

# CRS Report for Congress

## Coastal Zone Management: Background and Reauthorization Issues

January 28, 2008

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Prepared for Members and  
Committees of Congress

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## Summary

The Coastal Zone Management Act (CZMA) was first enacted in 1972, at a time when coordinated land use planning was generally supported in Congress. Planning was seen as central to protecting natural resources while fostering wise development in the coastal zone. Since 1972, pressures for both preservation and development have grown more intense as people continue to migrate to coastal areas to take advantage of economic opportunities, to retire, and to pursue recreational interests; as economic activities continue to concentrate in coastal locations; and as natural resources are threatened by the magnitude and location of these changes. The CZMA recognizes that many of these pressures are not compatible, and also that states (and in some states, local government) have the lead responsibility for planning and managing their coastal zones. The CZMA authorizes grants to states to develop and implement coastal management programs to address these pressures. The concepts behind the program combined with the modest grants have attracted 34 of the 35 eligible states and territories to participate. Although authorization for appropriations expired after FY1999, Congress continues to fund this program.

Congress has reauthorized or amended this act eight times since 1972, responding to changing issues combined with a continuing interest in assisting states to manage their coastal resources. Participants also have adjusted their programs to reflect their changing priorities. Since 1999, when the most recent reauthorization expired, Congress repeatedly has considered, but not enacted, reauthorization language. Reauthorization has proven difficult, in part, because the numerous stakeholders (broadly consisting of three groups: participants; use and development interests; and environmental interests) have divergent views about possible changes to the current approach and about which topics should be emphasized or eliminated from the purview of coastal management. Since the law expired in 1999, the context in which reauthorization legislation could be considered continues to change. These changes include events (such as Hurricane Katrina in 2005), new information (such as knowledge about places in coastal waters where biological activity ceases during some seasons, called “dead zones”), trends (such as rising energy prices), and implementation of other federal programs addressing coastal topics. Congress is likely to consider several topics in reauthorization legislation, including:

- overall **program funding**, and allocations among program elements;
- **coastal vulnerability** to sea level rise, trends in natural hazards, and exposure of shorefront development generally;
- roles that program participants might play in **ocean management**, especially offshore energy development;
- effectiveness of efforts to address nonpoint source water pollution and other **environmental quality topics** in coastal waters;
- **health of natural systems**, including coastal ecosystems, estuaries, and wetlands; and
- **program performance measures** that track accomplishments and how coastal zone management programs contribute to the overall health and vitality of the coastal zone.

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# Coastal Zone Management: Background and Reauthorization Issues

## Introduction

Economic activity and people are increasingly concentrated in the coastal zone, as are important and often fragile natural resources. One way to address the resulting conflicts is through coordinated planning that attempts to foster wise development while protecting natural resources. In recent decades, pressures for both preservation and development have grown more intense at many locations, as people continue to migrate to coastal areas to take advantage of economic opportunities, to retire, and to pursue recreational interests; as economic activities continue to concentrate in coastal locations; and as coastal natural resources, such as estuaries, beach systems, and wetlands, are threatened by the magnitude and location of these changes. Views about how the coastal zone might be managed are also shaped by recent events, such as Hurricane Katrina and other natural disasters; by new information, such as knowledge about the so-called “dead zones” where biological activity ceases during a portion of the year; and by current trends, such as the health of the economy and rising energy prices; as well as by views about the appropriate role for the federal government in land use planning, including uses and activities on non-federal lands.

The Coastal Zone Management Act (CZMA, P.L. 92-532, 16 U.S.C. 1451-1464) was enacted in 1972, at a time when Congress was considering options to respond to widespread public concern about estuarine and oceanfront degradation. At the same time, it was also considering general national land use planning legislation to foster state (and local) planning capacity and coordination; bills were reported by Senate committees in 1970 and 1972 and passed the Senate in 1972 (S. 632 in the 92<sup>nd</sup> Congress), but not enacted. Many in Congress concluded that the challenges that national land use planning legislation was intended to address were most concentrated in coastal areas and needed immediate attention. The result was the CZMA, enacted with a promise by some congressional leaders to continue to pursue national land use legislation. These leaders stated that they intended to fold coastal management into this more encompassing legislation at a later date. Comprehensive land use planning legislation was never enacted, and Congress has not ventured beyond the CZMA with this approach to resource planning and management. Nevertheless, since 1972, many of the trends that called congressional attention to a need for this legislation have continued to grow.

**Coastal Population.** Central to many of these trends is increasing coastal population. The number of people in coastal counties continues to grow, increasing by 33 million between 1980 and 2008. About 53% of the country’s population is estimated to live in the 673 coastal counties, which is about 21% of all counties. Other measures of concentration are that 23 of the 25 most densely populated counties in 2003 were coastal, and about one-quarter of all seasonal homes are found

in coastal Florida.<sup>1</sup> Using coastal counties to measure the concentration of people and development greatly understates the degree of concentration, because in many counties, both are most heavily centered along the immediate coastline, which is the preferred site for high-value housing and the location of many service and recreational businesses. A significant byproduct of this pattern is that shoreline development has modified beach systems and other coastal landscapes. In some more rural coastal counties, a very high portion of the county tax base is often on the immediate coast. Pressures on natural resources caused by the degradation that can accompany this development pattern have been documented repeatedly.

Looking at coastal population at the scale of states, almost 82% of the country's population lived in coastal states and territories, according to the 2000 census. In many of these, however, only a portion of the state is in the coastal zone, especially in larger states that extend far inland. Total state population and coastal zone population, as defined by each state that participates in the federal coastal program, are shown for each listed participant in the third column of the table in **Appendix C**.<sup>2</sup> According to the Office of Ocean and Coastal Resources Management (OCRM) in the National Oceanic and Atmospheric Administration (NOAA), an agency of the Department of Commerce where the federal coastal program is administered, about 11% of the area of the country is in these defined coastal zone areas. However, these coastal areas are home to more than 41% of the country's population. That also means that more than twice as many people live in coastal states but outside the coastal zone (about 40% of the total) as live in non-coastal states (about 18% of the total).

**Coastal Environmental Threats.** In the 35 years since the CZMA was enacted, some of the trends leading to its enactment have been slowed or reversed, but many have not, and new issues have appeared. For example, development continues in coastal areas, but in many locations, more recent development includes environmental considerations, from protecting dunes and beaches to treating water, that were not a part of coastal developments more than 30 years ago. One example of a new issue is the growing awareness that sea levels will continue to rise, according to most experts, intensifying the exposure of property and people to hazardous conditions associated with major storms. Therefore, if the CZMA had never been enacted and one were to consider enacting a new CZMA today, it might take a different form and be focused on a somewhat different collection of coastal topics.

**CZMA Incentives.** The CZMA creates a structure where the 35 eligible states and territories (participants) can choose to apply for relatively modest federal grants from the OCRM. These grants can be used to address numerous coastal topics.

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<sup>1</sup> Additional information about coastal population trends can be found in a March 2005 report from NOAA, titled *Population Trends Along the Coastal United States: 1980-2008*.

<sup>2</sup> State definitions of their coastal zones vary widely; from a narrow band (California, for example, is limited to a band 1,000 yards inland from the mean high tide line) to the entire state (Florida, for example). Also, some states use political boundaries while others use distance from the shore. Finally, several states, including Florida and Connecticut, use tiers to distinguish land closer to the coast from other land.

