

Chapter 1:
Description of the Environment Affected

Chapter I of the South Carolina Coastal Program provides an in-depth discussion of the environment of South Carolina's coastal zone. Ecological features, such as the character of the salt marsh and barrier island systems and the distribution of flora and fauna within the coastal zone, are discussed in Section C, "The Natural Environment." Additional, detailed discussion of the marine and estuarine ecosystems, and the wildlife and shellfish and finfish resources which they support is contained in Chapter IV(E), "Living Marine Resources."

Chapter I also contains a synopsis of lowcountry history (Section B), the understanding of which is vital to a comprehensive view of the present coastal environment. In addition, economic (Section D), demographic (Section E) and land use patterns (Section F) of the region are discussed. In the following summaries are brief descriptions of (1) the natural environment and (2) the economic/social environment.

The governmental framework relative to coastal management in South Carolina is presented primarily in Chapter V(A), although that section focuses on the system to be employed during implementation, rather than the current situation. Below in (3) is a comparison of the current institutional environment and that which will be implemented by the coastal program.

(1) Natural Environment

The South Carolina coastal zone (out to the 3-mile limit) is approximately 8,116 square miles.

South Carolina's coast is as yet relatively unspoiled, due to two

important factors. The plantation system kept large tracts of coastal property under single ownership until the time of the Civil War, when much of the land was sold to hunt clubs or other private entities which have continued to maintain large tracts in non-commercial use. In addition, both population growth and industrial development in the State as a whole have proceeded relatively slowly, resulting in less pressure for growth in South Carolina's coastal zone than in some other areas of the nation.

South Carolina still contains roughly 500,000 acres of coastal marshes, of which some 335,000 acres are classified as salt marsh. The primary salt marsh vegetation is smooth cordgrass (Spartina alterniflora). A highly productive plant, it thrives in saltwater and, as it decomposes, serves as a vital year-round food source into the ecosystem, supplying numerous fish and shellfish species (including crabs, shrimp, and oysters). Salt marsh also serves as an erosion buffer for the shoreline, as a pollution filter for pesticides and other pollutants before they enter the stream systems, and an aesthetic asset. In addition, there are approximately 70,000 acres of impounded coastal marshes, many of which were formerly cultivated for rice.

There are roughly 35,000 acres of brackish-water and 65,000 acres of freshwater marsh along the coast. The brackish area is a transition zone between salt and freshwater. Both areas play important roles in contribution of nutrients to the ecosystem and habitat for land and aquatic species. Interspersed among the coastal streams and marshes are over 200 sea islands, areas of forested high ground in the estuaries.

The Atlantic Ocean coastline of South Carolina is approximately 159 miles in length. Along this shoreline stretch miles of sandy beaches of four basic profiles or geomorphological types (see Chapter IV(C) under

the heading "The Erosion Problem"). Many of these beaches are currently facing erosion problems as well as the pressures for development and recreational use. Erosion rates along the South Carolina coast range from 30 cm. to 1 m. per year.

Forty barrier islands parallel the South Carolina coastline, part of the extensive chain from Maine to Texas. These dynamic and important formations are generally thin and elongated in shape, fringed by salt marsh on the landward side and bordered by a beach and dune system on the ocean side. They bear the brunt of ocean waves and storms and flooding, thus buffering mainland areas and providing the proper conditions for existence of saltwater and brackish marshes.

The coastal zone also boasts over 3 million acres of forested lands (much of which makes a significant economic contribution in commercial timber production). The South Carolina coast has abundant wildlife resources, too numerous and varied for inclusion here, but discussed fully in Chapter I of the program document. Other significant and often unique natural areas include mud and sand flats and oyster reefs in the coastal water areas; and pocosins, Carolina bays, savannahs and forested bottomlands in upland and fresh-water areas. All these features are discussed in Chapter I.

South Carolina's coastal zone can be divided into three segments, based on both physical and sociological distinctions. The morphology of the coast represents a transition zone between the North Carolina and Georgia shorelines. From the North Carolina border to Winyah Bay, the coast forms a gentle crescent called an arcuate strand. The coast in this section is

characterized by broad sandy beaches, few tidal inlets, a well-developed dune system and generally sparse salt marshes. In contrast, the Southern section of the coast from Bulls Bay to the Georgia border is fronted by a series of barrier islands separated from the mainland by a wide zone of salt marsh. Tidal inlets are more numerous, and in some areas there is little or no dune development. Extending thirty kilometers along the shore between the northern and southern coastal segments lies the Santee River Delta, the largest deltaic complex on the east coast.

(2) Economic/Social Environment

The eight-county coastal zone of South Carolina represents about 23% of the total land area of the State. In 1975 this area was estimated to have about 21% of the State's population, 18% of the civilian labor force and 16% of the State's unemployment. The 1976 estimated population for the coastal zone was 603,200. The coast is characterized by an uneven distribution of population, with Charleston County having 45% of the total population.

The most significant economic sectors in the coastal zone are agriculture, forestry, fisheries, recreation and tourism, government, and limited industry. South Carolina's economy as a whole has maintained a steady recovery rate since the 1974-75 recession, and this trend is expected to continue. As in other "Sun Belt" states, a growth rate above that for the nation is predicted.

The physical characteristics of each section of the coast have been important in determining the economic and social character which developed over time. The sandy beaches of the arcuate strand in the northern counties

of Georgetown and Horry have nurtured a thriving tourist economy centered around Myrtle Beach. Approximately 33% of the visitors to the coastal zone head to the "Grand Strand" area and expend over 40% of the tourist dollars along the coast (over \$1 billion in 1977).

Horry County had a 1976 population of approximately 86,000, or roughly 14% of the coastal population. One problem faced by planners in the relatively urban Myrtle Beach area (population - 10,370) is the extreme seasonal influx of additional populace which requires an infrastructure adequate to meet the necessary service levels.

Inland from the urban "Grand Strand," approximately 94% of Horry County is rural in character. This area led the coast in agricultural income, with over 11% of its income from farm sources. It also led the State in sales from tobacco, the State's leading cash crop. Conway (population - 9,845) is the county seat.

Along with Horry County, nearby Georgetown County leads the coast in acreage devoted to forestry - approximately 72% of the land area of this northern region. These abundant forests supply the raw materials for a thriving pulp mill industry in the City of Georgetown (county seat, with population - 11,200). Georgetown also boasts a major steel production facility - Georgetown Steel - and a State Ports Authority terminal, and is a significant historical area. The county population is 38,000 (1976).

