#### AN INTRODUCTION

In 1970, the Department of Defense discontinued use of the Charlestown Naval Auxiliary Landing Field in Charlestown, Rhode Island and transferred nearly 400 acres to the U. S. Fish and Wildlife Service. The plan was to expand the nearby Ninigret National Wildlife Refuge. Unfortunately, nearly 70 of the 400 acres were covered by aging asphalt runways, effectively precluding any large scale restoration efforts of the coastal sandplain grassland habitat that once covered the refuge. Although representing one of the northeast's high priority habitats for restoration and protection, the estimated costs to remove the runways — ranging from \$1,700 to \$7,000 per acre — were prohibitively expensive and effectively delayed restoration efforts for almost three decades.

"To pursue the protection and sustainable development of the marine and coastal environment and its resources ... requires new approaches to marine and coastal area management and development."

U.N. Conference on Environment and Development

In 1997, Coastal America facilitated collaboration between a U.S. Army Reserve Unit and the Refuge. Moving earth and asphalt, Army reserves prepared the site as part of their annual two week training on heavy equipment. The asphalt runways and underlying crushed stone were excavated and removed to a local sand and gravel company where they were recycled and received new life as roadbed material. With some asphalt left to create parking areas, handicapped access and interpretive trails, visitors can now delve into the refuge's fascinating and diverse habitats.

This productive and nontraditional partnership yielded multiple benefits: The U.S. Fish and Wildlife Service could at last begin cost-saving restoration, saving from \$1,450 to \$6,750 per acre over the original estimated costs. The actual cost—less than \$250 per acre—was for fuel to run equipment. The reservists gained from their training on heavy equipment, and all the partners contributed to a major ecological event that now serves their entire community.

#### **ORIGINS**

In early 1991, officials from four Departments — the Army, Commerce, Interior, and the Environmental Protection Agency — met to explore collaborative ways of more effectively complying with various environmental statutes, including, among others, the National Environmental Policy Act (NEPA), the Endangered Species Act (ESA), and the Fish and Wildlife Coordination Act (FWCA) of 1958. For example, the FWCA mandates that, during both planning and implementation, federal projects give equal consideration to fish and wildlife resources. The FWCA, however, was not working as planned. Key federal and state natural resource agencies were often excluded from decision-making and coordination was weak. Stringent focus on project schedules and funding restraints too often overrode valid alternative solutions to fish and wildlife concerns. As recognized by the four officials, compliance was clearly not working.

A working group was organized which proposed establishing an interagency partnership to address significant national coastal problems. The working group proposed Congressional funding to help federal partners, together with state and local governments, develop and implement projects at the community level. It proposed a vision in which all partners would jointly identify coastal concerns and cooperatively use their existing authorities and assets to restore and protect our coasts. Coastal America became the outgrowth of this vision.

Widespread support but no Congressional funding resulted. Yet the four Departments remained solidly committed to strengthening their vision of the partnership. They continued promoting more open discussion of coastal issues, creatively examined their existing authorities to determine how best to collaboratively support Coastal America's goals and objectives, and generated alternative funding sources such as in-kind transfers and volunteer services. The partner agencies sought new and ever-innovative means to fund joint activities — and turned initial financial defeat into an advantage. Vision, dedication, innovative funding and other mechanisms still prevail. Today Coastal America's activities continue to leverage resourceful blends of programmatic funding, in-kind transfers of technical assistance, volunteer labor and cost-sharing with state and nongovernmental organizations.

#### **OBJECTIVES**

Coastal America was formally established in April 1992. The four founding partners, the Departments of the Army, Commerce, Interior, and the Environmental Protection Agency, were joined by the Departments of Agriculture, Air Force, Navy and Transportation and the President's Council on Environmental Quality. Two years later, the Departments of Defense, Energy, and Housing and Urban Development came on board.

Federal partners comprise those with statutory responsibilities for coastal resources and those whose operational activities affect the coastal environment. Two guiding concepts predominate: ecosystem management and sustainable development. Issues might include habitat loss and degradation, nonpoint source pollution and/or contaminated sediments.

Integrating existing federal resources with state, local and nongovernmental efforts, partners focus on regional activities that provide direct local and watershed action. They pledge to:

- Protect, preserve and restore the nation's coastal ecosystems through existing federal capabilities and authorities;
- Facilitate collaboration and cooperation in the stewardship of coastal living resources by working in partnership with other federal programs;
- Integrate federal actions with those of state, local and nongovernmental efforts: and
- Provide a framework for action that effectively focuses agency expertise and resources on jointly identified problems to produce demonstrable environmental and programmatic results that may serve as models for effective management of coastal living resources.

