From Pilot Phase to Full Implementation: Moving Forward with the NCMPMS

Introduction

This report summarizes the results of the 2004 National Coastal Management Performance Measurement System (NCMPMS) pilot phase during which seven coastal management programs tried out draft performance indicators in seven categories: coastal habitats, coastal water quality, public access, coastal hazards, coastal community development, coastal dependent uses, and government coordination and decision-making. The report lists the suite of contextual and performance indicators that resulted from the pilot wrap-up meeting in January 2005. These indicators will be implemented by the National Coastal Management Program (NCMP) in FY 2005, according to the phased implementation plan detailed near the end of the report.

Background

OCRM has been working to develop indicators of the effectiveness of the Coastal Zone Management Act (CZMA) at the national level, as reflected by the performance of coastal management programs and estuarine reserves in progressing toward the goals of the Act. In 2002, the H. John Heinz Center developed a framework for the NCMPMS, which included six categories based on CZMA Section 303 objectives, to guide the development of performance indicators for the coastal management programs. In 2003, a federal-state workgroup composed of representatives from NOAA's Office of Ocean and Coastal Resource Management (OCRM) and eight coastal management programs developed a draft list of performance indicators based on the Heinz Center categories. In 2004, seven coastal management programs volunteered to try out the draft indicators to determine the usefulness and feasibility of each indicator. This report summarizes the lessons learned from the 2004 pilot phase, and presents the narrowed performance indicator list as discussed at the wrap-up meeting, which was held in Silver Spring from January 10-12, 2005.

When fully implemented, the system will allow us to track the effectiveness of NCMP efforts, meeting the requests set forth by the Congress and the Office of Management and Budget. We have seen an increased emphasis on quantifying program effectiveness in the form of performance measures (CZMA programs received a "Results Not Demonstrated" rating in OMB's Program Assessment Rating Tool (PART) last year). But the benefits gained from a national performance management system go far beyond tracking a series of indicators. Through the process, the NCMP will gain a greater understanding of coastal resources and coastal management strategies as well as improved communication of the role of NCMP to interested audiences.

Overview

Benefits of NCMPMS

- Improved communication of the national CZMA story to various audiences, including improved understanding and visibility within NOAA, OMB, and Congress.
- Improved understanding of CZM program accomplishments and needs at the national level to assist OCRM shaping national program priorities.
- Improved ability by OCRM to promote information exchange between states.

Guiding principles of NCMPMS

- NCMPMS indicators should represent the primary facets of CZM programs across all states to reflect the value of the national CZMA program.
- NCMPMS indicators should reflect the niche of CZM programs on issues that are not the sole responsibility of the programs.

- All NCMPMS indicators may not be applicable to all CZM programs due to differing program structures and/or coastal resources, but a set of simple measures that can be aggregated nationally need to be identified.
- NCMPMS indicators will not be used to rank or score CZM programs. Instead, they will be used as a one tool in the broad range of information used in assessing program progress.
- NCMPMS indicators should be populated using existing data if possible. If new data is needed, CZM programs will work with OCRM to determine the most cost-effective collection methodology.
- NCMPMS indicators will be integrated as much as possible with existing activities including 309 assessments, 312 evaluations, and performance reporting.
- Current NCMPMS indicators should be recognized as a starting place. Data collection needs to start now since it will take time to build baseline information before trends can be observed. Indicators will surely evolve as we learn from them, and the national indicators will thus need to be reassessed for usefulness and feasibility periodically.
- In the future, the national program should focus on developing measurable objectives with specific targets to assess progress. This will make indicator information more valuable to the program in evaluating progress on the national scale. Measurable objectives will also help to communicate more clearly the role and intended direction of the program.

Audience for NCMPMS

- Congress FY 2003 Appropriations Conference Report (Report 107-278) directed NOAA to "begin
 designing and implementing performance measures to validate the continuation of the Coastal Zone
 Management program."
- OMB Program Assessment Rating Tool (PART) assessment found that "The CZMP and NERRS lack both long-term and annual performance measures. As a result, program effectiveness cannot be demonstrated." In response, OMB made the following recommendation: "The CZMP and NERRS will work to complete development of outcome oriented performance measures."
- Coastal states Desire for increased information on their coastal resources and management issues to improve communication with constituents and decision-makers.