Charleston County and the more inland coastal counties of Berkeley and Dorchester comprise the central portion of the coast (south of the Santee Delta area). This region is similar physically to the southern-most portion, although there are fewer river and wetland areas. This is the most highly developed section of the coast, with the urbanization centered

around the Greater Charleston area (Charleston County population - 260,200 (1976)).

Government-owned property accounts for approximately 22% of Charleston County. This property includes the Francis Marion National Forest (extending into Berkeley County, as well); Cape Romain National Wildlife Refuge; Capers Island and the Santee Coastal Reserve (State-managed); major military installations (Navy, Air Force and Coast Guard); and numerous educational facilities including the College of Charleston, the Citadel, and the Medical University of South Carolina.

Due to its fine natural harbor, the Charleston area has become a port of major importance and has attracted a number of industrial and manufacturing concerns. The cities of Charleston and North Charleston are the primary population centers. The Greater Charleston area is also one of cultural and historical importance.

Development in nearby Dorchester County (population - 46,800) centers around Summerville and is mainly suburban in character. Almost 18% of the County is devoted to agricultural use, with primary products being tobacco, cotton, corn, soybeans and truck crops, livestock and dairy products, and timber.

Approximately 25% of the County is marsh or wetland and almost 50% undeveloped for urban uses (includes forested areas). The most rural areas are in the northern part of the County.

Berkeley County (population - 70,400), too, has development of a suburban character, centered around Moncks Corner and Goose Creek. A higher percentage of industrial development is present in Berkeley than either

Charleston or Dorchester Counties, comprising almost 10% of the developed land area. Over 20% of the total area of the County is within the boundaries of the Francis Marion National Forest. These latter two Counties are the fastest growing not only in this region, but in the coastal zone as a whole.

The natural history of the lower part of the coast - Jasper, Beaufort and Colleton counties - has had a great influence on the economic and social development of the area. Because of the extensive tracts of marsh and estuary and the numerous waterways, population and industrial growth have been constrained to some degree. Approximately 55% of the total land area of Beaufort County is wetlands. Almost three-fourths of the land area in the Lowcountry region is devoted to agricultural uses, with over 70% of Colleton and Jasper Counties as timberland. The population in the three-county area is as follows: Colleton - 29,200, Beaufort - 58,400 and Jasper 13,300 (1976 estimates). All but three of the numerous small municipalities in this region had 1970 populations below 2,500. These larger cities were Port Royal (2,865) and Beaufort (9,454) in Beaufort County and Walterboro (6,257) in Colleton County.

Major military installations in Beaufort County are the Parris Island Marine Base and U.S. Marine Corps Air Station, which combine to make the public sector a significant factor in the economy of the area. Industrial development is limited in the Lowcountry region.

The numerous sea islands and barrier islands, often isolated, have given rise to a culture all their own. The development of exclusive resort property on Hilton Head Island and Fripp Island has taken place in recent

years and contributed to the tourist economy. The historic district in the City of Beaufort represents a rich cultural asset and another tourist destination.

(3) Governmental/Administrative Setting

The governmental or institutional framework in South Carolina is oriented toward the General Assembly or state legislature. Administrative agencies in the State are directed by commissions or boards which are generally appointed by the General Assembly, and often include members of the General Assembly. Other than governor and lieutenant governor, there are limited Statewide Constitutional offices filled by popular election. These include Secretary of State, State Treasurer, Attorney General, Comptroller General, Superintendent of Education, Adjutant General, and Commissioner of Agriculture.

Development and implementation of a coastal management program in South Carolina has already impacted the governmental/administrative setting, specifically, the regulatory process at the State level. Because South Carolina's program is focused on direct State control, the impacts on local government functions will be minimal. It is hoped that through coordination and technical assistance, the Coastal Council can encourage further planning and resource management at the local level. At the Federal level, the impacts on government process will be felt only after full program approval when the Federal consistency provisions of the Federal Coastal Zone Management Act will be implemented.

The State level of government will be the most significantly impacted by implementation of the coastal program, specifically in terms of

the regulatory process for those activities which would have direct and significant impact on coastal waters. The situation in South Carolina is slightly different from most coastal states at this stage in the program approval process since a permit application and review procedure has already been instituted, pursuant to State statute.

As background, prior to passage of the South Carolina Coastal Management Act of 1977, the State regulatory authority for activities in coastal waters was limited to the area below the mean high water mark. These waters and submerged bottoms are presumed to be held in trust for the people of the State, and permits from the South Carolina Budget and Control Board were required prior to any alterations in these areas. The statutory authority for this permit requirement was implied only. The South Carolina Water Resources Commission handled the administrative process, functioning mainly as a clearinghouse for comments from other State agencies.

The South Carolina Coastal Management Act of 1977 established a new State agency, the South Carolina Coastal Council, an 18-member body with representatives from each of eight coastal zone counties, from each State congressional district, and from the State House and Senate. This Council was mandated to develop and implement a comprehensive coastal management program. A portion of this program is part of the regulatory or permit authority previously covered by the Budget and Control Board. The scope of this authority was expanded to encompass what the Act defined as the "critical areas" - coastal waters (from mean high water out to the 3-mile limit), tidelands (periodically inundated wetlands which are integrally part of the estuarine system), beaches (subject to periodic inundation so that no nonlittoral vegetation is established) and primary ocean-front sand dunes. This expanded permit authority includes areas

above mean high water, both in wetlands and on beaches and dunes.

The Coastal Council's regulatory authority in the "critical areas" went into effect on September 28, 1977, under Interim Rules and Regulations which were made final and enacted into law with legislative approval on June 7, 1978. In addition to guidelines or standards for specific types of projects, this permitting process includes definite time frames for review and decision-making, appeals procedures for any aggrieved party, provision for public notices of all permit applications, and provision for public hearings upon request of 20 or more citizens. The Coastal Council's "critical area" permitting process is explained in detail in Chapter V(A) and (B) and Appendices C and E of the Program.

The South Carolina Coastal Management Act delineated the coastal zone as those eight counties containing some "critical areas" within their boundaries. In addition to the direct regulatory authority in these critical areas, the Coastal Council was mandated to consider all lands and waters of the coastal zone for planning purposes. The Act established a framework for indirect authority by the Council in the remainder of the coastal zone. All permit applications of other State agencies in the coastal zone must be reviewed and certified by the Council (Section 8(B)(11)). This "networking" approach for management throughout the coastal zone is now in effect after approval (February 14, 1979) of the Proposed South Carolina Coastal Program by the South Carolina General Assembly and the Governor. Review and certification of permit applications by the Council will be based on the Resource Policies contained in the program, thus providing for the first time a comprehensive review of projects in the coastal zone which require a permit from a functionary.

or line agency. The management authorities are fully detailed in Chapter V(A) and (B) of the Program Document and Appendices C and E.

