

South Slough National Estuarine Research Reserve Coastal Training Strategy Revision

March 3, 2009

Introduction

This report updates the South Slough National Estuarine Research Reserve (SSNERR) strategy for coastal training for 2009-2012. It describes the context in which the program operates and its goals, objectives and priorities. The revision reflects accomplishments made since the program began in 2003 and draws on key lessons learned. It reflects opinions of reserve staff and of members of the coastal training advisory group, and information gathered through audience needs assessments.

SSNERR CTP provides information, outreach and training to individuals whose decisions affect coastal environments. In 2003 CTP identified six training priorities (habitat restoration, invasive species, water quality, visitor impacts, climate change and marine protected areas) and developed a training strategy. In its start-up years the program offered significant training on several of the priority topics, emphasizing those, such as habitat restoration, in which SSNERR has considerable expertise.

CTP will retain the 2003 priority issues with a few minor modifications:

- 'Marine protected areas' is now 'nearshore ocean management,' reflecting the physical, biological, social and economic interdependence of estuarine, nearshore and human communities.
- 'Climate change' is now 'coastal hazards, climate change and energy,' emphasizing the interconnectedness of these issues.
- 'Visitor impacts' is now 'valuing coastal ecosystems,' reflecting growing awareness that the cumulative effects of environmental losses have definable economic costs.

Priorities for habitat restoration, controlling invasive species, and managing water quality are unchanged. Not all of the priorities are likely to be addressed during the next several years. For more discussion, please see "Audiences and needs assessment" below.

Strategy for 2009-2012

Goal of coastal training: The NERRS goal for coastal training is better-informed decision-making to improve coastal stewardship. Under the 2006-2011 SSNERR Management Plan, the objective of the Coastal Training Program is that coastal decision makers make more informed decisions concerning key topics identified in the CTP strategy.

SSNERR seeks to achieve this objective by providing opportunities through CTP for education, training, technical assistance or other outreach. CTP coordinates workshops, field trips and other events; provides technical assistance where appropriate, and develops training materials such as Website presentations, written publications and photo-visual resources. The CTP coordinator periodically reviews and updates the CTP strategy for relevancy to current issues as identified through target audience needs assessments; conducts additional needs assessments; seeks and develops partnership opportunities to pursue decision-maker outreach on priority issues;

represents the reserve at regional and national levels, and cooperates with other reserve sectors to ensure an integrated approach to providing decision maker training and outreach. (SSNERR, 2006).

Over the next three years, in addition to addressing the management plan objective for CTP, the revised CTP strategy incorporates the following training and/or technical assistance objectives and tasks:

Objective 1.

Provide technical assistance, training and information about conserving and restoring native habitats and species, and about reducing the impacts of non-native, exotic species especially as they relate to climate change.

Task 1. Illustrate climate change infrastructure adaptations using case studies and demonstration projects of techniques incorporated in reserve facilities.

Task 2. Convene a session on the fate of small estuaries relative to climate change at the CERF 2009 conference.

Task 3. Produce a series of articles about Pacific northwest estuaries for CERF 2009.

Task 4. Provide periodic GIS training for watershed councils and restoration professionals in 2009 and beyond.

As an example of non-training decision-maker outreach, in preparation for the Coastal and Estuarine Research Federation's 2009 conference in Portland, Ore., CTP is developing a series of articles for CERF's national newsletter and Website. The intent is to orient the estuarine research, stewardship and restoration professionals who will be attending the conference to regional coastal habitats and environmental issues.

CTP will continue to provide opportunities for GIS-related training for watershed councils and restoration professionals.

Objective 2.

Integrate coastal training with other reserve sector and NERRS activities.

Task 1. Work with stewardship and research staff to develop a system for tracking and evaluating decision maker requests for professional (technical) assistance.

Task 2. Work with Public Involvement Coordinator to publish the SSNERR newsletter and to market education and community/CTP outreach.

Task 3. Assist ERD with developing needs assessments.

Task 4. Participate in national and regional CTP work groups; seek and develop partnership opportunities with other West Coast NERRs.

Research and stewardship staff provide professional or technical assistance, in person, by phone or other contacts to decision makers. These contacts may qualify as CTP technical assistance. CTP is working with other reserve staff to determine when and how these types of contacts should be evaluated for CTP purposes. Staff will also consider ways to formalize these kinds of contacts.

CTP will continue to assist other reserve staff in developing audience needs assessments.

Objective 3.

Develop visual and graphic training materials for use on the Internet.

