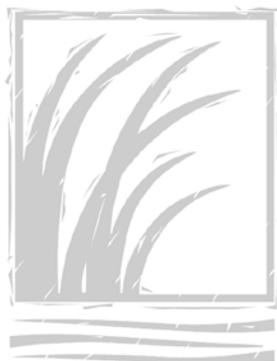


*Performance Monitoring Manual*  
*The NERRS Coastal Training Program*



*December 2007*

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## OVERVIEW

### Reasons for monitoring performance

The NERRS Coastal Training Program (CTP) is a system-wide training program that aims to increase informed decision-making related to coastal resource management at local and regional levels. CTP serves as the NERRS flagship program for knowledge and information transfer and provides an effective vehicle to ensure that science-based knowledge and skills are available to those individuals making decisions about the coast on a regular basis in an elected, professional, or volunteer capacity. At the local level, reserve staff conducts intensive planning to develop targeted training programs that complement other training efforts in the region, and partner with a range of agencies and organizations to transfer relevant scientific and technical resources and information to key audiences on priority coastal resource issues.

Since early 2000, NERRS Education Coordinators, CTP Coordinators, the CTP Oversight Committee and a CTP Performance Measures Workgroup have worked hard to develop a logic model and framework for measuring performance of the Coastal Training Program. The CTP logic model has helped focus program development efforts and identify common indicators for tracking progress in this emerging program. While there is a process underway to develop an over-arching logic model for the NERRS as a system, the Coastal Training Program logic model provides a framework for monitoring progress towards addressing Goal One of the 2003 NERRS Strategic Plan: *"To improve coastal decision making by generating and transferring knowledge about coastal ecosystems."*

As the CTP continues to develop and mature, it is increasingly important to track progress at a system-wide level, in order to:

- Quantify the types of audiences reached;
- Provide quantifiable data for program evaluation
- Assess effectiveness in meeting the goals and objectives of the CTP;
- Assess participant satisfaction with different training methodologies;
- Identify and establish significant trends in audiences and issues that could influence NERRS policy and strategic planning and other organizations and programs that target coastal decision-makers;
- Attract partners interested in working with a successful program;
- Increase accountability to constituents and stakeholders;
- Document achievements for use in fund-raising efforts.

### What is included in this manual

This manual provides the framework and tools needed to collect performance data for the Coastal Training Program across the system. Baseline data collected between July 2004 and June 2005 at the local level was used to establish system-wide minimum performance requirements for CTP. Minimum requirements for FY '06 can be found in Appendix A. Performance monitoring data collected by CTP coordinators is included in each reserve's semi-annual progress report to NOAA as required through the annual operations grant of each reserve with an approved CTP program. In addition, the coordinators include a narrative report describing the challenges and accomplishments of their CTP programs faced during the reporting period. This combination of quantifiable data and qualitative information depicts the progress of each reserve's CTP towards meeting program goals and objectives.

Aggregate data collected under this framework provides a periodic snapshot of progress towards meeting the goals of CTP, but by itself, cannot serve as a comprehensive tool for evaluation. Rather, data generated by performance monitoring tools serve as reference points for individual reserve and system-wide program progress, and are complemented with periodic program evaluations to assess trends and successes and identify program development needs relative to CTP goals and objectives.

**CTP Logic Model:** The logic model incorporates revised program goal and objective statements that emphasize, from a results perspective, what CTP participants will know and do following participation in a CTP activity. The goal and objective statements used to market the program are very provider oriented, e.g., "To improve decision-making...", "To provide the best available science-based information," "To increase networking and collaboration..." For performance monitoring and measurement, goal and objective statements need to reflect measurable behavioral, cognitive and attitudinal results or outcomes. The "key results" statements in the model describe intermediate outcomes that contribute directly to objective-level results statements. For example, a municipal official needs to "know" something about non-point source pollution before he or she can "do" anything about it. The key results also provide context for the selection of indicators or metrics, as defined on Page 6.

The goal, objectives and key results statements used for performance measurement in the program are in results-like language. While they are not necessarily useful for marketing the program externally, they do represent CTP coordinators' collective sense of the "results" or "outcomes" expected from the program.

A *Glossary* is included to provide commonly understood definitions in the NERRS community of the terms used in the measurement system.

**Performance Indicators:** The indicators are designed for start-up CTP programs in their first 3-5 years of operation and thus focus primarily on short-term results or outcomes, i.e. a participant's "intent to apply" or "intent to integrate" or "intent to initiate new collaborations". We expect in later years to be able to include indicators (see Appendix D) that measure longer term results (i.e., participants' applications of knowledge and skills, and the types of collaborations resulting from participation in CTP). Reserve staff are encouraged to measure longer-term outcomes at the reserve level, which will inform the development of system wide indicators and data collection strategies in later years. A chart is included that highlights potential data sources relevant to each indicator. At this time, CTP lacks reliable sample data for tracking of performance against program indicators. The implementation of standard evaluation tools and data collection methods will enable CTP to track performance in 2006.

**Performance monitoring reporting on system-wide indicators:** Participating reserves are required to provide NOAA with information relevant to the performance of their CTP programs. Required indicators include the higher order, objective level indicators that focus on participant-reported (self-reported) intent to apply, integrate or collaborate and at least one of the key results under each of them. Key results address increases in knowledge, skills, abilities, increases in contacts, and awareness of opportunities for collaboration. In addition, reserves are required to report on quantitative and qualitative indicators that address demographics and participant satisfaction. Reporting data is submitted in a standardized format for data analysis purposes and as per NERRS operations grant requirements.

Baseline data collected from July '04 to June '05 was used to set minimum requirements for the performance indicators. Over time, reporting data collected will be used to monitor the progress of CTP programs towards meeting the goal of improved coastal decision-making.

**Generic evaluation questions** are included for your use for data collection relevant to each indicator. Questions linked to objective-level indicators reflect the intent to apply or integrate lessons and skills, or to initiate collaborations resulting from CTP programs. Questions linked to key results reflect increased knowledge, skills, contacts and awareness of opportunities for collaboration. Reserve staff will need to select questions relevant to the objectives of individual CTP activities and adapt these questions to address specific topical content or skills addressed in participant evaluations. For example, a CTP session that brings together scientists and planners to discuss the merits of various restoration approaches and techniques (Objective: "To increase understanding and awareness...") would not necessarily have a skill-related question in a participant evaluation. However there would be questions about increased understanding of various approaches and techniques. These generic questions can also be adapted for use in followup participant interviews, focus groups, etc., as an integral part of ongoing CTP performance measurement and program development.

#### **Key Results:**

**Frequently Asked Questions:** offer answers to often repeated questions about the CTP performance measurement system.

#### **Appendices:**

**Appendix A - Minimum Performance Requirements for the FY '06 Grant Cycle:** A description of the minimum performance requirements for NERRS CTP by performance indicator. Included in this appendix is the rationale used to set the minimum requirements and a discussion on how reserves will be evaluated and by whom.

**Appendix B - CTP Performance Monitoring Tool:** A representative example of the performance monitoring tool used by CTP coordinators to submit semi-annual data to ERD.

**Appendix C - Sample Narrative:** A sample narrative for submission to ERD of a CTP program's activities conducted during the last six months. This appendix provides CTP coordinators with a sample format to follow when describing the highlights and accomplishments or challenges facing the program.

**Appendix D - Sample Evaluation Survey:** A sample post-event/training evaluation form used by the CTP coordinator to characterize their audiences and assess the performance of the event as related to the CTP performance indicators. The sample questions provided should be used by the CTP coordinator for their own evaluation templates.

**Appendix E - Ideas for future CTP Indicators:** A list of ideas for future system-wide indicators that you might consider adopting now at your reserve. As CTP programs become better-established, these types of indicators will be evaluated for their efficacy in addressing objective levels and key results. Note that many of these indicators monitor participant application of skills and knowledge, and new collaborations initiated, as opposed to self-reported "intent" to apply. Several CTP coordinators have indicated that they plan to begin to monitor participants' application and integration of lessons learned, skills gained, and new collaborations in their work, resulting from participation in local CTP activities.

**Appendix F - Data Collection Strategies:** A short general reference on data collection and some points to keep in mind. This appendix will be broadened in later editions of this manual to include successful examples and tips from your experiences of individual reserves, as well as sample evaluation forms that have been used in the NERRS and illustrate adaptations of the generic questions for specific CTP activities.

**Appendix G – Additional Resources:** A reference list related to project design, performance measurement and evaluation. This list has been adopted from the training materials provided in the Project Design and Evaluation Workshop, a training workshop sponsored by NOAA’s Coastal Services Center in Charleston, SC. (contact: [Ann.Weaver@noaa.gov](mailto:Ann.Weaver@noaa.gov) )

**NOTE:** Only the table of contents for the reference list is provided in this manual. If you are interested in receiving the full reference list, please contact Ann Weaver at the CSC.

NERRS Coastal Training Program  
A Framework for Performance Measurement

<p><b><u>CTP GOAL</u></b>  <b>Better-informed decision-making by local and regional Coastal Decision-Makers to improve coastal stewardship.</b></p>
<p><b><u>CTP Objective 1:</u></b>  Local and regional Coastal Decision-Makers <i>increasingly apply science-based knowledge and skills</i> in their work related to NERRS priority issues.</p>
<ul style="list-style-type: none"> <li>• <b><u>Key Result 1.1</u></b>  Coastal Decision-Makers <i>increase their scientific understanding of NERRS priority issues</i>.</li> </ul>
<ul style="list-style-type: none"> <li>• <b><u>Key Result 1.2</u></b>  Coastal Decision-Makers <i>improve their abilities to access science-based resources</i> related to NERRS priority issues.</li> </ul>
<ul style="list-style-type: none"> <li>• <b><u>Key Result 1.3</u></b>  Coastal Decision-Makers <i>increase skills related to technologies and/or best management practices</i> for NERRS priority issues.</li> </ul>
<p><b><u>CTP Objective 2:</u></b>  Local and regional Coastal Decision-Makers increasingly <i>apply diverse perspectives</i> related to NERRS priority issues.</p>
<ul style="list-style-type: none"> <li>• <b><u>Key Result 2.1</u></b>  Coastal Decision-Makers <i>increase the diversity of their contacts</i> for NERRS priority issues.</li> </ul>
<ul style="list-style-type: none"> <li>• <b><u>Key Result 2.2</u></b>  Coastal Decision Makers <i>are increasingly aware of opportunities for collaboration</i> regarding NERRS priority issues.</li> </ul>

## Glossary of Terms

This glossary provides a reference for commonly used terms in the CTP logic model and performance measurement system.

### GOAL STATEMENT TERMS

**Improved coastal stewardship:** Is defined at the reserve level based on strategic planning processes.

**Better-informed decision-making:** Refers to changes in decision-making behavior on the part of the coastal decision-makers who have been involved with CTP. Our assumption is that coastal decision-makers will make better-informed coastal stewardship decisions as they gain new knowledge and skills and are exposed to additional science-based information and diverse perspectives.

**Coastal Decision-Makers:** Individuals who regularly make decisions about coastal resources in a professional or volunteer capacity. NERRS CTP focuses on a sub-set of regional and local coastal decision-makers that participate in CTP (e.g., CTP participants), rather than all coastal decision-makers. Each reserve identifies key coastal resource issues that fall within the context of NERRS priority issues and the related coastal decision-maker audiences they wish to target under this program. Each reserve will also periodically review strategies and adjust program focus, issues and audiences as appropriate, to reflect changing needs and issues.

### OBJECTIVES AND KEY RESULTS STATEMENT TERMS

**Apply Diverse Perspectives:** In coastal areas, resource management issues are complex and cross economic, political, social and ecological boundaries. Participation in CTP events enables coastal decision-makers to interact with experts, peers and technical informants relating to specific issues. Through this interaction, they may identify potential contacts; gather new perspectives and resources, and gain new points of view.

The CTP assumes that coastal decisions frequently draw on a range of disciplines, perspectives and approaches to solve complex coastal resource problems and conflicts that may enhance opportunities for collaboration and build broad constituencies for coastal stewardship to solve complex coastal resource problems and issues.

**Apply Science-based Knowledge and Skills:** A key niche for the NERRS in coastal resource management is the system's focus on and attention to science and the use of science-based solutions in managing the nation's coasts. The reserves offer a platform and forum for the presentation and exchange of scientific data, best management practices, technical resources, information, knowledge and diverse perspectives. "Science-based" includes a range of technical resources and policy information. "Best practices" or "Best management practices" are broadly interpreted to include a range of techniques and practices such as decision-support models.