The additional step of approval at the Federal level, by the U.S. Department of Commerce, through the Office of Coastal Zone Management, will be vital for continued implementation of these regulatory and management procedures. The funding provided by the Federal coastal program will enable the State of South Carolina to maintain the level of staff and expertise necessary to best manage coastal resources. Also, individual projects or intensive studies can be made during implementation to provide improved information and identify areas of the program needing refinement or amendment.

Chapter 2:

Probable Impacts of the Proposed Action on the Environment

Introduction

The purpose of coastal management from both the State and Federal perspective is to promote the wisest use of the coast. Wise use requires striking a balance between the economic, social, and environmental concerns and resources of the coastal region. The South Carolina Coastal Program provides a significant step towards striking that necessary balance by establishing a process of rational decision-making affecting use of coastal resources.

Significant economic, social, and environmental impacts will therefore result from final approval and implementation of the South Carolina Coastal Program. In order to fully anticipate and understand the possible impacts associated with approval and implementation, the following evaluation has been made. The first section summarizes the implementation process and its overall impacts. Secondly, the impacts of major policy priorities are analyzed. Thirdly, impacts of policies which are specific to certain coastal activities are delineated, followed by consideration of the impacts of the three planning elements.

Summary of the Implementation Process and Its General Impacts

Coastal management in South Carolina encompasses both direct permitting authority in the critical areas and certification of other State permits for projects throughout the eight county coastal zone. The South Carolina Coastal Council was created by the State Coastal Management Act (the Act) passed in May, 1977. The Council was given the direct State permitting authority for the designated critical areas and charged with the responsibility of developing a comprehensive coastal management program.

The Council's direct permitting authority began on September 28, 1977, and extends to any alteration of a critical area which is defined as coastal waters, tidelands, beaches, and primary ocean front sand dunes seaward of the critical area boundary to the State's three mile limit. The Council's permitting authority is considered a vital instrument of the Coastal Management Program. The associated impacts are significant in that this type of authority has never before been centralized under one State agency in South Carolina with a clear time limit for permit decisions and with published rules and regulations which clearly spell out the criteria used in making these decisions.

While individuals who are denied permits may be negatively affected, the overall impacts of more predictable, timely, and conscientious decisions are immensely positive to the public and the coastal region. The economic impacts generally are not negative, except in instances of individual property owners, because all development is not prohibited. Development is, however, required to be environmentally responsible and is clearly allowed in appropriate locations. In addition, by giving decisions which are made within thirty days for minor permits and ninety days for major permits, the economic loss associated with project delays is avoided. Thus, the Council's rules and regulations for permitting will have the positive impacts of protecting the State's vital, renewable environmental resources as well as enabling a predictability which is economically beneficial.

The authority for the Council to review all State and Federal permits and to certify that they do not contravene the Coastal Program is given in the Act. In addition, the Act requires all State and local agencies to administer their regulatory authority in accordance with the Program and the permitting rules and regulations. The Resource Policies and the policies for the Energy, Erosion

and Public Beach and Shoreline Access elements of the Program clearly delineate the criteria which the Council and staff will use when making certification determinations. The Council will be required to make certification decisions within a time-frame agreed upon with the affected agency. The definitive, comprehensive, and long-range perspective provided by the permitting and certification processes can have tremendously positive effects on the economy and environmental resources of the State. In specific instances, however, the need to balance conflicting concerns may allow development which will negatively impact some environmental and economic resources in order to provide for vital current needs of the State.

Another element of the Program will be the attention given to Geographic Areas of Particular Concern. These areas have been singled out because of their unique economic, environmental or recreational value. The result of this attention will not be to protect them from any change, but to protect the primary purpose or use of the area.

The mechanism for protecting the primary purpose or use of the area will be through the Council's issuance of permits or its review and certification of permits in the coastal zone. The Coastal Program states that, "When a project overlaps with, is adjacent to, or significantly affects a GAPC, the Council will carefully evaluate the project based on the criteria specifically addressing each type of GAPC listed as the priority of uses." In practical terms this means if a project, either in or adjacent to a GAPC, requires a permit, the Council will evaluate the impact the project will have on the priority uses of the GAPC. If the project would permanently disrupt

a priority use, it would be prohibited. If a priority use would otherwise be significantly impacted, the project would be discouraged or the permit conditioned. Thus, the Coastal Program will provide a careful analysis of activities which might infringe on the primary uses of these areas designated for their unique value. This implementation and the identification of priority uses is in Chapter IV (A) of the Program document.

General Policy Impacts

Several major policy priorities of the South Carolina Coastal Program will significantly affect the coastal region. Each of these policies is reiterated as applicable to many different activities determined to be subject to management.

One major policy is to prohibit the filling of wetlands for almost any activity regulated by the Program unless no feasible alternative can be found or there is an overriding public interest. A narrow interpretation of either of these considerations can be expected as they apply to the filling of wetlands. Specific policies for residential, commercial, and industrial development; transportation facilities such as ports, roads, airports, railways, and parking facilities; energy facilities; and solid waste disposal sites include this major policy on wetlands. The preservation of existing wetlands is a high priority of the program.

Another major policy is to reserve the State's limited amount of shoreline for water-dependent activities. The Coastal Program defines water-dependent facilities as those which can demonstrate that dependence on, use of, or access to coastal waters is vital to the successful functioning of their primary activity. Facilities for energy, manufacturing, industrial, parking,

commercial, or recreational purposes are prohibited from locating along the shoreline unless they are water-dependent.

The result of the implementation of this policy will be to assure that many types of shoreline development will occur less rapidly and to more nearly assure that shoreline areas will be available for facilities which require water access. However, because much residential development is outside of the jurisdiction of the Coastal Council, the policy will not generally affect residential shoreline development except for large-scale developments.

Another recurrent policy is to prohibit construction in wetland areas which unnecessarily shades vegetation or interrupts the natural water flow or movement of sand unless there is no feasible alternative. When construction encroaches on the vegetation, natural water flow, and in some cases the sand movement, it disrupts the natural equilibrium of the areas and can destroy natural purification systems, storm buffers, food supplies, etc.

