses. The 33 training providers cited a total of 53 training activities that were conducted in the last year in the area of coastal resources management training. The responses are aggregated for the purpose of analysis.

The topic most frequently offered by providers is on water quantity and quality, followed by coastal wetlands and estuaries. Conservation lands management, endangered and threatened species, invasive species, habitat restoration, and wildlife management are also noted as popular topics for training.

Frequency/Duration of Offerings

The respondents were asked to indicate whether training was offered once, twice, three, or other times within the past three years. The training activities were offered an average of nearly eight times in the past three years, with three times being the median number of times they were offered.

The survey participants were asked to identify the duration of sponsored training activities, choosing from one hour or less, one to two hours, three to four hours, all day (eight hours), two to five days, and other. The highest percentage of respondents stated that the training activities lasted from two to five days (26 percent), with 25 percent responding that courses lasted all day (eight hours). Twenty-one percent stated that their courses lasted three to four hours, and 15 percent indicated one to two hour sessions. The remainder selected either the one-hour or less category (two percent), or the "other" response (11 percent). Other time periods cited were five to six hours, 40 hours (one week), once per week, weekly, or monthly. Figure #5 depicts the results.

More than 46 percent of the respondents offered one training session for their courses. However, the remaining respondents answered that the number of training sessions varied for their courses, although there was no discernible pattern or explanation for variance in the number.

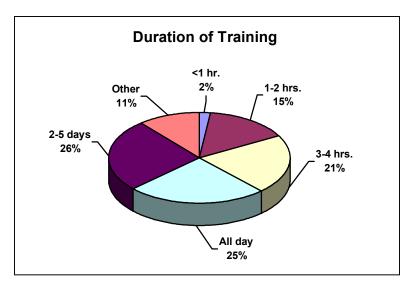


Figure #5

The respondents were asked to indicate the time of day the course is most frequently offered. The choices were mornings (until noon), afternoons (noon to 5 p.m.), evenings (5 p.m. or later), all day (eight hours), or weekends. The courses were most often held in the afternoon (35 percent). This was followed by time periods of all day (30 percent), weekends (14 percent), or evenings (seven percent). Training times are illustrated in Figure #6.



Figure #6

Location of Training/Course Participation

The survey participants were asked to identify the coastal regions of the state where the organization offers training. Selections were within one county, within a few northwest Florida counties, within the Panhandle (counties from the Apalachicola River to the Alabama state line), within Big Bend (counties from the Apalachicola River to Crystal River/Citrus County), and statewide.

The majority of the respondents stated that their courses were offered on a statewide basis (43 percent), while 24 percent stated that their courses were offered in one county, specifically Franklin, Citrus, Wakulla, Collier, Gulf, or Bay counties. The remainder of the distribution was split between offerings in a few northwest Florida counties (11 percent), the Panhandle (13 percent), or the Big Bend area (nine percent) (see Figure #7).

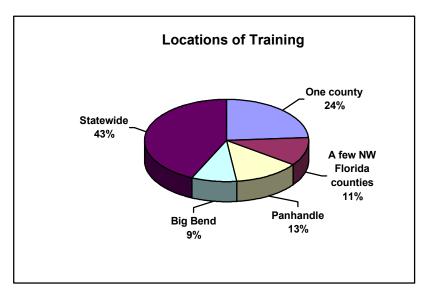


Figure #7

A question on the survey asked the respondents to indicate the number of participants that are typically enrolled in a course. The choices were ranges of 10 or fewer, 11 to 50, 51 to 75, and more than 75 participants.

Attendance for these courses varied only slightly according to the respondents, with 83 percent typically enrolling between 11 to 50 participants. Eight percent of the respondents stated that greater than 75 participants enrolled in their courses, while nine percent indicated having fewer than 10 participants (see Figure #8). No respondents selected the 51 to 74 category.

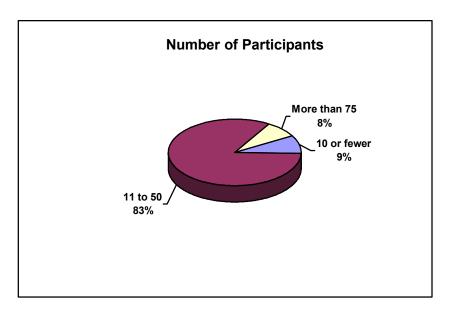


Figure #8

Training Delivery Methods and Instructors

The survey respondents were asked to indicate the methods used by instructors when conducting training. Methods of lecture format, seminars, workshops, interactive/focus group approaches, accelerated learning, simulations, professional conferences, Internet/web-based approaches, field experience, or other approaches were offered as choices.

The primary training delivery methods were lectures (29 percent), workshops (20 percent), and field experiences (16 percent). Other methods were used less frequently, such as seminars (eight percent), interactive/focus groups (12 percent), professional conferences (six percent), simulations (three percent), the Internet (three percent), and accelerated learning (one percent). Those who selected the other category listed presentations, lab time, and tours for their responses (see Figure #9).

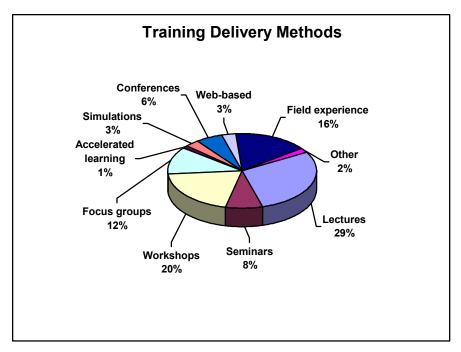


Figure #9

Respondents were asked to identify whether in-house staff, hired consultants, or volunteers typically instruct the courses, and to what percentage that instructor is utilized for the delivery of the training activity. According to the respondents, staff members and employees from within the organization conduct the majority of the coastal resources management training courses. In-house staff primarily conducts these courses (63 percent), followed by volunteers (20 percent) and hired consultants (17 percent). Figure #10 depicts the results.

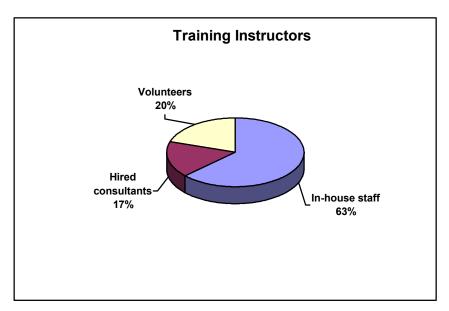


Figure #10

The respondents were asked to specify the education level of the instructors of these courses as either doctorate/professional, master's degree or equivalent, bachelor's degree, associate's degree, professional certification, no college degree, or other. The instructors of these courses primarily were educated at the college level, specifically possessing college degrees at the masters and doctorate levels (see Figure #11).

The instructors possessed a master's degree (36 percent), a doctorate/professional degree (36 percent), or a bachelor's degree (20 percent). The remainder held professional certification (four percent), or no college degree, but professional experience (two percent).

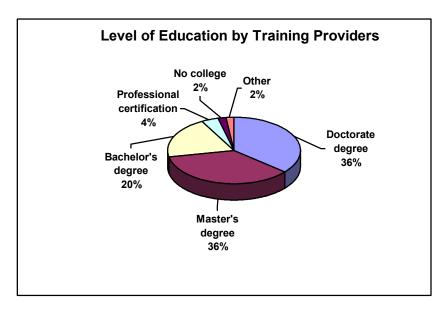


Figure #11

Course Completion and Costs

The survey respondents were asked to identify what is provided to them upon the completion of the course. Selections were academic credits, continuing education credits, certificates of participation, professional development, educational/training materials, or other (see Figure #12).