#### NOT BUSINESS AS USUAL

Processes and procedures are often locked into place by years of experience and use. It's a "business as usual" way of doing things, a "gestalt" or unified pattern that extends beyond the sum of its component parts. The existing gestalt is reinforced by familiarity with "the ways things are done." The term "gestalt shift" is used to describe the process of moving away from the unified whole, to a different

configuration or even an entirely different way of thinking. Gestalt shift is not easy to achieve. There is often resistance from within an organization, especially by those individuals who are most affected. They have grown accustomed to a given way of doing business, regardless of its inefficiencies.

"Coastal America continues to bring together federal agencies, as well as state and local governments and other organizations, to develop projects that protect, preserve and restore coastal ecosystems. By applying different federal authorities and programs synergistically to natural resources and infrastructure issues, Coastal America solves problems that would be intractable for one agency alone."

Al Gore Vice President

Coastal America's multiagency approach represents a major gestalt shift — a move away from individual agency projects and proponency to the collaborative partnership approach. Years of dissatisfaction with the single agency approach to coastal projects laid the groundwork for the shift. Still, building a partnership network and standardizing procedures and techniques were essential to successfully initiating the shift. In its 1997 Fisheries and Wildlife Assessment, the National Fish and Wildlife Foundation indicated that a significant contribution by Coastal America was the change in the organizational behavior of its member agencies. Their assessment stated, "Agencies with historic rivalries or that simply ignored each other have embraced cooperative activity at all levels of their organizations under the auspices of Coastal America." Additionally, Senator Joseph Lieberman (CT) observed the following at a Coastal America event: "We are challenging the barriers that often exist between state and federal efforts. We are recognizing that no one agency or citizens' group or elected official can accomplish big tasks alone. It's encouraging to see these agencies pool their financial and technical resources to a common end." Coastal America will continue to strengthen its network of partners and speak to the importance and efficiency of collaborative activities undertaken by its partner agencies. It is the most effective, enduring means of addressing America's coastal challenges.

#### THE COLLABORATIVE PROCESS

Coastal America partners bring a broad, problem-solving orientation to the table. National policy issues are identified and resolved, regional plans and strategies are developed, and local projects are effectively implemented. Four complementary elements formulate and implement policy and program direction: the Principals Group, the National Implementation Team (NIT), the Regional Implementation teams (RITs) and the Coastal America Coordinating Office (see organizational chart on page 4).

#### The Principals Group

The Principals Group is composed of subcabinet-level Under Secretaries, Assistant Secretaries and Administrators from each of the federal partnership agencies. Their responsibilities include establishing overall partnership direction; addressing broad, multiagency policy issues as they relate to the collaborative implementation of the agencies' coastal programs; and reviewing and approving the operating budget of the Coastal America Coordinating Office. The Principals Group receives advice and suggestions on the setting of coastal policy from consensus recommendations of the NIT, the RITs and the Coastal America Coordinating Office.

The subcabinet-level standing of the Principals Group is an asset to the Coastal America process. The Principals are in a unique position to direct and influence national coastal policy as well as coastal program activities within their respective agencies. In addition, the participation of the Council on Environmental Quality adds the support of the Executive Office of the President. The considerable influence of the Principals is used to recommend to Congress policy changes in the partners' coastal programs. Perhaps the most beneficial aspect of such policy changes is that they are formulated

"All of us involved in Coastal America are convinced that collaboration is the most cost effective and efficient way of doing business in a time of limited resources. Partnerships among federal and state agencies and nongovernment organizations better serve the public and the environment."