**Ability to find science-based resources:** Target audiences may need assistance in learning how and where to access resources, develop networking opportunities, locate information (e.g., geographic information systems (GIS), mapping references, and databases), and other resources. A component of a CTP event may include an orientation for participants around how to find certain types of information.

**Diverse Contacts:** During CTP training, participants often have the opportunity to network with professionals across a range of disciplines and/or professionals in related or similar occupations. CTP aims to increase the range of contacts available to decision-makers in addressing coastal management issues and concerns. Even in cases where the other participants are very similar, there will always be other viewpoints or levels of knowledge within the group.

**NERRS Priority Issues:** The NERRS strategy provides an overall context for CTP. Under Goal One of the NERRS strategic plan, priority issues are broadly defined as:

- Biodiversity conservation;
- Mitigating impacts of invasive species
- Nonpoint source pollution, eutrophication, and nutrient dynamics
- Habitat conservation and restoration
- Sustaining estuarine systems.

Within this context, each reserve defines more specifically, through assessment, planning and strategy development what coastal resource issues will be addressed by CTP.

**Opportunities for Collaboration:** CTP events provide venues for participants to discuss their experience, expertise, opinions and availability of resources relative to priority issues. Through this exchange, participants identify new contacts, or revitalize existing contacts and networks. Opportunities emerge for joint project development, identifying advisory assistance or services, and access to best management practices, information, and models.

## GENERAL TERMINOLOGY

**CTP Training Events:** Training, in the NERRS CTP, refers to a range of learning services and activities, targeted and tailored to key coastal decision-maker groups around strategically selected coastal resource issues. Reserve-based CTPs focus on the interactive transfer of knowledge and skills to increase coastal decision-maker's ability to access and apply information, techniques and technologies. Training events are conducted in an interactive context, e.g., workshops, seminars, field experiences, training modules and as independent, self-directed distance learning opportunities structured by CTP staff (e.g., Web-based learning modules, seminars and materials).

**CTP Technical Assistance:** Repeated interaction over time (e.g., 6 months, 12 months, 18 months, etc...) with a discrete coastal decision-maker audience by a CTP coordinator or staff. To qualify as technical assistance, the CTP coordinator must articulate to the target audience that the services provided will be evaluated on a periodic basis. Additionally, a CTP coordinator must establish and document mutually agreed upon objectives with the audience receiving CTP services.

**Technical Training:** Includes the direct provision of information and materials via websites, technical consultation and one-on-one training to a discrete audience of coastal decision-makers.

**Skill-based Training:** Training designed to improve process or technical skills to participants. CTP participants learn procedures or skills followed by application to a real-world situation. To support informed decision-making, reserve CTP's may identify a need for training among various target audiences to improve "process skills", such as conflict resolution, facilitation, etc. relative to identified issues. This area includes training in procedures such as 'how to manage controlled burns' or decision support tools 'GIS software applications'.

**Peer learning:** CTP participants frequently express that one of the most useful benefits from participation in these programs is the exchange among professionals across or within disciplines and professions. Coastal Training Programs often focus on the transfer and application of knowledge, skills and information among peers, as well as from experts. CTP can provide a venue for participants to discuss their experience, expertise, opinions and available resources regarding coastal issues. Enabling this exchange reflects integration of key adult learning principles of experiential learning into the training process.

**On-line learning modules:** Distance learning via web or internet-based modules and programs are offered by some reserves under the CTP umbrella. An on-line module includes an interactive, often self-directed learning sequence of material or curricula; web-based workshops or seminars; each incorporating measurable learning objectives, self-directed evaluation tools or other forms of evaluation.

**Indicator:** In CTP, an indicator is a metric or measurable to measure that provides us with a common means to monitor progress and performance relative to goals, objectives, and key results of the program. In this program, the indicators are expressed as a percentage, or a number value.

**Outcome:** Mid to long-term practical results of CTP events that improve coastal resource management as related to NERRS priority issues. CTP coordinators, in addition to tracking the progress and performance relative to the indicators, are using these mid-term and long-term practical results to measure impacts on coastal decision-making.

**Reporting:** In the NERRS, reporting refers to data that reserves regularly provide to NOAA and state agency/organization partners. Reports can be written or verbal. Often workshop data is included as part of overall reserve reporting. For performance monitoring in CTP, a reporting tool is provided to you for data consistency purposes.

**Contact Hours:** The number of hours each attendee participates in a CTP training event or receives technical assistance. It is a quantitative measurement of the number of clock hours of instruction multiplied by the number of participants during a training event or the number of clock hours a CTP coordinator provides technical assistance to coastal decision-makers.

**Diversity Index:** A diversity index is a summary statistic of diversity within a community. Diversity indices provide an indicator of the richness and evenness of different organizations (i.e., the abundance of different organizations present) at a CTP activity. Overall, diversity indices provide important information about rarity and commonness of organizations participating in CTP activities. For example, given a set richness, diversity increases as evenness moves closer to one. While, given a set evenness, diversity increases as organizational richness increases. The ability to quantify diversity using evenness and diversity is an important tool for social scientists trying to understand community structure.

**Evenness:** A summary statistic, used to help measure diversity, of the relative abundances of different types of organizations that participate in CTP activities. The closer the evenness value is to 1, the more equal the abundance (i.e., equitability) is between different types of organizations.

## Linking the CTP Performance Framework & System-Wide Indicators

Based on the logic framework and the key results, NERRS staff identified indicators for data collection to monitor progress and track performance for the CTP program. Quantitative (Indicators 1, 3, and 4) and qualitative (Indicators 12 - 14) provide key data sets for aggregation across the system, as well as a snapshot of individual reserve activity and progress. Objective level indicators (5 and 9) represent measures that indicate progress towards meeting system-wide objectives, which in turn, contributes towards reaching the goal of the program. Key results and associated indicators (6 through 8 and 2, 10, and 11) represent more specific measures that contribute towards meeting the objective.

**Objective level indicators must be measured by CTP coordinators for each training event. In addition, coordinators must measure key result indicators (6,7,8,10 and 11) that are relevant to the training event objectives.**

### The Reporting Schedule

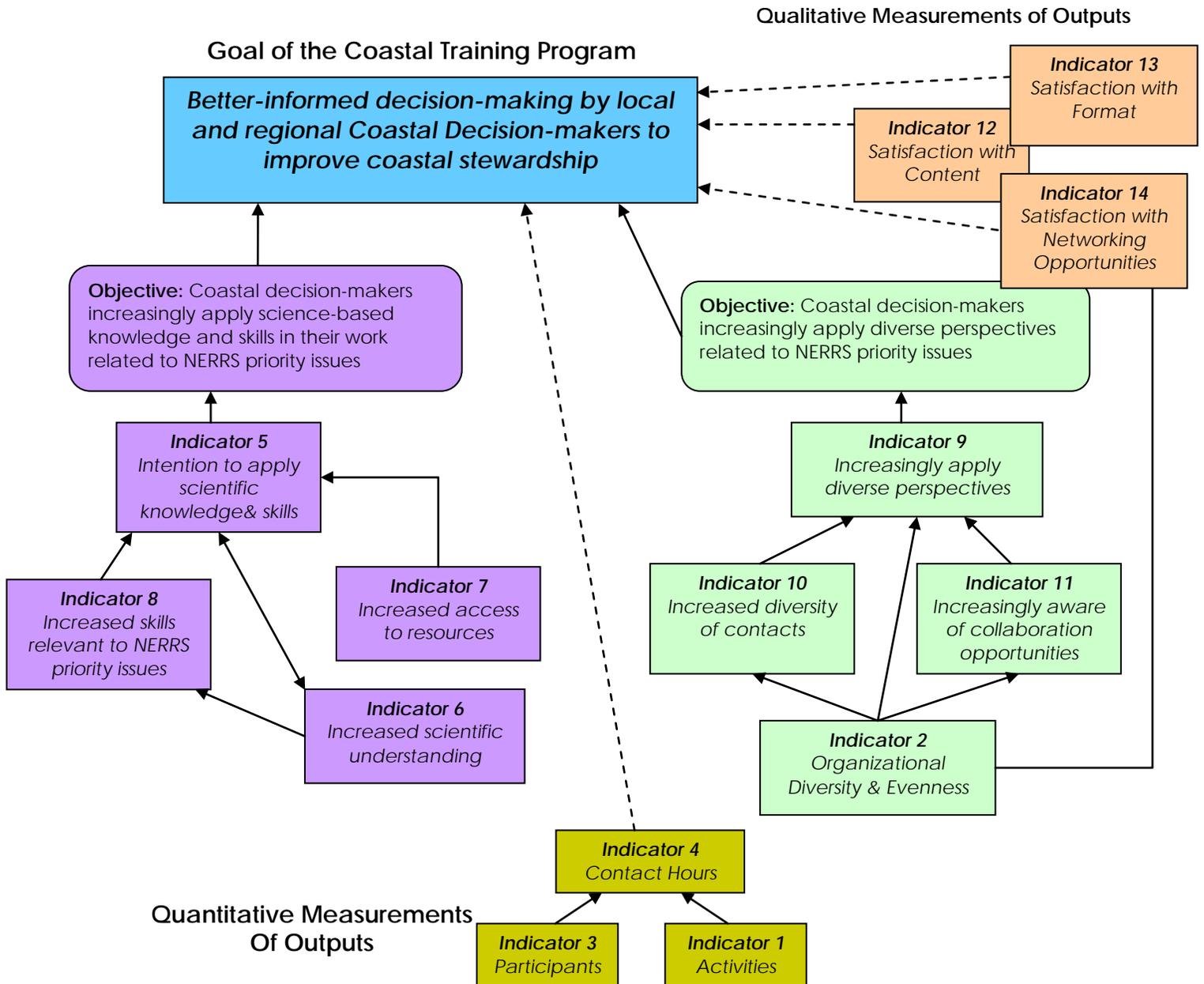
Beginning with the FY 05 grant cycle, reserves are required to report on all performance indicators for CTP training events and on quantitative indicators 1-4 for all technical assistance (see reporting tool in Appendix B). Reporting is to coincide with Reserve operations grant semi-annual progress reports to NOAA. In an effort to standardize reporting data, NOAA has made available a CTP reporting tool that coordinators can use to submit their performance data. In addition, coordinators are encouraged to report on desired outcomes of CTP events as related to a NERRS priority issue.

In addition, CTP coordinators must submit a short (1-2page max.) narrative with their 6-month reporting spreadsheet. This narrative should highlight any CTP accomplishments by the Reserve and provide supporting commentary on events described on the reporting spreadsheet. An example is included in appendix C.