This policy applies to transportation facilities such as roads, rail-ways, and parking facilities; residential development; mining; manufacturing and industrial facilities; commercial and public buildings; and docks and piers. The primary impact of this policy will often be to either move the construction outside of the wetlands or condition the construction design to decrease the environmental, and often the resulting economic, damage. Only in isolated cases is it expected that construction costs would be significantly higher.

A related policy priority of the Program is to give careful consideration to drainage plans and construction measures to control erosion, sedimentation and water quality. The beneficial impacts of this policy, similar to the preceding one, are to reduce flood damage, reduce property loss, maintain

the natural purification systems, and maintain water quality of both surface water and aquifer recharge areas. The negative impacts of this policy are expected to be minimal because no specific design is mandated, and the design can be flexible according to the specific facility, often at little or no cost increase. The policy applies to residential development; transportation facilities such as roads, airports, and railways, agriculture; timber-related activities; mining; manufacturing, industrial, energy, and recreational facilities; and commercial and public buildings.

The South Carolina Coastal Program strongly encourages the multiple use of existing or future rights-of-way wherever possible to avoid unnecessary disruption. Rights-of-way are expensive, create disruption of people and their homes and property, can affect property values negatively and can significantly affect the existing ecosystem. Thus, where any combination of transmission lines, pipelines, fishing catwalks, bicycle and footpaths, railways, and bridges can be built along a right-of-way the economic, social, recreational, and environmental benefits are immense. This policy is expected to affect development more in wetland areas where the Council's authority is direct. However, it is hoped that other agencies, industry and individuals will follow the encouragement and lead of the Coastal Program throughout the coastal zone.

Throughout the Resource Policies of the Program various activities are prohibited unless no feasible alternative exists or, in some cases, if there is an overriding public interest. If the activity receives approval because of either of these stipulations, it must be conducted in such a way as to minimize any substantial environmental damage. "Feasibility" and the concept of "feasible alternatives" is carefully defined in the glossary.

Specific resource policies have also been written for residential development, transportation, coastal industries, commercial development, recreation and tourism, marine-related facilities, wildlife and fisheries management; dredging, public service and facilities, erosion control, energy and energy-related facilities, and activities in the following areas of special resource significance: barrier islands, dune areas (outside the critical areas), navigation channels, public open spaces and wetlands outside the critical areas. In all cases, the intent of the Coastal Council is to achieve a balance between developmental and environmental considerations. This is done by providing guidelines for new development.

Impacts on Specific Coastal Activities and Areas

The South Carolina Coastal Program has policies which apply to specific activities or areas which will have an impact on the coastal region. The primary difference between the policy priorities identified in this section and those in the preceding section is that the policies of this section apply to either a specific activity, such as the design and operation of a marina, or a specific type of area, such as barrier islands. Thus, the impacts are likely to manifest themselves in more localized ways than the impacts of policies which apply to multiple activities.

To begin with the case of marinas, one impact of the Coastal Program will be to allow marinas only in areas where minimal adverse impacts will occur. The adverse impacts on salt, brackish, or freshwater wetlands;

water quality; wildlife, and marine resources or their critical habitats will be of prime concern. Therefore, the program includes policies discouraging the location of marinas near shellfish harvesting areas; encouraging marinas to locate only where minimal or no dredging, excavating, and filling will be required; where disruption of currents is avoided or minimized; and where adequate circulation or tidal flushing will exist. In addition, policies are very specific requiring pumpout and sewage facilities, trash receptacles, and facilities for disposal of waste and noxious materials in order to protect water quality. Therefore, the overall impact will be that marinas will be located in more desirable natural areas and designated to operate in the least damaging manner.

Another specific priority of the Coastal Program is to protect both the stocks and habitats of wildlife and marine resources. The impact of this policy will be not only biological or environmental but also economic and social as well. Activities requiring any State permits which would interfere with the spawning or mating seasons or habitats would be timed or spaced or changed in other ways to eliminate or significantly minimize the impacts.

Barrier islands are recognized in the Coastal Program to be less stable and more prone to erosion and other hazard risks than most areas. They are recognized as having a close proximity to and strong relationship to the critical areas of the coastal zone. As a result, many barrier islands are considered unsuitable for intensive and high density development.

An impact of the Program thus will be to better preserve their integrity than would be the case without coastal management. For example, construction and development on the islands should not reduce their value as a natural storm buffer. Activity on the island should take precautions to avoid

negatively affecting the critical areas. Public funds will not be spent to provide road and bridge access unless there is an overwhelming public interest to be served. Any public funds spent to extend public services, such as sewer and water facilities, to barrier islands must not jeopardize the natural "carrying capacity" of this land and carefully consider the existing level of access to the island. Generally, the Coastal Program will encourage the protection and preservation of barrier islands as natural stabilizing forces and for public recreation.

Impacts of the Three Planning Element Policies

The three "new planning elements" of the Coastal Program address energy facilities, erosion control and public shoreline access. In the area of energy development, many of the policies for other coastal activities apply also to the location and design of energy facilities, such as water dependency requirements, the unlikely filling of wetlands, and the multiple use of rights-of-way.

In addition, there are policies which specifically address energy facilities. For example, the location of both nuclear and liquified natural gas (LNG) facilities, as a result of the Coastal Program, will be located away from populated areas and hazardous areas in the coastal zone as a safety precaution. Furthermore, a more comprehensive evaluation of both types of facilities will be an impact of the program. For example, when nuclear plant applications are considered, a vital part of the evaluation will be the plans for disposal of nuclear waste associated with operation of the plant. When a LNG facility application is evaluated, the transportation patterns associated with the facility are considered as a vital part of the application. This kind

of comprehensive evaluation of a project allows for all associated impacts of a project to be anticipated and provided for or avoided before the project is approved. Thus the impacts of the policies on nuclear and LNG facilities will be toward a more realistic initial evaluation.

Another prevailing policy of the Program is to maintain, at a minimum, existing public beach and shoreline access and to encourage additional public access in the future where possible. South Carolina still has large undeveloped areas and thus it is early enough for development to occur in such a way as to assure areas of public access for future generations. South Carolina's Coastal Program recognizes the value of shoreline recreation along its many rivers as well as ocean shoreline access.