The majority (41 percent) of the respondents indicated that they typically provided educational and training materials to the course participants. The participants also received professional development (20 percent), certificates of participation (18 percent), or continuing education credits (17 percent). A small proportion received academic credits (two percent). One respondent indicated in the "other" category that participants receive an educational opportunity.



Figure #12

The training providers were asked to estimate the fees and/or costs that participants would pay to enroll in a training session. Incremental costs selections were no cost, \$100 or less, \$101-\$200, \$201-\$300, \$301-\$400, \$401-\$500, or greater than \$500 (see Figure #13).

Overall, the fees paid by participants varied, but nearly half of the respondents indicated that they offer training at no cost to participants (49 percent). About 15 percent indicated that \$100 or less is typically paid by participants for the course, while 18 percent stated that participants typically paid \$101-\$200. The remaining responses were split between the other cost categories on the survey. One respondent indicated in the over \$500 category that \$850 is typically paid by participants.

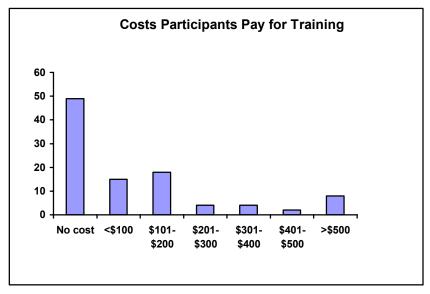


Figure #13

The costs to training providers were considerably more than that of the participants. The respondents were asked to estimate the largest item and cost expended by the organization when conducting a course. The average cost to the providers was \$3,305 (median equals \$1,000), which was used to cover refreshments, food, materials, printing, videos/manuals, or facilities rentals.

Training Needs

The survey respondents were asked to indicate the type(s) of professional groups that have participated in their training sessions over the past two years, and the degree to which the respondent perceives additional training is needed for each type of group (high need, medium need, low need). The professional groups listed were:

- Media professionals
- Neighborhood/homeowner associations
- Nonprofit organization staff and/or board members
- Planning/zoning boards and/or staff
- Realtors and/or real estate developers and architects
- Sewage treatment/waste water management employees
- State and/or federal legislators
- Water resource agencies
- State and/or regional land use planners
- State and/or regional law enforcement/regulatory staff
- Builders and/or developers
- Nature-based tourism providers
- Scientific/research community
- Port and/or marina operators
- Others not listed

In terms of which groups of professionals have received training from the respondent's organization within the past two years, the data reveal that the primary groups involve nonprofit organization staff and/or board members (95 percent), the scientific/research community (89 percent), water resource agencies (81 percent), law enforcement/regulatory personnel (77 percent), state and/or regional land use planners (75 percent), nature-based tourism providers (75 percent), and neighborhood/homeowners associations (74 percent). While these are the audiences attending training sessions within the past two years, these providers did not necessarily indicate these audiences as target audiences. Figure #14 below displays the percentage of responses for each professional group.

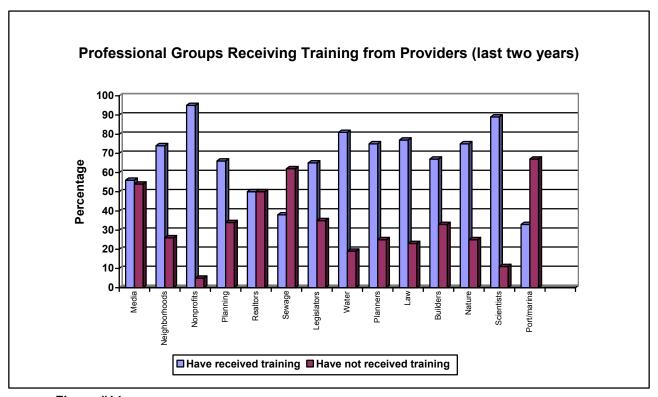


Figure #14

The respondents indicated a high need for additional training and education for the majority of the professional groups, primarily neighborhood/homeowner associations, non-profit organization staff/board members, realtors/developers, state and/or federal legislators, state/regional land use planners, state/regional law enforcement staff, builders/developers, and port/marina operators. A proportion of respondents also indicated a medium need for training and education, particularly for media professionals, water resource agencies, and the scientific research community. A few respondents perceived a low need for the various groupings.

An "other" category on the survey allowed respondents to list other professional groups that were not listed. These responses included county commissioners, recreational users, environmental consultants, engineers, miscellaneous leaders, teachers, maintenance people, government officials, volunteers, and interns. There was a perceived high to medium need indicated overall by respondents for these professional groups. These findings are shown in Figure #15 below.

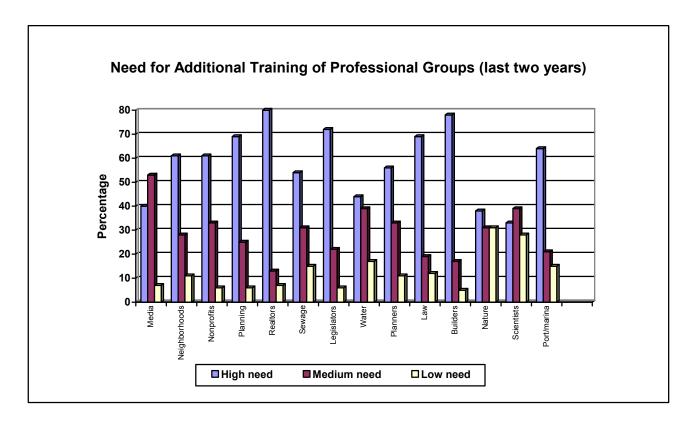


Figure #15

Section 4: Funding

Funding Sources to Conduct Training

The respondents were asked how coastal resources management training opportunities are funded at their organization, whether through tuition or fees, general operating budget, grants from public/private institutions, loans from outside sources, philanthropy/donations, or some other source. Thirty-three percent of the respondents indicated that training courses are funded through the general operating budget, and 33 percent from grants from public/private grants. Twenty-three percent indicated tuition or fees as funding sources, and three percent stated philanthropy/donations.

Eight percent of the respondents selected the "other" category, citing state funds, the Florida Coastal Management Program, cost sharing with partner organizations, school district funds, or in-kind contributions as measures of funding to conduct training activities. The figure below exhibits the responses for this question (Figure #16).

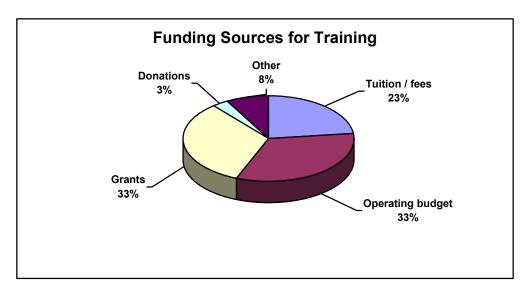


Figure #16

Section 5: Target Audiences

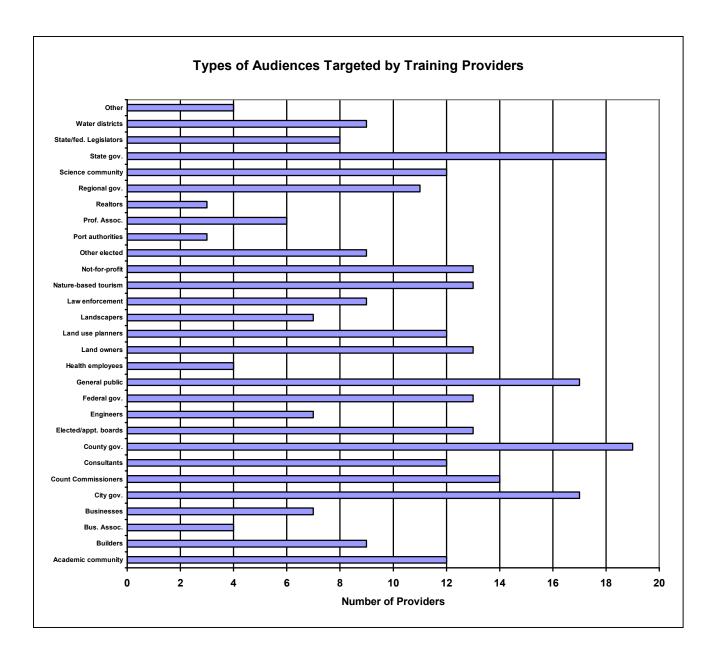
Types of Audiences Targeted by Training Providers