<b>Framework</b>	<b>System-Wide Performance Indicators</b>
<b>General Quantitative Measures</b>	<p><b>Indicator 1 Events</b> Total # of CTP activities (Events &amp; Technical Training) offered during reporting period.</p> <p><b>Indicator 2 Organizational Diversity &amp; Evenness</b> Total # and type of organizations, entities represented by participants during the reporting period. Organized into 11 defined organizational categories</p> <p><b>Indicator 3 Participants</b> Total # of CTP participants involved in a distinct CTP activities (Events and Technical Training) over the reporting period.</p> <p><b>Indicator 4 Contact Hours</b> Total # of contact-hours for reporting period.</p>

Framework	System -Wide Performance Indicators
<p><b>CTP Goal:</b>  <b>Better-informed decision-making</b> by local and regional Coastal Decision-Makers to improve coastal stewardship.</p>	
<p><b>CTP Objective 1:</b>  Local and regional Coastal Decision-Makers <b>increasingly apply science-based knowledge and skills</b> in their work related to NERRS priority issues.</p>	<p><b>Indicator 5</b>  % of CTP participants reporting the intention to apply science-based knowledge and skills in their work related to NERRS priority issues as a result of training event.</p>
<p><b>Key Result 1.1:</b>  Coastal Decision-Makers <b>increase their scientific understanding</b> of NERRS priority issues.</p>	<p><b>Indicator 6</b>  % of CTP participants reporting increased scientific understanding of NERRS priority issues as a result of training event.</p>
<p><b>Key Result 1.2:</b>  Coastal Decision-Makers <b>improve their abilities to access science-based resources</b> (e.g., people, information, tools and technologies) related to NERRS priority issues.</p>	<p><b>Indicator 7</b>  % of CTP respondents reporting increased access to resources relevant to their work as a result of the training event.</p>
<p><b>Key Result 1.3:</b>  Coastal Decision-Makers <b>increase skills</b> related to technologies and/or best management practices for NERRS priority issues.</p>	<p><b>Indicator 8</b>  % of CTP respondents reporting increased skills relevant to NERRS priority issues.</p>
<p><b>CTP Objective 2:</b>  Local and regional Coastal Decision-Makers <b>increasingly apply diverse perspectives</b> across sectors and disciplines related to NERRS priority issues.</p>	<p><b>Indicator 9</b>  % CTP respondents reporting the intention to apply new perspectives learned through networking and collaborations at the training event.</p>
<p><b>Key Result 2.1:</b>  Coastal Decision-Makers <b>increase the diversity of their contacts</b> regarding NERRS priority issues.</p>	<p><b>Indicator 10</b>  % of respondents reporting that they intend to make new contact about NERRS priority issues as a result of this training event.</p>
<p><b>Key Result 2.2:</b>  Coastal Decision Makers <b>are increasingly aware of collaboration opportunities</b> regarding NERRS priority issues.</p>	<p><b>Indicator 11</b>  % of CTP respondents reporting that they are more aware of opportunities for collaboration regarding NERRS priority issues as a result of the training event.</p>
<p><b>Qualitative Measures</b></p>	<p><b>Indicator 12</b>  % of CTP respondents that were more than satisfied with the content of the training activity.</p> <p><b>Indicator 13</b>  % of CTP respondents that were more than satisfied with the format of the training activity.</p> <p><b>Indicator 14</b>  % of CTP participants that were more than satisfied with the networking opportunities provided by the training activity.</p>

# CTP Performance Indicator Flow Chart





# CTP Performance Monitoring Reporting Guidance/Instructions

The Performance Monitoring Spreadsheet is a tool developed by NOAA's Estuarine Reserves Division (ERD) to assist CTP coordinators in providing information on the performance of CTP programs within the NERRS System. In addition, the tool offers CTP coordinators a standardized data format for grants reporting purposes. Coordinators will submit these spreadsheets semi-annually to ERD and in conjunction with the NERR's Operations Grant Performance Reports.

To use the spreadsheet, a coordinator must have a Microsoft Excel Spreadsheet Program. A copy of this spreadsheet can be found on the NERRS intranet site at <https://www8.nos.noaa.gov/nerrs/intranet/login.aspx>

*Note: If you do not know the reserve password to access the intranet, ask the manager.*

Prior to opening the document, open Excel and check the macro security of the program. The tool contains a macro that may not be validated if your macro security setting is at high. To check and change your macro security setting, do the following:

1. Go into Excel and open the **Tools** drop down list.
2. Click on **Options** from that list.
3. Click tab marked **Security**.
4. Click button labeled **Macrosecurity**.
5. Set security to "Medium" and click OK.
6. You can now open the tool on your machine.

When first opening the tool, a security warning screen will pop up giving the following options: disable macros, enable macros, or more information. Choose the enable macros button to ensure that equations for calculating organizational diversity will be used.

## CTP Performance Monitoring Tool

The performance monitoring tool enables you to record raw data from your CTP activities to a spreadsheet for data analysis. From this raw data, the tool will automatically calculate summary data that is to be reported to ERD. In addition to providing the summary report data, it also offers coordinators the option to record a variety of data.

**Objective level indicators must be measured by CTP coordinators for each training event. In addition, coordinators must measure key result indicators (6,7,8,10 and 11) that are relevant to the training event objectives.**

Looking at the Tool for the first time, you will see three worksheet tabs at the bottom of the spreadsheet. These tabs are labeled as:

- ERD Summary Sheet (Appendix B)
- CTP Training Events
- Technical Assistance

\*\*Some data will need to be input by a coordinator on each worksheet. Start with the worksheet labeled "ERD Summary Sheet"

### Report Submission Guidance

After recording your data into the performance report complete the following tasks:

- Save the spreadsheet under a name that describes the source of the spreadsheet (i.e., GreatBayJan-July04) and provide an electronic copy of the ERD summary sheet to Reserve staff that prepares the Reserve's semi-annual Performance reports as required by the Operations Grant. Only submit reports for the first two six month reporting periods of the grant. Because all operations grants are 18-months long and have a 6 month overlap with the following grant cycle there is no need to submit CTP report for the last 6-month period, **except** if your grant uses CTP as an 18 month task.
- In a word format, **create a written narrative** that highlights any accomplishments by the Reserve and supply supporting commentary on CTP activities described on the reporting spreadsheet. Send this narrative to Reserve staff that prepares the Reserve's semi-annual Performance reports as required by the Operations Grant. An example of a report narrative included in Appendix C.
- Make sure to email your entire report (e.g., the entire spreadsheet) to the ERD's national CTP coordinator.

Eventually, the data collected and submitted to ERD will be available through a database on the NERRS intranet.

### ERD Summary Sheet

This worksheet provides a 6-month template of performance monitoring data about a NERRS CTP program. Coordinators will attach it to the Reserve's semi-annual Performance Reports

### Six Month Data Report Template

#### Reporting period (Start & End)

aa/bb/cccc

07/01/2004

aa/bb/cccc

12/30/2004

#### NOAA Operations Grant Number

NA03NOS4200011

#### Reserve Name

Jobos Bay

#### General Quantitative Measures

Indicator 1	Indicator 2	Inst. Types	Event	Tech.	Total
# Activities	Org. Diversity	Federal	0	0	0
	Org. Evenness	State	0	0	0

submitted to ERD as required by the Operations Grant. Only a few fields are needed to be filled out by coordinators (denoted in light green of the spreadsheet). The other fields denoted in orange are automatically calculated from the other worksheets. The fields that must be filled out are as follows:

1. **Reporting Period Start and End Date** in "mm/dd/yyyy" format
2. **Operations Grant Number**, obtain this number from your manager
3. **Reserve Name**, select your reserve name from the dropdown menu

As previously stated, all other numbers on this worksheet are calculated automatically. All calculated and blank fields on this worksheet are locked to prevent accidental data input errors.

The locked information contained on the sheet includes summary data on

- General Quantitative Measures
- CTP Event Qualitative Measures
- Measures related to CTP Objectives 1 and 2 indicators
- 6-month Technical Assistance evaluation data
- And outcomes related to NERRS priority issues.

Note that all data is summarized from the combined CTP Events and Technical Assistance worksheets.

#### CTP Training Event Worksheet

This worksheet contains the raw performance data that was collected from CTP events only when a formal evaluation was used. Some important tips to follow when filling out the worksheet include:

1. Mouse over the fields with the red triangles, these contain instructions on how to fill out fields and other useful information
2. Certain fields (i.e., Diversity Index) and all the data summary fields are locked to prevent accidental data inputs or delete important equations.

CTP coordinators are instructed to fill out the remaining fields with each row being a new CTP training event.

### Quantitative Data

1. **Title of Training Event** – Fill out the title of each individual training event. List new events in subsequent rows. The worksheet contains enough rows for 20 different CTP activities to be record. If you have more than 20 activities use another spreadsheet.
2. **Event Start Date** – Enter the start date of the CTP event in the following format mm/dd/yyyy.
3. **Event End Date** – Enter the end date of the CTP event in the following format mm/dd/yyyy.
4. **NERRS Priority Issues** – Select the NERRS priority issue that best applies to the CTP event from the drop down menu.
5. **Desired Outcome** – Select the desired outcome as a result of the CTP event for the drop down menu. Desired outcomes are either mid-term (i.e., 1-6 months in the future) or long-term (i.e., 1-2 years in the future). Relate each outcome to specific skills or knowledge gained from CTP activity. Examples of outcomes as related to NERRS priority issues and CTP activities are as follows:

*Non-point source pollution, eutrophication & nutrient dynamics* (NERRS priority issue)

Fostering sustainable behavior workshop (CTP event title)

Identify local behaviors on pesticide reduction (Mid-term Outcome)

*Habitat Conservation & Restoration* (NERRS event issue)

Salt Marsh Restoration & Conservation workshop (CTP event title)

50 acres of blackwater marsh revegetated (Long-term Outcome)

*Invasive Species* (NERRS priority issue)

Management of Rapa Whelk Seminar (CTP event title)

Develop Rapa Whelk control strategy (Long-term Outcome)

*Sustaining Estuarine Systems* (NERRS priority issue)

Managing Visitor Use in Coastal Areas (CTP event title)

Installation of trail markers at wetland park (Mid-term Outcome)

*Biodiversity* (NERRS priority issue)

Wetland Plant ID field class (CTP event title)

## Important local wetlands identified and preserved (Long-term Outcome)

Use the comment boxes to add additional explanation about specific outcomes.

Title of <b>Training Event</b>	Event Dates		NERRS Priority Issues
	Event Start	Event End	
Wetland Plant Identification	12/1/2004	12/1/2004	Biodiversity

6. **Topic** – Select the topic that best applies to the CTP event from the drop down menu. Only one topic can be selected, therefore, choose the primary topic. Secondary topics can be listed in the comment box.
7. Indicator 1 **Training Events** – This field is locked. A final tabulation of events can be seen at the bottom of the column. Applicable events can be workshops, seminars, field experiences, web-based activities, consultations, presentations, or training modules among others.
8. Indicator 2 **Organizational Diversity** – The first three columns within this field are locked (shaded in orange). Enter the number of different organizations that are participating in the CTP event. Group the organizations into the 9 category fields shown. They include **Federal** (Federal level staff, elected, and appointed officials), **State** (State agency staff, elected, and appointed officials), **County** (County or Township staff, elected, or appointed officials), **Regional** (Regional governmental groups or associations {i.e., Atlantic States Marine Fisheries Council, etc...} staff, elected, and appointed officials), **Tribal** (tribal staff, elected, or appointed officials), **Local** (Local government {town, city, etc...} staff, elected, and appointed officials), **Business** (Business officials, business association staff, and private consultants), **University** (University/College officials, staff, researchers, etc.), **Media** (Print, radio, TV, and freelance media representatives), **Community Members** (Unaffiliated community members), **NGO/com** (Non-profit or community-based organizations, or private citizens). These descriptions are also listed in the comments tabs associated with the category headings.
9. Indicator 3 **Participants** – Record the total number of people attending the CTP event.
10. Indicator 4 **Contact Hours** – The columns denoting participants and totals are locked (in orange). Record the number of hours for each event. Contact hours are automatically computed by the worksheet. "Contact hours" is defined as the number of hours each attendee participates in a CTP event. It is a quantitative measurement of the number of clock hours of instruction during a training event.

Indicator 3 Participants		Indicator 4 Contact Hours		
Trainings		Participants	Hours	Totals
10		10	4	40
		0		0

The worksheet continues to the right of the spreadsheet.

### Data related to CTP Objective 1 – Local and regional Coastal Decision-makers increasingly apply science-based knowledge and skills in their work related to NERRS priority issues

11. Indicator 6 **Scientific Understanding** – Record the number of workshop participants that completed the question related to this indicator on the event evaluation. Record the number of respondents that answered "Yes" to if they have increased scientific understanding of a NERRS priority issue as a result of this activity. An "N/A" or "I am more confused" option may be available on the evaluation, if so, fill out the NA column under this indicator if there is corresponding data.

12. Indicator 5 **Applying Science-based Knowledge** – This question applies only for those respondents that answered “yes” to indicator 6. The column containing the number of respondents is locked (in orange) and derived from indicator 6. Record the number of respondents intending to apply science-based knowledge and skills about a NERRS priority issue as a result of the CTP event in the “Affirm” column.

Core CTP objective 1 indicator

Indicator 5 Applying Science-based Knowledge		Indicator 7 Ability to Access Resources			
Respondents	Affirm	Respondents	Increase	No Change	Cannot Rate
7	7	8	2	2	4
0					

13. Indicator 7 **Ability to Access Resources** – Record the number of event participants that completed the question related to this indicator on the activity evaluation. Record the number of respondents indicating that their ability to access resources relevant to working on a NERRS priority issue has “Increased”, “No Change”, or “Cannot Rate”. Note that some evaluations may have different wording or a higher resolution of those that reported increased abilities. Group all the levels or degrees of increase into the “increased” category on the worksheet.