In practical terms, the primary application of this policy will be as an incentive rather than as a restriction. For example, public erosion control funds can only be spent by the Coastal Council in areas to which the public has full and complete access. Additionally, in the consideration of permit applications and certifications, one criteria always used will be the extent to which development could affect existing public access. Disturbance of existing public access is strongly discouraged. Areas of public access which must be disrupted can be compensated for by additional public access areas provided elsewhere. A closer look will be taken at development in the future to assure that all citizens have access to recreational areas.

The Coastal Council is mandated by its State as well as Federal legislation to develop a comprehensive beach erosion control policy. Moreover, most erosion control structures will require a Council permit. The Program contains extensive policy language specific to all types of structural

and non-structural measures, requiring that decisions be made after consideration of their effects on other beach areas and on public access to and use of the beaches. The requirement for public access to be available where public erosion control funds are spent recognizes and supports the important interrelationship between these two planning elements.

Chapter 3:
Alternatives to the Proposed Action

Given the nature of the proposed action, which is approval of the South Carolina Coastal Program, all Federal alternatives involve a decision to delay or deny approval. To delay or deny approval could be based on failure of the South Carolina Program to meet any one of the requirements of the Federal Coastal Zone Management Act (CZMA) as amended. In approving a coastal management program affirmative findings must be made by the Assistant Administrator for the Office of Coastal Zone Management on more than twenty requirements.

The South Carolina General Assembly passed comprehensive coastal legislation in 1977 in response to the need for wise management of South Carolina's valuable coastal resources. The proposed South Carolina Coastal Program has been prepared to provide guidelines for further protection and development of the State's coastal zone. The South Carolina Coastal Management Act (SCCMA) establishes the South Carolina Coastal Council (SCCC) and directs it to develop and implement a comprehensive management program. The SCCC has sole permitting authority for activities occurring in identified "critical areas." These activities are permitted according to Rules and Regulations for Permitting promulgated by the (SCCC) pursuant to the SCCMA.

The SCCMA further provides that all State agencies shall administer their authority in accordance with the SCCMA as well as the (program) policies developed under the Act. This provides the SCCC with a certification authority over activities occurring throughout the eight-county coastal zone.

Therefore, the South Carolina Coastal Program is based upon comprehensive coastal legislation inside critical areas and relies on "networking" and SCCC certification of activities occurring throughout the remainder of the coastal zone.

In the Section 305(d) "Findings" made by the Assistant Administrator, in September 1978, program deficiencies were identified. These deficiencies have now been remedied by South Carolina, and the Assistant Administrator has made a preliminary determination that South Carolina meets the requirements for program approval under Section 306 of the CZMA, as amended.

In order to elicit public and agency comment and assure that the Assistant Administrator's initial determination is correct, this section identifies areas where there are possible deficiencies and considers alternatives of delay or denial based upon each. Before examining the alternatives, the following section identifies the generalized impacts that would result from delay or denial on any basis.

1. Loss of Federal funds to administer the program. Under Section 306, of the CZMA as amended, South Carolina would receive approximately \$1.1 million per year to administer its coastal management program. Most basic to a loss of Federal funds will be the inability of the State to provide adequate staffing and administrative support to coordinate and evaluate coastal actions and permits, and to assure that government agencies operate consistently with coastal policies.

Additionally, problems identified by South Carolina may continue due to a lack of funds to address them. Local governments would also be

without the funds necessary to identify and resolve local coastal resource issues. To delay or deny approval of this program would also make it difficult for the State to give needed consideration to shorefront access, shoreline erosion, and energy facility siting.

2. Loss of consistency of Federal actions with South Carolina's Coastal Zone Management Program and its policies. Program approval would mean that Federal actions, in or affecting the South Carolina coastal zone, would have to be consistent with the State's program under Section 307(c) of the CZMA. This consistency provision would be of particular concern to the State of South Carolina as its coastal zone is heavily influenced by Federal activity. Loss of federal consistency in the State's coastal zone could have significant and adverse effects on the coastal resources.

3. Loss of adequate consideration of the national interest in the siting of facilities which are other than local in nature as required by Section 306(c)(8) of the CZMA. By delaying or denying program approval, State and local governments would be under no obligation to give adequate consideration to coastal resources and facilities that are of national interest. This could result in loss of public benefit that the use of such resources may provide. For example, failure to allow expansion of port facilities in the national interest to accommodate trans-shipment of local for energy production could result in the need for use of different energy sources. This may add to higher energy costs to the public. However, the national interest also encompasses a concern for the protection of resources

such as water, air, wetlands and wildlife. Consideration of the need for the national interest in facilities must take into account the impacts of facilities on these key resources.

Program approval would mean that the State could undertake increased technical assistance to local governments and improved implementation of existing state programs. This would give the State and local governments an opportunity to give balanced consideration to both facilities and resources in the national interest. Lacking program approval, these considerations affecting resources in the national interest might not be made.

FEDERAL ALTERNATIVES

Alternative I - The Assistant Administrator could delay or deny program approval if the policies of the program are not specific enough to ensure a sufficient degree of predictability in decision-making.

The South Carolina program relies on a "networking" approach in coastal areas outside of the identified "critical areas." Seventeen (17) state agencies exercise authority over coastal resources as well as specific areas and activities occurring within the eight (8)-county coastal zone. Most of the statutes granting these authorities were enacted prior to the South Carolina Coastal Management Act.

Through Section 8(B)(11) of the Coastal Management Act the South Carolina Coastal Council (SCCC) is required to review and certify the compliance of permit (and license) applications with the policies of the coastal management program. This "certification" authority in areas outside of "critical areas" is the prime method by which the South Carolina program manages upland uses and activities. OCZM considers this "certification" authority very important and therefore has continually stressed to South Carolina the importance of developing very specific and predictable management policies to use in certifying activities occurring in the coastal zone.

OCZM believed that many of the draft management policies originally submitted were not sufficiently predictable. In many instances OCZM felt that too much discretion had been left to the SCCC. Membership on the SCCC is subject to change as is the leadership of various State agencies and SCCC staff. OCZM felt that it was important that approved program policies not

be subject to major changes in interpretation and emphasis due to changes in SCCC membership, etc.

Additionally, OCZM reviewers have encouraged the State to produce more specific policies for activities occurring in the coastal zone and outside of "critical areas" so that developers, etc. will have a very clear idea of exactly what activities and uses can occur where and under what circumstances.