Dr. James Baker
Former Chair,
Coastal America and
Under Secretary of
Commerce for Oceans
and Atmosphere

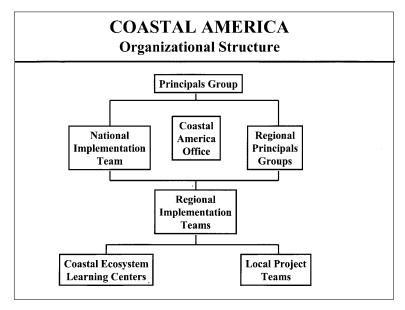
through a collaborative, bottoms-up approach beginning at the local and regional levels. The RITs identify policy issues and provide input to the NIT, which, in turn, provides consensus recommendations to the Principals Group which determines any actions to be taken. The active involvement of the Principals Group has allowed these individuals to reconcile agency procedural and substantive conflicts through regular meetings. Just as importantly, they have applied their individual agency's authorities and programs synergistically to natural resource and infrastructure issues, to solve problems that would be intractable for one agency acting alone. Finally, the ability to raise field-level, interagency frustrations to key officials in Washington has greatly improved interagency cooperation and understanding and reduced the time necessary to resolve them.

#### The National Implementation Team (NIT)

The NIT is composed of senior staff from each of the partnership agencies, who are designated by their Assistant Secretaries and/or Administrators. The NIT is chaired by the Director of the Coastal America Coordinating Office and meets monthly. This organizational structure enables early identification of policy issues and conflicts at the local, regional, and national levels and encourages their timely resolution by senior policy makers. The NIT is responsible for reviewing policy issues identified by RITs and developing and forwarding consensus recommendations to the Principals Group. In addition, the NIT members represent their respective agencies at national coordination meetings, provide advice to the Coastal America Coordinating Office, represent Coastal America in various forums, participate on special work groups as necessary, explore and facilitate coordination of national, inter-regional and other large-scale projects and provide assistance to regional public education and outreach efforts to facilitate awareness, support and involvement in Coastal America projects.

#### The Regional Implementation Teams (RITs)

The RITs are composed of individuals selected by their agencies to collaboratively develop local, watershed focused proposals which could be enhanced through the Coastal America partnership. The process of exchanging information on agency plans encourages the early identification of collaborative opportunities



to restore the environment while simultaneously moving forward with vital economic development. The RITs provide a forum for this type of interagency consultation and action. Members examine their own agency's programs and authorities looking for areas of overlap with those of the other partnership agencies to determine the potential for implementing joint projects that address coastal problems in a more effective manner.

The RITs also develop regional action strategies defining major issues, special focus areas, goals and objectives within each region and specifying the processes whereby joint projects are

identified and implemented. Within the framework of each regional strategy, site-specific coastal projects addressing habitat loss, nonpoint source pollution, contaminated sediment management, and other issues considered unique to the region, are identified and planned. Finally, each RIT establishes priorities for project implementation from a suite of proposed collaborative projects. There are nine Coastal America regions - Northeast, Southeast, Gulf of Mexico, Southwest, Northwest, Alaska, the Great Lakes, the MidAtlantic and the Pacific Islands. These regions closely parallel the areas of responsibilities of the partnership agencies making collaboration easier and encouraging a stronger geographic focus.

The Principals have challenged the RITs to incorporate the principles of sustainable development and ecosystem management into their regional strategies. The RITs are also expected to develop a mechanism for sharing information on agency programs and priorities among the partners, and encouraging public, state, and nongovernmental organization involvement in Coastal America projects so they harmonize with state and local objectives. Each RIT gives priority to projects that: 1) are action oriented and focus upon national coastal issues; 2) are multiagency, including at least three federal partners and one non-federal participant; and 3) include an education/outreach and monitoring component. In addition, project cost sharing of total project costs from the nonfederal participants is strongly encouraged.

#### The Coastal America Coordinating Office

The Coastal America Coordinating Office provides the external point of contact for the partnership and facilitates the activities of the Principals Group, the NIT and the RITs. The Office conducts numerous administrative activities, including maintaining day-to-day contact with the RITs, providing administrative support to the NIT and organizing meetings and annual retreats for the Principals, RITs and NIT representatives to discuss and resolve policy and implementation issues. The Office produces an annual report in cooperation with the RITs and NIT as well as quarterly newsletters, technology transfer reports, educational products and a national homepage on the Internet. Office staff are provided by long-term personnel details from the partnership agencies, which provide the Director, Deputy Director, Education and Outreach Coordinator, Watershed Coordinator and a Secretary. Additionally, two federal programs, the Executive Potential Program and the Women's Executive Leadership Program have been effectively utilized to provide highly motivated short term (2-3 month assignments) support to the Office. The Office coordinates the multi-agency committee structure of the partnership, and is responsible for generating articles and making presentations at conferences and symposia on the beneficial activities of the partnership and in developing new partnership arrangements with interested organizations. In addition, the Office coordinates the activities of four standing work groups: Policy; Education and Outreach; Technology Transfer; and the Scientific and Technical Advisory Committee. Finally, the Office is a catalyst for the development and facilitation of national projects and products and education/outreach activities.

