

CZMA

Section 312 Evaluation

Summary Report – 2006

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
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Introduction

Purpose

As mandated by the Coastal Zone Management Act (CZMA) of 1972, NOAA's Office of Ocean and Coastal Resource Management (OCRM) conducts periodic evaluations of state coastal management programs and National Estuarine Research Reserves. The purpose of this report is to describe coastal management issues that were common among evaluation findings documents issued in a single fiscal year. Coastal issues that were emphasized in numerous findings documents were identified as themes and discussed, and innovative ways in which programs are addressing them were highlighted. OCRM anticipates that this annual report will educate NOAA staff regarding program challenges and enhancements while encouraging information exchange among CZMA programs.

As this is the first attempt at such a summary, OCRM would greatly appreciate feedback to improve the value of this document in the future. Please contact the OCRM National Policy and Evaluation Division with your comments (bill.o'beirne@noaa.gov).

Background

The Coastal Zone Management Act (CZMA) of 1972 created a voluntary partnership between coastal states and the federal government. The federal government provides grant funds, program oversight, and a national vision for managing the Nation's coastal and ocean areas. The Act provides states and territories with the freedom to design coastal management programs that best fit their organizational structure, legal authorities and coastal environments. Likewise, the National Estuarine Research Reserve System was established as a network

of protected areas established for long-term coastal and estuarine research, education and stewardship. To date, 34 coastal states (including the Great Lakes) and territories have approved coastal management programs; and there are currently 27 research reserves. Approved coastal programs guide the protection and development of coastal resources via enforceable laws, policies and regulations. Research reserves provide essential habitat for wildlife; allow for educational opportunities for students, teachers and the public; and serve as living laboratories for scientists.

Sections 312 and 315 of the CZMA mandate periodic performance reviews of coastal programs and reserves in order to evaluate how well the state is: 1) implementing its federally approved program, 2) advancing national goals, and 3) adhering to the terms and conditions of financial assistance awards. OCRM conducts these evaluations, which consist of 1) a detailed analysis of program documents and performance reports, 2) a site visit, 3) opportunities for public input, and 4) a final report. The process includes significant participation by state and local stakeholders and other interested parties.

Evaluation findings are issued following each review, and contain program accomplishments and areas for improvement. Findings highlight innovative program activities, identify opportunities for program enhancement, and provide ideas for fostering new and continuing partnerships. Thus, the evaluations are a management tool that provides NOAA and coastal states with the opportunity to assess needs and future directions for federal assistance. This report serves as a summary of the evaluations issued in the same fiscal year and is designed to share the wealth of information that NOAA gains through these periodic evaluations.

Methods

In compiling this report, personnel from NOAA OCRM's National Policy and Evaluation Division (NPED) analyzed the nineteen CZMA Section 312 evaluation findings issued in federal fiscal year 2006 (FY06), or October 1, 2005 through September 30, 2006. A list of the findings issued in FY06 is contained in Appendix A (Table 1). Note that the evaluation of the Maine Coastal Management Program and the Wells NERR (Maine) was a joint evaluation.

Program accomplishments, program suggestions, and necessary actions in each evaluation document were analyzed and attributed to one or more of the following nine categories, which broadly represent the goals and functions of the CZMA programs: operations and management, public access, water quality, research and monitoring, education and outreach, coastal hazards, coastal dependent uses and community development, coastal habitat, and government coordination and decision-making.

Accomplishments and suggestions that addressed multiple topics were divided into their constituent parts and assigned to the appropriate categories. Additionally in some cases, report authors identified important evaluation content that was not presented as an accomplishment, suggestion, or necessary action. This additional content was assigned content to the appropriate category.

Findings in each of the nine categories were then informally analyzed for recurrent themes. In this report, themes are generally those issues being addressed by five or more CZMA programs. Issues discussed in the "Other Topics" sections of the report are generally common to more than one, but less than five CZMA programs.

There are several important limitations to the results presented in this report. First, subjectivity is inherent to both the evaluation documents and NPED personnel's interpretation of the evaluation findings to create this report. As such, this report does not constitute a comprehensive assessment of all work performed by the nineteen evaluated coastal programs and NERRs. Additionally, the findings presented in this report are based on evaluation of only 19 of the existing 61 CZMA programs, so results may not be representative of CZMA programs in general. Finally, the analysis used to identify recurrent themes in evaluation documents was not supported by statistical analysis or other rigorous methodology. NPED personnel did, however, cross-check results with one another to ensure that the recurrent themes presented in the report are replicable and defensible.