In response to concerns raised by both OCZM and commenters who reviewed the Draft Program document and the Draft Environmental Impact Statement, the SCCC has revised many of its program policies. These policy changes are generally categorized as follows:

- 1) changes in language from "should" to "shall" on many policies,
- 2) additional (new) policies under specific resource categories,
- 3) a more detailed definition of the phrase "no feasible alternative,"

The strengthening of language on various policies, from "should" to "shall" significantly increases the enforceability of these policies. In addition, the State developed new resource management policies in response to comments received during Draft Program review. Examples of these new policies are policies on septic systems in residential development, additional marine and wildlife protection policies, etc.

The State also made further revisions to its draft policies for energy facility siting. These policy changes reflect a much more specific definition

of the role the Council intends to have in planning and siting decisions for energy facilities locating in the coastal zone. Policies like "k" and "l" (Part II, Chapter IV, Energy Policies) reflect these changes while simultaneously addressing some of the comments received from utility companies and other energy interests.

Probably the most significant refinement made by the SCCC to its draft program policies is a broadened interpretation of "no feasible alternative." The resource management policies of South Carolina's proposed program rely heavily on the concept that certain uses and activities will not be permitted unless "no feasible alternative exists." OCZM has requested that this terminology be further defined and clarified. The final draft program has established specific criteria for determination of what "feasibility" means. These criteria include: legal feasibility, technical feasibility, environmental feasibility and economic feasibility.

In addition, the SCCC has stated that in making a determination of "no feasible alternative" they will consider that "no feasible alternative" applies to no feasible alternative site location as well as no feasible design or construction alternatives, etc. The program policies make the test for "feasibility" include consideration of "public need" and ability to minimize environmental damage. The concept of "feasibility" has been expanded to include consideration of the no action alternative. These policy changes have been submitted to and approved by the SCCC. The South Carolina General Assembly and the Governor, as part of the Final Draft Management Program approval process, have adopted the proposed program.

(The nature of the policy changes subsequent to the DEIS led to the determination that the General Assembly did not need to adopt these refinements.)

The Assistant Administrator believes that the policy changes made affect the significant management concerns identified by the program document and OCZM and provide increased predictability for the applicant.

However, because of concerns raised during Draft Program and Draft Environmental Impact Statement reviews, the Assistant Administrator could delay or deny program approval. In response to such action the State could:

- 1) make no additional policy changes,
- 2) revise specific program policies identified by OCZM as needing further refinement.

If the State determined to make no additional changes, the impacts of delay of program approval would be those generalized impacts identified above for delay or denial.

Under the second option, South Carolina would further modify or refine existing policies. These refinements would then be submitted to the Council for approval, and the nature and extent of policy changes would determine whether or not the General Assembly needed to adopt the new language.

Alternative II: The Assistant Administrator could delay or deny program approval if the definition of Uses of Regional Benefit (URB) is not sufficiently broad to meet the requirements and intent of the CZMA as amended.

During the development of the South Carolina program, the State considered a number of different uses for the inclusion within its definition of Uses of Regional Benefit (URB). At the time of preliminary program approval (October 1978), the State had not finally decided on its URB definition. In his Findings for Section 305(d)(Preliminary Approval) the Assistant Administrator of OCZM found the State responses to URB requirements to be deficient.

As a result of the OCZM's negative finding, South Carolina considered a number of different uses for definition as URBs. The first definition included parks, transportation facilities, and all energy facilities located in the State's coastal zone.

Subsequently, the State decided to limit its definition of URBs to include only parks and transportation facilities as those uses most clearly of regional benefit. The State decided to define URBs more narrowly because of its determination that energy facilities were more naturally in the national interest rather than of a regional nature and thus more appropriately covered under Section 306(b)(8) of the CZMA.

In accord with Section 923.12 of the CZMA Rules and Regulations, two criteria have been established for identifying URBS.

- 1) effect on more than one local unit
of government,
- 2) direct and significant impact on
coastal waters.

The uses cited by South Carolina clearly are in line with these criteria. Section 923.12 of the CZMA Rules and Regulations requires that a State identify URBs and identify those methods that will assure unreasonable local restrictions do not occur. The regulations do not instruct the states as to which uses they must list as URBs. However, based on the program approved to date by the Assistant Administrator and OCZM's interpretation of this requirement, the following uses may be important omissions: electrical generating facilities, regional waste treatment plants and water supply facilities; regional land-fill and/or garbage disposal sites.

The Assistant Administrator has made a preliminary determination that the proposed South Carolina Program meets the URBs requirement as stated. However, because of questions concerning the comprehensiveness of the two identified URBs, the Assistant Administrator could decide to delay or deny program approval. If such action were taken the State could:

- 1) determine not to make changes in its definition of URBs,
- 2) re-define its URBs more comprehensively, ensuring that unreasonable local restrictions do not occur, and submit these program changes to the SCCC for approval.

If the State determined to make no further changes, the impacts would be those generalized impacts identified above for delay or denial of a program.

Under the second option, the State would identify additional URBs that meet the criteria outlined in Section 923.12 of the CZMA Rules and Regulations and submit these changes to the SCCC for consideration and approval.

ALTERNATIVE III: The Assistant Administrator could delay or deny program approval if the State has not clearly defined its Section 307 Federal Consistency procedures.

The State's consistency procedures, as identified in the final draft program document, do not appear to be specific enough to ensure that applicants and federal agencies know exactly how to proceed in getting a coastal program "consistency" determination.

State consistency procedures will continue to be refined after Section 306 program approval as the need arises. However, certain basic procedural questions have already been identified.

Additional information is needed in the following areas:

- 1) The State issuance of a license or permit constitutes its comment on the corresponding federal permit application. The State needs to more fully describe what happens with regard to Federal consistency if an amendment to the approved management program takes effect at the State level prior to Federal approval and incorporation into the State management program.
- 2) The State needs to indicate exactly what State and Federal permits are processed jointly at the present time? What are the differences in procedures for processing joint permit applications and individual State and Federal permit applications.
- 3) In the case of Federal licenses and permits the applicant is required to make a consistency determination to the SCCC. Exactly what materials should this "determination" include specifically? What supporting information will be required.

Similarly, the State should provide, where possible, further guidance to applicants on how to evaluate their proposed programs and activities.

- 4) The Program document should be able to stand alone and not rely upon heavy reference to the Section 307 Federal Consistency Regulations. Federal agencies and other applicants for Federal and State licenses and permits should be able to understand what their responsibilities are in regard to "Federal consistency" without having to understand the Federal regulations.

Numerous refinements have been made subsequent to the DEIS in response to comments received on the Federal consistency section. In addition to answering specific comments, these changes have addressed the items listed above.