#### THE PARTNERS

#### Federal Partners

The federal partners today include those agencies with principal responsibilities for the stewardship of coastal resources, those with responsibilities

"This event represents an important milestone in our efforts to establish a collaborative partnership between federal and State government agencies ... This effort represents a level of government cooperation that is unprecedented. The benefits that can be accrued are immeasureable."

Gerry Studds U.S. Congressman (MA)

Massachusetts Coastal America Event for infrastructure development and maintenance, and the military departments. The Departments of Agriculture, Air Force, Army, Commerce, Interior, Navy, Transportation, and the Environmental Protection Agency were signatories to the 1992 Memorandum of Understanding (MOU). Additionally, the President's Council on Environmental Quality signed as the ninth member and served as the overall partnership chair. In July of 1994 a new MOU was developed and three more federal agencies joined the Coastal America partnership: the Departments of Housing and Urban Development, Defense and Energy. The Principals Group now elects one of their own to serve as the chair and provides overall partnership coordination.

#### Nonfederal Partners

The nonfederal partners of Coastal America comprise an increasingly important and diverse group of agencies and organizations. They include those state, regional, county and city agencies involved with coastal restoration, protection and enhancement projects in their respective jurisdictions. Such agencies include departments of natural resources, environment, fish and wildlife, transportation and education to name just a few. In addition, many coastal commissions and program offices are Coastal America partners providing expertise and assistance with local issues such as permitting, zoning and local regulations. These partners help to bring local interests into the partnership process by providing local knowledge, local funding for projects, in-kind transfers of services, real estate and technical assistance.

Since Coastal America's inception, various nongovernmental organizations (NGOs) have also become involved in the partnership. They bring expertise and a private sector viewpoint to the Partnership as well as being a source of volunteers for project implementation. Among the NGOs currently participating are conservation groups, industry associations, universities and aquariums.

#### **DELIVERING A STRONG PUBLIC MESSAGE**

Many aquariums and science centers have become Coastal America partners by joining the innovative network of Coastal Ecosystem Learning Centers. With a trove of educational and scientific riches, the Learning Centers are delivering a strong public message about the value of our coastal resources. Designated in 1996, Boston's New England Aquarium was the pioneering Coastal America Learning Center. The Florida Aquarium in Tampa was designated soon after. They have since been joined by: the Mystic Aquarium in Mystic, Connecticut; the National Aquarium in Baltimore, Maryland; the New York Aquarium in Brooklyn, New York; the Monterey Bay Aquarium in Monterey, California; the Texas State Aquarium in Corpus Christi, Texas; the Hatfield Marine Science Center in Newport, Oregon; and the Alaska Sealife Center in Seward, Alaska. (See pages 15 and 16 for more details about the Learning Centers.)

# The Five Elements Of Success

Cooperation and Collaboration

Enhanced Project Benefits and Scale

Funding

**Technology Transfer** 

**Education and Outreach** 

Elements of Success: A Summary

Coastal America succeeds in five complementary ways. Each element of success plays a unique role when present in a particular project. Since one of Coastal America's primary purposes is to build cooperation and collaboration among its partners, this becomes the first element of success. With this strengthened level of cooperation the second element of success is an enhanced level of project benefits. The third and vitally important element is the leveraged funding generated by increased collaboration among partner agencies. The transfer of technology resulting from innovative projects and increased collaboration is a fourth element. Finally, improved education and understanding, for both partners and the general public, evolves as the fifth element. As summarized below and reflected in the case studies (See Appendix A), every element is a firm contributor to more effective environmental solutions for the health of our coasts.

"Coastal America represents a somewhat different approach. It provides a forum under which agencies discuss their plans and programs in a context that is not crisis driven. Coastal America also brings together a much broader set of players than we normally think of in an environmental context."

Jim Pipken Department of Interior

#### COOPERATION AND COLLABORATION

Cooperation and collaboration occur on every level, from more extensive coordination of research, policy and regional environmental management efforts, to the comprehensive management of coastal problems via a watershed approach. No activity, however, is more critical than the partnership process itself.