Under the original law, Section 305 provided matching grants for up to three years to help fund initial preparation of coastal management plans.<sup>3</sup> While participation is voluntary, two incentives provided through the CZMA have attracted considerable interest. One incentive is the modest financial assistance in the form of grants under several sections of the law to implement their plans.<sup>4</sup> Participants have developed widely varying programs that emphasize different topics, within the rather general components identified in the law and defined in greater detail in regulation. A second incentive is the federal consistency provision in Section 307, which gives participants leverage with the federal government by requiring that any federal actions in or affecting the coastal zone be consistent with the coastal plan after it has been approved by NOAA. These incentives apparently have had the intended effect, as 34 participants are administering federally approved programs.<sup>5</sup>

## Provisions in the CZMA

A review of the enacted reauthorization legislation, briefly summarized in **Appendix B**, shows that the underlying approaches of the program have changed little, even though the topics addressed through the programs have evolved. As noted above, the approaches have remained voluntary (with the notable exception of the Section 6217 program to address nonpoint source water pollution, discussed below, which was not enacted as an amendment to the CZMA), and participants continue to have wide latitude in what issues they choose to emphasize when implementing their programs.<sup>6</sup> The major provisions in current law are briefly summarized below. **Appendix A** contains a summary of the contents of every provision in the CZMA.

**Provisions in the CZMA.** The basic approaches and procedures that were established in the initial law and in implementing regulations have been retained even though the CZMA has been amended eight times since 1972. These amendments responded to evolutionary changes in national coastal issues. For example, amendments in 1976 and 1978 addressed concerns about the potential environmental and coastal development impacts of accelerated and expanded offshore energy development. Major provisions in today's CZMA, as amended, include the following.<sup>7</sup>

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<sup>3</sup> Section 305 grants are no longer authorized as almost all eligible participants had developed approved programs by 1990.

<sup>4</sup> Federal funding has totaled about \$100 million annually in most recent years, according to data compiled by the Office of Ocean and Coastal Resource Management. **Appendix C** lists the total dollar amounts going to each participant in FY2006 and FY2007.

<sup>5</sup> The eligible state that does not have an approved program is Illinois.

<sup>6</sup> Nonpoint source pollution enters surface and/or groundwater from diffuse or unconfined sources, and typically occurs as a result of precipitation events. Examples might include runoff from impervious surfaces and from land surfaces. In contrast, point source pollution refers to discharges from such facilities as factories and sewage treatment plants.

<sup>7</sup> The act, as amended, is reproduced at [[http://www.coastalmanagement.noaa.gov/czm/czm\\_act.html](http://www.coastalmanagement.noaa.gov/czm/czm_act.html)].

*Section 303* is a declaration of policy. It identifies six purposes of the act, including “to preserve, protect, develop, and where possible, to restore or enhance” resources of the coastal zone; to assist states in implementing management plans for at least 11 listed purposes; to encourage special area management plans to improve predictable decision-making; to encourage intergovernmental cooperation; to encourage intergovernmental sharing of information; and to respond to changing circumstances affecting coastal environments.

*Section 306* authorizes grants to participants to implement approved programs. Programs are required to contain nine specified elements, and the participant must meet numerous specified procedural and substantive requirements. Procedures to be followed when participants modify or amend their programs are specified.

*Section 306A* establishes the Coastal Resources Improvement Program, which provides matching grants to participants to (1) preserve or restore resources that meet certain qualifications; (2) redevelop urban waterfronts; (3) improve access to coastal areas such as beaches; and (4) provide a process to develop aquaculture facilities.

*Section 307* authorizes the federal consistency provisions, which require that each participant be given the opportunity to certify that all federal actions in or affecting its defined coastal zone are consistent with its federally approved coastal management program. It also includes provisions for coordination and cooperation, and authorizes the use of “special area management planning.”

*Section 308* establishes a fund to make loans to (1) address regional issues; (2) initiate demonstration projects; (3) respond to emergencies and disasters; (4) fund awards that recognize excellence (see Section 314); and (5) support the analysis and application of the public trust doctrine.

*Section 309* authorizes coastal zone enhancement grants for nine specified purposes, including (1) protecting and enhancing wetlands; (2) addressing natural hazards; (3) improving coastal access; (4) reducing marine debris; (5) developing procedures to address the secondary effects of coastal development; (6) fostering special area management planning; (7) planning for ocean resources; and (8-9) facilitating energy-related activities and aquaculture facilities.

*Section 315* establishes the National Estuarine Research Reserve System. Sites in this system, nominated by participants, are used as research and education centers. A system goal is to use sites in every coastal biogeographic region for comparative research projects.

In addition to the CZMA, a closely related program, called the Coastal Nonpoint Source Pollution Control Program (CZARA), was enacted in Section 6217 of the Coastal Zone Reauthorization Act amendments of 1990, in the Omnibus Reconciliation Act of 1990 (P.L. 101-508, Title VI, Section 6217, 104 Stat. 1388-314). CZARA is a free-standing law rather than an amendment to the CZMA. It requires CZM participants to develop coastal nonpoint source pollution control programs as part of their coastal management efforts; it identifies program contents, the approval process, and what portion of federal coastal zone and water pollution assistance could be lost for noncompliance.

## Implementing the CZMA

**Federal Funding for Coastal Zone Management.** After participant plans are federally approved, funds from a total of five accounts become available through the CZMA. The Office of Ocean and Coastal Resource Management in NOAA administers these accounts. These accounts include three types of management grants, funds to address nonpoint source pollution, and support for participation in the National Estuarine Research Reserve System. The basic management grant to implement the program is provided under Section 306. Section 306A, added in 1980, provides additional grants to participants who are satisfactorily implementing their programs to address four specific topics, listed above. Section 309, added in its current form in the 1990 amendments, provides grants for nine specified enhancement areas, also listed above, on a competitive basis.

Total funding for these three grant programs was last authorized at \$50.5 million in FY1999. No percentage or dollar amount is specified for the Section 306 or Section 306A grants, and between 10% and 20% of the total appropriated for Section 306 and Section 306A is to be made available for Section 309 grants, up to an annual ceiling of \$10 million. In FY2007, Congress provided \$66 million to implement these programs.

A fourth source of grants was added in 1990 with enactment of the CZARA to more effectively manage nonpoint source water pollution that degrades coastal waters. CZARA was enacted in conjunction with the 1990 CZMA amendments, but is a free-standing law rather than an amendment to the CZMA. It provides implementation and planning grants. In recent years, the Administration has requested and Congress has provided \$10 million annually to implement this program.

The Estuarine Research Reserve System, authorized by Section 315 of the CZMA and currently consisting of 27 units, receives funding for land acquisition and facility construction, and for operations. Operations includes research and education programs and coastal monitoring. Total funding in FY2007 was \$25.5 million, and in many recent years, about 60% of the total has been used for acquisition and construction. All funding for acquisition and construction is earmarked for specific units.

**The Consistency Provisions.** The consistency provisions in Section 307 require that each participant be given the opportunity to certify that all federal actions in or affecting its defined coastal zone be consistent with its federally approved coastal management program. Federal actions include not only construction projects, but also financial assistance and the issuing of federal licenses and permits. Historically, states have concurred with about 95% of the federal actions they have been asked to certify.<sup>8</sup>

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<sup>8</sup> Conversation with federal Office of Ocean and Coastal Resource Management (OCRM) staff, Nov. 14, 2007.