14. Indicator 8 **Skills Related to NERRS Priority Issues** – Record the number of event participants that completed the question related to this indicator on the activity evaluation. Record the number of respondents indicating that their skills related to a NERRS priority issue has “Increased”, “No Change”, or “Cannot Rate”. Note that some evaluations may have different wording or a higher resolution of those that reported increased skills. Group all the levels or degrees of increase into the “increased” category on the worksheet.

Indicator 8 Skills Related to NERRS Priority Issues				Indicator 9 Integrating Diverse Perspectives		
Respondents	Increase	No Change	Cannot Rate	Respondents	Affirm	Cannot Rate
7	5		1	5	5	

Core CTP objective 2 indicator

## Data Related to CTP Objective 2 – Local and regional Coastal Decision-makers increasingly apply diverse perspectives across sectors and disciplines related to NERRS priority issues

15. Indicator 9 **Integrating Diverse Perspectives** – Record the number of event participants that completed the question related to this indicator on the event evaluation. Record the number of respondents indicating that they will integrate new or diverse points of view in their work related to a NERRS priority issue in the “Affirm” column. Also record the number of respondents that “Cannot Rate” this evaluation question.

16. Indicator 10 **Diversity of Contacts** – Record the number of event participants that completed the question related to this indicator on the event evaluation. Record the number of respondents intending to make new contacts as a result of this CTP activity in the “Affirm” column. Also, record the number of respondents that “Cannot Rate” this evaluation question.

Indicator 10 Diversity of Contacts		
Respondents	Affirm	Cannot Rate
7	6	1

17. Indicator 11 **Awareness of Collaborations/Partnerships** – Record the number of event participants that completed the question related to this indicator on the event evaluation. Record the number of respondents indicating that their awareness of opportunities for collaboration as “Increased”, “No Change”, or “Cannot Rate” because of their participation in the CTP event. Note that some evaluations may have different wording or a higher resolution of those that reported increased skills. Group all the levels or degrees of increase into the “Increased” category.

Indicator 11 Awareness of Collaborations/Partnerships			
Respondents	Increase	No Change	Cannot Rate
6	5		1

## Qualitative Data

The worksheet now considers qualitative data collected during an CTP event. Individual events evaluated using a Likert scale of 1 to 5 for each major qualitative aspect of the event. Coordinators are not limited by the indicators listed as other qualitative factors are often measured to meet site specific needs. However, for the purpose of the 6-month performance monitoring reporting form, additional information is not required.

18. Indicator 12 **Content of [Event]** – Content refers to the topical knowledge or skills provided during the CTP event. Record the number of respondents that scored content in the 4-5 range as being “More than Satisfied” on a scale of 1-5. Note that some coordinators may use evaluations that break down the individual components of an event and have them rated separately. If this is the case, average the “satisfied” responses for reporting purposes.

19. Indicator 13 **Format of [Event]** – Format refers to the mode or the presentation format that is used to deliver during the event. Record the number of respondents that scored Format in the 4-5 range as being “More than Satisfied” on a scale of 1-5. Note that some evaluations may break down the individual components of an event and have them rated separately. If this is the case, average the “satisfied” responses for reporting purposes.

20. Indicator 13 **Networking Opportunities provide through the [Event]** – Record the number of respondents that scored the networking opportunities at the event in the 4-5 range as being “More than Satisfied” on a scale of 1-5.

Indicator 12 Content		Indicator 13 Format		Indicator 14 Networking Opportunities	
Respondents	Satisfied	Respondents	Satisfied	Respondents	Satisfied
7	5	7	4	7	5

### Technical Assistance Worksheet

This worksheet contains raw performance data collected about CTP activities where no formal evaluation was used on the participants and 6 months after the activities were completed or ongoing. Some important tips to follow when filling out the worksheet include:

- Mouse over the fields with the red triangles, these contain instructions on how to fill out fields
- Specific fields (i.e., Diversity Index) and all the data summary fields are locked and denoted in orange to prevent accidental data inputs or the deletion of important equations.
- Only 10 different activities can be recorded on this worksheet, if more are fields are needed start a new worksheet.

The fields that must be filled out are as follows:

- **Reporting Period Start and End Date** in "mm/dd/yyyy" format
- **Operations Grant Number**, obtain this number from your manager
- **Reserve Name**, select your reserve name from the dropdown menu

### Technical Assistance

This report captures intermediate and long-term outcomes of other CTP efforts related to NERRS priority issues

Reporting period		Operations Grant Number
mm/dd/yyyy	mm/dd/yyyy	

### Quantitative Data

1. **Title of Technical Training**– Fill out the title of each individual technical training activity. List new events in subsequent rows. The worksheet contains enough rows for 10 different CTP technical training activities to be record. If you have more than 10 activities use another spreadsheet.
2. **Event Start Date** – Enter the start date of the Technical training activity in the following format mm/dd/yyyy.
3. **Event End Date** – Enter the end date of the Technical training activity in the following format mm/dd/yyyy.

NERRS Priority Issues	Desired Outcome	Topic

4. **NERRS Priority Issues** – Select the NERRS priority issue that best applies to the Technical training activity from the drop down menu.

5. **Desired Outcome** – Select a desired outcome from the drop down menu as a result of the training activity. (See evaluated sheet for examples)
6. **Topic** – Select the topic that best applies to the training activity from the drop down menu.

**6-month Evaluation Questions**

Six	Knowledge Level				Knowledge Application				Month
	Respondents	Yes	No	Cannot Rate	Respondents	Yes	No	Cannot Rate	
	0	0	0	0	0	0	0	0	

**Evaluation Questions**

7. **Knowledge Level** – Ask the participant if the level of their knowledge or skills have increased as a result of the technical assistance provided by the CTP coordinator. Input the number of participants that responded to the question. Select a **yes, no or cannot rate** answer from the drop down menu as a result of the technical assistance. Without a formal evaluation, CTP coordinators can collect evaluative data on technical training activities by asking the recipient of the assistance certain questions on a 6-month basis. These questions can be asked either informally or formally with a questionnaire.
8. **Knowledge Application** – As described above, 6-month evaluation questions are used to evaluate technical training activities. Ask the participant if they have applied or intend to apply the knowledge or skills they learned as a result of the activity. Input the number of participants that responded to the question. Select a **yes, no or cannot rate** answer from the drop down menu as a result of the technical assistance. These questions can be asked either informally or formally with a questionnaire.

**Indicator 2  
Organizational Diversity**

Diversity	Evenness	Data Helper	Fed.	State	County	Regional	Tribal	Local	Business	University	Media	Community Members	NGO/Com
0	0	1											

9. Indicator 2 **Organizational Diversity** – Enter the number of organizations that are participating in the technical training. Group the organizations into the 8 category fields shown. They include Federal, State, County, Regional, Tribal, Local, Business, University, Media, Unaffiliated community members and NGOs/community orgs. Detailed descriptions of what to include in each category are listed in the comments tabs associated with the category headings.
10. Indicator 3 **Participants** – Record the total number of people attending the CTP technical training activity.
11. Indicator 4 **Contact Hours** – Record the total number of hours for each technical training activity.

After completion of the worksheet, save the spreadsheet under a name that describes the source of the spreadsheet (i.e., GreatBayJan-July04) and submit the final electronic copy of the document to the Reserve’s staff preparing reports and one to the ERD’s national CTP coordinator.

**Remember** to submit a copy with the Reserve semi-annual performance report. Make sure to submit the entire worksheet to the national CTP coordinator.



## System-Wide Indicators & Potential Data Source

This chart provides some examples of how CTP Coordinators could collect system-wide indicator data. Generic evaluation questions and the six month data report spreadsheet provide resources for collecting and reporting on performance indicators. Please note: "self report immediately" also refers to just following, or shortly thereafter a training event.

### Indicator 1

Total # of CTP training events offered during reporting period. This could be workshops, seminars, field experiences, web-based activities, consultations, presentations, training modules, etc...

*Data Source: Reserve's CTP database and records*

*Note: Reporting spreadsheet automatically completes this calculation for the total number per reporting period.*

### Indicator 2

Diversity and evenness of organizations and entities represented by participants during reporting period. Like organizations are grouped into categories listed on the reporting spreadsheet. Shannon Diversity (natural logs) and

Evenness indices provide information about rarity and commonness of organizations participating in CTP activities. Shannon's index accounts for both abundance and evenness of the species present. The proportion of species  $i$  relative to the total number of species ( $p_i$ ) is calculated, and then multiplied by the natural logarithm of this proportion ( $\ln p_i$ ). The resulting product is summed across species, and multiplied by -1:

$$H = -\sum_{i=1}^S p_i \ln p_i$$

Shannon's equitability or evenness index ( $E_H$ ) can be calculated by dividing  $H$  by  $H_{\max}$  (here  $H_{\max} = \ln S$ ). Equitability assumes a value between 0 and 1 with 1 being complete evenness.

$$E_H = H / H_{\max} = H / \ln S$$

H	Shannon's diversity index
S	total number of species in the community (richness)
$p_i$	proportion of $S$ made up of the $i$ th species
$E_H$	equitability (evenness)

*Data Source: Registration and evaluation forms*

*Note: Reporting spreadsheet automatically completes this calculation.*

### Indicator 3

Total # of participants involved in CTP events or technical training activities during reporting period.

*Data Source: Calculated from activity and module registration, log books*

### Indicator 4

Total # of contact-hours during reporting period:

[(#CTP participants completing the training events) X (# hours of trainings provided)]

+  
[(# CTP participants completing on-line modules) X (# hours logged by CTP participants to complete on-line learning modules)]

+ Other contact hours

*Data Source: Calculated from training activity registration, training event agenda & time logs for modules.*

*Note: Reporting spreadsheet automatically completes this calculation.*

## System-Wide Indicators & Potential Data Sources continued.

<p><b>Indicator 5</b> % of CTP participants reporting their intention to apply science-based knowledge and skills in their work related to NERRS priority issues after training activity.</p> <p><i>Data Source: Participants self-report immediately after CTP activity (evaluation forms).</i></p>
<p><b>Indicator 6</b> % of CTP participants reporting increased scientific understanding of NERRS priority issues after training activity.</p> <p><i>Data Source: Participants self-report immediately after CTP activity (evaluation forms).</i></p>
<p><b>Indicator 7</b> % of CTP participants reporting increased access to resources related to NERRS priority issues after the training activity.</p> <p><i>Data Source: Participants self-report immediately after CTP activity (evaluation forms).</i></p>
<p><b>Indicator 8</b> % of CTP participants reporting increased skills relevant to a NERRS priority issue as a result of the training activity.</p> <p><i>Data Source: Participants self-report immediately after activity (evaluation forms).</i></p>
<p><b>Indicator 9</b> % of CTP participants reporting their intention to integrate diverse points of view in work related to a NERRS priority issue.</p> <p><i>Data Source: Participants self-report immediately after CTP activity (evaluation forms).</i></p>
<p><b>Indicator 10</b> % of CTP participants reporting that they intend to make new contacts about NERRS priority issues as a result of the training activity.</p> <p><i>Data Source; Participants self-report immediately after CTP activity (evaluation forms).</i></p>
<p><b>Indicator 11</b> % of CTP participants reporting that they are increasingly aware of opportunities for collaboration regarding NERRS priority issues as a result of training.</p> <p><i>Data Source: Participants self-report immediately after CTP activity (evaluation forms).</i></p>
<p><b>Indicator 12</b> % of CTP participants that were satisfied with the content of the activity.</p> <p><i>Data Source: Participants self-report immediately after CTP activity (evaluation forms).</i></p>
<p><b>Indicator 13</b> % of CTP participants that were satisfied with the format of the activity.</p> <p><i>Data Source: Participants self-report immediately after CTP activity (evaluation forms).</i></p>
<p><b>Indicator 14</b> % of CTP participants that were very satisfied with the opportunities for networking provided by the activity.</p> <p><i>Data Source: Participants self-report immediately after CTP activity (evaluation forms).</i></p>

## Technical Assistance: 6-Month Evaluation Indicators

### Knowledge Level (Informal Indicator 6)

% of CTP participants reporting increased scientific understanding of NERRS priority issues after training activity.

*Data Source: Participants are polled semi-annually after CTP technical training completed or as part of ongoing technical training. Informal or formal questionnaire is an appropriate mechanism.*

### Knowledge Application (Informal Indicator 5 Hybrid)

% of CTP participants reporting that they have applied or intend to apply science-based knowledge and skills in their work related to NERRS priority issues after receiving technical training.