Process Summary

2004 Pilot Phase

The seven coastal management programs were asked to try out each of the performance indicators for the specific indicator categories they chose, as well as a select set of contextual indicators that need to be collected at the state level. The pilot states are delineated according to the indicator categories below:

Coastal Habitats – CNMI, VA, WA, and WI

Coastal Water Quality - CNMI, ME, and SC

Public Access - CNMI, FL, ME, SC, VA, and WI

Coastal Hazards - CNMI, FL, ME, WA, and WI

Coastal Community Development – CNMI, FL

Coastal Dependent Uses – CNMI, FL

Government Coordination and Decision-Making - CNMI, SC, and VA

Over the course of eight months in 2004, pilot states determined sources and quality of data, collected data from existing sources, noted data difficulties and further indicator refinement needs, estimated costs per indicator, and evaluated the relevance and feasibility of the indicators. The pilot phase was completed in December 2004, when the pilot programs provided their results to OCRM for analysis.

2005 Pilot Wrap-Up Meeting

Representatives from five of the seven coastal management programs that participated in the NCMPMS pilot phase met with staff from the Office of Ocean and Coastal Resource Management (OCRM). Alaska, who served in an advisory position during the pilot, also participated in the meeting. Primary outcomes included:

- Narrowed list of indicators
- Ideas on how to collect and manage indicator information
- Ideas on how to use indicator information for communication and management
- Ideas on next steps for implementation

In preparation for the January 2005 wrap-up meeting, OCRM compiled the data and notes across the pilot states for each indicator. Using the evaluation results from the pilots, OCRM categorized each indicator as "good" or "not so good." With the recognition that the primary purpose of the indicators was to improve communication about the effectiveness of coastal management programs, OCRM drafted a mock-up of a report to Congress to guide discussions of 1) what types of indicators would be needed to actually tell a complete story, and 2) how indicator information and supporting text might be presented. Using the report outline, an indicator framework was created by OCRM to guide indicator discussions at the wrap-up meeting.

At the wrap-up meeting, OCRM and the pilot representatives discussed both the contextual and performance indicators using the indicator framework. Indicators were kept, deleted, or modified through consensus, and in some cases, additional indicators were added where necessary. Primary guiding principles of the indicator discussion included the needs to:

- 1. Better articulate the CZMA niche in moving toward each of the goals (with the recognition that many other agencies work toward similar goals), and align performance indicators to highlight the CZMA role.
- 2. Tie performance measures to what attained/accomplished using CZMA federal and state matching funds.
- 3. Select cost effective indicators that are likely to have data available in most states but that still reflect the important aspects of the national program.

Final Performance Indicators

Note: For full list of both contextual and performance indicators, see Appendix C.

Note: All performance indicators will be collect by the State, except those denoted by an (N), which will be collected by NOAA.

The pilot participants suggested that the performance indicators should reflect only results funded by CZMA federal or state-match funds. This design would thus limit the purpose of the NCMPMS to quantifying and qualifying the national benefits of federal and state match investments in the CZMA. For some indicators or for some programs, however, indicator results limited solely to CZMA funds will not capture the full impact of the federally-approved CZM programs. To capture both results based on activities of the approved program and results based solely on CZMA funds, OCRM would like to collect data for both sets of results for some performance indicators.

Key

(CZ\$) – Report data if project funded at least partially by CZMA federal or state-match funds

(AP) – Report data if project not directly funded with federal or state CZM \$ but conducted under authorities contained in the federally approved CMP

(CZ\$/AP) – Report data for both CZ\$ and AP, as two separate numbers

Performance Measures

Note: All performance indicators will be collect by the State, except those denoted by an (N).

¹ CFR§ 923.47 states that "This entity [state lead agency] must have the administrative capability to monitor and evaluate the management of the State's coastal resources by the various agencies and/or local governments with specified responsibilities under the management program (irrespective of whether such entities receive section 306 funds); to make periodic reports to the Office of Ocean and Coastal Resource Management…regarding the performance of all agencies involved in the program."