However, when a participant disagrees with the federal agency proposing an action as to whether that action will be consistent with the participant's plan, there is an appeals process. If agreement is not reached during any of the steps in this process, a final determination is made by the Secretary of Commerce. To date, 40 consistency decisions have been subjects of these secretarial determinations, and an additional 61 have been settled or withdrawn after they reach the secretarial level but before a determination is made.<sup>9</sup> Of the 40 decisions, 27 have been made in favor of the participant and 13 in favor of the applicant. The subject of 16 of these appeals has been offshore energy activities, and half of these (8) have been decided in favor of the participant. The most recent decision, filed in late 2002 with a secretarial decision announced in May 2005, was about a proposed natural gas pipeline opposed by the State of Connecticut. In this instance, the Secretary overrode the state determination. Currently, four appeals are pending.

It is widely believed that the existence of the consistency requirement and the uncertainty of the outcome of an appeal have led applicants to negotiate with states and to modify proposed actions early on, thereby reducing the number of appeals. However, there are no data on the number of proposed actions that have been altered because of the consistency process.

**The National Estuarine Research Reserve System.** The National Estuarine Research Reserve System is a network of protected areas nominated and administered by participants. The areas are protected as sites for long-term and comparative research, education, and stewardship. The federal program provides matching funds to acquire sites, up to a maximum of \$5 million. It provides 70% of the funds for operating and managing the reserves, as well as construction of facilities and activities related to education.

The national system was set up to include sites representing each of 11 coastal biogeographical regions and 29 subbiogeographical regions that are found in the coastal United States.<sup>10</sup> To date, 27 units have been designated in 19 subbiogeographical regions. Units have been designated since 1974 (the first was South Slough, Oregon). The most recent designation was made in May 2006 (Mission-Aransas, Texas). The system encompasses 1.1 million acres of estuarine lands and waters, and coastal wetlands. The sites range in size from 571 acres (Old Woman Creek, Ohio) to 365,000 acres (Kachemak, Alaska).

**Monitoring and Evaluating Participant Programs.** Information about participant programs is gathered during periodic evaluations. These evaluations are conducted on a multi-year cycle (generally every three years). OCRM has the discretion to schedule evaluations more frequently if it has concerns that warrant a follow-up review sooner. Years in which the most recent evaluations were conducted

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<sup>9</sup> All data summarized in this paragraph can be found at [<http://www.coastalmanagement.noaa.gov/consistency.html>]. The site was visited November 20, 2007, and the data were last updated September 20, 2007.

<sup>10</sup> Biogeographical regions are distinguished by similar dominant plants, animals, and prevailing climate. More information on these coastal regions, including a map of where they are located, can be found at [[http://www.nerrs.noaa.gov/Background\\_Bioregions.html](http://www.nerrs.noaa.gov/Background_Bioregions.html)].

are listed in the fourth column of the table in **Appendix C**. For FY2008, NOAA has scheduled nine programs for evaluation. These evaluations are among the sources of information that OCRM draws on when it summarizes the activities and accomplishments of participants and the federal program in a biennial report to Congress.<sup>11</sup> The most recent report covered FY2004 and FY2005.

The OCRM evaluates each state's accomplishments only against the goals of that state's program, rather than against broader criteria applied to all participants. In addition, the OCRM has developed a system of national indicators called the Performance Measurement System. This system provides information on some program characteristics for all participants. OCRM's participant evaluations appear never to result in either a perfect rating or a failing rating. That is, no participant is concluded to be successfully doing everything to fully implement its program, or to be performing so poorly that the participant is threatened with a reduction or loss of federal funds. Instead, evaluations always show where participants could be doing something more or could make adjustments to be more successful. To date, no program has lost its funding, although at least one state, California, reportedly was once threatened with loss of funding about two decades ago.

**Participant Approaches to Coastal Zone Management.** The general language of the CZMA and OCRM's implementation of it have given participants, the eligible states and territories, great latitude in both how to participate in the federal program and what topics they emphasize. Participants have used this flexibility to organize and administer their programs in many different ways and emphasize different topics. Among the variations discussed below are relationships between state and local levels of government, which program elements are being emphasized, and where the program is situated in each participant's government.

One major variation from participant to participant is how responsibilities are divided between the state and local levels of government. In some participant states, such as Washington, which administers the first coastal management program that was federally approved, the coastal program is largely administered at the local level by county and city governments. In other participant states, such as Rhode Island, the state level of government retains responsibility for implementing most or all of the program. These differences appear to mostly reflect relationships between levels of government over planning responsibilities and natural resource management that were established long before the CZMA was enacted. It does not appear that any participant has significantly altered these basic relationships to accommodate a coastal management program.

A second variation is the selection of program elements that participants choose to emphasize. California, for example, is widely recognized in the coastal community for the great attention that it has given to beach access. It has prepared detailed maps to show public access points, how they can be reached, and opportunities for car parking. Also, it has bought or obtained easements to additional

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<sup>11</sup> For a more detailed summary of recent evaluations, see *CZMA Section 312 Evaluation Summary Report — 2006*, available at [<http://www.coastalmanagement.noaa.gov/success/media/312summaryreport2006.pdf>].

corridors to increase the number of access points. This is not to imply that California works only on beach access through its program; most participants emphasize several elements at any time. However, the diversity of coastal concerns among all participants is demonstrated by the fact that almost every authorized CZMA program element has been emphasized by some participants.

Each biennial report to Congress is replete with examples of participant activities. Some include a brief overview for each participant, and others provide examples for each theme identified. In the 2004-2005 report, common themes identified include the challenges of reduced funding, the growing need for interstate coordination and cooperation, the concern about public access in most programs, evolving efforts to address water quality issues, and, not surprisingly, efforts to plan for coastal hazards. Much of the discussion in this report is organized around discussions of each of the six major goals of coastal management, termed focus areas, that the OCRM has identified. Each of these discussions includes a number of participant activities and “success stories.” These areas include:

- coastal habitats;
- coastal hazards;
- coastal water quality;
- public access;
- coastal community development; and
- protecting water dependent uses and revitalizing urban waterfronts.

A third variation is the placement of the program in the participant’s organizational structure. A few participants, such as California, have created an independent coastal management agency. Most participants have nested their coastal programs within established agencies or offices. The broader responsibilities for these lead agencies range from protection of natural or living resources, or environmental protection and regulation, to planning. For some participants, the program is directed by the governor’s office, rather than by an agency with other program administration responsibilities. Where programs are placed within state government provides a strong indication of how that participant approaches coastal management, because these agencies and offices tend to emphasize the topics and issues that are already a part of their responsibilities. Within the administering agencies or offices, some participants have created independent units that address only coastal management topics, while others have assigned coastal management to units that already had other responsibilities. The second column of the table in **Appendix C** lists the lead agency or agencies administering the coastal program for each participant.