The Assistant Administrator has made a preliminary determination that the South Carolina program document meets OCZM requirements regarding Federal consistency; however, because of comments received during Draft Program and DEIS reviews there might be a determination to delay program approval pending further clarification(s).

The State has two options if OCZM decided to delay program approval:

- 1) the State could determine to make no further refinements,
- 2) the State could make further refinements and submit them to Federal agencies and all interested parties during the first 120-days after formal program approval.

If the State determined to make no further refinements, the impacts of delay of program approval would be those generalized impacts identified above for delay or denial.

Under the second option, South Carolina could rely on the specificity of its "operational guidelines" as stated in the program document and issue further guidance after program approval. This option would allow the State to operate under its currently defined procedures for the first 120-days of program approval and then issue, separate from the approved program document, its further refined procedures reflecting changes noted during the first period of implementation. If these consistency procedures are refined and issued separately after program approval, they will also be subject to full Federal agency review.

Chapter 4:
Probable Adverse Environmental Effects Which Cannot Be Avoided

Consistent with the Congressional legislative intent of coastal zone management, the most probable environmental effects of the South Carolina Coastal Management Program will be positive. However, as the Program strives to be flexible and strike a balance between competing needs, localized adverse environmental and socio-economic impacts will occur.

The most likely occasion for adverse environmental impacts will come with the necessary decisions to meet immediate vital needs of the people. Policies within the Program outline the parameters within which the Council will recognize the essential necessity for the defense of the nation, transportation, energy supplies, and concerns of national interest in general. Whenever one of these fundamental needs must be met, detrimental effects on the natural environment may occur. The program does, though, establish a process whereby rational evaluations can be made in each case in order to strike a balance among various needs and to minimize adverse impacts.

Adverse environmental effects can also occur as a result of the cumulative effects of numerous small projects beyond the purview of the Council. The most likely instance would be with individual homes built on highground adjacent to a sensitive area. Yet, even here the Council's point of access will occur when the density of homes requires a new or enlarged water supply, sewer system or utility lines, most of which would require permits. At this point the policies of the Coastal Management Program would apply.

Another possibility for adverse effects could come as a result of

a few policies of the Coastal Program which encourage the concentration of development in urban areas. Concentration of development can lead to increased congestion and concentration of pollutants. The South Carolina Program encourages concentration only in isolated cases, however, and there is an environmental trade-off to be gained where concentration is preferable.

Chapter 5:
Relationship Between Local, Short-Term Uses of the Environment and
the Maintenance and Enhancement of Long-Term Productivity

One of the primary benefits of the South Carolina Coastal Program is to establish a rational process for balancing the short- and long-term uses of the coastal environment. The objective is to minimize or prohibit local, short-term uses, except where a critical public need must be met, if the short-term use precludes the long-term uses and productivity of the environment. In each permit and certification decision of the Coastal Council, this objective will be a major consideration. Water-dependent activities which support both the coastal and inland population are short-term uses of the environment which are generally consistent with the Coastal Program. These activities must, however, be conducted in such a way as to minimize any environmental losses which would threaten long-term ecological stability and minimize any losses which would require public investment for mitigation.

Overall, a high priority is to assure the long-term availability of the renewable resources of the coastal environment. These resources are essential to a stable economy and productive natural ecosystem and to the present quality of life. Rational growth will not be stopped by the Program as long as these essential resources are not jeopardized. Key policies in the Program which address the long-term equilibrium are those which protect the habitats for fisheries and marine life, discourage development in high erosion areas (the mitigation of which would require a major public investment), and those which would prohibit the filling of wetlands and the location of nonwater-dependent activities along the shoreline.

Chapter 6 :
Irrevocable or Irretrievable Commitments of Resources That Would Be
Involved in Proposed Action

Without the Coastal Program in South Carolina, development and activities throughout the coastal region which result in the irrevocable and irretrievable commitment of resources definitely will occur. The objective of the Coastal Program is to assure that a process of evaluation is established whereby significant commitments of coastal resources are made only after full consideration of the economic and environmental consequences. The Program will additionally direct attention not only to the impacts of the specific activity but also to its part of the cumulative effects.

Specifically, priority is given to water-dependent activities which require the utilization of coastal resources and which can be damaging. The Program requires, however, that the environmental, economic, and social costs be minimized more significantly and directly than would be the case without the Program. Therefore, implementation will result in a more comprehensive review of resource commitments and reduce the irrevocable commitments.

Chapter 7:
Relationship of Proposed Action to Land and Water Use Plans, Policies, and Controls in the Area.

The South Carolina Coastal Management Act of 1977 established a new State agency with the mandate to develop and implement comprehensive coastal zone management. Within the framework provided by this State legislation, the South Carolina Coastal Program uses the approach of Direct State Control (Technique B, 15CFR Part 923) as described by Federal regulations from the Office of Coastal Zone Management, National Oceanic and Atmospheric Administration.

The means by which the Coastal Council will exercise the State-level authority over land and water uses of management concern (identified in Chapter III(C)) are two-fold: direct permitting in the critical areas, and review and certification of other State agency permits throughout the coastal zone. In addition, the policies set forth in the program, particularly the recommended or enhancement policies, will serve as guidelines for prudent coastal development. All of these methods are discussed fully in Chapter V(A). The agencies with which the Coastal Council "networks" the review and certification procedure and their respective statutory authorities are detailed in Appendices C and E, respectively.

Conflict resolution procedures, as discussed in Chapter V(B), apply to all of the agencies "networked" into the program, as discussed in Chapter V(A) and Appendix C. In addition, Memoranda of Agreement between the Coastal Council and other State agencies (See Appendix D) should preclude a number of possible conflicts.

Coordination with relevant State, local and Federal entities during program development is outlined in Chapter V(E) and Appendices G, H, and I. Routine consultation will be provided during implementation by the permit

issuance and review and certification procedures, and by various coordination meetings held as needed. Following are brief discussions of some of the more significant aspects of plan and policy coordination at the three levels.

As noted elsewhere, the requirements of the Federal Clean Water Act and the Clean Air Act are addressed in Chapter V(D), and are incorporated into the program. Coordination with the South Carolina Department of Health and Environmental Control will be particularly important in this regard.