#### The Partnership Process

Coastal America was partially founded to improve the cooperation among federal agencies as they attempted to comply with various environmental statutes, including, among others, the National Environmental Policy Act (NEPA), the Endangered Species Act (ESA), and the Fish and Wildlife Coordination Act (FWCA) of 1958. Prior to the Coastal America partnership, construction agencies only included the recommendations of the natural resource agencies late in the planning process and then only gave them limited consideration. The considerable knowledge and expertise available from within the natural resource agencies was not being utilized in the development and implementation of federal construction projects as intended by these and other environmental statutes.

Today the partnership process forms the foundation for the success achieved by Coastal America. This process brings together the collective knowledge and expertise of partner agencies and applies it to resolve coastal problems through joint project development and implementation. Members of regional implementation teams can readily identify opportunities for partnering. They have sound knowledge of their agencies' authorities and understand how their authorities can best help address specific coastal issues. As project development moves forward and relationships are forged, a growing awareness of the services and expertise available from within the partnership begins to emerge. These relationships build over time, providing a familiarity with the process as well as valuable experience on how to make the process work more efficiently. Such familiarity of process, for instance, was responsible for engaging Navy divers to map eelgrass beds in Narraganset Bay, Rhode Island for federal and state natural resource agencies while testing new equipment designed for military purposes. Project development is conducted in an atmosphere that is non-threatening and non-confrontational, thus conducive to innovation. This was the case when Coastal America's Northeast Regional Implementation Team worked in collaboration with the State of Maine to examine various means of achieving the state's multiple environmental objectives such as

removing dams that were interfering with the spawning runs of anadromous fisheries. Now when new proposals are submitted for endorsement, potential partners are readily identifiable and their capabilities and limits are known, thereby providing an effective implementation vehicle.

#### Policy and Research Coordination

Within government, agencies with varying jurisdictions and missions often target research needs. This sometimes leads to concurrent research efforts on similar topics. One federal agency, for example, may conduct a biological impact study of a proposed project required for compliance with the National Environmental Policy Act. At the same time, another federal agency, or a local government agency, might have similar study needs in support of local and/or state regulatory requirements for the same project. When these efforts occur in isolation, there is strong potential for the inefficient use of available resources and duplication of effort. However, if all the agencies and interests involved in a project are identified at the outset and brought to the table as partners, opportunities for collaboration can be identified and such waste can be eliminated.

On North Carolina's Dare County Air Force Range, for example, Coastal America partners are collaborating on an extensive research effort into examining alternative reforestation techniques for Atlantic white cedar ecosystems. Partners include the U.S. Air Force, the U.S. Fish and Wildlife Service, the U.S. Forest Service, the North Carolina Division of Forest Resources, and the North Carolina State University. In northern California, Coastal America's partners worked collaboratively at the Sonoma Baylands restoration project to use a Corps authority innovatively (Section 1135 of WRDA 1986, as amended) as a means of determining whether a proposed disposal option could be successfully accomplished, The beneficial use of dredged material was demonstrated on a small 39 acre site and ultimately was successfully used on the larger, 348 acre wetland restoration site.

The partnership process further fosters early identification and timely resolution of agency policy conflicts, allowing more efficient project implementation. Reducing and eliminating overlapping efforts, and helping to curtail conflict in coastal initiatives, are key components of the value added by Coastal America partnerships.

#### Regional Environmental Management

America's coastal ecosystems are highly variable, ranging from the northwest's rocky shores to the lush salt marshes of the southeast. Consequently, the nature of coastal environmental problems faced in each region assumes a highly individual character based upon the unique environmental features of the resources. In some instances, a coastal restoration, protection or enhancement project might involve several sites. This may be the case where several coastal rivers and their corresponding watersheds are degraded for a variety of reasons and their combined discharges impact a broad coastal region. Any attempt to solve such a problem will require extensive coordination as well as various restoration efforts.

If funds are limited, a determination of which site(s) to be restored first will be required. Many factors must be considered when making such a priority

determination. Local desires and plans are key. Costs and environmental benefits must be assessed and compared. The types of development to be sought and approved must be considered.

The comprehensive study of the Blackstone River Basin in Rhode Island and Massachusetts is an excellent example of comprehensive regional environmental management. The Corps of Engineers, the National Park Service, the EPA, the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, the Massachusetts Department of Environmental Protection, and the Rhode Island Department of Environmental Management are collaboratively examining restoration alternatives for this degraded watershed, including: the restoration of fish spawning habitat, wetland ecosystems and waterfowl nesting areas; the construction of fish passage facilities; and the isolation of contaminated sediments by "capping" or covering them with clean sediments.