**Regional Cooperation.** There are a limited number of cooperative efforts, and fewer than might be expected at a time when partnerships and coordination are hallmarks of governance, especially if one is looking for formal cooperative agreements. The largest multi-state cooperative coastal efforts appear to be the Chesapeake Bay Program and the Great Lakes Program. These are also perhaps the oldest continuous cooperative efforts. The lead agency at the federal level for both is the Environmental Protection Agency, but many other federal agencies (among them, NOAA) and all the states in both watersheds participate. In the case of the

Chesapeake Bay Program, the states of Virginia and Maryland reportedly have significant portions of their coastal program efforts in activities that also contribute to the goals of bay restoration. For example, both states have estuarine reserve units in the bay that are important research and education centers. However, Chesapeake Bay restoration efforts are not managed by the coastal programs in either state.

There likely are additional opportunities for cooperative efforts where either a river or an estuary is a boundary between two states and where a coastal state is a part of a multi-state watershed. An example of the first type of situation is in Oregon and Washington, which share the Columbia River as a boundary. Both states appear to work toward compatible goals for the lower reach and mouth of the river, but no formal coordination currently exists. An example of the second type of situation is in the Southeast, where Florida, Georgia, and Mississippi are attempting to find mutually acceptable ways to deal with drought in the Apalachicola-Chattahoochee-Flint River watershed, which threatens the water supply for Atlanta. However, remedies for Atlanta, in turn, may threaten endangered and commercially and recreationally valuable species in the coastal Florida portion of the drainage.<sup>12</sup> The CZMA does not require or call for coordination either between coastal states or between coastal and noncoastal states. Provisions in Section 307 that addressed that topic were deleted in the 1986 reauthorization (P.L. 99-272), and the record that accompanied this reauthorization provides no explanation for this change; Section 307 is now limited to addressing coordination and cooperation between participants and the federal community.

The question of how coastal states and their coastal zones are affected by activities in inland states has become more visible in recent years, as topics like the hypoxia zone in the Gulf of Mexico have received more publicity. It is widely believed that this zone, which is depleted of oxygen, and therefore of marine life for part of the year, is a result of an influx of nutrients associated with agricultural and land management activities throughout the Mississippi River drainage. The largest and most concentrated source of nutrients is the corn belt, more than a thousand miles away, according to analysis conducted by the U.S. Geological Survey.<sup>13</sup> A similar but less extensive such zone is found in other coastal areas, such as the main drainage channel of the Chesapeake Bay. In this instance, the sources of nutrients are concentrated in states upstream in the watershed, especially in Pennsylvania.

**Special Area Management Plans (SAMPs).** SAMPs are resource management plans and implementation programs for discrete areas where complex coastal issues are concentrated.<sup>14</sup> SAMPs are supposed to improve the predictability and transparency of government decision-making in actions such as permitting by clarifying what activities and actions will be allowed at sites where multiple options

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<sup>12</sup> For more information on this issue, see CRS Report RL34250, *Apalachicola-Chattahoochee-Flint Drought: Federal Reservoir and Species Management*.

<sup>13</sup> For more information on hypoxia, see CRS Report 98-869, *Marine Dead Zones: Understanding the Problem*.

<sup>14</sup> “Special area management plan” is defined in Section 304 of the CZMA and is identified as one of nine coastal zone enhancement objectives in Section 309(a) of the act.

are possible. This is accomplished by a combination of refining general coastal policies, improving interagency coordination, and recognizing the cumulative impacts of multiple actions that may seem innocuous on a case-by-case basis. SAMPs can be challenging to develop, as the plan development requires flexibility and commitment from all parties that will be involved in implementing it. In some instances, the effort to develop the plan has not reached a successful conclusion, especially where the issues it seeks to address are complex and involve a large number of agencies and other parties.

SAMPs have been used for more than two decades under the CZMA, since the initial effort in Gray's Harbor, Washington, started. Many states participating in the coastal management program have successfully developed SAMPs to address such diverse topics as waterfront revitalization, habitat protection, water quality improvements, and other topics that are more generally addressed through participant's coastal management programs.

**Nonpoint Source Water Pollution in Coastal Areas.** Congress has directed the coastal zone management effort to more aggressively address one topic over all others, nonpoint water pollution, by implementing the Coastal Zone Act Reauthorization Amendments (CZARA) provisions. Enacted in 1990, the CZARA provisions require participants implementing an approved coastal program to prepare an additional program element to address nonpoint source pollution to restore and protect coastal waters. The Secretary of Commerce and Administrator of the Environmental Protection Agency must approve each participant's program element. CZARA may be considered regulatory, unlike the remainder of the coastal management program, because if a participant does not submit a plan, it risks losing up to 30% of its basic coastal management program funding from NOAA and up to 30% of its Section 319 funds (nonpoint source pollution management grants) under the Clean Water Act from EPA.

All participants have submitted plans and received conditional approval, and 19 have received full approval.<sup>15</sup> No participants have decided to drop out of the federal coastal program rather than work to implement this requirement. NOAA and EPA have not rejected any plans, but have indicated that they might impose future funding cuts on states that do not address issues that would enable the plan to be approved. The federal OCRM identifies participant success stories addressing six sources of polluted runoff: agriculture, forestry, urban, marinas, hydromodification, and wetlands and riparian areas.<sup>16</sup> However, accomplishments have been limited because of several factors. The most prominent of these factors is a generally perceived lack of federal funding, as current annual funding levels are about \$10 million for all participants, which is a small portion of the much higher costs to fully implement their programs.

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<sup>15</sup> Information on the status of each participant's CZARA plan can be found at [[http://www.coastalmanagement.noaa.gov/nonpoint/pro\\_approval.html](http://www.coastalmanagement.noaa.gov/nonpoint/pro_approval.html)].

<sup>16</sup> For more information on success stories, see [<http://www.coastalmanagement.noaa.gov/nonpoint/success.html>].

## Reauthorizing the CZMA: Status and Issues

Since the CZMA was last reauthorized in 1996, interest in policies and programs that address coastal topics has grown, bringing additional attention to some elements of coastal management efforts. Coastal (and ocean) topics have been elevated among policy makers through the work of two recent national commissions. One of these commissions, the Pew Oceans Commission, was established in April 2000 and released its final report, *America's Living Oceans: Charting a Course for Sea Change*, on June 4, 2003. This report included 26 recommendations within six categories, and two of those categories — titled “Preserving Our Coasts” and “Cleaning Coastal Waters” — deal with topics addressed in coastal management efforts. The second commission, the U.S. Commission on Ocean Policy, was created by legislation enacted in 2000 (P.L. 106-256). This commission issued its final report, *An Ocean Blueprint for the 21<sup>st</sup> Century*, in September 2004. The commission made 212 recommendations, including 13 “critical actions.” Many of these recommendations have a coastal component.

In September 2006, NOAA and the Coastal States Organization (CSO), a group that represents participants in the federal coastal zone management program, released a report titled *Discussion Paper: Current and Future Challenges for Coastal Management*. This report is more focused on coastal topics, but draws on the work of the two commissions, among other sources, according to the authors. It identifies 28 topics, and for each topic, provides a brief introduction and identifies some key questions and possible approaches. NOAA and the CSO are each reportedly developing possible CZMA reauthorization legislation, based in part on the contents of this discussion paper. Topics identified as specific challenges for coastal management include:

- governance issues (federal coordination, interstate and regional collaboration, local government involvement, and non-governmental organizations and the private sector partnerships);
- resource and management issues (habitat conservation and restoration, nonpoint source pollution, ocean resources management, coastal hazards, promoting economic growth and sustainable development, public access, climate change, marine commerce and transportation, invasive species, and knowledge and understanding); and
- decision support (resource assessments, science to support management, and providing tools and technologies).