Summary of FY 2006 Evaluation Topics and Trends

Operations & Management

State coastal programs are administered one of two ways: as a single centralized agency or entity, or as a network of state agencies and local governments. In both instances, state coastal programs' operations and activities are enhanced by significant coordination and collaboration with government, nonprofit and academic partners. State coastal programs also have the authority to regulate certain development activities in the coastal zone through permitting, monitoring and enforcement programs. These programs help to ensure a balance between coastal resource use and protection. Having a federally approved coastal program also authorizes states to require that federal actions be consistent with their federally approved state-specific enforceable policies. Research reserves are managed either through a lead state agency, university or a non-profit, with input from local partners. Reserve operations are guided by approved site-specific management plans which are to be updated every five years.

Theme: Assessment and discussion of program capacity and staffing needs.

Programs with findings related to this theme include coastal programs in California, Hawaii, South Carolina and Rhode Island, as well as the Chesapeake Bay-Maryland, Sapelo Island, Elkhorn Slough, Tijuana River, Hudson River and Kachemak Bay reserves

Evaluation Findings

Evaluation documents reviewed contained many findings related to program operations and management. Two major themes were identified, and two other topics were repeated in multiple findings.

The most common finding related to program operations revolved around the **assessment and discussion of program capacity and staffing needs**. State and program budget constraints seem to be universal; therefore almost every findings document reviewed contained discussion related to program capacity, including assessing and addressing staffing needs, as well as issues such as the inability to fill existing positions. Some programs identified innovative ways that programs are currently working to overcome such capacity issues. Rookery Bay NERR (RBNERR), for example, has developed a strong partnership with the Florida Gulf Coast University (FGCU), which supports many Reserve employees through a contractual agreement. Currently about half of RBNERR's personnel are supported via this contract, for which FGCU waived its usual overhead rate. Additionally, some Reserve personnel salaries are cost-shared with the University. This partnership significantly increased staff capacity at the Reserve, enhancing both the research and education programs.

Other programs are relying more heavily on volunteers to support program operations. Wells NERR (WNERR) in Maine has an exemplary volunteer program that greatly benefits the Reserve's overall operations and management. Volunteers support WNERR's administration, maintenance, research, education and stewardship programs through their involvement in activities ranging from fundraising to saltmarsh characterization to leading interpretive walks. Due to the significant increase in program capacity provided via volunteers, WNERR was able to expand programming in ways that would not have been possible otherwise.

Theme: Review and improvement of permit standards, applications and issuance processes.

Programs with findings related to this theme include coastal programs in North Carolina, Maine, California, South Carolina, Louisiana and Hawaii

One interesting and innovative set of findings related to program operations was found regarding the **review and improvement of permit standards, applications and issuance processes**. In general, states are continuously working to improve permitting procedures through increased coordination among state agencies as well as enhanced tracking and enforcement activities. While some findings did include suggestions to review permit application and issuance procedures, many coastal programs were found to have successfully streamlined their permitting processes and consistency review through the development and implementation of new tools and technologies. For example, the Louisiana Coastal Resources Program (LCRP) developed a robust database to track permit applications, consistency authorizations and enforcement cases. The new “PermitTrak System” has not only helped to streamline the permitting process, but also increased government coordination. PermitTrak is accessible to program partners and the general public, via the internet. This database is essential for the LCRP to monitor the large number of permit applications processed every year, and is also used extensively by other state and federal agencies, local governments, academic institutions, industry groups and other citizens to search for information.

Programs evaluated in this summary are also working to improve permitting and coordination policies through initiatives including: updating memoranda of understanding to address permit procedures and interagency coordination, and establishing new rules to

assess cumulative and secondary impacts of development proposed in permit applications. The San Francisco Bay Conservation and Development Commission piloted the Bay Resource Analysis Tool (BayRAT) to improve its permitting process. BayRAT includes data on habitat types, endangered species, wildlife areas, marinas, parklands and public access, as well as an easy-to-use desktop mapping tool. This new capability has already proven to be a powerful tool to inform policy and regulatory and permitting decisions.

Other operations and management topics

Programs with findings related to other operations and management topics include coastal programs in Pennsylvania, Hawaii, American Samoa and South Carolina, as well as the Wells, Chesapeake Bay-Maryland, Hudson River, ACE Basin, North Inlet-Winyah Bay, Tijuana River, Elkhorn Slough, Kachemak Bay and Rookery Bay reserves.

Two additional operations and management topics appeared in multiple findings: the roles of advisory groups, and the revision or development of program documents. Many coastal and reserve program evaluations recommended examining the goals of groups that serve in an advisory capacity. Often as programs develop, so do their advisory needs; therefore, the composition, roles, and responsibilities of these groups need to be periodically assessed and redefined. Several findings documents also included suggestions or necessary actions regarding the required update of reserve management plans, the submission of coastal program routine program changes and the completion of reserve site profiles.