Long-term plans for the region are also critical. This requires an organized strategy jointly developed by regional stakeholders. Each Coastal America regional implementation team is charged with establishing and updating such a regional strategy. Each team is also asked to bring appropriate state and local organizations into the Coastal America process. For example, in Juneau, Alaska, Coastal America is now involved with a 26- member team to examine potential solutions to restoring Duck Creek and its watershed. A key element of success, this regional approach helps define regional priorities and flags potential areas for project activities.

#### Comprehensive Management of Coastal Problems

Many coastal problems begin miles from the coast. Pollutants from such diverse sources as factories, farms, home septic systems, acid rain, roads and silvicultural practices are deposited in the upper reaches of coastal watersheds. As these pollutants are carried across the land as runoff, they collect in the watershed's smaller, upstream tributaries. Eventually these smaller streams combine, concentrating greater amounts of pollutants from within their watersheds. Ultimately these streams converge and enter coastal embayments and bays where the pollutants are deposited and harm these coastal ecosystems. It is, therefore, imperative that efforts to enhance, restore and protect our coastal ecosystems take a comprehensive watershed approach.

Such an approach must include remediation of the pollutant sources upstream through downstream because coastal restoration and protection efforts can be seriously diminished without this remediation. In the northeast, the Blackstone River watershed example cited above demonstrates just such an approach. Working together, several partner agencies are rallying legislative authorities to provide a more comprehensive watershed solution. On another site, in the Cockroach Bay watershed of Florida, Coastal America's partners are restoring 651 acres of estuarine habitat in an effort to help improve Tampa Bay's water quality by using the restored habitat to act as a filter to purify runoff from adjacent properties.

Coastal America is committed to such watershed approaches and actively promotes projects that incorporate a watershed focus. This commitment arises out of a growing body of evidence that aquatic ecosystems are most effectively addressed within a watershed context and that truly comprehensive watershed approaches can only succeed with the cooperation of all interested parties.

"Coastal America's ability to bring agencies and organizations together to achieve common objectives in the coastal arena continues to serve as a model for effective government in this time of declining resources ... We accomplish this through our partnership structure that links national policy formulation to

Robert Perciasepe Assistant Administratror, U.S. EPA, and former Chair, Coastal America

regional planning and

ultimately, to local

implementation."

project

In the Neuse River basin of North Carolina, anadromous fish passage was obstructed by the Quaker Neck Dam, blocking important spawning grounds for many anadromous fish species, including sturgeon, striped bass, shad and river herring. Removal of the Quaker Neck Dam restored 75 miles of mainstem river and 925 miles of tributaries, reestablishing a significant amount of spawning area and habitat for these anadromous fish species. Efforts are now underway to remove other dams in the basin. Building upon these dam removal efforts, the State of North Carolina and Coastal America's southeast regional implementation team recently agreed to further examine the Neuse River Basin in an effort to identify and implement projects that would address water quality, habitat protection and sustainable development issues.

"Coastal America provides a mechanism for a wide array of federal and state agencies to work together and develop national and regional plans for protecting our coastal areas."

U.S. Senator Joseph Lieberman (CT)

#### ENHANCED PROJECT BENEFITS & SCALE

Enhanced scale of project is the second element of success. Project scale can be enhanced by adding the services of additional partners with similar and/or complementary authorities. Bringing together the capabilities, assets and resources of multiple agencies, the partnership approach heightens the level of environmental benefit obtained by such project collaboration and the speed with which a project can be completed, representing the two most significant enhancements to scale provided by Coastal America.

#### Level of Environmental Benefits

The environmental benefits of a project are determined by the size of the area to be protected, enhanced and restored. This is especially true for wetlands and other habitat restoration and preservation projects, the restoration of travel corridors for migratory species, and activities designed to improve, conserve and restore biodiversity.

While smaller projects may be critical, large scale projects generally provide greater environmental benefits because of the numbers and variety of species capable of using the habitat. Larger habitat areas generally provide greater buffer areas between humans and their activities and the species of interest. Larger wetland areas, for example, provide greater surface area for water purification and more habitat, cover and nursery areas for fishery resources. In many cases, the greater the scale of the project the higher the level of environmental benefits. Enhanced scale usually adds value to a project.