Public Access

- Number of CZMA dollars (federal and state match) spent on activities that provide or enhance public access to the coast
- Number of dollars leveraged by CZMA funds for activities that provide or enhance public access to the coast
- Number of approved CZM programs that have a process to periodically assess the public demand for increased and/or improved public access sites within the coastal zone (CZ\$/AP)
- Number new sites that provide public access to the coast, by category (CZ\$/AP)
 - a. beach/shoreline access
 - b. recreational boat access
 - c. other natural/cultural resource access
- Number of existing public access sites that have been enhanced, by category (CZ\$/AP)
- Number of sites where public access is protected or maintained through permitting, conservation easements, or other CZM activities, by category (CZ\$/AP)
- Percent of public that feel they have adequate access to the coast for recreation purposes (S or N)
- Percent change in coastal sites open for public access (N)

Coastal Habitat

- Number of CZMA dollars (federal and state match) spent on activities that protect natural habitats within the coastal zone
- Number of dollars leveraged by CZMA funds for activities that protect natural habitats within the coastal zone
- Number of approved CZM programs that have habitat restoration plans, by category (CZ\$/AP)
 - a. tidal wetlands, mangroves
 - b. non-tidal wetlands
 - c. beach/shoreline
 - d. dune
 - e. riparian areas
 - f. coral reefs
 - g. submerged habitats/lands, SAV
- Number of approved CZM programs that have priority land conservation needs identified in an approved Coastal and Estuarine Land Conservation Program (CELCP) plans (N)
- Number of permits issued that directly disturb coastal habitats of particular significance/priority (CZ\$/AP)
- Percent change in acres of coastal habitats of particular significance/priority directly disturbed by permit activities, by category (CZ\$/AP)
- Percent change in acres of coastal habitats of particular significance/priority created, restored or protected through a mitigation program, by category (CZ\$/AP)
- Number of acres of coastal habitats of particular significance/priority restored or created through non-mitigation activities (CZ\$/AP)
- Number of acres of coastal habitats of particular significance/priority protected through acquisition or easement (CZ\$/AP)
- Number of acres protected nationally through CELCP (N)

Water Quality

- Number of CZMA dollars (federal and state match) spent on activities that manage coastal development to improve, safeguard, and restore the quality of coastal waters
- Percent of total federal and state dollars spent on coastal water quality that is attributable to CZMA funds (N)
- Number of dollars leveraged by CZMA funds for activities that manage coastal development to improve, safeguard, and restore the quality of coastal waters
- Number of state CZM programs with approved coastal nonpoint pollution control plans (N)

- Number of management measures to address nonpoint pollution approved for implementation through a state's coastal nonpoint program (N)
- Number of approved CZM programs conducting capacity building activities in coastal watersheds, such as demonstration BMPs, clean marina programs, and monitoring programs
- Number of capacity building activities in coastal watersheds to improve, safeguard, and restore the quality of coastal waters, by category (CZ\$)
 - a. training (number of people per training)
 - b. demonstration BMPs
 - c. education initiatives
 - d. clean marina programs (% of marinas participating in program)
 - e. monitoring programs (number of miles monitored)
 - f. permits reviewed for CNP
- Percent of coastal watersheds enhanced through CZM funded capacity-building activities (CZ\$)
- Percent of classified shellfish bed acres listed in the following categories due to water quality concerns (N)
 - a. restricted
 - b. conditional restricted
 - c. prohibited
 - d. unrestricted

Coastal Hazards

- Number of CZMA dollars (federal and state match) spent on activities to manage coastal development to minimize the loss of life and property from coastal hazards
- Number of dollars leveraged by CZMA funds for activities to manage coastal development to minimize the loss of life and property from coastal hazards
- Number of states with setbacks/buffers and other location requirements to address coastal hazards at the state level (CZ\$/AP)
- Number of communities in hazardous coastal areas that have undertaken activities to reduce future damage from hazards (i.e. mitigation activities) (CZ\$/AP)
- Number of educational programs or campaigns to raise public awareness of coastal hazards (CZ\$/AP)
- Number of acres that are protected by setbacks, buffers, or public ownership to direct development away from areas vulnerable to coastal hazards (CZ\$/AP)