Public Access

More than 180 million Americans visit the Nation's coasts each year to enjoy activities such as swimming, boating, fishing and wildlife watching. State coastal programs help to ensure that that public has adequate access to the coast through various activities such as: planning and constructing public accessways; education and outreach on public access opportunities and responsibilities; and permit review processes that account for the loss of access when sites are developed or redeveloped. Reserves offer a variety of public access opportunities, including nature trails, boat launches, boardwalks, fishing piers, and observation platforms for birding. The coastal and reserve programs create new public access opportunities through land acquisition. The federal Coastal and Estuarine Land Conservation Program (CELCP) was established to protect coastal and estuarine lands considered important for their ecological, conservation, recreational, historical, or aesthetic values. Through CELCP, states develop acquisition plans and receive federal funding to purchase coastal land for protection and public use.

Evaluation Findings

Though relatively few findings in those evaluations reviewed were related specifically to public access, various public access issues are currently being addressed by multiple states. Many states are challenged with maintaining traditional public accessways in the face of increasing coastal development. Evaluation findings identified a couple different means by which states are addressing this issue. One way by which programs protect and increase public access is via partnerships with other state and local government or nonprofit entities. For example, some coastal programs are working directly with local communities to identify, improve and provide public access through coastal zone land acquisition projects and land-use planning.

Programs with findings related to public access include Maine, California, Rhode Island, and Hawaii

States also use their permitting processes to protect and improve existing accessways. A few of the evaluated coastal programs require permit applicants to ensure that new and re-development projects will not adversely impact the public's waterfront access. Coastal programs also work with applicants to mitigate impacts when necessary. A good example is the permitting process employed by the San Francisco Bay Conservation and Development Commission (BCDC's) Design Review Board. The Board helps permit applicants by reviewing the design of proposed developments for conformance with BCDC policies regarding Bay access and visibility. Personnel then work collaboratively with developers to find mutually acceptable solutions that meet or exceed BCDC's public access requirements. Developers of diverse projects have been willing to partner with BCDC because they have found that creating attractive open space and public access provides them with a competitive edge.

Coastal Water Quality

Coastal waters are an extremely valuable resource, providing society with food, recreational opportunities, commerce pathways and solace. Coastal programs work to preserve and protect coastal water quality through activities and initiatives such as: developing and implementing watershed management plans; initiating Clean Marina Programs; and assisting local governments to develop and implement ordinances to control storm water runoff. The federal Coastal Nonpoint Pollution Control Program ensures that states have the tools to address nonpoint source pollution, currently the greatest threat to coastal water quality. Through this program, states implement management measures to help control polluted runoff at the local level.

Reserves address water quality via a suite of programs as well, including research and monitoring, coastal education, and stewardship. For example, data collected through Reserve research and the System-wide Monitoring Program (SWMP) can be used to identify water quality issues, as well as potential causes and effects. The Coastal Training Program reaches diverse audiences, from coastal decision-makers to planners and regulators

to the general public, to provide education and training on various water quality topics.

Programs with findings related to coastal water quality include coastal programs in California, Pennsylvania and Maine, as well as the Chesapeake Bay-Maryland and Rookery Bay reserves

Evaluation Findings

Relatively few findings related specifically to water quality. That said, evaluations showed that coastal programs and reserves are engaging in initiatives to address water quality, and that those activities, e.g., Clean Marina Program and SWMP, are generally successful. Findings highlighted the **innovative collaborations that these states are developing to address water quality issues**. Partnerships are often initiated to leverage financial and technical resources, a necessity in the light of the current lack of federal funding for state Coastal Nonpoint Programs and budget constraints in general. Coastal and reserve programs are coordinating with local communities, other state and federal agencies, nonprofits and even international organizations for activities such as implementing best management practices, water quality monitoring and habitat restoration. Collaborations such as these help programs to overcome some financial challenges and allow them to continue to make progress in address water quality.

For example, the California Coastal Commission maintains a successful water quality program, despite federal funding cuts, through a variety of innovative partnerships. The water quality unit leverages modest personnel resources by coordinating with state and federal agencies such as the State Water Resources Control Board, the Monterey Bay National Marine Sanctuary, and the Elkhorn Slough NERR. The Commission also works with other state agencies (1) to identify areas where water

quality is threatened by new and expanding development and (2) to focus assistance in pilot communities within some of these priority watersheds. These communities receive assistance in implementing nonpoint source pollution best management practices.

Research & Monitoring

While coastal and reserve programs both play integral roles in coastal resource research and monitoring, the reserve system is uniquely set up to ensure a stable environment for coastal and estuarine research and monitoring while providing long-term protection of natural resources. Reserves thus coordinate and conduct a variety of projects through system-wide initiatives such as the System-wide Monitoring Program, as well as site-specific activities and partnerships.

In many states, CZMA programs work together to identify current coastal resource issues and research needs. Coastal programs also often provide funding for research and monitoring efforts.