The purpose of this question was to have respondents identify the types of audiences targeted by their organizations when providing coastal resources management training. Selections included:

- Academic community
- Builders/developers or construction industry
- Business associations
- Businesses
- City government employees
- City/county commissioners
- Consultants/consultant groups
- County government employees
- Elected/appointed advisory boards or councils
- Engineers
- Federal government employees
- General public
- Health department employees
- Land owners/homeowners associations
- Land use planners

- Landscapers and plant nurseries
- Law enforcement/regulatory personnel
- Nature-based tourism providers
- Nonprofit organizations
- Other local elected officials
- Port authorities/commissioners
- Professional associations
- Realtors
- Regional government employees
- Science community
- State government employees
- State/federal legislators
- Water and wastewater utilities/districts
- Other

The respondents indicated that all audiences listed were targeted to some extent, yet overwhelmingly, the majority of the training courses are marketed to public employees at various levels of government. The general public is also a popular target audience. The respondents also listed other audiences, such as college and university students, lawn and road contractors, and volunteers. These findings are shown below in Figure #17.



Marketing Methods

The respondents were asked to identify the techniques used most often by their organizations when marketing training opportunities to their target audiences. Selections were direct mail campaigns, email lists, marketing by cosponsors/partners, newspaper advertisements, organizational newsletters, organizational websites, press releases, telephone solicitations, television/public service announcements, or other.

Direct mail campaigns were rated as the top marketing method, followed by email lists, organizational websites, organizational newsletters, and marketing by cosponsors/partners. Some respondents also listed techniques not included on the list, such as magazines, booths at events, and word of mouth. Some respondents stated that their organizations are in the process of developing or revising a website. Table 3 below lists the techniques most utilized by providers.

Table 3

TOP FIVE MARKETING TECHNIQUES USED BY TRAINING PROVIDERS		
Marketing Technique	Ranking	
Direct mail campaigns	1	
Email lists	2	
Organizational websites	3	
Organizational newsletters	4	
Marketing by cosponsors/partners	5	

Section 6: The Training Environment and Organizational Partnerships

The final section of the survey asked respondents to identify any perceived gaps in the Florida training environment, any other organizations that might offer similar training opportunities, and partnering assistance and opportunities.

Perceived Training Gaps

The respondents were asked to identify any gaps (i.e., unmet training needs, audiences, timing and length of training) that they perceived exists in the coastal resources management training market. The responses from the providers most often reflected the need to "grow the environment" of coastal training programs by targeting more or different audiences in the CTP process, by enhancing leadership for administering training programs, by increasing attendance at training events, by providing inter-agency training, and by providing more training opportunities.

Respondents indicated expanding the coastal training program beyond its current geographic boundaries, particularly to the Big Bend area, to obtain a more regional focus. Audiences that providers stated should be targeted are architects, professional contractors, federal agency staff, the community, homeowners, landowners, retailers, the media, and the general population (at all levels of learning). One provider indicated that some coastal users are overlooked – such as commercial fishermen, tourists, and recreational users – and should be included as target audiences for training. Another provider expressed difficulty in getting elected officials to attend training sessions and considered elected officials a viable target audience.

The providers expressed a need for conducting coastal resources management training within government agencies (at all levels), including a component on best management practices. Providers also indicated leadership training for volunteers as a need.

The respondents cited unmet training needs in topical areas of risk and vulnerability assessment, meeting management and planning, greening construction, and land development. Providers indicated that training should be science based, and more hands-on in approach and delivery. Certification and continuing education credits were also cited as necessary outcomes to training. The providers stated a need for more one-day special topic workshops, and expressed an uncertainty as to what training venues are offered by other providers.

These gaps suggest the need for a more cohesive and connected network of training providers that could provide a degree of consistency to training activities across the region. A more coordinated and connected provider network could aid in generating interest for this type of training, and in formulating courses to best meet audience skill and knowledge needs. The actual list of gaps cited by respondents is displayed in Appendix F.

Respondents were also relatively familiar with other organizations in Florida that offer similar opportunities for coastal resources management training. Several organizations were listed in responses, namely: other NERR's (in particular Rookery Bay NERR and the Guana Tolomato Matanzas NERR); Aquatic Preserves; the Florida Department of Environmental Protection; the Florida Fish and Wildlife Conservation Commission; Leave No Trace; the University of Miami; the University of Florida; Florida State University; Florida International University; other state universities in general; Florida Sea Grant; Harbor Branch; the Mote Marine Laboratory; St. Johns River District; the Southern Florida Water Management District; the Southwest Florida Water Management District; the Northwest Florida Water Management District; RC&D Districts; the Florida Master Naturalist Program; the National Conservation Training Center; and the Florida Aquarium.

Types of Assistance/Partnerships

The ANERR is interested in forming partnerships with training providers in an effort to better coordinate coastal resources management training activities throughout the counties, the region, and the state. The respondents were asked to rank the types of assistance that would be most beneficial to their organizations. Rankings were from one to six, with one being the most beneficial, two being the second most beneficial, and so forth. The types of assistance listed were facilities and operational support, funding support, instructors/trainers, marketing assistance, professional expertise/technical assistance, and other.

The respondents primarily ranked instructors/trainers and funding support as the two dominant types of assistance that would be the most beneficial. Marketing assistance, professional expertise, and facilities/operational support were also listed in the top five rankings by respondents. The order of the rankings of the types of assistance is shown in Table 4.

Table 4

TOP FIVE TYPES OF ASSISTANCE MOST BENEFICIAL TO PROVIDERS				
Type of Assistance	Ranking			
Instructors/trainers	1 st			
Funding support	2 nd			
Marketing assistance	3 rd			
Professional expertise	4 th			
Facilities and operational support	5 th			

Of the types of assistance listed above, the survey respondents were also asked to identify what they might offer as a coastal training partner. Thirty-one percent of the respondents indicated that they could primarily offer expertise and technical assistance to other organizations. This was followed by instructors/trainers (26 percent), facilities and operational support (16 percent), marketing assistance (11 percent), and funding support (10 percent).

Other types of assistance noted (six percent) were in the form of travel, expertise, participation, and a full curriculum. Figure #18 below illustrates the responses.

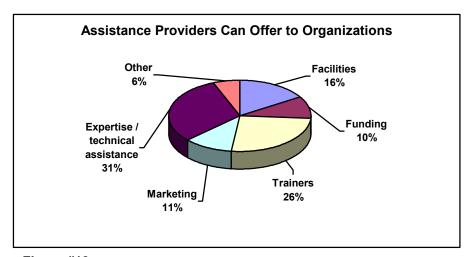


Figure #18

COASTAL TRAINING OPPORTUNITIES

The ANERR's targeted coastal resources management training region spans 19 counties, from the Florida Panhandle and across the Big Bend in northwestern Florida. From within this geography, a total of 33 organizations were identified as providing coastal training activities to coastal decision-makers and policy-makers. Some of the individuals surveyed were from the same organization, but have different training or courses within separate divisions of the organization.