*Data Source: Participants are polled semi-annually after CTP technical training completed or as part of ongoing technical training. Informal or formal questionnaire is an appropriate mechanism.*

## Writing the CTP Narrative

Reporting narratives are important elements of NERRS operations grant progress reports. Narratives enable coordinators to give supporting commentary on CTP activities covering six-month periods. Coordinators can highlight CTP activities and accomplishments, provide explanation of data anomalies or update NOAA on previously-reported activities that would not show up on the data summary page. Each narrative is a descriptive snapshot of the CTP at the reserve. NOAA's Estuarine Reserves Division staff will use the narrative to monitor performance; keep apprised of CTP activities; and to highlight the program in communications products for a range of NOAA and external audiences.

For each semi-annual report, the coordinator will write a narrative to provide additional context to CTP activities. **The narrative is limited to 2 pages of text.** An example of a reporting narrative is included in Appendix C.

Reporting Narratives must use the following format:

**Reserve Name**  
**Reporting Period**  
(dd/mm/yyyy to dd/mm/yyyy)

### Program Highlights (*training activities and/or technical assistance*)

- Name of event(s) and short description or overview(s)
- Identify the target audience(s)
- Identify existing or new partnerships
- Describe elements of the event that demonstrated new and innovative approaches or techniques. Note additional activities that the coordinator believes will promote their CTP or prove valuable to the NERRS (e.g., emerging partnerships, new grant funding opportunities, new marketing efforts, etc...).
- Provide additional detail and context for quantitative results (if applicable)
- Other important highlights (information that may be applicable to other narrative sections but the coordinator has determined is appropriate as a highlight)

**Outcomes (if applicable)**

- Discuss actual, not intended, outcomes of current or past CTP training activities/technical assistance (includes previously funded grants) that you feel are important to your reserve (e.g., a stormwater workshop that leads to the adoption of mitigation strategies by township officials developing new stormwater regulations).

**Program Administration**

- Reference the status of any new needs assessments, program analysis, marketing plan updates, etc... conducted during the reporting period. If completed note completion date. (These could be ongoing efforts over several reporting periods)

**Identifying your Audience for Reporting Purposes**

Identifying your audience is an important component of performance monitoring. Performance monitoring indicator 2 specifically measures the diversity of organizations represented at CTP events. Each coordinator must create a participant registration format that will capture the following organizational categories:

**Federal** – Elected, appointed officials or staff from the U.S. Federal government

**State** – Elected, appointed officials or staff from state government

**County** – Elected, appointed officials or staff from county government

**Regional** – Elected, appointed officials or staff from regional governmental groups or associations

**Tribal** – Elected, appointed officials or staff from U.S. tribes

**Local** – Elected, appointed officials or staff from local government

**Business** – Business officials, association staff and private consultants

**University** – University or college officials, researchers or staff

**Media** – Print, radio, TV or freelance media representatives

**Community Members** – unaffiliated members of a community

**NGO/Community** – Not-for-profit or community-based organization members

## Generic Evaluation Questions Linked to Indicators

The purpose of this section of the manual is to provide generic evaluation questions that directly link to the indicators for your inclusion in participant evaluations of training activity. It is important for all reserves to ask the same questions to participants (appropriate to the activity) providing NOAA with system-wide data tied directly to the performance indicators.

Persons developing CTP sponsored activities should adapt these questions to their evaluations when program objectives relevant to the questions are addressed. The format they are listed below in is not a sample evaluation form format. Coordinators will need to develop an evaluation form that is tailored to your activity and topic but that reflects the information gathered by the generic questions. **It is critical to maintain both the intent of the question** as it is posed here, as well as the **same scale or answer choices for respondents/participants**. Ensuring similar intent and respondent scale is critical to ensuring that our system-wide data is valid and credible. Remember, the data collected will be used to assess the performance of reserve CTP programs towards meeting the system-wide goals and objectives.

### Generic Questions for CTP Participants

Name: \_\_\_\_\_

Organization/agency/affiliation: \_\_\_\_\_

Training activity or on-line learning module: \_\_\_\_\_

Date: \_\_\_\_\_

If you already know the affiliations of participants, there is no need to include question #1 on an evaluation form. However ensure that you record affiliations in the post training data sheet for that activity.

### Indicator 2 – Organizational Diversity

**How would you best characterize your organizational affiliation? Check most appropriate boxes.**

**Governmental:**

- |                                     |                                      |
|-------------------------------------|--------------------------------------|
| a) Federal <input type="checkbox"/> | d. Regional <input type="checkbox"/> |
| b) State <input type="checkbox"/>   | e. Local <input type="checkbox"/>    |
| c) County <input type="checkbox"/>  | f. Tribal <input type="checkbox"/>   |

Are you Appointed ; Elected ; or Other

Business:  Business association:  Consultants:

University:  Non profit or community based organizations:

Media:  Unaffiliated Community Members:

Other: \_\_\_\_\_

### Indicator 6 – Increased scientific understanding

**Has your knowledge or understanding of (NERRS priority issue) increased as result of this training?**

Yes  No

*\*\*An option is to add N/A or “I am more confused” as additional choices*

### Indicator 5 – Intention to apply science-based knowledge

**Do you intend to apply this knowledge and/or skills in your work with (NERRS priority issue)?**

Yes  No  Cannot Rate

*Tie this question to the workshop objectives:*

Example “Do you intend to apply this information about Best Management Practices (BMPs) for protecting vernal pools in your work?”

\*\*Another option is “Where could we look in the first year to see evidence of your application of this knowledge”. Any answer given here would be considered a “Yes” answer to indicator 5.

#### **Indicator 7 – Increased access to resources**

**Did your ability to access resources (e.g., people, information, tools, and/or technology) relevant to your work with (NERRS priority issue) increase as a result of this activity?**

Yes  No  Cannot Rate

\*\*An option is to make the choices “increased a bit” and “increased a lot” instead of just “increased” if you want more resolution in the answer provided. On the performance reporting spreadsheet, you would report the total percentage of people reporting listed either “increased a bit” and “increased a lot”.

#### **Indicator 8 – Increased skills relevant to NERRS priority issues**

**Has your skills or ability using this (technology, methodology and/or best management practices) related to (NERRS priority issue) increased as a result of this activity?**

Increased  Didn't Change  Cannot Rate

\*\*An option is to make the choices “increased a bit” and “increased a lot” instead of just “increased” if you want more resolution in the answer provided. On the performance reporting spreadsheet, you would report the total percentage of people reporting listed either “increased a bit” and “increased a lot”.

#### **Indicator 9 – Intention to apply diverse perspectives**

**Do you think you will apply new perspectives in your work and /or decision-making as a result of your interactions with others at this event? Or**

**Did you hear any new perspectives (i.e., different ways of thinking about this topic) from the instructors or other attendees that you intend to apply in your decision-making? Or**

**Do you think that you will consider (apply/integrate) new points of view when making decisions relating to (NERRS priority issue) as a result of (participating in) today's training?**

Yes  No  Cannot Rate

#### **Indicator 10 – Diversity of Contacts**

**Do you intend to contact others about this issue as a result of this event? Or**

**Do you think that you might contact others about the information or technology you learned as a result of this event?**

Yes  No  Cannot Rate

#### **Indicator 11 – Increased awareness of collaboration opportunities**

**Did your awareness of opportunities for collaboration increase as a result of this activity?**

Yes  No  Cannot Rate

\*\*An option is to make the choices “increased a bit” and “increased a lot” instead of just “increased” if you want more resolution in the answer provided. On the performance reporting spreadsheet, you would report the total percentage of people reporting listed either “increased a bit” and “increased a lot”.

#### **Qualitative Indicators**

**WORKSHOP FORMAT, CONTENT, & NETWORKING:** Please circle the number which best describes your feelings. Number “1” = not satisfied; Number “2” = minimally satisfied; Number “3” = “satisfied; Number “4” = highly satisfied; Number “5” = “very highly satisfied.

How satisfied were you with the opportunities provided for networking:      Not Satisfied      1   2   3   4   5      Very Highly Satisfied

How satisfied were you with the content of [Activity]:      Not Satisfied      1   2   3   4   5      Very Highly Satisfied



## **CTP Performance Monitoring: Frequently Asked Questions (FAQs)**

### **1. Do I need to include all the generic evaluation questions in all my evaluated events?**

No. The generic evaluation questions provide participant data against objectives and key results indicators. However, CTP events are not equal and some events may focus on certain indicators but not all. Any one CTP event will (presumably) address objective-level indicators and some subset of key results level indicators as described in the logic model. As a result, any particular event that is evaluated must include the objective-level questions (with language adapted to the training content/topic/issue); but only those key-result level questions that make sense for that event. Finally, such an evaluation should also include the three qualitative (satisfaction) indicators. Different types of programs will incorporate different types of evaluation schemes, but all CTP activities should be able to be measured against objective-level indicators.

You will need to keep track of the quantitative (1-4 indicators) across all aspects of the Coastal Training Program that can be evaluated (events and technical training), such as number of participants reached, etc.

### **2. Can I add additional questions in CTP event evaluation forms?**

Yes. You may want to include additional or more specific questions around content, format, effectiveness of various program elements, what they liked, what they would improve, solicit comments on participant interest in additional trainings, find out how they heard about your program, etc... The indicator questions are only a minimum, and are the ones that you must aggregate for reporting purposes.

### **3. Can I re-word the questions in more appropriate language to my program?**

Yes, but only to tailor the question to the issue or topic as appropriate. It is critical to keep to the same format, i.e. scaled questions remain scaled, yes/no questions remain yes/no. The reason for this is to ensure comparability and consistency in reporting, otherwise there is no validity or credibility in our data.

### **4. How often and to whom do I need to report on these measures?**

You will need to report data in operations grant performance reports, which are due every 6 months to NOAA/ERD and your reserve Program Specialist. A six-month reporting tool found on the NERRS intranet is provided for you to complete and include as an attachment to reserve performance reports. Your performance report will also include narrative text on completed CTP-related programs and activities during the six month period. The narrative section and data report will be reviewed by the ERD Program Specialist, the ERD CTP Coordinator, and entered into a NERRS system-wide database. This individual and aggregate information will be available anytime to reserves, the CTP Oversight Committee, etc. for review and analysis.

For the FY 04 grant cycle, we collected base-line indicator data. This data was organized into 2 six month periods from the July-Dec. 04 and Jan.-June 05 periods. The performance monitoring workgroup used this data to determine minimum performance requirements for FY '06. This means you will assemble actual data every six months from the start of your reserve's operations grant. In FY '06, you will be asked to set targets for the coming grant cycle.

### **5. Will I be penalized if our reserve "results" are lower than expected, or rewarded if they are higher?**

In FY 06, and onwards, coordinators will set targets that meet or exceed the minimum performance requirements for fully implemented CTP programs across the NERRS. You will record these targets in operations grant proposals under the coastal training task description. Each reserve CTP's performance will be monitored using the FY '06 minimum requirements as a reference (see Appendix A). If your results are lower than the targets you set for the program a CTP performance mentoring team will provide you with support designed help you improve your program's performance. Over the next two years, the performance monitoring workgroup will develop a rewards system to reward reserve CTP's showing exemplary performance. Your ERD program specialist and the ERD CTP Coordinator will review and monitor your progress, and provide feedback, based on what you say you will do in your grant proposal.

**6. Where can I access summary data on these measures from across the NERRS?**

Summary data will be available via an intranet web site starting in FY06. In the mean time, ERD staff will compile results on a biennial basis, and ensure this data is made available periodically to NERRS staff, track progress and report to the NERRS, NOAA, and Congressional interests.

**7. Will I need to set targets for performance at the beginning of every grant cycle?**

Yes. Minimum performance requirements will be established for FY '06, your operations grant proposal task description for CTP will describe program plans for the grant period and include targets for all objective-level and key-results indicators.

**8. What if my program doesn't address all of the key results?**

During the implementation phase of your program, we are only requiring you to report on indicators for the objective-level indicators and key results data relevant to your CTP training events.



## Appendix A

### FY'07 MINIMUM PERFORMANCE REQUIREMENTS NERRS COASTAL TRAINING PROGRAM

#### Rationale for monitoring performance

The NERRS Coastal Training Program (CTP) serves as the NERRS flagship program for knowledge and information transfer to ensure that science-based knowledge is available to those individuals making decisions about the coast.