In addition, programs may partner with the Cooperative Institute for Coastal and Environmental Technology (CICEET) to support applied coastal research. CICEET projects are conducted on subjects ranging from restoring habitat to developing new sampling methodologies and technologies, with a focus on understanding and reversing the impacts of coastal and estuarine contamination and degradation.

Theme: Coordination between coastal programs and reserves

Programs with findings related to this theme include Rookery Bay, Hudson River, North Inlet-Winyah Bay, Elkhorn Slough, Tijuana River, Wells and Chesapeake Bay-Maryland reserves

Evaluation Findings

Evaluation documents contained many findings related to research and monitoring. Though most of these were related to reserve programs, coastal programs were also found to contribute to research and monitoring activities. Three major themes were identified.

The most common research and monitoring finding regards the [coordination between coastal resource managers and research communities](#) to address current coastal management issues. Evaluations highlighted numerous means by which reserves foster relationships with resource management communities and how information gained via research and monitoring is applied to coastal management. Coastal management efforts enhanced by this research include ecological indicator development, habitat restoration, land-use planning and policy formulation. Rookery Bay NERR, for instance, has been working with the state to develop ecological indicators for coastal water quality. The Reserve has been working closely with regional coastal management partners to develop performance measures for waterways and bays based on data from their various monitoring programs. The Reserve has already identified hydrological and ecological performance measures and targets for the Faka Union Canal and Bay in the Ten Thousand Islands region.

Findings demonstrate that coordination between researchers and managers is an integral part of a strong adaptive science-to-management continuum, whereby research is stimulated by current management needs and in turn produces information that can be widely used by coastal resource professionals and policy-makers. Elkhorn Slough NERR's research on the habitat management of Australian blue gum eucalyptus is a good example of coordinated science-to-management efforts. The Reserve's research team and resource managers identified an information gap regarding the ecology and management options for blue gum eucalyptus, a particularly infamous invasive species in California. In response, a suite of research projects were initiated to address this need. Investigations, conducted by the research team and NERRS Graduate Research Fellows, examined the eco-

logical value of native oak versus non-native eucalyptus stands. The results were disseminated via the Coastal Training Program. Based upon the research findings, specific management measures were recommended based on eucalyptus stand size and location. These recommendations were employed on Reserve managed lands.

Theme: Application of new tools and technologies to enhance coastal research and monitoring

Programs with findings related to this theme include Tijuana River, Kachemak Bay, Chesapeake Bay-Maryland, South Carolina and Sapelo Island reserves

Another prominent theme in the evaluation findings was the [application of new tools and technologies to enhance research and monitoring efforts](#). New tools employed by programs include the telemetry of monitoring data to provide information real-time via the web, and the use of high-resolution aerial photography and side-scan sonar imagery to map submerged aquatic vegetation.

The application of these new technologies greatly enhances coastal program and reserve research efforts and expands the use of research and monitoring data in coastal management. For example, Geographic Information Systems (GIS) use at Tijuana River NERR (TRNERR) greatly enhanced the precision and usefulness of data produced for ongoing projects. Personnel use GIS to monitor the spread of invasive plants as well as in the development of a new habitat classification scheme. The latter is now used in coordination with geo-referenced water quality data to highlight causal relationships and predictor variables for water quality. TRNERR's GIS program also established close working relationships with Mexican partners such as Colegio de la Frontera Norte and the City of Tijuana's Planning Department.

Evaluations specifically emphasize the growing use of GIS tools for research, monitoring, land-use planning and policy development. For instance, Sapelo Island NERR's growing GIS capacity is regularly used for resource management efforts within and surrounding the Reserve. The Reserve is developing an impressive GIS reference library that includes historic geo-referenced photographs and maps, current aerial surveys, and timber and fire management layers. The Reserve regularly provides maps and information to individuals working on the island, including resource managers and biologists from the Georgia Department of Natural Resources, scientists from the University of Georgia Marine Institute and researchers using the NERR as a study site.

Other research and monitoring topics

Programs with findings related to other research and education topics include Rookery Bay, Tijuana River, Elkhorn Slough, Hudson River, Chesapeake Bay-Maryland, and Kachemak Bay reserves

Three additional research and monitoring topics are worth mentioning: a focus on invasive species management; partnerships to broaden the network of scientists using the NERRS; and connections with reserve stewardship efforts. Evaluations in multiple states included information and accomplishments on how reserves are addressing invasive species management, currently a serious threat to coastal habitat. Programs are supporting efforts to map invasive species location and coverage; conduct research on eradication and restoration techniques; and partner for management efforts.