Coastal America enhances the scale of projects and activities by combining the resources, skills and capabilities of tribal and federal partners with those of state and local governments and nongovernmental organizations. If a project is too complex for a single agency to manage on its own, other agencies may lend a hand by providing for the management of project increments and keep the project on schedule. In addition, no single agency is fully equipped to deal with every facet of a more comprehensive project. For example, the Duwamish River Estuary project in Seattle, Washington benefited from the project management skills of the Corps of Engineers. The Corps assisted the U. S. Fish and Wildlife Service, the overall project lead, to implement three restoration projects designed to improve salmon habitat degraded by industrial development in a highly urbanized setting.

Project collaboration can also increase the scale of the project. Such components as infrastructure improvements, public access and educational features can be added to a project where they might otherwise be left out. It is unusual for a single agency to be able to do it all. The Galilee Bird Sanctuary Saltmarsh Restoration Project in Rhode Island was enhanced by partner efforts to simultaneously modify a highway and a navigation project. One hundred and twenty-eight acres of vital saltmarsh were restored, providing a valuable mitigation site and improved infrastructure. This project could not have been accomplished without the combined authorities, expertise and resources of the Corps of Engineers, the National Oceanic and Atmospheric Administration, the Department of Transportation, the Environmental Protection Agency, the U.S. Fish and Wildlife Service and the Rhode Island Departments of Transportation and Environmental Management.

"Coastal America's strength is the creativity and "wholeness" of projects that are developed through the collaborative partnership process. Using dollars to measure success misses the point; Coastal America is about taking advantage of opportunities."

Leonard Shabman
Committee on
Restoration of Aquatic
Ecosystems, National
Academy of Sciences

#### **Expediency**

Coastal problems often require immediate action. Stabilizing eroding dunes by planting native vegetation, regenerating seagrass beds following natural disasters and enhancing storm-damaged mangrove forests by removing debris and replanting are all examples of projects requiring expedited action. The repair and/or relocation of damaged infrastructure further adds to the need for expediency while also providing the opportunity to rehabilitate needed infrastructure in a less environmentally damaging manner.

In some cases, seasonal time frames mandate when work must be done. Newly planted vegetation may need to establish itself. Migratory species may need time for passage past a construction site. In other cases, there are critical habitat requirements. Mangroves and tidal wetlands require proper elevation to assure adequate tidal exchange. Generally, the sooner a project is completed, the sooner environmental and social benefits begin to accrue. This follows from the concept of net present value which tells us that the benefits of projects done today are far greater than the benefits of projects completed in a few years or even next year. Expediency, the timely completion of a coastal project, is a strong element of Coastal America's success.

When red mangrove forests around Puerto del Mangler in Puerto Rico were severely damaged as a result of Hurricane Hugo, it was clear that natural regeneration would not occur expeditiously. The U.S. Fish and Wildlife Service, the Environmental Protection Agency, the National Marine Fisheries Service, the University of Puerto Rico, together with numerous local volunteers and nongovernmental groups engaged in a restoration project that replanted over 15,000 feet of shoreline and over 20 acres of fringe red mangrove.

Just as in Puerto Rico, Coastal America expedites projects by pooling multiple agency resources, funding and skills to adopt projects sooner than they otherwise might be adopted. This hastens a project's entry into the federal budget cycle. Additionally, given today's restricted budgets, the value of collaboration is demonstrated by the higher budget priority being given to jointly funded projects and project cost-sharing. This promotes the extension of federal dollars by incorporating nonfederal sources and giving these nonfederal interests a greater stake in the effort. In some cases volunteer labor can be utilized to speed project activities within seasonal constraints and reduce overall project costs.

The partnership also acts to expedite projects by promoting the participation of all interested parties at the outset, thereby adding quality and ownership of the activity. In this way, potential implementation barriers, such as obtaining local permits and avoiding activist law suits, can be considered from the beginning, thereby reducing potential costly delays during project construction. On the Kenai River restoration project in Soldotna, Alaska the Coastal America partners worked collaboratively to provide various successful erosion control solutions along the river for the benefit of salmon and recreational fishing. By working closely with local, state and federal agencies several solutions were successfully demonstrated and a "one-stop shop" created to provide technical and administrative support to local land owners.