The public also has become more aware of coastal issues, informed by widespread press coverage of specific events like Hurricane Katrina, and more general trends, such as the reported increased frequency of hurricane formation, sea level rise, fishery stock declines, and expanding areas of so-called dead zones associated with hypoxia. Each of the issues discussed below may be largely viewed by the public and Congress as a free-standing topic, but several themes connect them, including where they occur, the effectiveness of existing programs and policies in addressing them, and a limited ability to deal with their interrelated characteristics. A growing recognition of these themes could prompt policy makers to devote more

attention to coastal management issues, especially if specific events trigger greater attention and interest.

The topics discussed below are selected issues that are currently receiving attention. This is by no means a complete list of issues, which continue to evolve nationally, and the importance of each issue may be viewed differently from place to place. The discussion below centers on how coastal zone management efforts currently recognize and try to address each issue, and what changes in policy have been proposed to enhance those efforts. For some of these topics, coastal management could be a central or critical policy response, while for others, it could be one of multiple components in how the topic is addressed.

These issues are addressed in some of the more than two dozen reauthorization proposals that have been introduced since the CZMA authorization expired in 1999. None of these legislative proposals has been enacted. Most of these proposals would have made modest rather than major changes to the current law. They all would have increased funding levels for at least some components of the coastal management effort, and many would have made adjustments to the purposes of coastal management. The only general reauthorization bill introduced in the 110<sup>th</sup> Congress is S. 1579, the Coastal Zone Enhancement Reauthorization Act of 2007, introduced by Senator Snowe; other bills are reportedly being prepared.

**Coastal Natural Hazards and Sea Level Rise.** Coastal hazards are receiving more attention for several reasons. These include a reported increase in the number of hurricanes in recent years; the devastation along the central Gulf Coast and on the Florida peninsula caused by several recent hurricanes; effects on the coastal zone from anticipated rates and patterns of sea level rise; and continued investment in coastal development. Coastal zone management program participants address these topics through general policies to manage coastal development so as to limit threats that could result in the loss of life and property. Participant programs are intended to be a part of any efforts to discourage unwise development in flood-prone and exposed areas and to encourage protection of natural protective features along the coast, including beach systems, coastal barriers, and wetlands. While addressing coastal hazards is primarily the responsibility of floodplain programs and emergency programs, advocates maintain there is an important role that better planning and land use decisions through the coastal management program could contribute to these efforts, serving the dual goals of reducing public costs and lowering the need for relief in the future.

From their perspective, the coastal management effort could contribute to anticipating and minimizing the effects of future coastal hazard events in many ways. They argue that Congress should direct the coastal program to give greater priority to coastal hazards by such changes as requiring that a certain portion of federal grant funds be spent on topics related to coastal hazards. They believe that the coastal program (and NOAA more generally) should work more closely with the Federal Emergency Management Administration and others concerned with natural disasters at the federal and state levels to provide better information, such as comprehensive maps, and stronger partnerships through coordinated planning to assist in dealing with, anticipating, and understanding coastal hazards. Additionally, they ask for

Congress to have the federal coastal program report on how its efforts are increasing the capacity of participants to deal effectively with these topics. One aspect of building capacity might be to make the coastal zone program central to other programs that tie federal assistance to participation in programs that are designed to lower vulnerability or risk. Finally, coastal hazards could be given a more prominent role in all program evaluations.

**Coastal-Dependent and Other Living Resources.** The coastal zone is both the site of very diverse ecosystems and the location of intense development pressures that may adversely affect those systems. Habitat protection efforts have tended to be highly fragmented, focusing on specific coastal-dependent species that are endangered, that have commercial and recreational value, or that are invasive. There are certainly numerous habitat protection success stories, but those tend to focus on specific species, locations, or programs rather than larger ecosystems and more comprehensive approaches. Coastal-dependent species do not appear to play a prominent role in the current federal law or in most participant programs. The CZMA identifies these resources in several places in the congressional findings section and includes it as a topic of one of 11 national policies, where it calls for greater coordination between federal and participant levels, and better and more comprehensive planning. However, in terms of funding for coastal zone enhancement grants under Section 309 of the CZMA, participants could use several provisions to protect these species.

Efforts to address threats to coastal-dependent species issues reinforce the potential value of approaching these topics more broadly than just with regard to the species itself. Other examples of topics where broader considerations may be helpful include wetlands protection, fisheries management, hypoxia, and nonpoint source pollution. Past experiences suggest that each of these topics are most successfully addressed in a broader rather than narrow context, one that considers larger scales and many factors. For example, the hypoxia condition (more graphically termed “dead zone”) has been identified in a number of coastal waters, in both nearshore marine areas and estuaries. The sources of the inputs that create hypoxic conditions are often many miles away, most famously in the case of the Mississippi River drainage, where nutrient and chemical inputs associated with agricultural production in the corn belt (generally the upper Mississippi River and Ohio River basins) are believed to be major contributors to hypoxia in the Gulf of Mexico.

While the coastal zone program is unlikely to directly reach the corn belt, it could be used as a mechanism to coordinate the myriad federal and other programs limited to or affecting coastal-dependent living resources. Better coordination could lead to improved program effectiveness and be more consistent with the principles of managing resources on an ecosystem basis. Additional planning at the state level and the regional level (the salmon restoration effort in the Pacific Northwest may be the most prominent current example) could have substantial benefits for living resources.

**The Ocean Side of the Coastal Zone.** The ocean side of coastal management extends to state boundaries, which are 3 nautical miles offshore (or 9 nautical miles for Texas and the gulf coast of Florida). Participants’ coastal

management programs have tended to give limited attention to the ocean side of coastal management as they focus on where the land and water meet and on the land side of the coastal zone. However, within state waters the number and intensity of uses are growing and this growth is likely to continue. Some of these uses are not compatible with others. Some new activities include interest in siting new energy facilities ranging from liquified natural gas (LNG) terminals and pipelines to offshore wind farms, use of sand and gravel resources, and new aquaculture facilities. Each participant has its own set of laws and programs to address these issues. Many of these uses also transect the state-federal boundary, and in federal waters, a complex array of federal laws and programs guides activities and is used to frame issues.

The CZMA encourages participants to comprehensively plan for marine resources and uses within state waters. A few participants have addressed these uses in one fashion or another already (Oregon, Massachusetts, and California are examples), and more are reportedly considering doing so as well. The CZMA also enables states to influence federal decisions beyond 3 miles in federal waters through the consistency provision. As participants seek to become more involved in ocean management, they often encounter a lack of basic information about the ocean side of their coasts and a lack of expertise to effectively address many of the management topics. Congress could add provisions to the CZMA to encourage participants to more aggressively identify and address state ocean management topics within the complex planning framework of coastal management, and consider innovations, such as ocean zoning.<sup>17</sup> It could also include language to encourage states to work more closely with federal agencies on topics that transcend coastal boundaries, and amend the consistency provision in ways that would increase coordination.