Since early 2000, NERRS education coordinators, CTP coordinators, the CTP Oversight Committee and a CTP performance monitoring workgroup have worked hard to develop a logic model and framework for measuring CTP performance. This logic model provides a framework for monitoring progress towards addressing Goal One of the 2003 NERRS Strategic Plan: *"To improve coastal decision making by generating and transferring knowledge about coastal ecosystems."*

As the CTP matures, it is increasingly important to monitor performance system-wide in order to:

- Assess effectiveness in meeting the goals and objectives of the CTP;
- Provide quantifiable data for program evaluation;
- Assess participants' satisfaction with different training methodologies;
- Quantify the types of audiences reached;
- Identify trends in audiences and issues that could influence NERRS policy and strategic planning;
- Identify other organizations and programs that target coastal decision-makers;
- Attracting partners
- Increase accountability to taxpayers and stakeholders, and
- Document achievements for use in fund raising efforts.

#### I. Performance Indicators

Framework	System-Wide Performance Indicators
General Quantitative Measures	<p><b>Indicator 1 <i>Events</i></b> Total # of CTP activities (events &amp; technical assistance) offered during reporting period.</p> <p><b>Indicator 2 <i>Organizational Diversity &amp; Evenness</i></b> Total # and type of organizations, entities represented by participants during the reporting period. Organized into 8 defined organizational categories</p> <p><b>Indicator 3 <i>Participants</i></b> Total # of CTP participants involved in distinct CTP activities (events and technical training) over the reporting period.</p> <p><b>Indicator 4 <i>Contact Hours</i></b> Total # of contact-hours for reporting period.</p>

Framework	System -Wide Performance Indicators
<b>CTP Goal:</b> Better-informed decision-making by local and regional coastal decision makers to improve coastal stewardship.	
<b>CTP Objective 1:</b> Coastal decision makers <b>increasingly apply science-based knowledge and skills</b> in their work related to NERRS priority issues.	<b>Indicator 5</b> % of CTP participants reporting the intention to apply science-based knowledge and skills in their work related to NERRS priority issues as a result of training event.
<b>Key Result 1.1:</b> Coastal decision makers <b>increase their scientific understanding</b> of NERRS priority issues.	<b>Indicator 6</b> % of CTP participants reporting increased scientific understanding of NERRS priority issues as a result of training event.
<b>Key Result 1.2:</b> Coastal decision makers <b>improve their abilities to access science-based resources</b> (e.g., people, information, tools and technologies) related to NERRS priority issues.	<b>Indicator 7</b> % of CTP respondents reporting increased access to resources relevant to their work as a result of the training event.
<b>Key Result 1.3:</b> Coastal decision makers <b>increase skills</b> related to technologies and/or best management practices for NERRS priority issues.	<b>Indicator 8</b> % of CTP respondents reporting increased skills relevant to NERRS priority issues.
<b>CTP Objective 2:</b> Coastal decision-makers <b>increasingly apply diverse perspectives</b> across sectors and disciplines related to NERRS priority issues.	<b>Indicator 9</b> % CTP respondents reporting the intention to apply new perspectives learned through networking and collaborations at the training event.
<b>Key Result 2.1:</b> Coastal decision makers <b>increase the diversity of their contacts</b> regarding NERRS priority issues.	<b>Indicator 10</b> % of respondents reporting that they intend to make new contact about NERRS priority issues as a result of this training event.
<b>Key Result 2.2:</b> Coastal decision makers are <b>increasingly aware of collaboration opportunities</b> regarding NERRS priority issues.	<b>Indicator 11</b> % of CTP respondents reporting that they are more aware of opportunities for collaboration regarding NERRS priority issues as a result of the training event.

### Minimum Performance Requirements for CTP

Based on an analysis of baseline data from the period June 2004 - July 2005, the following minimum performance requirements were implemented for the FY '06 NOAA grant cycle.

- **Indicator 1** - No minimum requirements set due to variability in approaches across the system\*
- **Indicator 2** - No minimum requirements set due to variability in approaches across the system\*
- **Indicator 3** - No minimum requirements set due to variability in approaches across the system\*
- **Indicator 4** - 2250 hours annually - Set by taking the mean of the contact hours per reserve (as reported in the baseline data).

- **Indicator 5** - 79%
- **Indicator 6** - 83%
- **Indicator 7** - 72%
- **Indicator 8** - 72%
- **Indicator 9** - 86%
- **Indicator 10** - 70%
- **Indicator 11** - 80%
- **Indicator 12** - 77%
- **Indicator 13** - 80%
- **Indicator 14** - 63%

Minimum performance requirements were set by ranking the baseline performance data from highest % to the lowest % (within each indicator) for reserves. The minimum performance requirements were set at the % that was reported by the reserve listed fifth from the lowest ranking.

The following performance standards were set using the same approach as indicators 5-11 except the outliers were removed before ranking in an attempt to normalize the data.

\*Annual targets for indicators 1-3 will be determined by each reserve and included in annual grant applications.

### Minimum Performance Requirements - Implications for Reserves

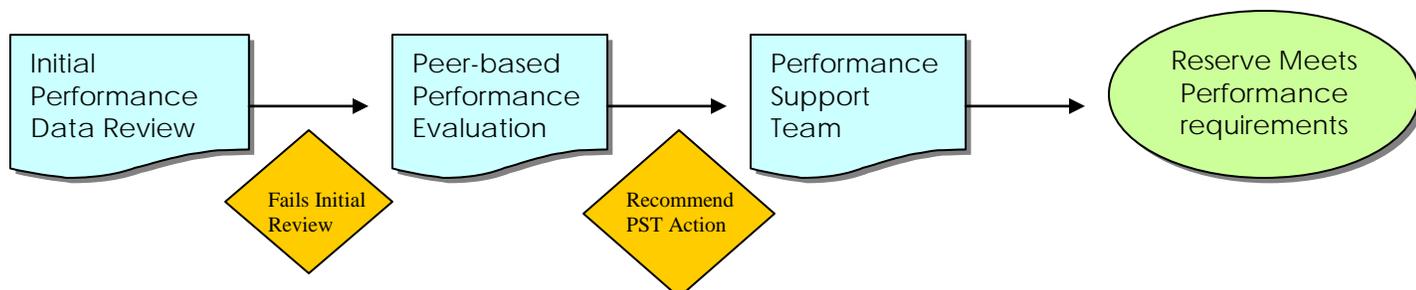
Reserves receiving funds for CTP program implementation are required to report their performance monitoring data in their six-month progress reports. Of the 14 indicators, reserves must report on indicators five and nine, and on any other indicators relevant to the types of programs offered. Data from all reporting reserves will be collated by ERD on an annual basis. The CTP performance monitoring workgroup (PMWG) will review all data submitted. Through this review, the PMWG will identify exemplary reserves as well as reserves that are not meeting performance minimums.

The performance review includes:

- An initial performance data review

- A peer-based performance evaluation
- A CTP performance support team.

### CTP Performance Review Structure



#### Phase I - Initial Performance Data Review

Every December the PMWG will review CTP performance monitoring data and compare reported data to performance minimums. The PMWG will review both raw data and synthesized data graphs for each reserve. Graphics will depict reserve indicator data as positive and/or negative deviations from the minimum performance requirements. Pie charts will also be used to display audience diversity.

Points will be assigned to reserves whose performance data falls below the minimums. Each of the indicators will be assigned the following point values:

- ★ Indicator 5 = 3 points
- ★ Indicator 9 = 2 points
- ★ Indicators 4, 6, 7, 8, 10-14 = 1 point

Reserves that accrue three or more points, or that do not submit any data at all, will move to a peer-based performance evaluation.

#### Phase II - Peer-based Performance Evaluation

The peer-based performance evaluation's purpose is to help reserves achieve compliance with minimum performance requirements.

The PMWG will review CTP reporting narratives to gain further information about the program. The PMWG chair will call the coordinator and the Reserve's manager (together), and describe the reporting deficiencies of concern, and request that a one-page report be submitted to the chair within 30 days. This self-assessment report should include the following elements:

1. An explanation of the data deficiencies
2. An analysis of why the program is under performing (e.g. Changes in program strategy; personal issues; changes in staffing)
3. Planned actions to improve program performance.

Once the PMWG chair receives the report he/she will email it to the rest of the PMWG and copy the Reserve's manager. If the PMWG determines that:

- The self-assessment report did not sufficiently document the reasons for underperformance,
- The CTP coordinator did not provide a reasonable plan for improving program performance, or
- The reasons for underperformance are beyond the scope of the workgroup,

The PMWG may create a CTP performance support team to provide additional guidance to the reserve.

At the end of Phase II, the PMWG chair will advise the CTP coordinator whether or not it is necessary to initiate the Phase III of the review process.

### Phase III - CTP Performance Support Team (PST)

Reserves requiring additional assistance will be referred to a CTP Performance Support Team (PST). The PST will additional support to help improve performance.

The role and the responsibilities of the PST include the following:

1. A PST is created by the PMWG chair and is made up of:
  - A CTP coordinator from another reserve in region or from one that works on similar topics or audiences as the reserve in need of support;
  - The Reserve's manager;
  - The ERD national CTP coordinator;
  - One or two additional members as determined by the chair of the PMWG, such as a member of the reserve's CTP advisory group or committee, a Coastal Services Center representative, the ERD program specialist, etc.

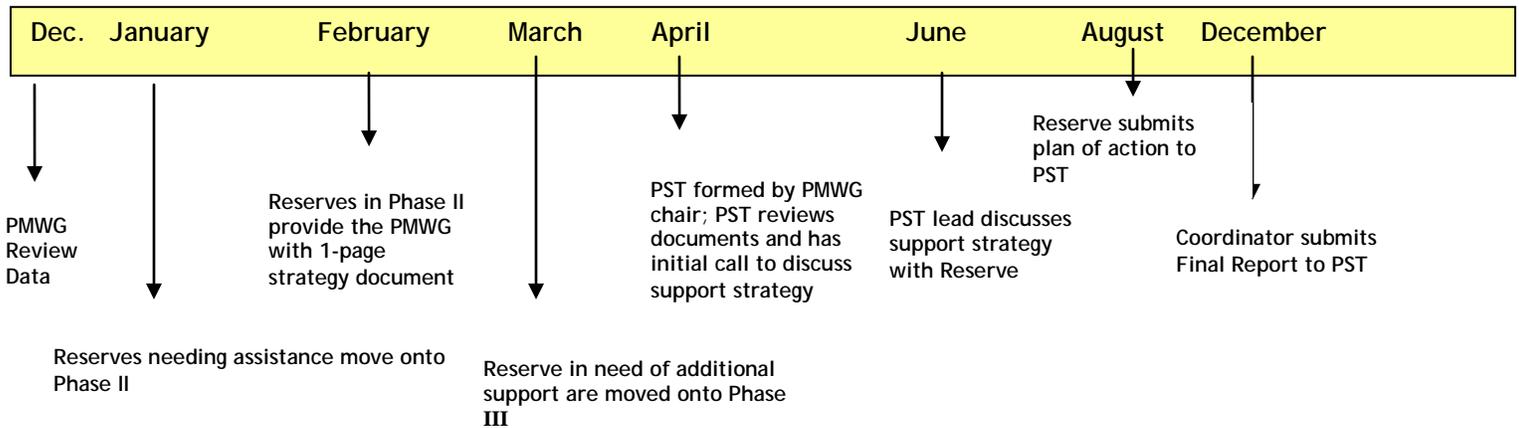
The PMWG chair will not serve on the support team but will appoint a team leader to keep the PMWG informed about the PST's progress.

**Confidentiality:** PST members will sign a confidentiality statement agreeing not to divulge their discussions, actions, recommendations or any other information about performance review, nor divulge the identities of the reserve under review or any of its affected staff to anyone outside of the PMWG or the PST..