Coastal Dependent Uses & Community Development

- Number of CZMA dollars (federal and state match) spent on coastal community planning and development activities
 - a. Portion of above spent on promoting coastal dependent uses
- Number of dollars leveraged by CZMA funds for coastal community planning and development activities
- Number of approved CZM programs that provide financial and/or technical assistance to coastal communities for port and/or waterfront redevelopment (CZ\$/AP)
- Number of approved CZM programs that assist coastal communities to promote growth management (CZ\$/AP)
- Number of approved CZM programs with enforceable policies that place priority on coastal dependent uses in their permitting and planning programs (CZ\$/AP)
- Percent of coastal communities with waterfront areas that have undertaken port and/or waterfront redevelopment projects (CZ\$)
- Percent of coastal communities that are supported by approved CZM programs in developing and implementing local plans that promote growth management (CZ\$/AP)
- Number of coastal communities that have been recognized for growth management efforts through national or state award programs (i.e. Sustainable Community Certification Program, Smart Growth awards, All-America City)

Government Coordination & Decision Making

- Number of CZM programs that support local governments through (CZ\$):
 - a. technical assistance programs (i.e. dedicated staff time)
 - b. financial assistance
- Percent of CZM funds used to support local governments through:
 - a. technical assistance programs (i.e. dedicated staff time)
 - b. financial assistance
- Percent of federal consistency projects submitted that were consistent with state standards, by category
 - A) % of projects meeting state standards as originally proposed
 - a. federal agency activities,
 - b. federal license or permit activities
 - c. projects implemented under OCS plans
 - d. federal financial assistance to state agencies and local governments
 - B) % of projects meeting state standards as a result of consultation and modifications
 - a. federal agency activities,
 - b. federal license or permit activities
 - c. projects implemented under OCS plans
 - d. federal financial assistance to state agencies and local governments
- Number of educational activities (including stewardship events) and training opportunities offered by the CZM program (CZ\$)
- Number of participants in educational activities and training opportunities offered by the CZM program (CZ\$)
- Number of CZMA dollars spent per year on research and tools (including surveys) to improve coastal management decision-making
- Number of approved CZM programs that have adopted streamlined permitting processes (through joint interagency review, general permits, etc.)
- Number of approved CZM programs that have up-to-date program management plans
- Number of approved CZM programs that have program guides to improve public understanding of the program

Implementation Plan

The first NCMPMS triennial report, due to Congress in July 2005, will compile information from the data collected during the 2004 pilot phase. Our goal is to complete data collection for all NCMPMS indicators for a second triennial report to be published in July 2008. OCRM and pilot participants discussed several options for implementation at the meeting, knowing that a viable option had to have an endpoint of all programs reporting on all indicators by 2008. The final recommendation from the pilot participants was to try to determine priority indicators that reflect the main facets of CZM programs for initial implementation.

In order to ease into implementation, the group determined that OCRM should provide the following:

- 1. Clear articulation of the purpose of each indicator and definitions for terms within each indicator to prevent misinterpretation.
- 2. Guidance on data reporting format and mechanism.
- 3. Clear implementation timeline.
- 4. Training for the performance measurement staff contact for each program, perhaps through regional meetings, on the performance indicators and reporting format.
- 5. Learning network composed of OCRM staff and coastal management program contacts to assist information exchange and problem solving among folks working on similar issues.
- 6. Assistance in soliciting data acquisition and management support from other NOAA offices.

After the pilot meeting, OCRM cleaned up the indicators, cross-referenced with the CZMA Section 303 language to ensure strong linkages between goals and indicators, and tried to identify priority indicators as recommended by the pilot participants. However, no specific indicators rose to the top as more important than others. In addition, OCRM noted advantages to all programs working on all indicators in one or two categories at the same time. These advantaged included:

- 1. Working on all indicators in one or two categories in the first year would allow us to tell a complete story at the end of that year. We would be able to demonstrate results on the national level sooner, and communicate with Congress and OMB in the interim before we have complete data on all indicators.
- 2. With all programs working on the same set of indicators, OCRM can focus its energy on guidance and problem-solving for that indicator set and all programs can share information.