These providers were asked to identify any perceived gaps they felt might exist across the coastal resources management training market. Their overall responses indicate the need for nurturing the current coastal training environment through networking, collaboration, and coordination. The providers see the need for targeting different types of audiences, perhaps those not necessarily working within an environmental profession but whose actions might in some way impact the coastal environment. They noted a lack of interest on the part of some audiences to participate in training, particularly elected officials, and expressed a need for workshops with topics (in particular risk and vulnerability assessment, and greening construction and land development) that might appeal to these types of audiences.

There is a perceived need for additional information and communication as to the types of organizations and programs available to provide this type of training. Training providers are unaware of the types of training being offered by their counterparts, thus indicating a lack of coordination and cross marketing among the providers themselves. These respondents also acknowledged the need to integrate scientific information into their training courses, and the need to utilize qualified instructors as partners or consultants to deliver the quantity and specificity needed.

The gaps identified by these providers are an indication that several opportunities exist in the coastal resources management training arena for the ANERR. Opportunities are prevalent for collaborative training initiatives, redefining training content and delivery methods, and developing strategies to consistently coordinate and implement training to decision-makers, policy-makers, and even training providers.

Within this geographic expanse, the ANERR is poised as one of the primary providers of coastal training events, having historically provided education and skills training courses to various audiences. The majority of the training providers indicated that coastal resources management training was either not the sole focus of their organization or only one area out of series of topics for which training opportunities are provided. This presents an opportunity for the ANERR to serve in a leading role to coordinate and build a training

provider network. With the majority of these organizations being government agencies, the ANERR has access to these providers and, in some instances, is currently partnering on training initiatives.

The training providers identified the audiences that were recipients of their training activities within the past two years. The audiences not in receipt of training – primarily port/marina operators, sewage treatment/wastewater management employees, media professionals, and realtors/real estate developers/architects – could be potential CTP target audiences for the ANERR. The needs assessment phase of the CTP development process should determine if these are viable audiences for the ANERR CTP.

The training providers offer training, as a whole, in limited areas across northwestern Florida. While 43 percent of these providers indicated their courses are offered statewide, 57 percent conduct their courses within certain geographies. This presents an opportunity to the ANERR to utilize existing partnerships and cultivate new partnerships to deliver CTP training across northwestern Florida and other areas within the state. With limited resources and staff, collaborative agreements with current and anticipated partners will be key to implementing an effective CTP. Partnering organizations, agencies, and institutions that are truly engaged as stakeholders – providing training facilities, sharing information and multidisciplinary expertise, collaborating on fundraising and grant activities, marketing and disseminating training information, and participating in strategy and planning efforts – will help to expand the CTP initiative across the ANERR region and sustain CTP activities over the long term.

There are many variances and inconsistencies across the ANERR region with regard to course offerings, content, format, costs, audiences, marketing methods, and the dissemination of training information. When observed as a whole, the dissimilar methods and course emphases might be construed as an uneven coverage of the potential training audiences. This, too, emphasizes the need for better coordination of coastal training activities across the ANERR region. With such an expansive geography, partnerships and collaborative efforts will be key to effectively and efficiently organizing and disseminating information, and enhancing the quality of coastal training within the ANERR region.

One predominant opportunity lies with the formation of a regional and statewide coastal training framework through the existing ANERR, the GTM NERR, and the Rookery Bay NERR. The territory of these three Reserves primarily encompasses the entire state, thus revealing the potential to create one of the largest coastal training program initiatives in the nation. Working together, these Reserves could collectively collaborate with training providers at all levels to develop strategies and benchmarks for a comprehensive statewide coastal training program, and to efficiently market the CTP as an integrated training program throughout the state. This includes funding sources; the sharing and

dissemination of training information – both current and archival; the sharing of instructors, and professional and technical expertise; the sharing of training facilities, as well as hands-on field sites, tours, research gathering, and excursions; and in defining training activities specific to the needs of identified audiences. The Reserves could also work with state and local leaders to develop training activities that would be responsive to the schedules of elected officials, thus enabling them to participate in this type of training.



APPENDICES

Appendix A: Survey Cover Letter

Appendix B: Market Survey Questionnaire

Appendix C: List of Training Providers

Appendix D: List of Course Names/Descriptions Provided by

Respondents

Appendix E: List of Organizational Mission Descriptions Provided

by Respondents

Appendix F: List of Gaps Identified By Training Providers



Appendix A: Survey Cover Letter



Great Lakes Environmental Finance Center Maxine Goodman Levin College of Urban Affairs Cleveland State University 2121 Euclid Avenue UR 120 / Cleveland, OH 44115



Dear

Coastal decision-makers in the state of Florida face a variety of issues that are critical for managing and maintaining the health and sustainability of their communities. The Great Lakes Environmental Finance Center (GLEFC) of the Maxine Goodman Levin College of Urban Affairs at Cleveland State University is conducting a research project for the Apalachicola National Estuarine Research Reserve (Reserve) to perform an analysis and assessment of the coastal training education market. The research will assist the Reserve in developing a comprehensive Coastal Training Program that does not duplicate the efforts of other organizations, that will build upon the Reserve's current training and education efforts, and that will identify new partners and foster new collaborations.

To provide *you* with the greatest opportunity to participate in this process, we are asking you to participate in our survey process to gather information on the current training environment. Attached is a survey that the GLEFC is sending to providers of coastal resources management training. The survey is four pages, and we expect that it will take approximately 20 minutes to complete. The survey may be returned by **fax to 216/687-9291** or by mail to the **GLEFC**, **Cleveland State University, Levin College of Urban Affairs, 2121 Euclid Ave/UR 120, Cleveland, OH 44115**. If you'd rather participate online, the survey is available at http://urban.csuohio.edu/glefc/anerr/. The online survey will take you through the process. Please click the "Submit" option when you have completed the survey. **We would like to have all surveys returned as soon as possible**.

We hope that you will take the time to assist us with our research. Participants will benefit from their assistance, since not only will we be sharing the results of the survey with you and your organization, but this project will also form the basis for potential collaborations and partnerships between providers of future coastal resources management training. We have provided the following definitions to assist you in answering the questions accurately and consistently:

- 1) Coastal Resources Management: Coastal Resources Management is defined as the overall practice of coastal decision-makers to make and implement informed decisions affecting the human, economic, function, geography, and health of coastal ecosystems and coastal resources.
- 2) Coastal Decision-Maker: An individual who makes decisions regarding coastal resources on a regular basis in a professional or volunteer capacity. Coastal decision-makers include elected officials, land use planners, regulatory personnel, coastal managers, agricultural and fisheries interests, volunteer boards, contractors, consultants, non-profit agencies and organizations, and others.
- **3) Training:** Training includes instruction and learning experiences that expand the understanding of coastal decision-makers and allow them to better understand the context of Coastal Resources Management. Training enhances the base of knowledge and skills of coastal decision-makers by allowing them to interact with experts in the field while networking with other professionals well versed on coastal management issues and tools.

4) Course: A non-degree seeking program, formal or non-formal, that may include special information days for elected officials, seminars, workshops, and other formats, which may or may not provide certification or credit.

We appreciate your assistance in helping us with our research efforts. **Please remember to return your survey as soon as possible.** If you have any questions concerning this survey or project, please contact either me at (216) 687-2188 (kobrlc@ix.netcom.com) or Claudette Robey at (216) 875-9988 (crobey@urban.csuohio.edu), or by fax at 216/687-9291. Once again thank you, and we look forward to our interview.

Sincerely yours,

Kevin O'Brien, Director Great Lakes Environmental Finance Center

Appendix B: Market Survey Questionnaire







This project is supported by the Apalachicola National Estuarine Research Reserve, the Florida Department of Environmental Protection, and the National Oceanic Atmospheric Administration.