Reserves are strengthening partnerships with universities and government to expand the network of scientists conducting research in and for the reserve. For example, reserves are having good success using student researchers through the NERRS Graduate Research Fellowship Program, the NSF Research Experiences for Undergraduates and other university-specific intern programs. Finally, numerous accomplishments highlighting the collaborative efforts of reserve research and stewardship

efforts, where resource management techniques are being developed and tested by personnel on reserve lands.

Education & Outreach

One goal of CZMA programs is to enhance public understanding and awareness of coastal and estuarine issues so that the public can be actively involved in coastal decision-making. Coastal Management Programs (CMPs) and NERRs thus offer a variety of education and outreach programs and provide volunteer opportunities for the general public. CMPs may accomplish education and outreach through publications, public service messages and initiatives such as speaker series. The NERRS is specifically mandated to provide opportunities for public education and interpretation. Reserves provide K-12 environmental education on-site, in the classroom and via the Internet that ranges from hands-on field experiences to curricula development to teacher trainings. NERRS also offers education and training opportunities to professionals who make decisions about coastal resources, such as planners, local elected officials and coastal managers, through the Coastal Training Program.

Evaluation Findings

Evaluation documents contained many findings related to education and outreach. Two major themes were identified, and two other topics were repeated in multiple findings.

Theme: Development and implementation of Coastal Training Programs

Programs with findings related to this theme include Wells, Rookery Bay, Chesapeake Bay-Maryland, Tijuana River, Elkhorn Slough, North Inlet-Winyah Bay, ACE Basin and Sapelo Island reserves

The most common education and outreach finding was related to the [development and implementation of reserve Coastal Training Programs \(CTP\)](#). Many reserves have successfully developed and begun implementation of their CTPs. Findings discuss implementation issues such as: how reserves identify workshop subjects, the development and use of successful outreach tools and the use of Reserve research to inform workshop content.

Evaluation findings described many instances of coordination among reserve CTPs to provide joint workshops on regional coastal issues. CTP collaborations such as these not only allow reserves to reach larger audiences, but also enhance the science and expertise available to support information provided via workshops. Findings of the three southeast reserves evaluated—ACE Basin, North Inlet-Winyah Bay and Sapelo Island—provided multiple examples of successful coordinated workshops. The two South Carolina reserves work collaboratively to present seminars and programs on regional topics, including coastal hazards, isolated freshwater wetlands and invasive species. ACE Basin NERR and Sapelo Island NERR partnered to offer a workshop on marsh dieback, another serious regional issue.

In addition to CTP implementation, many of the reserves have already begun to enhance the scope of site-specific CTPs with supplementary efforts. For example, in addition to their successful CTP workshops, Elkhorn Slough NERR offers a suite of follow-up options to coastal managers interested in supplementary information. DVDs of past workshops are available, and mini-workshops are often requested by local management agencies to review and expand upon CTP topics. A particularly innovative component of the Reserve's post-workshop service is the Coastal Training Network. The Network consists of coastal experts—former presenters—who have agreed to be available post-workshop to answer questions, review documents, visit field sites, etc., in their area of expertise. Response to the Network from the coastal management community has been very positive.

Theme: Establishing new facilities to enhance programs' education and outreach

Programs with findings related to this theme include Wells, Rookery Bay, South Carolina, Hudson River and Kachemak Bay reserves

[Establishing new facilities to enhance programs' education and outreach](#) capacity or activities was another prominent theme in the findings reviews. Facilities development and enhancement includes efforts such as: expanding dormitory and laboratory space, renovating and remodeling using “green” building design and materials and building new visitor centers. Findings described a variety of circumstances resulting in successful facilities enhancement ranging from local community partnerships to large state government investments.

For example, the Hudson River NERR successfully established a physical presence in its watershed at the Tivoli Bays Visitor Center via a unique partnership with the Village of Tivoli. The partnership and exhibit represents a significant investment of time and resources by both the Reserve and community. Space for the Visitor Center, which has been well received by the public, was provided by the Village in its historic Watts de Peyster Fireman's Hall, is used frequently for presentations about the Hudson River and Reserve. The development of the Visitor Center and exhibit through this partnership not only provides a permanent physical presence for the Reserve, but also engages the public and fosters stewardship of the estuary.

Evaluation findings also identified challenges related to dramatic infrastructure growth. The cost of a state-of-the-art facility is not only realized in its design and construction, but also in its daily operation and ongoing maintenance. The long-term financial responsibility for infrastructure is of great concern and debate. Findings documented not only the various financial challenges in

facility operations and maintenance, but also discussed means by which states can and will address these needs. Among the options/opportunities identified to help with long-term infrastructure costs were: the use of volunteers, coordination/cost and facility sharing with program partners, nominal admission fees and usage fees for public meeting spaces.