OCRM proposes a phased implementation plan in which all programs would work on two new indicator categories per year for three years. For each phase, it is envisioned that CZM programs will identify data sources, establish a standard process to collect indicator data, and report indicator data annually. In looking at the performance indicators, OCRM considered which two focus areas would be most appropriate for year one based how difficult data collection may be, what areas are priorities for at least majority of the programs, and what areas will create successful stories. The proposed implementation schedule is as follows:

Year 1 – Public access; Government coordination & decision-making

Year 2 – Coastal habitats; Coastal water quality

Year 3 – Coastal hazards; Coastal dependent uses & community development

Several caveats for reporting indicator information include:

- All indicators may not be applicable to all CZM programs due to differing program structures and/or coastal resources, but we need a set of simple measures that we can aggregate nationally. For example, the NCMPMS includes indicators to track progress in managing coral reef habitat, which only occurs in a few coastal states and territories. For those indicators not applicable to your program, you will be able to reply "n/a." However, programs are encouraged to develop and report similar applicable indicators. This will both allow OCRM to both communicate your story and to inform the direction of how the national indicators evolve.
- CZM programs should look for existing data to populate the indicators. If the data is not currently available, OCRM will work with you to determine what data is needed and a process for attaining it. We recognize that if data is not currently available for certain indicators, it will take time to start collecting new data.
- The national indicators may not provide adequate information for management of your program activities at the state level. If the national indicators do not provide adequate information, or the necessary type of information, OCRM encourages and will support your program in developing and implementing performance indicators specific to your program.

Communication Ideas

Report to Congress in July 2005

The Report to Congress in July will provide an update on the progress of the NCMPMS, including lessons learned from the pilot phase, a mock-up of a report for one or more categories using data from the pilot phase, and an outline of the implementation plan. This report will show Congress that we are working hard to improve our accountability, as well as what they can expect in the future as justification for continued funding of the national program.

Primary Messages for NCMPMS Communication Materials (to Congress and OMB)

- You get a lot for what you pay for the taxpayers' money is well invested.
- There is a specific niche that the national CZM program fills. It addresses gaps that other federal programs do not address.

- The nation's coasts are better because of this program, as manifest through results shown in indicator trends.
- If this program received more funds, then greater, or additional, results could be achieved.

Conclusion

Overall, the participants at the pilot wrap-up meeting felt it was necessary to begin implementation of the NCMPMS as soon as possible. Delay in moving forward on the national indicators could increase the risk of losing CZMA funding. In addition, some states are interested in moving forward on their own performance measures and are waiting for the national indicators in order to reduce a duplication of effort. However, participants agreed that this was a substantial task, and implementation should be phased in over time, with much support from OCRM.

Appendix A: Meeting Attendees

State CZM Attendees:

Randy Bates (AK)
Julie Bixby (VA)
Jasmin Raffington (FL)
Mike Friis (WI)
Blair Gollibur (ME)
Kathleen Leyden (ME)
Ramona Madhosingh (FL)
Steve Moore (SC)
Alberto Vargas (WI)

Other Attendees:

David Keeley (The Keeley Group) Jena Carter (Coastal States Organization)

Appendix B: CZM Programs Participating in Pilot Phase

Pilot States:

Commonwealth of Northern Mariana Islands Florida Maine South Carolina Virginia Washington Wisconsin

Advisory States:

Alaska New York

Appendix C: List of Contextual and Performance Indicators

(N) – NOAA collected, from national datasets

(S) – State collected

(CZ\$) – Report data if project funded at least partially by CZMA federal or state-match funds

(AP) – Report data if project not directly funded with federal or state CZM \$ but conducted under authorities contained in the federally approved CMP

(CZ\$/AP) – Report data for both CZ\$ and AP, as two separate numbers

Focus area: PUBLIC ACCESS

CZMA 303 Objective: Provide for public access to the coasts for recreation purposes.