Some interests have also sought to enact legislation to extend offshore state boundaries from 3 miles to 12 miles. Efforts to make such a change would generate issues, such as whether control of and revenues from subsea energy resources would also shift from the federal government to states, and whether states would assume responsibilities, including the costs, for enforcing laws in the expanded state waters. There also may be problems for some users (and uses) that had operated under federal law, which is consistent throughout waters under federal jurisdiction but might be different in adjoining state waters, and also vary from state to state. There is also a potential for litigation if neighboring participants disagree on how boundary lines are to be extended to 12 miles offshore, especially where there are rocky outcrops offshore that provide options for locating lateral boundaries, or where there are resources of value, such as subsurface energy resources, that would lie within the jurisdiction of multiple participants, or both participant and federal waters. Even though lateral boundaries between states have been settled, it is unclear whether an extension of jurisdiction may instigate new litigation.

**Governance.** Improved governance has been a goal of the federal Coastal Zone Management Program. Among the many potential benefits of this program cited by observers are that it builds capacity within participants to plan for and

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<sup>17</sup> This concept, taken from land use planning, would divide the ocean into areas where some uses would receive preference over others, and incompatible uses might be limited or prohibited.

manage coastal areas, provides opportunities and a central focus for coordination and building partnerships, and helps government make more informed decisions. These benefits have proven difficult to measure, and the federal office does little to measure these benefits beyond evaluating participant activities and accomplishments in implementing their coastal program, usually every three years. Efforts to quantitatively measure broader benefits of the federal and participant programs to either coastal resources or coastal governance have proven extremely challenging.<sup>18</sup>

Given the central importance of governance, a number of topics may be addressed in reauthorization legislation. One topic could be to use coastal management to create new opportunities for greater coordination among the many federal programs that operate in coastal areas. These programs continue to proliferate and are administered by many agencies, each with its own mission. A second topic could be to encourage additional regional or interstate coordination and collaboration, since many coastal issues transcend political boundaries. Efforts in some locations, such as the Chesapeake Bay and the Great Lakes, may be potential models for others to draw from. Benefits of managing resources at the scale of watershed or landscapes are receiving greater attention, and the CZMA may offer a structure that can be used to foster working at that scale. A third topic could be using coastal management to create greater consistency among decisions made by local governments concerning coastal resources. This could be fostered by establishing a national framework to support local government efforts, and by providing funding and technical assistance to support this framework. Finally, reauthorization could include provisions that would encourage additional collaboration with private and non-governmental organizations. The Bush Administration has encouraged such relationships through its Cooperative Conservation Initiative, which is promoting those types of collaborative efforts. A major benefit of this approach could be to draw on the greater flexibility that nongovernmental organizations often have to work toward their goals.

## **The CZMA in Context: Selected Related Federal Laws and Programs**

Participants use their coastal zone management programs to coordinate many topics and activities that are also addressed by other federal laws and programs. Some of these topics and activities also might appear in CZMA reauthorization legislation. The reauthorization might directly recognize a topic, making it a consideration for coastal program participants, or it might indirectly recognize the topic by calling for coordination or recognition in participant programs. The programs discussed below are all limited to implementation in coastal locations, and are therefore among those most directly related to aspects of coastal management. Each program addresses topics that can be central to coastal management efforts in some, but not all, locations.

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<sup>18</sup> One example of such an effort is *Evaluation of the National Coastal Zone Management Program*, prepared in 1991 by the Department of City and Regional Planning at the University of North Carolina for the National Coastal Resources Research and Development Institute.

In addition to the programs below, many other federal programs are not limited to coastal areas but can have substantial effects on coastal areas. Such programs include many infrastructure development programs for highways, water and sewer facilities, shoreline protection, and the like; financial subsidies such as numerous loan and grant programs and provisions in the federal tax code for mortgage interest deductions and the availability of federal flood insurance; and disaster relief efforts.

**Coastal and Estuarine Land Conservation Program (CELCP).**

CELCP, enacted in the FY2002 Department of Commerce, Justice, and State Appropriations legislation (P.L. 107-77), provides matching grants to eligible states and local governments to develop and implement plans to acquire property or easements on coastal property. Matching federal grants are awarded competitively to participants with approved plans. Between 2002 and 2006, 130 projects have been funded at a total federal cost of \$177 million. Funded projects have protected coastal habitats (including wetlands), reduced coastal water pollution, and improved access to the coast for recreation.<sup>19</sup>

**Coastal Barrier Resources Act (CBRA).**

CBRA, enacted in 1982 (P.L. 97-348) and amended numerous times, designates undeveloped coastal barriers and adjacent areas, where most federal spending that would support additional development is prohibited. The system includes 585 units encompassing nearly 1.3 million acres of land and associated aquatic areas. It also includes 271 “otherwise protected areas” where the only unavailable federal program is flood insurance. Every unit is identified in law and with a reference to a map, so both designating units and drawing boundaries have been contentious for some units. Only Congress can modify the unit boundaries, and it has enacted numerous site-specific amendments.

This program takes a unique approach to resource protection because it does not prohibit or regulate any activity; it merely prohibits the federal government and federal programs from being used to support additional development within any designated unit. Even without federal programs, development has occurred at a few units, especially along the southeast Atlantic coast. Also, CBRA does not preclude federal expenditures to restore designated units to former levels of development after natural disasters by such actions as reconstructing roads and water or sewer lines, but only up to their former dimensions or capacity.<sup>20</sup>

**Coastal Wetlands Planning, Protection, and Restoration Act (CWPPRA).**

CWPPRA, also known as the Breaux Act (Title III of P.L. 101-646), was enacted in 1990 as the first source of funds dedicated exclusively to the long-term restoration of coastal wetlands. Of the total amount appropriated, which is limited to \$100 million annually, 70% is required to go to Louisiana to implement projects on a priority list of coastal restoration projects, 15% is to go to the Coastal Wetlands Conservation Grants Program, and the remaining 15% is to go to the implement the North American Wetlands Conservation Program. The Louisiana-

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<sup>19</sup> For more information, see [<http://www.coastalmanagement.noaa.gov/land/celcp>].

<sup>20</sup> For more information, see [[http://www.fws.gov/habitatconservation/coastal\\_barrier](http://www.fws.gov/habitatconservation/coastal_barrier)].

specific portion is administered by the U.S. Army Corps of Engineers, and the other two portions are administered by the U.S. Fish and Wildlife Service. A recent report on the Louisiana portion of the program showed that 78 projects have re-established or protected more than 70,000 acres of wetlands and enhanced an additional 320,000 acres, at a cost of almost \$625 million.<sup>21</sup>

**National Estuary Program (NEP).** Section 320 of the the Clean Water Act, in 1987 amendments (P.L. 95-217), created NEP to maintain and restore estuaries of national significance. EPA administers this program. There are 28 NEPs around the country, with half of them along the east coast between Maine and North Carolina. Each NEP is implemented through a partnership represented by all levels of government and numerous private interests. Each NEP prepares and implements a plan, which includes specific actions to improve water quality, habitat, and living resources. NEPs are required to monitor their accomplishments, and can modify their plan to achieve their goals. According to EPA, NEP is credited with protecting and restoring more than a million acres of habitat since 2000 (including almost 450,000 acres of wetlands), and has leveraged about \$16.50 for every \$1.00 of EPA spending, resulting in more than \$1.1 billion being committed to achieve the program goals.<sup>22</sup>

**Place-Based Programs.** Numerous programs for specific coastal locations, especially specific estuaries, have also been enacted. Perhaps the oldest and largest such program is the Chesapeake Bay Program, led by the EPA and involving numerous federal, state, and other participants. The Chesapeake Bay Program has large components for basic research to better understand the bay (especially the ecology associated with key species such as crabs and striped bass), to address activities in the bay's watershed that have adverse effects on the resources in the bay, and to inform and involve a wide array of interests in bay restoration efforts. The bay program has been in operation for nearly 30 years, and can document both accomplishments and remaining problems.<sup>23</sup> There is a continuing controversy, however, over measuring program accomplishments. Other site-specific programs include ones for Long Island Sound, the Great Lakes, and the Everglades and southwest Florida. None of these programs is as comprehensive as the Chesapeake Bay Program, and none has as long a track record as a comprehensive program.