Thank you for participating in our survey. This questionnaire will provide valuable information on the number, types, scope, and future directions of coastal resources management training opportunities offered in the Florida Panhandle area. Please be as accurate and complete as possible to assist us in our analysis.

**If a particular question does not apply to your organization, please respond with N/A to signify not applicable.

Survey of Coastal Resources Management Training Opportunities in Florida

Section 1: Your Organization 1) What is the name of your organization? (Write In)	
3) What is the official address, telephone number, website address, and email address of your organization? (Write Address: Street Number and Name: City, State, and Zip Code: Telephone Number: () Email Address: Website Address: Website Address: 4) Who is the person responsible for overseeing the training offered for coastal resources management courses? Check here if you are the person responsible or write in an alternate person Name: Title: Phone: () 5) Please write in your name, title, and telephone number (person responding to the survey).	
3) What is the official address, telephone number, website address, and email address of your organization? (Write Address: Street Number and Name: City, State, and Zip Code: Telephone Number: Email Address: Website Address: Website Address: Website Address: Or write in an alternate person Title: Phone: Phone: Decay Please write in your name, title, and telephone number (person responding to the survey).	
Address: Street Number and Name: City, State, and Zip Code: Telephone Number: Email Address: Website Address: Website Address: 4) Who is the person responsible for overseeing the training offered for coastal resources management courses? Check here if you are the person responsible or write in an alternate person Title: Phone: 5) Please write in your name, title, and telephone number (person responding to the survey).	
Address: Street Number and Name: City, State, and Zip Code: Telephone Number: Email Address: Website Address: Website Address: Or write in an alternate person Title: Phone: Di Please write in your name, title, and telephone number (person responding to the survey).	
Telephone Number: () Email Address: Website Address:	ln)
Email Address:	
4) Who is the person responsible for overseeing the training offered for coastal resources management courses? Check here if you are the person responsible or write in an alternate person Title: Phone: () 5) Please write in your name, title, and telephone number (person responding to the survey).	
Check here if you are the person responsible or write in an alternate person Name:	
Name: Title:	
Phone: ()	
5) Please write in your name, title, and telephone number (person responding to the survey).	
Name: Title:	
Phone: ()	
6) Is your organization a public, private, or nonprofit organization? Governmental Private / for profit Higher Education Institution Nonprofit	
7) How many total individuals does your organization employ? (Write In) employees	
8) Where does coastal resources management training fit into the mission of your organization? It is the only training provided and the sole purpose of the organization It is one area out of a series of topics for which training opportunities are provided It is not the focus of training, but a few courses are offered on the topic of coastal resources management Other: (Write In)	

The Great Lakes Environmental Finance Center

Section 2: Coastal Resources Management Training Information

Which topics are covered in the coastal resources man	nagement training at your organization? (Check all that apply)
Agricultural uses – plant and livestock	☐ Invasive species
Aquaculture	Land use planning
Artificial reefs	Marinas
Beach nourishment/sand availability	Maritime/science museums
Beach health	Monitoring
Biodiversity	Nature-based tourism
Boating	Oil and gas drilling/Mineral extraction
Boating pump out	Organizational development (funding, leadership, conflict
Boating safety	management, etc.)
Brownfields redevelopment	Population shifts/Demographic changes
Clean Vessel Act and issues	Port facilities
Coastal building codes	Protection of agricultural land
Coastal hazards and emergency management	Public access to shoreline
Coastal parks and natural areas	Recreational fishing
Coastal protection regulation	Riparian corridors
Coastal wetlands	Sewage out falls/combined sewer overflow
Commercial fishing	Shipping and shipping activities
Compliance and enforcement	Shore erosion protection/management
Conservation lands management / acquisition	Shore(line) erosion causes
Cultural and historic resources	Siltation management
Dredging and dredge disposal	Surface water quality/non-point source pollution
Endangered and threatened species	Sustainable economic and coastal development
Environmental regulations	Sustaining estuarine ecosystems
Environmental technology	Toxic organisms
Estuaries	Wastewater treatment methods
Fisheries, fisheries management	Watershed planning
Global climate change	Water levels and diversions
Green practices (building, landscape, lodging)	Water quantity and quality
Growth and economic development issues	Wildlife management
Habitat restoration	Zoning
Heritage tourism	Other: (Write In)
Home septic systems	

Section 3: Course Information:

What were the three most well attended coastal resources management training courses offered last year by your organization? Please answer the following questions about these courses:

	Course 1:	Course 2:	Course 3:
10) Course Name / Description: (Write In)			
11) How many times in the past three years have you offered this course?	Once Twice Three times Other: (Write In)	Once Twice Three times Other: (Write In)	Once Twice Three times Other: (Write In)
12) How long does this individual course last?	1 hour or less 1-2 hours 3-4 hours All day (8 hours) 2-5 days Other: (Write In)	☐ 1 hour or less ☐ 1-2 hours ☐ 3-4 hours ☐ All day (8 hours) ☐ 2-5 days ☐ Other: (Write In)	☐ 1 hour or less ☐ 1-2 hours ☐ 3-4 hours ☐ All day (8 hours) ☐ 2-5 days ☐ Other: (Write In)
13) How many training sessions are offered in this course? (Write In)	Training Sessions	Training Sessions	Training Sessions
14) At what time of day is this course most frequently offered?	Mornings (until noon) Afternoons (noon to 5 p.m.) Evenings (5 p.m. or later) All Day (8 hours) Weekends	☐ Mornings (until noon) ☐ Afternoons (noon to 5 p.m.) ☐ Evenings (5 p.m. or later) ☐ All Day (8 a.m. to 5 p.m.) ☐ Weekends	☐ Mornings (until noon) ☐ Afternoons (noon to 5 p.m.) ☐ Evenings (5 p.m. or later) ☐ All Day (8 a.m. to 5 p.m.) ☐ Weekends

	Course 1: Continued	Course 2: Continued	Course 3: Continued
15) In which coastal regions of the state does your organization offer training? (Write In)	☐ One County (Specify:) ☐ A few NW Florida Counties (Specify:) ☐ Panhandle (Counties from Apalachicola River to Alabama State Line) ☐ Big Bend (Counties from Apalachicola River to Crystal River / Citrus County) ☐ Statewide	One County (Specify:) A few NW Florida Counties (Specify:) Panhandle (Counties from Apalachicola River to Alabama State Line) Big Bend (Counties from Apalachicola River to Crystal River / Citrus County) Statewide	One County (Specify:) A few NW Florida Counties (Specify:) Panhandle (Counties from Apalachicola River to Alabama State Line) Big Bend (Counties from Apalachicola River to Crystal River / Citrus County) Statewide
16) How many participants typically enroll in this course?	10 or fewer participants 11 to 50 participants 51 to 75 participants More than 75 participants	☐ 10 or fewer participants ☐ 11 to 50 participants ☐ 51 to 75 participants ☐ More than 75 participants	☐ 10 or fewer participants ☐ 11 to 50 participants ☐ 51 to 75 participants ☐ More than 75 participants
17) What methods are used by the instructors when conducting this course? (Check all that apply)	Lecture format Seminars Workshops Interactive / Focus Group approaches Accelerated learning Simulations Professional Conferences Internet/Web-based approach Field Experience Other: (Write In)	Lecture format Seminars Workshops Interactive / Focus Group approaches Accelerated learning Simulations Professional Conferences Internet/Web-based approach Field Experience Other: (Write In)	Lecture format Seminars Workshops Interactive / Focus Group approaches Accelerated learning Simulations Professional Conferences Internet/Web-based approach Field Experience Other: (Write In)
18) Who typically instructs this course and what is the percentage that they are utilized? (Check all that apply)	☐ In-house Staff:% ☐ Hired Consultants:% ☐ Volunteers:%	☐ In-house Staff:% ☐ Hired Consultants:% ☐ Volunteers:%	☐ In-house Staff:% ☐ Hired Consultants:% ☐ Volunteers:%
19) What level of education do instructors of this course typically possess?	Doctorate/professional degree Master's degree / equivalent A Bachelor's degree An Associate's degree Professional Certification No college degree Other: (Write In)	Doctorate/professional degree Master's degree / equivalent A Bachelor's degree An Associate's degree Professional Certification No college degree Other: (Write In)	Doctorate/professional degree Master's degree / equivalent A Bachelor's degree An Associate's degree Professional Certification No college degree Other: (Write In)
20) What do you provide to participants who successfully complete this course? (Check all that apply)	Academic credits Credits for continuing education Certificate of participation Professional development Educational / Training Materials Other: (Write In)	Academic credits Credits for continuing education Certificate of participation Professional development Educational / Training Materials Other: (Write In)	Academic credits Credits for continuing education Certificate of participation Professional development Educational / Training Materials Other: (Write In)
21) What would be an estimate of fees/costs that participants would pay to enroll in this course?	No cost \$100 or less \$101 - \$200 \$201 - \$300 \$301 - \$400 \$401 - \$500 Over \$500 (Write In): \$	No cost \$100 or less \$101 - \$200 \$201 - \$300 \$301 - \$400 \$401 - \$500 Over \$500 (Write In): \$	No cost \$100 or less \$101 - \$200 \$201 - \$300 \$301 - \$400 \$401 - \$500 Over \$500 (Write In): \$
22) As a provider, what is the largest item and cost that your organization incurs when providing this course?	Item Description:	Item Description: Cost: \$	Item Description: Cost: \$