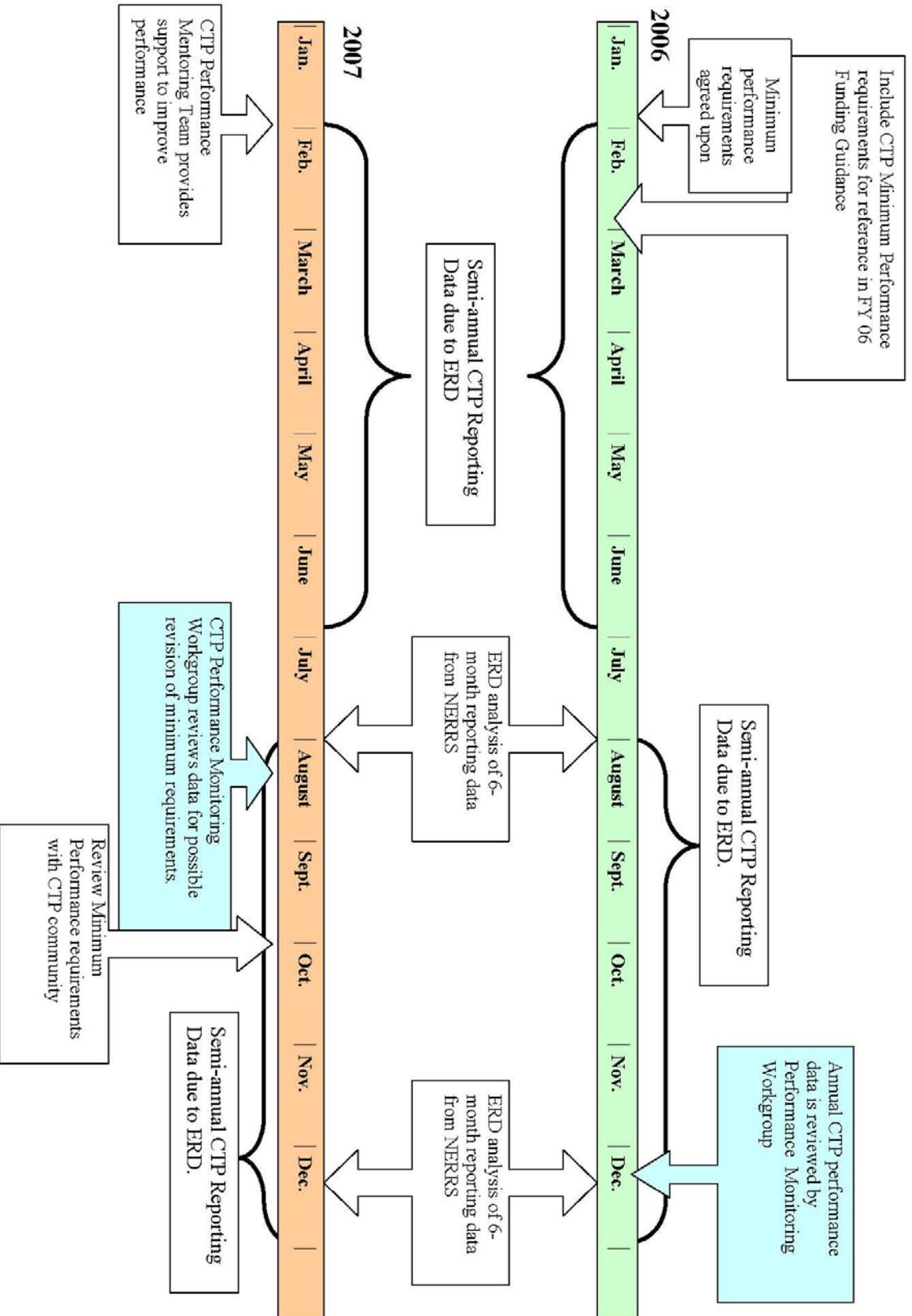
2. The PST will review the reserve's most recent program strategy, performance data and the CTP self-assessment report developed during Phase II.
3. After completing their initial assessment, the PST will hold a conference call to review findings, discuss further support if needed, and offer recommendations for improving performance. Examples of recommendations the team offers might include:
  - Techniques to improve data gathering and evaluation;
  - Changes in training techniques to better address event objectives;
  - Re-evaluating target audiences and needs;

- Clarifying reporting requirements to decrease the likelihood of inaccurate reporting as a cause for substandard performance.
4. Within 60 days, the PST leader should discuss the findings with the CTP coordinator and identify specific actions that may improve program performance and develop a timeline for implementation.
  5. The CTP coordinator will then develop a detailed plan to implement recommendations within 60 days following completion of the Phase III review.
  6. One year, post initial data review by the PMWG, the CTP Coordinator of the supported Reserve will provide a final report of their actions and progress towards implementing their plan. This report will be submitted to the PST, PMWG, Reserve manager and ERD program specialist. This report will include performance measurement data from the year in which PMWG and PST support was provided.
  7. The PST will review the final report and provide recommendations to ERD about the Reserve's progress towards improving performance.

### CTP Performance Review Timeline



# CTP Performance Monitoring Timeline



# Appendix B CTP Performance Monitoring Tool

## Six Month Data Report Template

Reporting period (Start & End)

aa/bb/cccc      aa/bb/cccc

NOAA Operations Grant Number

Reserve Name

### General Quantitative Measures

Indicator 1 # Activities	Indicator 2 Org. Diversity	Inst. Types Media Community Federal	Training	Tech.	Total
0	0	State	0	0	0
		County	0	0	0
		Tech Assist. Div Regional	0	0	0
		Local	0	0	0
		Tech Assist. Evt Business	0	0	0
		University	0	0	0
		NGO/Com.	0	0	0
		Tribal	0	0	0

### CTP Objective 1 System-Wide Indicators

Indicator 5  
% Intending to apply knowledge & skills\*

#DIV/0!

Indicator 6  
% Reporting increased scientific understanding\*

#DIV/0!

Indicator 7  
% Reporting increased access to resources\*

#DIV/0!

Indicator 8  
% Reporting increased skills\*

#DIV/0!

\* Indicates % of those participants responding to the activity evaluation

### CTP Event Qualitative Measures

Indicator 3  
Total # Persons

0

Indicator 4  
Total # Hours

0

Indicator 12  
% Satisfied\*

0

Indicator 13  
% Satisfied\*

0

Indicator 14  
% Satisfied\*

0

Percentage of total participants completing evaluations  
Total number of participants completing evaluations

#DIV/0!  
0.00

### Number of Outcomes by NERRS Priority Issues

Training      Tech Assistance

0

0

Non-point source pollution, eutrophication & nutrient dynamics

0

Habitat Conservation & Restoration

0

Invasive Species

0

Sustaining Estuarine Systems

0

Biodiversity

### CTP Objective 2 System-Wide Indicators

Indicator 9  
% Intending to apply diverse perspectives \*

#DIV/0!

Indicator 10  
% Reporting an increased diversity of contact Participants applied or intend to apply gained knowledge

#DIV/0!

Indicator 11  
% Reporting increased awareness of opportunities for collaboration\*

#DIV/0!

Indicator 3  
Total # Persons

0

Indicator 4  
Total # Hours

0

Indicator 1  
# Activities

0

Participants increased their knowledge

0

0

0

0

0

0

\* Indicates % of those participants responding to the activity evaluation

## Appendix C Sample Narrative

### South Slough National Estuarine Research Reserve

#### 2005 Coastal Training Program Report January 1, 2005 – June 30, 2005

Example of a training activity

Partnership is identified

#### Program Highlights Summary

Master Watershed Stewards Program [Priority topics: habitat restoration, invasive species, water quality] **Target audience:** Landowners, watershed association members.

In cooperation with Oregon State University (OSU) Extension Service and local watershed associations, South Slough hosted a four month watershed training program developed by OSU. Topics: salmonid biology; watershed and stream processes; soils, erosion and conservation; creating successful groups; riparian management; water quality monitoring; wetland evaluation and enhancement; stream assessment and restoration. South Slough provided tuition benefits for training materials and hosted a field trip on the reserve.

**Decision makers trained: 20<sup>1</sup>**

Example of technical assistance

Audience is identified

Spartina identification project [Priority topic: invasive species] **Target audience:** Restoration professionals, watershed associations, Oregon Department of Agriculture staff

CTP participated in planning for a survey of invasive *Spartina* cordgrass in the Coos estuary. Exotic vegetation found growing in the South Slough, originally thought to be *Phragmites*, was positively identified as *Spartina* through DNA analysis this summer. Staff cooperated with Vanessa Howard, research assistant at the Center for Lakes & Reservoirs, Portland State University, to develop a plan for conducting ground and aerial surveys for additional *Spartina* clones in the Coos estuary, with the expectation of hosting a *Spartina* identification workshop for watershed associations. However, the initial aerial survey indicated the infestation was limited to the previously-identified clones. South Slough NERR will continue to monitor and control the infested site. CTP will stand ready to develop the identification workshop if additional clones are discovered in the bioregion.

**Decision makers trained: 7**

The Earthquake-Tsunami Connection (Priority topic: coastal hazards) (Target audience: home and business owners, emergency services and first-responders, tourism operators, ports, marinas, elected officials (local, county, state)

In response to the December, 2004 Indian Ocean tsunami, CTP participated in planning and development of a tsunami readiness workshop held June 8 and facilitated the workshop. The workshop provided individuals, businesses and decision makers with critical information and training to survive the immediate impacts of a major tsunami expected to strike the Oregon coast. The workshop constitutes the first step in developing tsunami-ready community status for communities around Coos Bay. **Decision makers trained: ~350**

Coos Watershed Association's Lowlands Assessment Project [Priority topic: restoration] **Target audience:** Agricultural landowners

<sup>1</sup> The program, developed by Oregon State University Extension, provides watershed restoration education for landowners, professionals, and others. Graduates may become master watershed stewards by completing an approved, 40-hour habitat restoration project applying lessons learned during the course.

For the past year, CTP has participated on the advisory committee for the Coos Watershed Association's Lowlands Assessment, the intent of which is to understand stakeholders' concerns and needs concerning the development of a watershed restoration plan for the lower Coos Bay watershed (primarily agricultural lands below tide gates). This year the association conducted a series of coffee klatches to learn landowners' concerns.

**Decision makers trained: 78**

Coos Watershed Association's Lowlands Assessment Project

Priority topic: restoration] **Target audience:** Agricultural Landowners

For the past year, CTP has participated on the advisory committee for the Coos Watershed Association's Lowlands Assessment, the intent of which is to understand stakeholders' concerns and needs concerning the development of a watershed restoration plan for the lower Coos Bay watershed (primarily agricultural lands below tide gates). This year the association conducted a series of coffee klatches to learn landowners' concerns.

**Decision makers trained: 78**

**Outcomes**

Example of an outcome for technical assistance or CTP training event

Winchester Tidelands Restoration Project (WTRP) Case Histories

South Slough published comprehensive case studies of restoration projects in South Slough (*Restoring Kunz Marsh, a case history addressing marsh surface subsidence; Restoring Cox, Dalton & Fredrickson Creek Marshes, a case history addressing different methods for restoring, constructing and enhancing tidal channels; and Restoring Anderson Creek, a case history addressing methods for constructing a complex, non-tidal stream channel*). Members of each organization listed received copies as a result of a mailing or participation in a CTP workshop or seminar. Case studies are posted on South Slough Reserve's website.

**Decision makers trained: ~281**

Example of a non-CTP NERRS workgroup.

**Program Administration**

Attended the NERRS CTP Winter Meeting in Padilla Bay, WA and gave a presentation on the Northwest Association of Networked Ocean Observing Systems (NANOOS).

Member of the Performance Monitoring Workgroup and assisted in the development of new performance requirements for the system

Member of the Restoration Science and Habitat Mapping and Change workgroups working on revising habitat mapping protocols for this system-wide effort.

Member of Coos Regional Trails Partnership; Coast Coho Stakeholders Team, Coos Watershed Association Lowlands Advisory Group; Coos County Weed Advisory Group's education

**Other Efforts**

Examples of partner or stakeholder work groups

Note: the coordinator chooses not to identify additional information on other efforts. This section is optional.

## Appendix D

### Sample Evaluated Workshop Survey

#### CTP Evaluation Survey

Name: (Optional) \_\_\_\_\_

Organization/agency/affiliation: (Optional) \_\_\_\_\_

Has your (knowledge or understanding) of (NERRS priority issue) increased as a result of this training?

Yes  No  Cannot Rate

Has your (skill or ability) in using this (technology, methodology and/or best management practices) related to (NERRS priority issue) increased as a result of this activity?

Yes  No  Cannot Rate

*[CTP Coordinator: Indicator #5, you must ask this question about intent to apply]*

Do you intend to apply this knowledge and/or skills in your work with (NERRS priority issue)?

Yes  No  Cannot Rate

Did your ability to access resources (e.g., people, information, tools, and/or technologies) relevant to your work with (NERRS priority issue) increase as a result of this activity?