Other education and outreach topics

Programs with findings related to other education and outreach topics include coastal programs in Pennsylvania, South Carolina, Maine and California, as well as the Wells, Rookery Bay, Elkhorn Slough, Tijuana River, Hudson River, ACE Basin, North Inlet-Winyah Bay, Kachemak Bay, and Chesapeake Bay-Maryland reserves

Two additional education and outreach topics were identified: outreach strategies assessment and development as well as partnerships to deliver educational programming. Evaluations in multiple states included recommendations regarding the assessment of current outreach materials and the development of new outreach strategies. In most cases, these related specifically to increasing the public's awareness and understanding of CZMA programs, coastal program and reserve roles in coastal management and public involvement opportunities. There were also numerous accomplishments highlighting innovative collaborations with local school districts and universities. Many of these were related to partnerships developed in order to enhance and expand delivery of NERRS educational programming.

Coastal Hazards

Coastal areas are threatened by a variety of natural hazards that can cause tremendous loss of life and property. Principal among these are coastal erosion, coastal

flooding, landslides, and to a lesser degree, tsunamis. Coastal programs and reserves are active in educating the public on these hazards as well as in reducing hazard impacts on coastal properties and structures. From an educational perspective, coastal programs may produce hazard educational materials for a number of audiences. Reserves conduct educational programs and perform extensive research and monitoring of estuarine sites that provide critical long-term data on coastal hazards. For hazard mitigation, many state coastal programs become involved in the development and promulgation of regulations that attempt to minimize damage by coastal hazards, such as regulations requiring oceanfront setbacks and development affecting protective coastal features such as beaches, dunes, and wetlands. Coastal programs may also participate in state and local land use planning, provide technical assistance to local governments and help develop land use plans that recognize hazard-vulnerable areas.

Programs with findings related to coastal hazards include coastal programs in American Samoa, Hawaii, Louisiana, Maine, North Carolina, Pennsylvania, and Rhode Island

Evaluation Findings

Evaluations contained relatively few findings related specifically to coastal hazards, and no major themes were identified. Multiple coastal programs, however, shared findings related to providing technical assistance and education/outreach materials on coastal hazards to local governments and citizens. For example, the North Carolina Coastal Management Program (NCCMP) developed an interactive coastal hazards GIS web-based tool to provide information to property owners about coastal hazards areas, including shoreline position, erosion rates setback lines, and flood zones as well as inlet and ocean hazard areas. The tool was developed, in part,

as a response to proposed state legislation that would have provided for disclosure of coastal natural hazards to purchasers of coastal properties within designated ocean hazard areas of environmental concern. While the disclosure bill did not pass, the coastal hazards GIS allows current and prospective homeowners to assess physical threats to their homes. NCCMP is developing accompanying educational pieces that will provide information about types of hazards and other issues associated with coastal home ownership.

Additionally, evaluations documented findings on assessment, revision or development of rules and regulations on erosion control in coastal areas, as well as findings on state coordination with federal agencies, such as the U.S. Army Corps of Engineers and the Federal Emergency Management Agency (FEMA), to address coastal hazards issues.

Coastal Dependent Uses & Community Development

Concentrated and growing populations in coastal areas can cause degradation of coastal environments and can have negative economic and social impacts such as the loss of coastal-dependent industries. Coastal programs address these issues by participating in environmental and land-use planning processes, and by establishing regulations for coastal shoreline development. For example, among other things, coastal programs may provide local governments with technical assistance on growth management, revitalization, and redevelopment of deteriorated waterfronts. Coastal programs may also establish enforceable policies that give priority to preserving or revitalizing coastal-dependent uses. Programs may also address these issues by establishing special area management plans (SAMPs) for specific geographic areas, which supplement existing management programs by addressing specific, localized issues such as land use and economic development.

Programs with findings related to coastal dependent uses and community development include coastal programs in California, Louisiana, Maine, Rhode Island and South Carolina

Evaluation Findings

There were relatively few findings and no apparent themes on coastal dependent uses and community development. Nonetheless, multiple evaluations discussed addressing coastal dependent uses via policies, regulations, permitting and support of working groups on coastal dependent use issues. For example, in Maine, where recreational boating and rising property values threaten valuable coastal-dependent industries such as fishing and marine trades, the Maine Coastal Program (MCP) collaborated with municipalities and other parties to preserve and enhance Maine's working waterfronts. The MCP joined forces with a host of other state agencies, organizations, and businesses to form the Maine Working Waterfront Coalition, whose agenda includes public policy initiatives, education, investment and research. MCP supports the coalition with technical support, workshops, web resources and guidance on funding opportunities related to working waterfronts.

Coastal programs are also supporting redevelopment of underutilized or deteriorating waterfront areas through the use of SAMPs and through flexibility with waterfront permit applicants.