Task 1. Develop and produce video segments for project updates and overviews, technical demonstrations, or instruction.

Task 2. Coordinate staff efforts to produce video training presentations.

Task 3. Assist SSNERR information technology staff to develop Web resources (slide presentations, power points, video presentations, etc.) for use in providing training or technical assistance.

CTP uses visual and graphic aids to provide education or training and to market reserve education. For example, CTP developed marketing banners incorporating a redesigned SSNERR logo for use at public presentations or displays. CTP provides photographic and video images of research, stewardship, monitoring activities, habitats, waters, wildlife, etc. This material is used in Web displays, powerpoint presentations, exhibits, publications, and video presentations.

The results of the needs assessment indicate that decision makers want to view or download information, fact sheets, visual materials, training materials, etc., from the Web. However they are not interested in participating in live-to-Internet interactivity or video-conferencing sessions. CTP will continue to explore options for using the Web to provide information to decision makers in useful formats.

Over the last year CTP has developed several video presentations for use on the Web. These have included presentations on innovative methods for studying water quality in Sunset Bay, Oregon; shipwreck removal, promoting paddling activities in South Slough for education and interpretation, and local student participation in the International Brant Monitoring Program. SSNERR anticipates completing more projects like this in the coming planning period.

Integrating CTP with other sector resources

With recent additions to staff, CTP is seeking opportunities to integrate CTP activities with other staff resources to achieve complex objectives. For example:

- SSNERR recently submitted a preproposal to CICEET for an integrated, site-based study of land use and climate change that will require with significant input from several sectors including CTP. The project was undertaken as part of SSNERR's objective to develop a community-based watershed stewardship program, and encompasses the participation of all reserve sectors.
- The public involvement and coastal training coordinators now regularly consult on newsletter organization, style and content. The CTP coordinator edits newsletter articles for clarity and audience-appropriate language.
- CTP works with SSNERR information technology staff to develop training and demonstration materials for the reserve's Website, including visual and graphical aids such as slide shows, powerpoint presentations and video productions.
- CTP welcomes staff involvement in identifying potential CTP roles in projects and in reviewing CTP goals and objectives.

Partnerships

The 2006-2011 SSNERR Management Plan requires that staff to solicit and incorporate the advice and partnership of others (SSNERR 2006). Partnerships provide additional capacity to accomplish tasks that otherwise might not be achievable. They offer creativity, new ideas, additional workers, and of course, money. A partnership can lend legitimacy to an endeavor and encourage others to support a project.

CTP works with watershed councils in the Oregon coastal zone and seeks opportunities to partner with them whenever possible to provide training. The Coos Watershed Association is a frequent partner on training and technical assistance projects. Continuing partners include Southwest Oregon Community College (GIS training assistance), the Oregon Watershed Enhancement Board (funding), the Oregon Institute of Marine Biology (facility support), the NOAA Coastal Services Center (GIS training support). The NOAA Restoration Center, the Oregon International Port of Coos Bay, Oregon State University Extension, and OSU Department of Fish and Wildlife, have cooperated to provide training or organizational support in the past and we expect to find opportunities to work with these again. Finally, Oregon Sea Grant and the Oregon Coastal Management Program provide programmatic advisory support.

CTP will cultivate new partnerships whenever possible, or as need and circumstance dictate. In particular, with SSNERR restoration taking an uplands emphasis, CTP anticipates opportunities to develop new training partnerships with forestry-related groups.

In the context of coastal training, a partnership is a tool to expand the capacity for providing training. Forming a partnership, in itself, is not generally considered an outcome of coastal training.

Staffing

The program has a full-time coordinator with typical office environment support. CTP has invested in professional video and sound recording equipment for producing videos. In coming months CTP will work to expand staff participation in video project development and seek opportunities to enlist student or volunteer assistants in developing video and other Web materials.

Advisory Group

The coastal training advisory group represents stakeholders, training partners, public agencies and staff who provide periodic comments or advice about coastal training. Advisory group membership and guidelines are presented in Appendix B.

Audiences and needs assessment

CTP assessed regional training needs in September, 2007. A survey was emailed September 11, 2007 to 127 individuals in the lower Columbia biogeographic province who had previously interacted with the Coastal Training Program.

Thirty six people responded to the survey (response rate = 28.34%). Of the 36 respondents, 75% completed the survey. Efforts to encourage non-respondents to participate met with marginal success. The survey was closed on Oct. 11, 2007.