On-going State and local efforts in Areawide Waste Treatment Management Planning, pursuant to Section 208 of P.L. 92-500 (Federal Water Pollution Control Act of 1972, as amended), have been coordinated with the coastal program through several mechanisms, including both informal contacts and coordination meetings to discuss issues of mutual concern to the two programs. These meetings involve representatives from the U.S. Environmental Protection Agency (Region IV), South Carolina Department of Health and Environmental Control, which has been delegated Statewide 208 authority, and the three regional agencies developing local plans (identified in Appendix G).

Various Resource Policies for activities subject to the management program have referenced and rely to some degree upon the policies and any subsequent regulations developed within the "208 plans". These policies are particularly those which address the impacts of various activities on water quality from associated non-point source and storm water runoff. (Chapter III (C)(3)).

During implementation phases coordination between the two programs will continue. The Coastal Council has established a Memorandum of Agreement with the

Department of Health and Environmental Control (Appendix D). More specifically, the Council will have jurisdiction for any projects proposed for implementation under the "208 plans" in the coastal zone - direct permit authority in the critical areas, and review and certification of State permit applications throughout the coastal zone. (Permit review procedures and legal authorities are detailed in Chapter V(A) and (B). Note: Actual effluent discharges from treatment facilities, as permitted by law, are exempt from the Council's critical area permit requirements, 'provided, however, that the Council shall have the authority to review and comment on all proposed permits that would affect critical areas' (Section 13(D)(3), South Carolina Coastal Management Act).)

A second specific area of State planning and regulatory controls in the coastal zone which warrants particular discussion is that of oil and gas development activities, and oil spill monitoring and clean up. The South Carolina Water Resources Commission and the South Carolina Department of Health and Environmental Control were granted regulatory authority over the location and construction of oil and gas related facilities, and pollution and environmental damage, respectively. (South Carolina Oil and Gas Act of 1977, see Appendix E.) In addition, the Council will permit any oil and gas related facility in the critical area. The Coastal Council coordinates closely with these two State agencies, and they have had significant input into the coastal program. The Council will have opportunity to review and comment on any regulations promulgated pursuant to this Act, and will have authority to review and certify all oil and gas-related permit applications issued in the coastal zone by these two agencies. (Chapter IV(B), "Regulatory Authority")

South Carolina's Coastal Program addresses uses of regional benefit in

Chapter III(C)(2), which explains how the State of South Carolina has management authority sufficient to ensure that local ordinances do not unreasonably restrict or exclude land and water uses of regional benefit. Chapter V(E)(5) details provisions for Coastal Council review and consideration of local zoning ordinances, building codes and the like.

In development of the State's coastal program, the Coastal Council has identified several Federal agencies or management areas which warrant special concern. Coordination with these agencies has been significant during the planning stages and will be even more so in implementation of the program. These include, but are not limited to the following:

- The U.S. Army Corps of Engineers worked in close coordination with the Council during development of the "critical area" permitting section of the management program. Coordination with the Corps has resulted in a joint public notice procedure and the development of a general permit which simplifies the permitting procedure for construction of minor, private recreational docks. The Corps will continue to play a key role in administration of the permitting process.
- The U.S. Air Force has been a significant contributor due to the location and operation of major air facilities in Charleston and Myrtle Beach.
- The U.S. Fish and Wildlife Service and the National Marine Fisheries Service input is significant because of their interest in environmental protection and resource management. The Fish and Wildlife Service also manages two major refuges in the coastal zone.

-Recent revisions to Bureau of Land Management and U.S.G.S policies and regulations have enabled greater participation by State coastal programs in monitoring of OCS activities.

-Both the Soil Conservation Service and the Forest Service were important contributors due to the importance of forestry and agriculture in South Carolina's coastal zone. In addition, the Forest Service manages the Francis Marion National Forest, located in the coastal zone.

Chapter 8:
Consultation and Coordination with Others

Extensive consultation, coordination, and input has been received in developing the South Carolina Coastal Program. A number of mechanisms have been used for achieving this level of public and governmental input:

- exhaustive mailing lists of individuals, interest groups, and local, State and Federal agencies; also slide show presentations, information brochures, etc.;
- a newsletter to keep Federal agencies informed of progress in program development ("Carolina Currents", issued seven times since formation of the Coastal Council in July, 1977);
- Federal Regional Council meetings to reach Federal agencies at the regional offices (Atlanta, Region IV) (two held since formation of the Coastal Council); in addition, meetings were held with individual agencies at the regional level;
- citizen working groups in each of the eight coastal zone counties, as well as an inland-county group;
- Technical Advisory Committees for the three new planning elements - erosion, beach access and energy facility planning;
- a local government information packet, explaining various aspects of the program, distributed with personal contact by the local government liason;

- Memoranda of Agreement (MOA) developed with each of eleven State agencies, involving numerous formal and informal meetings;
- open and well-publicized regular monthly meetings of the South Carolina Coastal Council;
- four public hearings, throughout the coastal zone and in the State capital, on the proposed Rules and Regulations for Permitting, during January, 1978;
- workshops co-sponsored with the regional planning agencies to explain the program and the permitting process;
- circulation, and review and comment periods for each draft segment or chapter of the program, as well as the full program document;
- five public hearings on the completed draft program document, held across the State in November, 1978.

These activities and the continued emphasis on intergovernmental and public participation are documented in the following sections of the document:

- Appendix A - History of Program and Legislation
- Chapter V(F) - Intergovernmental Coordination
- Chapter V(G) - Public Participation
- Appendix D - Memoranda of Agreement
- Appendix G - Federal Coordination
- Appendix H - State Coordination

Appendix I - Local Coordination

Appendix J - Public Participation

Coordination will be an integral facet of the implementation of the South Carolina Coastal Program. It is a major goal of the Program (Chapter III(A)).

The Coastal Council's direct regulatory authority in the critical areas incorporates significant agency and public input, through public notices issued for all permit applications, publication of notice of application in local newspapers, opportunity for an appeals procedure, and the fact that twenty or more citizens may request a public hearing on any application. Comments from relevant local, State and Federal agencies are solicited on all permit applications, and are considered in permit decisions. (Explained in detail in Chapter V(A), and (B), Appendix K.)

Throughout the coastal zone, the use of "networking" as the basis for management authority will demand considerable coordination efforts (Chapter V(A), Appendix D). Federal consistency provisions will guarantee consultation and coordination with Federal agencies in implementation of the program (Chapter V(F)(3)). Continued public involvement will be vital to the success of the program in meeting its goals of wise coastal resource management (Chapter V(G)). And finally, the evaluation and amendment procedure (Chapter V(D)) will ensure consultation and coordination in the future refining and modification of the program.