Coastal Habitat

The nation's coastal zone is home to a great variety of natural habitats that provide many economic and ecological benefits. Reserves permanently protect and actively manage some of the nation's most pristine and regionally representative coastal habitats. Reserves also support ex-

tensive research and monitoring to better understand and predict conditions in these habitats. Coastal programs generally support coastal habitats through permitting, mitigation programs, alignment of local land use plans, and restoration programs. Many programs are charged with regulating activities, such as construction or alteration of land, in and adjacent to coastal habitats. Coastal programs and reserves participate in habitat restoration projects, provide educational materials for the public and other audiences and provide technical assistance to local governments addressing coastal habitat issues.

Evaluation Findings

Evaluation documents contained many findings related to coastal habitat. Two major themes were identified, and two other topics were repeated in multiple findings.

Theme: Assessment, adoption and revision of policy on coastal habitat

Programs with findings related to this theme include coastal programs in American Samoa, Hawaii, Louisiana, Maine, North Carolina and South Carolina

The issue of **assessment, adoption and revision of policy on coastal habitat** was a common topic in evaluations. Within this theme, multiple findings referred specifically to wetlands policies. For example, the Louisiana Coastal Resources Program (LCRP) adopted an interim policy on activities associated with harvesting coastal wetland forests. The logging of coastal wetland forests has become a concern to the state because of its potential impacts on water quality, land loss and wetland restoration projects. In the absence of state legislation on this topic, the LCRP established an interim policy that defines jurisdiction over these logging activities and requires a coastal use permit in certain cases.

Policy on other coastal habitats such as marsh islands, coastal sand dunes and public trust waters were also addressed. The South Carolina Coastal Management Program (SCCMP) assessed the need for standards for developing the state's marsh islands. The program receives requests for permits to develop these often pristine habitats, but current regulations provide little guidance on permitting in these controversial cases. The SCCMP convened a stakeholder group to craft recommendations on the issue and won a competitive grant from NOAA to develop a permitting decision-support tool.

Several findings also noted the establishment of stakeholder groups to achieve consensus on policy adoption or change.

Theme: Planning for and implementing coastal restoration

Programs with findings related to this theme include coastal programs in California, Louisiana and Maine, as well as the Elkhorn Slough, Hudson River, Rookery Bay and Tijuana River reserves

Planning for and implementing coastal restoration was another common theme. Activity in this theme ranged in scope and scale from participation in developing statewide restoration programs to restoration of specific sites degraded by localized problems. For example, the California State Coastal Conservancy, one of the state's three agencies administering the California Coastal Management Program, is involved in numerous ambitious and innovative habitat restoration projects. The agency provides funding, leadership and coordination of many stakeholders for multiple large-scale coastal restoration projects, including ongoing restoration of the South Bay Salt Ponds, a 15,000-acre project described as one of the biggest of its kind on the West Coast.

Other coastal habitat topics

Programs with findings related to other coastal habitat topics include coastal programs in California, Louisiana and Rhode Island, and the ACE Basin, Elkhorn Slough, Rookery Bay and Tijuana River reserves

Another example is the work of the Rookery Bay NERR Stewardship Program in Florida. The program proactively identifies site and watershed restoration needs and implements projects within and near the Reserve to address these needs. The Tarpon Bay Hydrological Restoration Project, for example, is restoring 360 acres of submerged habitat within the NERR. The program will also conduct monitoring and surveying throughout the project.

Land acquisition and conservation, and management of invasive species also appeared in multiple evaluations. Some findings on land acquisition and conservation in the context of coastal habitat specifically referenced development of Coastal and Estuarine Land Conservation Program (CELCP) plans.

Government Coordination & Decision-Making

Coordination among government agencies and many other stakeholders is essential to effective management and sound decision-making in the coastal zone. Coastal programs coordinate and network the coastal management activities of state and local agencies through technical assistance on coastal issues, financial assistance to address those issues, and in some cases, facilitation of multi-agency and stakeholder groups to achieve specific coastal management goals. Additionally, some coastal programs establish joint or streamlined permitting processes with other agencies, simplifying coastal decision-making processes. Coastal programs also administer the CZMA federal consistency provision, which obligates

federal agencies to be consistent with state policy, thus allowing states to improve coordination of federal agency activities.

Evaluation Findings

Evaluation documents contained many findings related to government coordination and decision-making. Two major themes were identified, and two other topics were repeated in multiple findings.

Theme: Technical support and training opportunities to local governments

Programs with findings related to this theme include coastal programs in California, Louisiana, Maine, North Carolina, Pennsylvania, Rhode Island and South Carolina

Findings regarding the **technical support and training opportunities for local governments** were common throughout the evaluations, including findings referencing the development of local SAMPs. For example, the South Carolina Coastal Management Program was commended for its technical assistance and leadership in the initiation, finalization or update of four SAMPs during the review period. The program participated in workgroups and workshops, coordinated stakeholders and mediated local governmental disputes in establishing these specific, localized plans. The state program also has been successful in lobbying state government for SAMP funding, and some coastal communities in the state have begun to directly request program assistance for developing a SAMP for their areas.