(Over)

23) Which of the following groups have received training from you in the past two years, and how do you perceive the need for additional training and education?

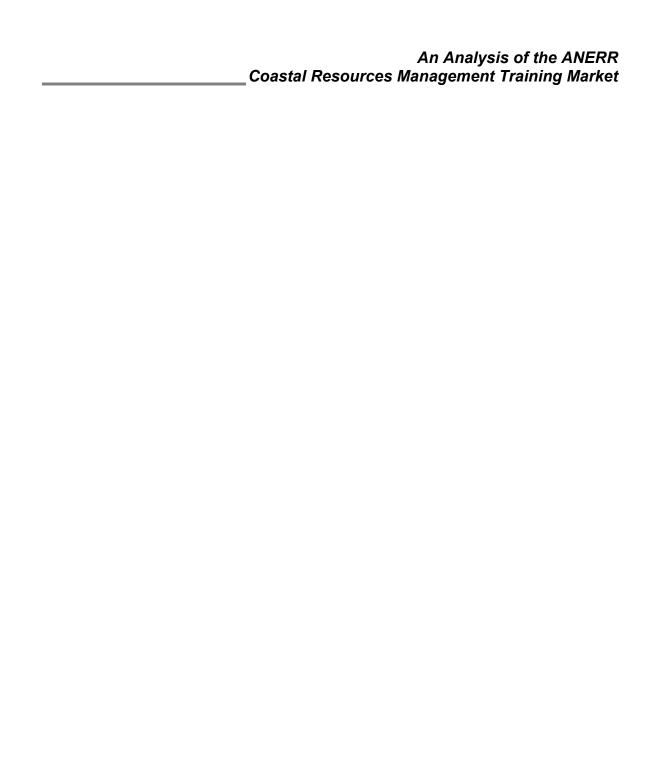
Group	Received Traini		Need for Ad	ditional Training and I	Education	
a. Media professionals b. Neighborhood / homeowner	Yes Yes	□ No □ No	☐ High Need ☐ High Need	☐ Medium Need ☐ Medium Need	Low Need	
associations c. Non-profit organization staff	Yes	□No	High Need	☐ Medium Need	Low Need	
and/or board members d. Planning / zoning boards and/or staff	Yes	□No	☐ High Need	☐ Medium Need	Low Need	
e. Realtors and/or real estate	Yes	□No	☐ High Need	☐ Medium Need	Low Need	
developers and architects f. Sewage treatment / waste water management	Yes	□No	☐ High Need	Medium Need	Low Need	
employees g. State and/or federal	Yes	□No	☐ High Need	☐ Medium Need	Low Need	
legislators h. Water resource agencies i. State and/or regional land use	☐ Yes ☐ Yes	□ No □ No	☐ High Need ☐ High Need	☐ Medium Need ☐ Medium Need	Low Need	
j. State and/or regional law enforcement / regulatory staff	Yes	□No	☐ High Need	Medium Need	Low Need	
k. Builders and/or developers I. Nature-based tourism	☐ Yes ☐ Yes	□ No □ No	☐ High Need ☐ High Need	☐ Medium Need ☐ Medium Need	Low Need	
providers m. The scientific / research	Yes	□No	☐ High Need	☐ Medium Need	Low Need	
community n. Port and/or marina operators o. Others not listed above that	Yes	□No	☐ High Need	Medium Need	Low Need	
you have trained or who might need training (please specify):						
need training (please speeliy).	Yes	□No	☐ High Need	☐ Medium Need	Low Need	
	Yes	□No	☐ High Need	☐ Medium Need	Low Need	
Section 4: Funding	Yes	□No	☐ High Need	☐ Medium Need	Low Need	
24) How are coastal resources manag	ement training o	pportunities fu	ınded at your orga	nization? (Check all tha	at apply)	
24) How are coastal resources management training opportunities funded at your organization? (Check all that apply) Tuition or fees General Operating Budget Grants from public or private institutions Loans from outside sources Philanthropy / donations Other: (Write In)						
Section 5: Target Audiences						
25) What types of audiences does you (Check all that apply)	ır organization ta	rget when pro	viding coastal reso	ources management tr	aining?	
Academic community Builders / developers or construction Business associations Businesses City government employees City or County commissioners Consultants / consultant groups County government employees Elected / appointed advisory boards of Engineers Federal government employees General public Health department employees Land owners / homeowners association	Nature-based tourism providers Not-for-profit organizations Solution Other local elected officials ers Port authorities / commissioners oups Professional associations yees Realtors Regional government employees Science community yees State government employees State / federal legislators ees Water and wastewater utilities / districts					

 How do potential participants learn about the training oppor that apply) 	tunities that are offered by your organization? (Check all
Direct mail campaigns	Organizational website
Email lists	Press releases
Marketing done by cosponsors / partners	Telephone solicitations Television / public service announcements
□ Newspaper advertisements □ Organizational newsletters	Other: (Write In)
Section 6: The Training Environment and Other Organizations	
Section 6. The Training Environment and Other Organizations	
27) What gaps can you identify in coastal resources management timing and length of training, and so forth? (Write In):	nt training in Florida, i.e., unmet training needs, audiences,
28) Do you know of any other organizations in Florida that offer training? □ No	similar opportunities for coastal resources management
Yes: (Write In):	
29) The ANERR and its partners are interested in forming partner training providers. Please rank from 1 to 6 the types of assistar most beneficial, 2 the second most beneficial, and so forth. Ple provided)	ice that would be most beneficial to you, with 1 being the
Facilities and operational support	
Funding support	
Instructors / trainers	
Marketing assistance	
Professional expertise / technical assistance	
Other: (Write In)	
30) The ANERR is also interested in determining what assistand training partner. Please check the services you may be able to p	
Facilities and operational support	
Funding support	
☐ Instructors / trainers	
Marketing assistance	
Professional expertise / technical assistance	
Other: (Write In)	
	urvey. Please mail or fax a copy of any coastal resources n may have available to:
Claudette Robey The Great Lakes Environmental Finance Center The Maxine Goodman Levin College of Urban Affairs Cleveland State University	2121 Euclid Avenue, UR 120, Cleveland, Ohio 44115 Fax: (216) 687-9291 Email: crobev@urban.csuohio.edu