When asked to rate the usefulness of various types of training or methods of information delivery, respondents indicated preference for hands-on activities, field trips or tours of demonstration projects; access to information provided by print and on Websites; and panel or roundtable discussions. They indicated lower preference for live-to-Internet interactivity, video-conferencing and presentations provided at technology fairs.

A note on target audiences

CTP over the years has identified numerous target audiences related to the various priorities, but a closer examination of contacts, training recipients, and partners reveals that target audiences can be lumped into fewer groups that have commonalities. For example, audiences interested in invasive species control, habitat restoration and water quality have tended to include restoration professionals, watershed councils and water quality managers. A secondary audience, agricultural landowners appears less interested in habitat restoration, but more interested in invasive species control and water quality. Since these are audiences the needs assessments have consistently identified, CTP will focus on these target audiences as it addresses the priority issues; we remain aware, however, that there is a need to continually consider new audiences. CTP will look for opportunities to expand the target audience, or include secondary audiences, as appropriate and whenever possible. In particular, it should be noted that decision-maker audiences may need to expand or contract, depending on local or regional impacts or interests.

Priority topics and training areas

The needs assessment indicated high interest in training or other assistance on several training areas related to each of the priority topics. High interest is defined as >80% of respondents reporting average interest or greater in receiving training or information related to the training area.

Higher-interest areas are listed first.

Habitat restoration

Audience: watershed councils, restoration professionals, water quality managers

High interest in:

- economic value of wetland ecological benefits and services
- dikes, tide gates and other water control structures
- integrating estuarine and watershed restoration efforts
- re-establishing native species
- functional analysis of wetlands (i.e., HGM method)
- shore lands development and erosion
- monitoring habitat restoration projects

Controlling invasive species

Audience: watershed councils, restoration professionals, shellfish growers

High interest in:

- control techniques for invasive species
- controlling reed canary grass in wetlands
- economic impacts of invasive species
- the effects of climate change on plant communities
- effects of climate change on wildlife distribution and migration
- characteristics of exotic invasions

Protecting water quality

Audience: watershed councils, restoration professionals, water quality managers

High interest in:

- best practices for watershed management
- nonpoint-source pollution
- stormwater management
- eutrophication, hypoxia
- protecting public health

Valuing coastal ecosystem services

Audience: watershed councils, restoration professionals, planners, ports.

High interest in:

- shore lands development
- what are the drivers of rural coastal economies?
- GIS coastal applications
- using GIS-based decision support software
- low impact development

Coastal hazards, climate change and energy

Audience: watershed councils, restoration professionals, planners, ports

High interest in:

- regional manifestations of climate change
- costs and benefits of conservation

Nearshore ocean governance

Audience: Undefined

CTP asked about training related to nearshore ocean environments, but none of the training areas received enough response to break the 80% “high interest” threshold. This more likely reflects problems with the survey rather than a lack of interest in the topic. CTP will explore this further with the advisory group.

The needs assessment results are available as an electronic attachment appended to electronic versions of this report. The attachment will open using a Web browser allowing viewers to read all open-ended comments as well as the categorical answers. The needs assessment results and summary are posted at www.southsloughestuary.org.

Evaluating the program

CTP uses performance measures developed by the NERRS CTP coordinators to evaluate training events. Typically the evaluation consists of a standardized paper form handed out during an event and collected as participants leave. There is no obligation to complete the evaluation. CTP has found that many decision maker contacts and exchanges happen informally and are not captured by performance evaluations. CTP uses comments from the evaluations to modify program delivery or conditions, but to date there has been little formal attempt to conduct long-term evaluations. However, many of the individuals that participate in CTP trainings, (especially GIS-related training) have on-going contacts with the CTP coordinator and are able to provide personal feedback with their progress. During the period covered by this revision, CTP will

develop a more rigorous method to capture long-term evaluations of training and technical assistance.

Conclusion

The SSNERR Coastal Training Program is an evolving program that is trying to discern the complex relationship of technical assistance to training within the context of coastal training outreach. Priority topics provide an effective, long-term guidance framework for CTP, allowing consistency in addressing training needs over the long term, while providing a flexible structure for addressing unforeseen or fast-moving issues.

CTP takes advantage of opportunities to interact with other program sectors and is beginning to consider its role in scenarios such as community education that tend to blur the distinction between general audiences and decision makers. Describing the relationships between these audiences will become increasingly important, especially as SSNERR begins to develop watershed stewardship concepts that invite community participation in decision-making affecting the South Slough NERR and watershed.