Other findings in this theme highlighted how programs provide training and technical assistance to local governments on a broad variety of topics such as land use

planning, public access, working waterfronts and other coastal issues. For example, the California Coastal Commission provides significant support to local coastal programs and successfully certified a new local program

conducted business in well-attended meetings. The group's 18 specific recommendations, presented in a report released during the review period, will guide coastal management in the state for years to come.

Theme: Engaging Stakeholders to Identify and Address Coastal Management Priorities

Programs with findings related to this theme include coastal programs in American Samoa, California, Hawaii, Maine, North Carolina and South Carolina, as well as in the Rookery Bay and Wells reserves

Other Government Coordination and Decision Making Topics

Programs with findings related to other government coordination and decision making topics include coastal programs in California, Hawaii, Louisiana, Maine and Pennsylvania, and the Rookery Bay Reserve

during the evaluation period. The state program worked with municipal government in Malibu to create a local coastal program for that city. The local program includes "model" water quality and habitat elements for reference by other coastal communities, and the Commission worked with a number of other local programs to update their plans and incorporate new areas of emphasis such as coastal character and nonpoint source pollution.

Another prominent theme relates to how programs **engage stakeholders to identify and address coastal management priorities**. The stakeholder engagement mechanisms used by states vary widely, and the issues that these stakeholder groups address range from development of broad state and territory-wide coastal priorities to management of highly localized problems.

For example, the South Carolina Coastal Management Program convened a high level multi-sector stakeholder group to consider the views and comments of the public and present a report documenting priority coastal issues in the state and strategies for addressing them. The stakeholder group employed a transparent process and

In a more ocean-centric example, the American Samoa Coastal Management Program helped to develop and initially implement a territory-wide Ocean Resources Management Plan. The purpose of the plan is to better integrate and streamline all natural resource management plans within the territory. During development of the plan, the coastal program led successful meetings and workshops among various community leaders, governmental agencies and non-governmental organizations. The program is also critical to implementing the plan, which began at the end of the review period.

Two other interesting government coordination and decision making topics were: the participation in regional or statewide initiatives to further coastal management; and the application of the federal consistency provisions of state coastal management programs. Initiatives to further coastal management ranged in scale and topic from a regional alliance addressing ecosystem health of the entire Gulf of Mexico to a state council protecting the health of its oceans. Federal consistency findings referenced consistency procedures and interagency coordination as well as the use of the consistency provision as an important tool for mitigating specific coastal problems such as shoreline erosion.

For Additional Information

This report was authored by the National Policy and Evaluation Division of NOAA's Office of Ocean & Coastal Resource Management and is the first in its annual series. The report, a summary of the findings by state and category, and copies of each evaluation analyzed in this report can be found on OCRM's web site:

<http://coastalmanagement.noaa.gov/success/evaluation.html>

If you have questions about the content of this report, contact Kim Penn at kim.penn@noaa.gov.

Appendix A:

Section 312 Evaluation Findings Summary Table

Table 1: CZMA Section 312 Evaluation Findings

CZMA PROGRAM	FISCAL YEAR OF SITE VISIT	FINDINGS ISSUED
ACE BASIN NERR (SC)	2006	JULY 2006
AMERICAN SAMOA CMP	2005	AUGUST 2006
CALIFORNIA CMP	2005	MARCH 2006
CHESAPEAKE BAY-MD NERR (MD)	2006	MAY 2006
ELKHORN SLOUGH NERR (CA)	2005	MARCH 2006
HAWAII CMP	2004	OCTOBER 2005
HUDSON RIVER NERR (NY)	2004	NOVEMBER 2005
KACHEMAK BAY NERR (AK)	2006	AUGUST 2006
LOUISIANA CMP	2005	OCTOBER 2005
MAINE CMP (AND WELLS NERR (ME))	2004	DECEMBER 2005
NORTH CAROLINA CMP	2006	AUGUST 2006
NORTH INLET/WINYAH BAY NERR (SC)	2005	JULY 2006
PENNSYLVANIA CMP	2005	MARCH 2006
PUERTO RICO CMP	2005	AUGUST 2006
ROOKERY BAY NERR (FL)	2005	JUNE 2006
SAPELO ISLAND NERR (GA)	2005	APRIL 2006
SOUTH CAROLINA CMP	2004	DECEMBER 2005
TIJUANA RIVER NERR (CA)	2005	AUGUST 2006
WELLS NERR (ME) (AND MAINE CMP)	2004	DECEMBER 2005

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