CONTEXTUAL MEASURES

Importance

Will be described using existing national statistics and/or case studies.

Pressure

- Percent increase in population growth of coastal counties (N)
- Percent increase in number of tourists/tourism dollars spent in coastal counties (N)
- Percent land use change (N)

Status

For all categories, total represents Federal, State, local and non-profit holdings

- Percent of acres in coastal zone open for public use (S)
- Percent of total miles of beach in coastal zone open for public access (S)
- Number of coastal sites open for public access, by category (S)

PERFORMANCE MEASURES

Funding

- Number of CZMA dollars (federal and state match) spent on activities that provide or enhance public access to the coast (S)
- Number of dollars leveraged for coastal access activities using CZMA funds (S)

Processes

• Number of approved CZM programs that have a process to periodically assess the public demand for increased and/or improved public access sites within the coastal zone (S, CZ\$/AP)

Outputs

- Number new sites that provide public access to the coast, by category (S, CZ\$/AP)
 - a. beach/shoreline access
 - b. recreational boat access
 - c. other natural/cultural resource access
- Number of existing public access sites that have been enhanced, by category (S, CZ\$/AP)
- Number of sites where public access is protected or maintained through permitting, conservation easements, or other CZM activities, by category (S, CZ\$/AP)

Outcomes

- Percent of public that feel they have adequate access to the coast for recreation purposes (S or N)
- Percent change in coastal sites open for public access (N)

Impacts

Will be described in terms of case studies.

Focus area: <u>COASTAL HABITAT</u>

CZMA 303 Objective: (2)(A) the protection of natural resources, including wetlands, floodplains, estuaries, beaches, dunes, barrier islands, coral reefs, and fish and wildlife and their habitat, within the coastal zone.

CONTEXTUAL MEASURES

Importance

Will be described using existing national statistics and/or case studies.

Pressure

- Percent land use change (N)
- Percent increase in population growth of coastal counties (N)

Status

- Number of states that have mapped inventories of coastal habitats of particular significance/priority based on best available data, by category (S)
- Number of acres of coastal habitat of particular significance/priority from mapped inventories, by category (S)

PERFORMANCE MEASURES

Funding

- Number of CZMA dollars (federal and state match) spent on activities that protect natural habitats within the coastal zone (S)
- Number of dollars leveraged by CZMA funds for activities that protect natural habitats within the coastal zone (S)

Processes

- Number of approved CZM programs that have habitat restoration plans, by category (S, CZ\$/AP)
 - a. tidal wetlands, mangroves
 - b. non-tidal wetlands
 - c. beach/shoreline
 - d. dune
 - e. riparian areas
 - f. coral reefs
 - g. submerged habitats/lands, SAV
- Number of approved CZM programs that have priority land conservation needs identified in an approved Coastal and Estuarine Land Conservation Program (CELCP) plans (N)

Outputs

Number of permits issued that directly disturb coastal habitats of particular significance/priority (S, CZ\$/AP)

Outcomes

- Percent change in acres of coastal habitats of particular significance/priority directly disturbed by permit activities, by category (S, CZ\$/AP)
- Percent change in acres of coastal habitats of particular significance/priority created, restored or protected through a mitigation program, by category (S, CZ\$/AP)
- Number of acres of coastal habitats of particular significance/priority restored or created through non-mitigation activities (S, CZ\$/AP)
- Number of acres of coastal habitats of particular significance/priority protected through acquisition or easement (S, CZ\$/AP)
- Number of acres protected nationally through CELCP (N)

Impacts

Focus area: WATER QUALITY

CZMA 303 Objective: The management of coastal development to improve, safeguard, and restore the quality of coastal waters, and to protect natural resources and existing uses of those waters.

CONTEXTUAL MEASURES

Importance

Will be described using existing national statistics and/or case studies focusing on coastal nonpoint source pollution.