The Great Lakes Environmental Finance Center Phone: (216) 687-2188 Fax: (216) 687-9291 Website: http://urban.csuohio.edu/glefc/





Appendix C: List of Training Providers

Organization Name	<u>Address</u>	<u>City</u>	State	<u>Zip</u>	Respondent	<u>Title</u>	Phone Number
Apalachicola National	350 Carroll					Reserve	
Estuarine Research Reserve	Street	Eastpoint	FL	32328		Manager	850-670-4783
Apalachicola National					Erik	Education	
Estuarine Research Reserve	261 7th St	Apalachicola	FL	32320	Lovestrand	Coordinator	850-653-8063
Apalachicola National	350 Carroll					Research	
Estuarine Research Reserve	Street	Eastpoint	FL	32328	Lee Edmiston	Coordinator	850-670-4783
Apalachicola National					Rosalyn		
Estuarine Research Reserve	261 7th St	Apalachicola	FL	32320	Kilcollins	CTP Coordinator	850-653-2296
Apalachicola National						Stewardship	
Estuarine Research Reserve	261 7th St	Apalachicola	FL	32320	Roy Ogles	Coordinator	(850) 653-8063
	2507 Callaway						
Audubon of Florida	Rd #103	Tallahassee	FL	32303	Eric Draper	Policy Director	
						Emergency	
Citrus County Sheriff's	3425 W.					Management	(352) 726-4488 x
Emergency Management	Southern St.	Lecanto	FL	34461	Rusty Harry	Coordinator	` ´ 210
Department of Wildlife							
Ecology & Conservation,				32611		Assistant	
University of Florida	PO Box 110430	Gainesville	FL	-430	Mark Hostetler	Professor	352-846-0568
Florida A&M University,							
Environmental Sciences	1520 South			32307		Distinguished	
Institute	Bronough St	Tallahassee	FL		Mark Harwell	Professor	(850) 561-2760
	3900						,
	Commonwealth					Education and	
Florida Coastal Management				32399	Jasmin	Outreach	
Program	47	Tallahassee	FL	-3000	Raffington	Administrator	(850) 245-2163
Florida Department of	2555 Shumard			32399			(222)
Community Affairs	Oak Boulevard	Tallahassee	FL			Senior Planner	850/922-1819
	3900					Director, Office of	
Florida Department of	Commonwealth					Environmental	
Environmental Protection	Blvd.	Tallahassee	FI	32312	Gregory C. Ira	Education	850.245.2132
Florida Dept. of	2			0_0	eregery erma		000121012102
Environmental Protection -							
Bureau of Watershed	2600 Blairstone			32399		Environmental	
Management	Rd.	Tallahassee	FL	-2400		consultant	(850) 245-8560
Florida Dept. of					,		,
Environmental Protection /	2051 E. Dirac				James W.H.	Program	
Bureau of Mine Reclamation	Drive	Tallahassee	FL	32310		Administrator	(850) 488-82
Florida Fish and Wildlife	620 South				Richard	Environmental	850-488-6058 x
Conservation Commission	Meridian Street	Tallahassee	FL	32399		Specialist II	224
Florida Sea Grant - Franklin				32320		Extension	
County Extension	28 Airport Rd	Analachicola	FI	-1204		Director	(850) 653-9337
Florida Shore & Beach	2952 Wellington	p.a.a.o			2	Executive	,222, 300 0001
Preservation Association	Circle	Tallahassee	FI	32309	David Tait	Director	850-906-9227
	C2200 University	. 4.14.140000	1 -	32306		2000	JUL JUU ULLI
Florida State University	Center	Tallahassee	FI	-2641			800/452-9805
National Conservation	698	Tallariassec	- '-	2041	David Landit		000/402 0000
Training Center - U.S. Fish	Conservation	Shenherdeto					
and Wildlife Service	Way	wn		25443	Frank Muth	Course Leader	(304) 876-7471
NOAA Coastal Services	2234 South	VVII	VVV	20440	Sacheen	Coastal Training	(004) 010-1411
Center	Hobson Avenue	Charleston	SC	29405		Specialist	843-740-1167
Recreational Fishing	176-B South	Ondriesion	- 50	20700	John DePers-	Fisheries	0-10-1-101
Alliance	New York Rd	Galloway	NI I	8205		Researcher	609 404-1060
St. Joe Wildlife Sanctuary &	690 Indian Pass	Port St. Joe	FL	32456	Marie Steele	President	850-229-9464

Educational Center, Inc.	Rd						
St. Marks National Wildlife	P.O. Box 68,						
Refuge U.S. Department	1255 Lighthouse						
of the Interior	Rd.	St. Marks	FL	32355	Robin Will	Refuge Ranger	(850) 925-6121
Taylor County Cooperative	203 forest park						
Extension service	drive	Perry	FL	32348			
The Conservancy of	1450 Merrihue					Nature Center	
Southwest Florida	Drive	Naples	FL	34102	Joe Cox	Director	239-403-4233
						Regional	
	1725 De Sales				Coralette	Program	
The Ocean Conservancy	Street, Suite 600	Washington	D.C.	20036	Damme	Coordinator	(727) 895-2188
	2741						
U of Florida / Jackson Co.	Pennsylvania	Marianna,				County Extension	
Extension	Ave, Ste 3	FL	FL	32448	H. E. Jowers	Director	850-482-9620
	1601 Balboa					Ecologist / GIS	(850) 769-0552 x
U. S. Fish & Wildlife Service	Ave.	Panama City	FL	32405	Paul A. Lang	Coordinator	230
UF Citrus County Extension	3600 S. Florida					Horticulture	
Service	Ave.	Inverness	FL	34450	Bruce Ide	Agent	726-2141
						4-H Youth	
UF/IFAS Extension - Bay	647 Jenks Ave.					Development	
County	Ste A	Panama City	FL	32401	Paula M. Davis	Agent	850-784-6105
University of Florida - Center					Dr. Mark		
for Wetlands	P.O. Box 113650	Gainesville	FL	32611	Brown		(352) 392-2309
University of Florida							
Florida Master Naturalist	2686 State Road					Program	
Program	29 North	Immokalee	FL	34142	Ginger Allen	Coordinator	(239) 658-3400
University of Florida							
Powell Center for							
Construction and				32611			
Environment	P.O. Box 115703	Gainesville	FL	-5703	Kibert		

Appendix D: List of Course Names/Descriptions Provided by Respondents

Name of Training Provider	Course 1: Names/Descriptions of Training Activities
Apalachicola National Estuarine Research Reserve	Storm water in Urban and Suburban Settings
Apalachicola National Estuarine Research Reserve	Wetland Restoration and Mitigation
Apalachicola National Estuarine Research Reserve	Sustainable Development
Audubon of Florida	Land Conservation Strategies
Dept. of Wildlife Ecology & Conservation, University of Florida	Preservation: Wildlife in Development
Florida Coastal Management Program	Coastal Zone Management Act Federal Consistency Requirements
Florida Department of Environmental Protection	Various NERR courses
Florida Dept. of Environmental Protection - Bureau of Watershed Management	Green Industry BMPS
Florida Dept. of Environmental Protection / Bureau of Mine Reclamation	Dam Safety & Engineering
Florida Sea Grant - Franklin County Extension	Clam Aquaculture / Farming
Florida Shore & Beach Preservation Association	FSBPA Annual Meeting
Florida State University	Ecoventures
National Conservation Training Center - U.S. Fish and Wildlife Service	Oil Spill Response
NOAA Coastal Services Center	Project Design and Evaluation
St. Joe Wildlife Sanctuary & Educational Center, Inc.	Florida Panhandle Birding & Wildlife
St. Marks National Wildlife Refuge U.S. Department of the Interior	Coastal Awareness and Cleanup Day
The Conservancy of Southwest Florida	Florida Master Naturalist - Coastal
The Ocean Conservancy	Sea Turtle Biology and Conservation Issues for the General Public
University of Florida - Jackson County Extension	Forest Stewardship
U. S. Fish & Wildlife Service	Stormwater Ecotoxicology
UF Citrus County Extension Service	Best Management Practices
UF/IFAS Extension - Bay County	Florida Master Naturalist
University of Florida - Center for Wetlands	Wetland Delineation and UMAM
University of Florida Florida Master Naturalist Program	Coastal Systems
University of Florida Powell Center for Construction and Environment	Introduction to Green Building