## **Concluding Observation: Strengths and Weaknesses of the CZMA Approach**

Since the federal coastal management program addresses the often conflicting pressures of resource protection and economic development, some may view it as a model for possible application in other places — rapidly urbanizing areas, or

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<sup>21</sup> For more information, see Louisiana Coastal Wetlands Conservation and Restoration Task Force, *Coastal Wetlands Planning Protection and Restoration Act (CWPPRA): A Response to Louisiana's Land Loss* (April 2006), and also see [<http://www.lacoast.gov>].

<sup>22</sup> For more information, see [<http://www.epa.gov/owow/estuaries>].

<sup>23</sup> For more information, see [<http://www.chesapeakebay.net>] and [<http://www.epa.gov/region03/chesapeake>].

segments of waterfront areas along rivers and lakes — where similar conflicting pressures are concentrated. The qualities of such a model may become clearer when one looks at some of the strengths and weaknesses that the many CZMA observers have identified. As some of these observations are based, in part, on value judgments, what may be regarded as a strength by one person may be a weakness to another. An example of divergent views is the debate over whether it is a strength or a weakness of the federal program to have permitted great variability in how the program is administered from participant to participant.

In looking at CZMA as a model, the context of each participant's program is important. This context reflects its traditions of governance, such as the laws and programs that are available to apply to the coastal management effort; already-established approaches to managing natural resources and guiding development; the role of the state level in planning and managing land use; and the relation between state and local levels of government to administer programs. In reviewing the two lists below, it is also important to remember that different aspects of the program or different topics that the program addresses may be important to different people. Each of the listed strengths and weaknesses could be explored further for comparative purposes, but just listing them points out what makes the CZMA and participant programs unique.

Some of the strengths of the CZMA approach identified by coastal management observers are:

- It provides a framework for coastal planning that has considerable latitude so that each participant can address its individual needs.
- It measures progress in the context of each participant's capabilities rather than using one standard by which all participants are evaluated.
- It allows participants to develop and expand its capacity for planning and management as it considers all activities occurring in or affecting a geographic area defined by the participant.
- It includes, as an integral component, a system of participant-designated protected research and education sites that provide opportunities to engage in comparative research projects and to educate the public about the value of coastal resources.
- It provides federal funding to encourage activities that participants might otherwise not initiate.
- It provides a procedure that allows participants to effectively oppose federal actions that are viewed as incompatible with their goals.
- Congress has periodically updated the federal law and participants have updated their plans to reflect changing concerns about the coast.

Some of the weaknesses of the CZMA approach identified by coastal management observers are:

- It is a voluntary program that has almost no regulatory leverage on a participant's actions.

- Participants can do too many alternative things and have a very wide range of levels of effort, and still be considered to be successfully implementing their program.
- Overall funding is inadequate to pay for doing all or even a portion of “the right things” that every participant should be doing where there is a federal interest in coasts.
- Some of the participants use their programs to accommodate coastal development, and do not do enough to protect natural resources and the environment.
- After more than 30 years of effort and numerous studies, the magnitude or dimensions of the impact that the federal program or any of the participants’ programs have had on either the rate and pattern of coastal development, or on protection of important coastal resources, is still uncertain.

## Appendix A. Provisions in the Coastal Zone Management Act, As Amended

*Section 302* lists 13 congressional findings about the national interest in the condition and changing circumstances of the coastal zone.

*Section 303* states the declaration of policy. It identifies the purposes of the act to include: “to preserve, protect, develop, and where ever possible, to restore or enhance” resources of the coastal zone; to assist states in implementing management plans for at least 11 listed purposes; to encourage special area management plans to improve predictable decision-making; to encourage intergovernmental cooperation; to encourage intergovernmental sharing of information; and to respond to changing circumstances affecting coastal environments.

*Section 304* lists 19 definitions, including “coastal zone,” “coastal resources of national significance,” and “special area management plan.”

*Section 305* authorizes participants to submit their management program to the Secretary of Commerce for approval.

*Section 306* authorizes grants to participants to implement approved programs. Nine program elements are specified for plans, and the participant must meet specified requirements. Procedures are specified for modifying or amending programs.

*Section 306A* establishes the Coastal Resources Improvement Program, which provides grants to participants to preserve or restore resources that meet certain qualifications, redevelop urban waterfronts, provide access to coastal areas, and provide a process to develop aquaculture facilities.

*Section 307* authorizes the federal consistency provisions, which requires that each participant be given the opportunity to certify that all federal actions in or affecting its defined coastal zone be consistent with its federally approved coastal management program. It also includes provisions for coordination and cooperation.

*Section 308* establishes a coastal zone management fund to make loans to address regional issues, demonstration projects, respond to emergencies and disasters, recognize excellence (see Section 314), and applying the public trust doctrine.

*Section 309* establishes coastal zone enhancement grants for nine specified purposes, including protecting and enhancing wetlands; addressing hazards; improving coastal access; reducing marine debris; developing procedures to address the secondary effects of coastal development; working with special area management plans; planning for ocean resources; and facilitating energy-related activities and aquaculture facilities.

*Section 310* authorizes the Secretary of Commerce to provide technical assistance and research results to participants to support their coastal management efforts.

*Section 311* requires 30 days notice for public hearings.

*Section 312* requires NOAA to periodically review and evaluate every participant's performance in implementing its program, and permits the withholding or withdrawal of financial assistance if a recipient is "failing to adhere" to its program.

*Section 313* specifies the maintenance of record by participants and grants federal access to those records.

*Section 314* establishes the annual Walter B. Jones awards for excellence in coastal zone management, specifies who is eligible, and identifies the types of awards.

*Section 315* authorizes the National Estuarine Research Reserve System. Participants nominate sites to be protected by participants and used as research and education centers. The system goal is to designate sites in every biogeographical coastal region so that comparative research projects can be conducted.

*Section 316* requires the Secretary of Commerce to prepare a biennial report for Congress. Reports are: to contain 12 specified elements that generally encompass the activities of the federal office in implementing the program; to lay out the status and accomplishments of participants' programs; and to make any recommendations for additional legislation.

*Section 317* requires the Secretary to prepare and issue rules and regulations. In addition, it authorizes the establishment of a National Coastal Resources Research and Development Institute in Oregon.

*Section 318* authorizes appropriations through FY1999.

*Section 319* spells out the appeals process and schedule for consistency determinations made under Section 307.

## Appendix B. Reauthorization Legislation

**1975** (P.L. 93-612). Limited amendments in free-standing legislation; set limits on upper and lower size of grants to participants, and increased some authorized funding levels.