Pressure

- Percent change in impervious surfaces (N)
- Percent land use change (N)
- Percent population growth (N)

Status

- Percent of waterbodies impaired (N)
- Percent of impaired waterbodies where nonpoint pollution is the primary source of contamination in coastal waters (S, N)
- Total federal and state dollars spent on coastal water quality activities (N)

PERFORMANCE MEASURES

Funding

- Number of CZMA dollars (federal and state match) spent on activities that manage coastal development to improve, safeguard, and restore the quality of coastal waters (S)
- Percent of total federal and state dollars spent on coastal water quality that is attributable to CZMA funds (N)
- Number of dollars leveraged by CZMA funds for activities that manage coastal development to improve, safeguard, and restore the quality of coastal waters (S)

Processes

- Number of state CZM programs with approved coastal nonpoint pollution control plans (N)
- Number of management measures to address nonpoint pollution approved for implementation through a state's coastal nonpoint program (N)
- Number of approved CZM programs conducting capacity building activities in coastal watersheds, such as demonstration BMPs, clean marina programs, and monitoring programs (S)

Outputs

- Number of capacity building activities in coastal watersheds to improve, safeguard, and restore the quality of coastal waters, by category (S, CZ\$)
 - a. training (number of people per training)
 - b. demonstration BMPs
 - c. education initiatives
 - d. clean marina programs (% of marinas participating in program)
 - e. monitoring programs (number of miles monitored)
 - f. permits reviewed for CNP

Outcomes

- Percent of coastal watersheds enhanced through CZM funded capacity-building activities (S, CZ\$)
- Percent of classified shellfish bed acres listed in the following categories due to water quality concerns (N)
 - a. restricted
 - b. conditional restricted
 - c. prohibited
 - d. unrestricted

Impacts

Focus area: <u>COASTAL HAZARDS</u>

CZMA 303 Objective: "The management of coastal development to minimize the loss of life and property caused by improper development, storm surge, geological hazard, erosion-prone areas and in areas likely to be affected by or vulnerable to sea level rise, land subsidence, and saltwater intrusion, and by the destruction of natural protective features such as beaches, dune, wetlands, and barrier islands."

CONTEXTUAL MEASURES

<u>Importance</u>

- Number of coastal hazard events per year (N)
- Number of dollars of damage from coastal natural hazards per year (N)
- Number of coastal disaster declarations per year in requiring state or federal financial assistance (N)
- Number of states receiving state or federal financial assistance for coastal disaster declarations (N)
- Number of dollars of coastal hazard assistance per year, paid by state and federal agencies (N)

Pressure

- Number of people in Category 1 storm surge area (N)
- Number of acres of residential and commercial land uses within coastal flooding and erosion areas (N)

<u>Status</u>

- Number of states that have mapped inventories of coastal areas affected by natural hazards based on best available data (by category)
 - a. flooding (N)
 - b. storm surge (N)
 - c. geological hazards (including tsunamis) (S)
 - d. shoreline erosion (including bluff and dune erosion) (S)
 - e. sea level rise (S)
 - f. lake level fluctuation (S)
 - g. land subsidence (S)

PERFORMANCE MEASURES

Funding

- Number of CZMA dollars (federal and state match) spent on activities to manage coastal development to minimize the loss of life and property from coastal hazards (S)
- Number of dollars leveraged by CZMA funds for activities to manage coastal development to minimize the loss of life and property from coastal hazards (S)

Processes

• Number of states (or approved CZM programs) with setbacks/buffers and other location requirements to address coastal hazards at the state level (S, CZ\$/AP)

Outputs

- Number of communities in hazardous coastal areas that have undertaken activities to reduce future damage from hazards (i.e. mitigation activities) (S, CZ\$/AP)
- Number of educational programs or campaigns to raise public awareness of coastal hazards (S, CZ\$/AP)

<u>Outcomes</u>

• Number of acres that are protected by setbacks, buffers, or public ownership to direct development away from areas vulnerable to coastal hazards (S, CZ\$/AP)

Impacts

Focus area: COASTAL DEPENDENT USES & COMMUNITY DEVELOPMENT

CZMA 303 Objective: "Priority consideration being given to coastal dependent uses and orderly processes for siting major facilities related to national defense, energy, fisheries development, recreation, ports and transportation, and the location, to the maximum extent practicable, of new commercial and industrial developments in or adjacent to areas where such development already exists... Assistance in the redevelopment of deteriorating urban waterfronts and ports, and sensitive preservation and restoration of historic, cultural, and aesthetic coastal features."