Yes  No  Cannot Rate

*[CTP Coordinator: Indicator #9, you must ask ONE (1) of the following 3 questions about application of new perspectives:]*

Do you think you will apply new perspectives in your work and/or decision-making as a result of your interactions with others at this event?

Did you hear any new perspectives (i.e. different ways of thinking about this topic) from the instructors or other attendees that you intend to apply in your decision-making?

Do you think that you will consider (apply/ integrate) new points of view when making decisions relating to [NERRS priority issue] a result of (participating in) today's training?

Yes  No  Cannot Rate

**[CTP Coordinator: Indicator #10, you must ask ONE (1) of the following 2 questions about the intention to contact others:]**

**Do you intend to contact others about this issue as a result of this event?**

**Do you think that you might contact others about the information or technology you learned as a result of this event?**

Yes  No  Cannot Rate

**Did your awareness of opportunities for collaboration increase as a result of this activity?**

Yes  No  Cannot Rate

**Please circle the number which best describes your feelings. Number "1" = not satisfied; Number "3" = "satisfied; Number "5" = "very highly satisfied.**

How satisfied were you with the opportunities provided for networking

Not Satisfied 1 2 3 4 5

Very Highly Satisfied

How satisfied were you with the content of [Activity]:

Not Satisfied 1 2 3 4 5

Very Highly Satisfied

How satisfied were you with the format of [Activity]:

Not Satisfied 1 2 3 4 5

Very Highly Satisfied

## Appendix E

### Ideas for Future System-Wide or Reserve Indicators

Framework	Other ideas for future system-wide or reserve indicators
<p><b>CTP Goal:</b></p> <p><b>Better-informed decision-making by local and regional Coastal Decision-Makers to improve coastal stewardship.</b></p>	<p>% of CTP participants making better-informed decisions when working with coastal stewardship issues.</p> <p><i>How: Periodic self-reporting and/or conduct a year-to-year comparison of the decision-making criteria used by CTP participants for selected major decisions on NERRS priority issues.</i></p>
<p><b>CTP Objective 1:</b></p> <p>Local and regional Coastal Decision-Makers <b>increasingly apply science-based knowledge and skills</b> in their work related to NERRS priority issues.</p>	<p>% of CTP participants applying science-based knowledge more often in their work related to NERRS priority issues.</p> <p><i>How: Self-reporting and/or survey of the supervisors of participants, measure at 6 or 12 months after CTP activity.</i></p>
<p><b>Key Result 1.1:</b></p> <p>Coastal Decision-Makers <b>increase their scientific understanding of NERRS priority issues</b> (i.e., biodiversity, invasive species, non-point source pollution, habitat restoration, and estuarine processes).</p>	<p>% of CTP participants using the information presented at the CTP event [or in the on-line learning modules].</p> <p><i>How: Self-reporting and/or survey of the supervisors of participants, measured 6 or 12 months after CTP event. This is currently being considered under Technical Training.</i></p>
<p><b>Key Result 1.2:</b></p> <p>Coastal Decision-Makers <b>improve their abilities to access science-based resources</b> (e.g., people, information, tools and technologies) related to NERRS priority issues.</p>	<p>% of CTP participants using improved skills related to searching for science-based resources that were addressed by the CTP event [or module/materials]</p> <p><i>How: Self-reporting and/or participants' supervisors survey, measured 6 or 12 months after CTP activity.</i></p> <p>% of CTP participants contacting reserve staff, the reserve web-site or the CTP speakers for additional information after the training event.</p> <p><i>How: Self-reporting and/or reserve staff records, measured 6 or 12 months after CTP activity.</i></p>
<p><b>Key Result 1.3:</b></p> <p>Coastal Decision-Makers <b>increase skills related to technologies and/or best management practices</b> for NERRS priority issues.</p>	<p>% of CTP participants using improved skills related to technologies and best management practices that were addressed by the training activity [or module/materials].</p> <p><i>How: Self-reporting or participants' supervisors survey, measured 6 or 12 months after CTP activity.</i></p>
<p><b>CTP Objective 2:</b></p> <p>Local and regional Coastal Decision-Makers <b>increasingly apply diverse perspectives</b> related to NERRS priority issues.</p>	<p>% of CTP participants that applied knowledge, skills or techniques gained through CTP-related peer learning.</p> <p><i>How: Self-reporting, measured 6 or 12 months after CTP event.</i></p> <p>% of CTP participants highly satisfied with how well diverse perspectives were incorporated into partnerships.</p> <p><i>How: Self-reporting, measured 6 or 12 months after CTP event.</i></p> <p>% of CTP participants highly satisfied with the effectiveness of their partnerships and collaborations.</p> <p><i>How: Self-reporting, measured at Time 1 (T1) &amp; at periodic intervals (T2, T3...) after CTP event.</i></p>
<p><b>Key Result 2.1:</b></p> <p>Coastal Decision-Makers <b>increase the diversity of their contacts</b> regarding NERRS priority issues.</p>	<p>Average # and type of contacts made by CTP participants at workshops/trainings.</p> <p><i>How: Self-reporting immediately after CTP activity.</i></p>
<p><b>Key Result 2.2:</b></p> <p>Coastal Decision Makers <b>are increasingly aware of collaboration opportunities</b> regarding</p>	<p>% of CTP participants who have found new opportunities to collaborate with other stakeholders on NERRS priority issues.</p>

NERRS priority issues.	<p>% of CTP participants who have used information, techniques, or contacts shared with peers at the CTP activity.</p> <p><i>How: Self-reporting and/or participants' supervisors survey, measured 6 or 12 months after CTP activity.</i></p>
<b>General Measures: Quantitative and Qualitative</b>	<p>% of CDMs from targeted audience who participate in multiple CTP activities each year.</p> <p><i>How: Survey of all coastal decision makers from targeted audience at periodic intervals. Add inquiry to survey forms or workshop registration.</i></p> <p>Number of requests for CTP training activities or training materials.</p> <p><i>How: Keep records of requests through cataloging email requests, keeping a phone log of requests and recording personal inquiries.</i></p> <p>Number of participants who attended or learned about CTP activities from a peer.</p>

## Appendix F

### Data Collection Strategies

#### I. General Issues Related to Data Collection

**Time.** Data collection will require time to collect but the data obtained should help CTP coordinators become more effective and efficient in their use of resources. Providing data will take time for your informants so you need to respect their time by making data collection as convenient and efficient as possible. You do not want to tax their patience by lengthy or overly frequent data collection.

**Types of research.** In this system, we are trying to get a snapshot of what happens to CDMs after participation in a CTP activity (*descriptive research*). Informants can self-report and offer information via less formal dialogue. The data collector can make their own direct observation or use more formal frameworks that impose your perspective and values on informants (e.g., *formal surveys*). You may want to understand CTP knowledge, skill and attitude changes over fixed periods of time (*longitudinal research*). To improve your programs, you also may want to understand more about the causal links between the particular format and content of a CTP activity and the specific changes that result (*predictive/explanatory research*).

**Bias.** It is nearly impossible to obtain social data without bias. It is important to recognize and acknowledge potential biases. It is also important to improve the reliability and validity of your data by trying to avoid biases. *Selection biases* often arise from the researcher's comfort and convenience requirements. For example, these types of biases include:

- talking to people like yourself or who you are comfortable speaking with because of their sex, age, race, profession, importance, income level, etc.,
- talking to convenient but non-representative people who live/work nearby, live near roads or have e-mail access,
- collecting data only in good weather,
- looking only at things that are visible or easily enumerated,
- looking at just the current situation rather than trends over time,
- accepting what people say versus finding out what they do,
- playing the role of important person (including body language, eye contact, tone of voice, wasting others' time, etc.).

There are also some common research traps that lead to bias: over-reliance on key informants (elites) who have authority over larger groups of people in your target population but are not necessarily representative of their views; ignoring elites and pretending to bias your work in favor of the larger group and offending elites in the process; over-identifying with your target group and taking the role of spokesperson for these people; asking people to recall things too long after the activity/event.

**Privacy and Confidentiality.** Any research involving people requires respect for their privacy. Most of the participant data is not overly personal information or otherwise sensitive. However, you want to avoid embarrassing participants and informants. For example, no one wants it known to the rest of their group that their individual scores on learning or skill change were lower than overall group scores. If you want to measure knowledge, attitude or skill changes over time after a CTP activity, you may need to know participant names. However, to protect their privacy, you can code their questionnaires before or afterwards and keep the master list of names/codes separate from the questionnaires. You can also reassure participants that most of our interests is related to aggregated information from the questionnaires.

**Proxy Indicators.** Most research is a compromise between the research objectives and the realities of the resources available, including time, money, informant patience, etc. For data collection associated with performance monitoring, the CTP coordinators must seek out meaningful but manageable information. Proxy indicators (substitute measures) may be helpful in situations where you need to represent things that you cannot observe or ask about directly, e.g., abstract

ideas. For example, employment is a proxy measure for accomplishment/success after leaving school. These indicators are often very local and only work if they allow you to draw conclusions reliably. They provide clues but do not always reveal causes. While they are often convenient, they can be misleading.

**Listen.** It is easy (and convenient) to be professionally arrogant and make assumptions about CTP results before they are achieved or checked. It is important to remember that listening to what participants and partners think can provide you with new information.

## II. Data Collection Strategies

**Triangulation.** To eliminate bias and increase the validity and reliability of your data for CTP, it is always a good idea to diversify your research strategies.

**Surveys and questionnaires.** Self-administered questionnaires have been the most common tool for reserves to assess CTP training activity. When using both questionnaires (self-administered) and surveys (administered by data collector), it is best to keep the length short and keep questions quite specific. Be careful not to use ambiguous or inappropriate wording for questions and answers. Do not ask loaded questions or overly complicated questions. Use a combination of both closed- and open-ended questions. Pay attention to question order by grouping similar questions, using bridging questions and saving more sensitive questions until the end. If possible, pre-test the instrument or tweak it after using it for the first time. The main advantage of using pre-set questions is consistency across workshops and across reserves. Answers can be easily coded for data analysis.

- **Avoid survey/questionnaire slavery.** To get a complete picture of a given topic, it is best to diversify your data collection techniques beyond self-administered questionnaires or researcher-managed surveys. Some common methods include individual key informants or group interviews (formal questions or topics or less-structured questioning and dialogue), direct observations (e.g. observing participants ability to execute a particular skill at the end of a workshop), secondary analysis (e.g., use of documents, reports, statistics, maps/photos, etc.). More creative options may include analyzing training activity videotaping and analysis, participatory group exercises or evaluation methods to rank satisfaction with different aspects of CTP, post-training activity debriefing sessions with trainers and planners.
- **Aim for representative informants.** It is also helpful to know the breakdown of important sub-groups in your targeted population. Be alert to the potential biases of your sampling and voluntary informants. For CTP, talk to diverse participants (i.e., including different professions, employers, sex and race) and diverse CTP partners. Your sample can be a non-probability one (e.g., purposively picking particular informants, a snowball approach when one informant recommends others, an accidental approach where one interviews whoever one meets or quota-based when a set number of individuals are to be interviewed in a fixed period of time). The alternative is a probability-based sample that is systematic and includes random selection, stratified selection or clusters (e.g., interviewing in particular neighborhoods or agencies).
- **Balance quantitative and qualitative data in your reporting.** It is also helpful and powerful to collect both quantitative data (e.g., number of participants and institutions represented), as well as descriptive statistics for more qualitative aspects of CTP (e.g., values, preference, satisfaction levels for percentages of the target group). Narrative examples can also enhance your reporting. Journal-writing may help you to collect these valuable stories.

**Discuss trends.** When setting up your performance monitoring system, identify ways to collect selected data before, immediately after and at some future point (s) (e.g., *longitudinal studies*).

**Feedback to participants.** How can participants, partners and others benefit from your data collection? Immediately, how can participants be rewarded for answering questions? How can the process of assessing results be more enjoyable? How can you return the data to those who took the time to answer your questions and how can you

structure feedback from them (e.g., via a meeting or a list-serve) on what you found out? Identifying strategies based on these questions will help to increase people's interest in providing you with CTP performance data.

## Appendix G

### Additional Resources

This annotated reference list is drawn from the 2003 Project Design and Evaluation Workshop Series, developed by NOAA's Coastal Services Center, Charleston, SC. ([www.csc.noaa.gov](http://www.csc.noaa.gov))

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