Training audiences in our region tend to be small. Recent trainings have involved some degree of GIS and required specialized assistance from CSC, and the cooperation of community college staff to make computer labs available. We will work with these and other partners to continue to make GIS training available in our region. There continues to be high interest in training and assistance related to habitat restoration. Over the next several years the focus of habitat restoration at SSNERR will shift from restoring estuarine wetlands to creating old growth (late successional reserve) forest habitats. The SSNERR restoration advisory group and a new, forest restoration advisory group will continue to be important CTP vehicles for decision maker dialogue and professional exchange.

The Web will be of additional benefit as agencies and organizations that rely on public funding, such as watershed councils, retrench or reduce spending for travel and training. CTP will continue to explore ways to use the Web to communicate with decision makers, including developing streaming video presentations, slide or powerpoint presentations, blogs, and networking sites to share information.

Appendix A

Results of the needs assessment

Appendix A provides a summary of the results of the coastal training needs assessment. Click on the icon to open the file. You will need Acrobat Reader. To view the complete results, please visit our website, www.southsloughestuary.org.



Questions about the needs assessment? Please call John Bragg, coastal training coordinator, at the South Slough National Estuarine Research Reserve, 541.888.5558, ext. 29, or email john.bragg@state.or.us.

Appendix B

Coastal Training Advisory Group Membership and Guidelines

Introduction

The Coastal Training Program was established as an initiative of the National Oceanic and Atmospheric Administration and the National Estuarine Research Reserves System, in partnership with the Oregon Department of State Lands, to provide information, outreach and networking opportunities to volunteers and professionals who regularly make decisions affecting coastal resources.

Under NOAA guidelines, SSNERR established a Coastal Training Advisory Group to assist staff in developing appropriate and effective training proposals. NOAA requires reserves to revise their coastal training strategies every three years. The strategy revision also presents an opportunity also to revisit and revise the guidelines for the advisory group.

Membership

Upon invitation and acceptance, advisory group members will serve three years or until the next NOAA strategy review. At a minimum, NOAA guidelines require the participation of the Oregon Coastal Program, Oregon Sea Grant, and the National Estuarine Research Reserve System in the advisory group. Other members have included representatives of environmental or conservation education groups or organizations, coastal watershed councils, and public lands managers.

Members of the advisory group include:

Jon Souder, Coos Watershed Association
Jeff Weber, Oregon Coastal Management Program
Frank Burris, Oregon Sea Grant
Cindy Myers, Lower Rogue Watershed Council

and interested SSNERR staff (Craig Cornu, Hans Klausner, Steve Rumrill, Jake Anderson, Deborah Rudd, Tom Elledge, Tom Gaskill).

CTP periodically reviews the make up of the advisory group to assure that the expertise represented within the group is sufficient to advise training needs.

Goal of coastal training

The goal of coastal training is better-informed decision-making to improve coastal stewardship in the lower Columbia biogeographical province. South Slough reserve accomplishes this goal by providing technical assistance, training or other outreach to increase the use of science among decision makers. CTP provides opportunities for discussion and collaboration among decision makers, and assists their efforts to understand the role of human activity in the coastal environment.

The advisory group's mission

The mission of the advisory group is to guide the Coastal Training Program in providing training and technical assistance to coastal decision makers.

Duties of advisory group members

Advisory group members will be invited to:

- comment on the appropriateness and effectiveness of training and topics;
- offer suggestions to improve the effectiveness of training and outreach strategies;
- identify training partners and funding sources;
- assist the coastal training coordinator to evaluate training needs for new or rapidly-changing issues.
- provide assistance as appropriate.

Time commitment

Members must be able to attend an annual one-day meeting at the South Slough National Estuarine Research Reserve in Charleston (normally this meeting occurs in winter). South Slough reserve will pay for travel, meals and lodging for members whose expenses are not reimbursed by agency budgets. All other advisory group business will be conducted to the extent possible by phone or email.

Other conditions

Except for reasonable per diem expenses for travel, meals and lodging to participate in advisory group meetings, membership is without compensation.

Participation on the advisory group is voluntary and may be terminated at any time at the request of the member.

All comments and discussions are advisory only.

Literature Cited

Bragg, John. Assisting Coastal Decision Makers in the Lower Columbia Biogeographic Province: A Strategy for the Coastal Training Program. South Slough National Estuarine Research Reserve, PO Box 5417, Charleston, Oregon 97420. 2003.

South Slough National Estuarine Research Reserve 2006-2011 Management Plan. South Slough National Estuarine Research Reserve, PO Box 5417, Charleston, Oregon 97420. 2006.



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