CONTEXTUAL MEASURES

Importance

- Percent of national employment in or attributable to coastal counties (N)
- Percent of the national economy attributable to coastal counties (N)

Pressure

- Percent increase in population growth of coastal counties (N)
- Number of people per square mile in coastal counties, in comparison to inland counties (N)

Status

- Percent land use change (N)
- Number of coastal communities with waterfront areas (S)
- Percent of coastal communities with waterfronts that have identified priority port and/or waterfront areas in need of redevelopment (S)

PERFORMANCE MEASURES

Funding

- Number of CZMA dollars (federal and state match) spent on coastal community planning and development activities (S)
 - a. Portion of above spent on promoting coastal dependent uses
- Number of dollars leveraged for coastal community planning and development activities using CZMA funds (S)

Processes

- Number of approved CZM programs that provide financial and/or technical assistance to coastal communities for port and/or waterfront redevelopment (S, CZ\$/AP)
- Number of approved CZM programs that assist coastal communities to promote growth management (S, CZ\$/AP)
- Number of approved CZM programs with enforceable policies that place priority on coastal dependent uses in their permitting and planning programs (S, CZ\$/AP)

Outputs

- Percent of coastal communities with waterfront areas that have undertaken port and/or waterfront redevelopment projects (S, CZ\$)
- Percent of coastal communities that are supported by approved CZM programs in developing and implementing local plans that promote growth management (S, CZ\$/AP)

Outcomes

• Number of coastal communities that have been recognized for growth management efforts through national or state award programs (i.e. Sustainable Community Certification Program, Smart Growth awards, All-America City) (S)

Impacts

Focus area: GOVERNMENT COORDINATION & DECISION-MAKING

CZMA 303 Objective: "...programs should at least provide for...(G) coordination and simplification of procedures in order to ensure expedited governmental decision making for the management of coastal resources; (H) continued consultation and coordination with, and the giving of adequate consideration to the views, affected Federal agencies; (I) the giving of timely and effective notification of, and opportunities for public and local government participation in, coastal management decision making; (J) assistance to support comprehensive planning, conservation, and management for living marine resources...and improved coordination between State and Federal coastal zone management agencies and State and wildlife agencies; and, (K) the study and development, in any case in which the Secretary considers it to be appropriate, of plans for addressing the adverse effects upon the coastal zone of land subsidence and of sea level rise."

- Number of CZM programs that support local governments through (S, CZ\$):
 - a. technical assistance programs (i.e. dedicated staff time)
 - b. financial assistance
- Percent of CZM funds used to support local governments through (S):
 - a. technical assistance programs (i.e. dedicated staff time)
 - b. financial assistance
- Percent of federal consistency projects submitted that were consistent with state standards, by category (S)
 - A) % of projects meeting state standards as originally proposed
 - a. federal agency activities,
 - b. federal license or permit activities
 - c. projects implemented under OCS plans
 - d. federal financial assistance to state agencies and local governments
 - B) % of projects meeting state standards as a result of consultation and modifications
 - a. federal agency activities,
 - b. federal license or permit activities
 - c. projects implemented under OCS plans
 - d. federal financial assistance to state agencies and local governments
- Number of educational activities (including stewardship events) and training opportunities offered by the CZM program (S, CZ\$)
- Number of participants in educational activities and training opportunities offered by the CZM program (S, CZ\$)
- Number of CZMA dollars spent per year on research and tools (including surveys) to improve coastal management decision-making (S)
- Number of approved CZM programs that have adopted streamlined permitting processes (through joint interagency review, general permits, etc.) (S)
- Number of approved CZM programs that have up-to-date program management plans (S)
- Number of approved CZM programs that have program guides to improve public understanding of the program (S)