**1976** (P.L. 94-370). Extensive amendments in free-standing legislation that restated and amended large portions of the CZMA; added energy development as a major topic; created a new Coastal Energy Impact Program and a new Interstate Grant Programs; and reauthorized appropriations for most program elements through FY1980.

**1978** (P.L. 95-372). Limited amendments placed in Title V of amendments to the Outer Continental Shelf Lands Act. Amended many of the energy provisions added in 1976, especially the Coastal Energy Impact Program.

**1980** (P.L. 96-464). Extensive amendments in free-standing legislation restated much of the law. Added a new grant category under Section 306A; amended sections authorizing the Coastal Energy Impact Program, the Interstate Grants Program, the biennial report, reviews of performance and penalties for nonperformance, and added a complex structure by which Congress could disallow a proposed rule (the latter was subsequently deleted). Authorized appropriations through FY1985.

**1986** (P.L. 99-626). Limited amendments placed in Section 7 of the Recreational Boating Safety Act of 1986 required participants to return any unobligated funds, which the Secretary is to reobligate to other participants through the same grant.

**1986** (P.L. 99-272). Limited amendments placed in Section 6044 of the Deficit Reduction Amendments of 1985, replaced the Estuarine Sanctuary Program with the Estuarine Research Reserve System and added considerable detail without changing the basic elements of this program.

**1990** (P.L. 101-508). Extensive amendments placed in subtitle C of Title VI of the Omnibus Budget Reconciliation Act of 1990 reauthorizing the CZMA through FY1995. It made changes to the findings sections, the basic management grants program, and the consistency provisions. It replaced the Interstate Grants with Enhancement Grants, amended provisions regarding estuarine research reserves, and established the Walter Jones awards. Also, Section 6217 established the coastal nonpoint source pollution program.

**1996** (P.L. 104-150). Limited amendments in free-standing legislation that eliminated grants to assist states in preparing plans, authorized appropriations through FY1999 and made other funding changes, and stated some deadlines for secretarial actions when consistency determinations have been appealed to that level.

## Appendix C. Information About Each Participant

State or Territory (year plan approved)	Lead Agency(ies) Administering Coastal Program	Coastal Population of State Population, in 000s (and %) in 2000	Most Recent Evaluation	Funding FY2006 (\$ 000)	Funding FY2007 (\$ 000)
Alabama (1979)	Dept. of Conservation and Natural Resources; Dept. of Environmental Management	540 of 4,470 (12.1%)	2003	\$6,133.2	\$1,399.0
Alaska (1979)	Dept. of Natural Resources	538 of 627 (85.8%)	2007	\$6,598.3	\$2,503.0
American Samoa (1980)	Dept. of Commerce	57 of 57 (100%)	2005	\$1,859.0	\$859.0
California (1978)	California Coastal Commission	24,260 of 33,499 (72.4%)		\$10,217.4	\$2,503.0
Connecticut (1980)	Dept. of Environmental Protection	2,121 of 3,406 (62.3%)	2006	\$4,321.0	\$2,051.0
Delaware (1979)	Dept. of Natural Resources and Environmental Control	784 of 784 (100%)	2005	\$4,075.0	\$1,327.0
Florida (1981)	Dept. of Environmental Protection	15,982 of 15,982 (100%)	2007	\$9,096.3	\$2,503.0
Georgia (1998)	Dept. of Natural Resources	538 of 8,186 (6.6%)	2005	\$5,837.0	\$2,237.0
Guam (1979)	Bureau of Statistics and Plans	155 of 155 (100%)	2007	\$1,879.0	\$884.0
Hawaii (1978)	Office of Planning	1,211 of 1,211 (100%)	2004	\$4234.0	\$2,021.0
Indiana (2002)	Dept. of Natural Resources	741 of 6,080 (12.2%)	2006	\$2,262.0	\$1,062.0
Louisiana (1980)	Dept. of Natural Resources	2,170 of 4,469 (48.6%)	2005	\$5221.0	\$2,503.0
Maine (1978)	State Planning Office	945 of 1,275 (74.1%)	2004	\$6,376.0	\$2,376.0
Maryland (1978)	Dept. of Natural Resources	3,592 of 5,296 (67.8%)	2007	\$6,366.0	\$2,488.0
Massachusetts (1978)	Executive Office of Environmental Affairs	4,783 of 6,349 (75.3%)	2007	\$6,227.0	\$2,380.0
Michigan (1978)	Dept. of Environmental Quality	4,842 of 9,938 (48.7%)	2006	\$5,221.0	\$2,503.0
Minnesota (1999)	Dept. of Natural Resources	217 of 4,919 (04.4%)	2006	\$2,093.0	\$975.0

State or Territory (year plan approved)	Lead Agency(ies) Administering Coastal Program	Coastal Population of State Population, in 000s (and %) in 2000	Most Recent Evaluation	Funding FY2006 (\$ 000)	Funding FY2007 (\$ 000)
Mississippi (1980)	Dept. of Marine Resources	364 of 2,845 (12.8%)	2004	\$4,121.2	\$1,148.0
New Hampshire (1982)	Office of State Planning	390 of 1,236 (31.5%)	2006	\$3,335.8	\$989.0
New Jersey (1978)	Dept. of Environmental Protection	7,576 of 8,414 (90.0%)	2007	\$6,471.0	\$2,503
New York (1982)	Department of State	18,088 of 18,976 (95.5%)	2007	\$6,770.0	\$2,503.0
North Carolina (1978)	Dept. of Environment and Natural Resources	826 of 8,049 (10.3%)	2006	\$6,412.2	\$2,359.0
Northern Marianas (1980)	Coastal Resource Management Office	69 of 69 (100%)	2006	\$1,993.0	\$925.0
Ohio (1997)	Dept. of Natural Resources	2,767 of 11,353 (24.4%)	2007	\$5,547.0	\$2,079.0
Oregon (1977)	Dept. of Land Conservation and Development	1,326 of 3,421 (38.8%)	2006	\$6,070.5	\$2,183.0
Pennsylvania (1980)	Dept. of Environmental Protection	2,947 of 12,281 (24.0%)	2005	\$4,240.0	\$2,013.0
Puerto Rico (1978)			2005	\$5,760.0	\$2,182.0
Rhode Island (1978)	Coastal Resources Management Council	1,048 of 1,048 (100%)	2005	\$4,246.0	\$1,429.0
South Carolina (1979)	Dept. of Health and Environmental Control	1,653 of 4,012 (41.2%)	2004	\$11,359.6	\$2,316.0
Texas (1996)	Texas Coastal Coordination Council	5,211 of 20,852 (25.0%)	2006	\$10,137.2	\$2,503.0
Virgin Islands (1979)	Dept. of Planning and Natural Resources	109 of 109 (100%)	2003	\$1,972.0	\$914.0
Virginia (1986)	Dept. of Environmental Quality	4,441 of 7,079 (62.7%)	2006	\$6,486.0	\$2,503.0
Washington (1976)	Dept. of Ecology	4,071 of 5,894 (69.1%)	2004	\$7,313.0	\$2,499.0
Wisconsin (1978)	Dept. of Administration	1,992 of 5,364 (37.1%)	2004	\$4,527.0	\$2,158.0

**Source:** OCRM website, accessed April 9, 2004, supplemented by data supplied by OCRM, December 5, 2007. Coastal population is for 2000. Illinois is not on this list as it is currently not participating in the federal coastal program.