Name of Training Provider	Course 2: Names/Descriptions of Training Activities
Apalachicola National Estuarine Research Reserve	Leave No Trace Workshop: Minimal Impacts
Apalachicola National Estuarine Research Reserve	Effective Buffers Associated With Development
Apalachicola National Estuarine Research Reserve	Leave No Trace Recreational Use Ethic
Audubon of Florida	Lobbying

Dept. of Wildlife Ecology & Conservation, University of Florida	Florida Master Naturalist Program
Florida Department of Environmental Protection	Clean Marina Program Workshops
Florida Dept. of Environmental Protection - Bureau of Watershed Management	Erosion & Sediment Control Training
Florida Dept. of Environmental Protection / Bureau of Mine Reclamation	Integrated Habitat Network 1
Florida Sea Grant - Franklin County Extension	Shrimping Industry (TEDs and BRDs)
Florida Shore & Beach Preservation Association	National Conference on Beach Preservation Technology
National Conservation Training Center - U.S. Fish and Wildlife Service	Shorebird Ecology & Management
NOAA Coastal Services Center	Public Issues & Conflict Management
St. Marks National Wildlife Refuge U.S. Department of the Interior	Scallop School
The Conservancy of Southwest Florida	Coast to Coast" Training"
U. S. Fish & Wildlife Service	Water Quality Needs of Sea grass Restoration
UF Citrus County Extension Service	Florida Yards & Neighborhoods
University of Florida Powell Center for Construction and Environment	USGBC LEED Green Building Assessment Standard

Name of Training Provider	Course 3: Names/Descriptions of Training Activities
Apalachicola National Estuarine Research Reserve	Coastal Decision-maker Workshop: Buffer Zones Around Wetlands
Apalachicola National Estuarine Research Reserve	Minimizing Recreational Impacts in Coastal Areas
Florida Dept. of Environmental Protection / Bureau of Mine Reclamation	Integrated Habitat Network 2
Florida Sea Grant - Franklin County Extension	USDA Aquaculture Program Workshop for Fishermen
National Conservation Training Center - U.S. Fish and Wildlife Service	Fish Stock Assessment
NOAA Coastal Services Center	Managing Visitor Use
The Conservancy of Southwest Florida	Mangrove Conservation Course
U. S. Fish & Wildlife Service	Stream Restoration Using Natural Channel Design Techniques
UF Citrus County Extension Service	Master Gardener Program
University of Florida Powell Center for Construction and Environment	Cutting Edge of Sustainable Construction
U. S. Fish & Wildlife Service	GIS & Natural Resources Workshop

Appendix E: List of Organizational Missions Descriptions Provided by Respondents

Name of Training Provider	Organizational Missions of Training Providers
Apalachicola National Estuarine Research Reserve	The management and protection of the reserve and its resources; research, education, and stewardship of the resource
Apalachicola National Estuarine Research Reserve	Provide for education, a linkage between research and coastal management, and information to audiences and decision makers
Apalachicola National Estuarine Research Reserve	To promote the protection of the natural resource through education, monitoring, research
Apalachicola National Estuarine Research Reserve	To conduct research, protect the natural resource, and provide education
Apalachicola National Estuarine Research Reserve	To protect Florida's coastline and aquatic resources
Audubon of Florida	To protect birds, wildlife, and habitat, and ensure their enjoyment by people
Citrus County Sheriff's Emergency Management	To prepare for emergencies using an all hazard approach
Dept. of Wildlife Ecology & Conservation, University of Florida	For ecology and conservation
Florida A&M University, Environmental Sciences Institute	To educate B.S., M.S., Ph.D. students in the environmental sciences
Florida Coastal Management Program	To ensure protection of ocean and coastal resources, and facilitate public access
Florida Department of Community Affairs	To make Florida a better place to call home
Florida Department of Environmental Protection	To protect, conserve and manage Florida's environment and resources
Florida Dept. of Environmental Protection - Bureau of Watershed Management	For environmental management and the stewardship of air, water, land resources
Florida Dept. of Environmental Protection / Bureau of Mine Reclamation	For regulatory goals: environmental resource permitting and the reclamation of mining
Florida Fish and Wildlife Conservation Commission	To manage fish and wildlife resources for their long-term well being and the benefit of people
Florida Sea Grant - Franklin County Extension	To provide research-based information and education to local citizens
Florida Shore & Beach Preservation Association	To preserve Florida's Beaches
Florida State University	To promote research and higher education
National Conservation Training Center - U.S. Fish and Wildlife Service	To conserve, protect and enhance fish, wildlife, and plants and their habitats
NOAA Coastal Services Center	To support the environmental, social and economic well being of the coast by linking people, information, and technology
Recreational Fishing Alliance	To protect the rights and access of the recreational fishermen and the recreational fishing industry
St. Joe Wildlife Sanctuary & Educational Center, Inc.	To promote wildlife Research, rehabilitation, and release, and the public education of the components
St. Marks National Wildlife Refuge U.S. Department of the Interior	To protect and enhance the habitat, protect endangered species, and provide recreation for visitors
Taylor County Cooperative Extension service	To promote education
The Conservancy of Southwest Florida	For preserving Southwest Florida's natural environment now and forever
The Ocean Conservancy	To inform, inspire, and empower people to speak and act for the oceans

U of FL/Jackson Co. Extension	To promote the land grant university extension mission
UF Citrus County Extension Service	To provide research based information to the community
University of Florida - Center for Wetlands	To promote an education and research unit dedicated to understanding wetlands
University of Florida Florida Master Naturalist Program	To promote awareness, understanding, and respect of Florida's natural world
University of Florida Powell Center for Construction and Environment	To foster the implementation of sustainable development in the built environment

Appendix F: List of Gaps Identified By Training Providers

Gaps Identified by Training Providers

There is a need to grow the program beyond current boundaries, especially the Big Bend Area, to make it more regional

Programs should target architects and professional contractors

Some users are overlooked; this is true of commercial fishermen; Programs need to target resource users like tourists and need to reach resource managers and users

Elected officials don't attend the sessions, but should; different formats might need to be used; There is a need with commercial fisheries, and wastewater needs to be address; also homeowners/landowners, the building industry; There needs to be certification and continuing education

There is a need to target the recreational use community as an audience because they have greatest impact on the coast

There needs to be leadership for volunteers

Those in decision making positions on the coastal environment could use more scientific training

There needs to be more training for federal agency staff and the community

There needs to be more training for homeowners, retailers, elected officials, and the media

There needs to be inter-agency training (at all levels of government), along with Best Management Practices

ocal elected officials need training

There are unmet training needs in risk & vulnerability assessment, and meeting management & planning

Programs need to target the general population at all levels of learning

There is uncertainty of what else is offered by other organizations

There needs to be a more "hands-on" approach training

There needs to be more one-day special topic workshops

There needs to be more topics on greening construction and land development