#### **FUNDING**

"Cleaning up our past mistakes in regard to the environment is very costly. In these tough economic times we can't afford to continue these mistakes, and then pass the bills on to others in the future. We need to invest in cost-effective technologies and partnerships that leverage our limited funds."

U.S. Senator Barbara A. Mikulski (MD) Funding coastal restoration and protection projects and activities is often the single most difficult obstacle to overcome, particularly in austere budget times. It is prudent to consider as many potential funding sources and to leverage these sources as much as possible.

Coastal America's projects are typically funded by and participated in by at least three federal partners. Additionally, state, local and/or nongovernmental partners are also encouraged to get involved. To date, over 300 nonfederal partners have contributed either cash or in-kind services to Coastal America's projects and activities. Coastal America provides a mechanism for combining funding resources and a vehicle for in-kind transfers and volunteer services, further bolstering funding levels. Coastal America's endorsement has proven to be a considerable benefit when it comes to federal project funding — the endorsement clearly increases the likelihood that a project will be given higher priority within a partner agency's annual budget proposal. Finally, creative costsharing mechanisms assist many projects.

#### Federal Programmatic Funds

All federal partners provide funding for Coastal America projects through their appropriate authorized coastal and environmental programs. In most cases, a lead partner agency is identified for a given project. This agency often provides the bulk of the funding. Partner agencies also encourage and facilitate contributions by other federal partners by seeking opportunities for them to identify program areas for which they have responsibility in the vicinity of the lead agency's project. In this way, more comprehensive solutions to jointly identified coastal issues are provided.

An excellent example of the use of programmatic funding occurred in Connecticut, where the Mohegan Tribe requested the use of Section 22 funds (Water Resources Development Act of 1976) to identify and develop solutions for water quality problems. Section 22 funds can be used by the U.S. Army Corps of Engineers to assist states and tribes in planning water resource development as long as the participating state or tribal agency funds 50 percent of the cost. The Corps, as the lead federal agency, joined with the Navy, the Natural Resources Conservation Service, the State of Connecticut and the Northeast Regional Implementation Team to host a workshop with tribal and partner agencies that explored possible implementation strategies. Section 22 funds are now an important element in

identifying state, tribal and/or federal collaborative possibilities. They have also become an important means of funding the planning components of Coastal America projects. Coastal America promotes the use of such funds for coastal projects and provides an existing federal state partner framework that is amenable to applying Section 22 funds.

A wide variety of authorized programs have been utilized in the implementation of coastal restoration and protection projects facilitated by Coastal America. Some of the more prominent ones include: Section 1135 of the Water Resources Development Act (WRDA) of 1986, as amended, which allows for the modification of existing structures or their operations by the Corps for environmental purposes; Section 206 of WRDA 1996 which allows for the restoration of aquatic ecosystems by the Corps; Section 204 of WRDA 1996 which allows for the beneficial use of dredged material associated with federal navigation projects constructed and maintained by the Corps; Section 319 of the Clean Water Act (CWA) which provides for the awarding of grant monies to states by EPA to implement nonpoint source management activities; Section 320 of the CWA which establishes the National Estuary Program and provides funds from EPA for problem identification in coastal waters; Sections 305, 306, 309, 310 and 6217 of the Coastal Zone Management Act which provide funds for NOAA to issue grants to states for various coastal zone activities; the environmental provisions of the Intermodal Surface Transportation Efficiency Act which allow DOT/FHWA to fund wetland conservation and mitigation activities; and the Legacy Program of the DOD which allows the military departments to fund environmental restoration activities on their installations. For more specific information on these and other programs of the partnership agencies see the joint Coastal America and Environmental Health Center publication entitled "Coastal Challenges: A Guide to Coastal and Marine Issues" (February 1998), specifically Chapter Five; Key Laws and Associated Programs.

#### **In-Kind Transfers**

In-kind transfers of service are valuable sources of expertise and agency talent. Coastal America brings them to nearly every project in many forms — technical assistance, permit administration, project management and loans of specialized equipment, among numerous others. While some agencies may be unable to provide cash contributions, all Coastal America partners have individuals with a wide range of necessary expertise. The Coastal America process facilitates in-kind transfers by joining their diverse skills and capabilities, all in the spirit of collaborative problem-solving.

At the Cape San Blas Dune Restoration project in Florida, the U.S. Fish and Wildlife Service Cooperative Research Unit at the University of Florida is contributing highly sophisticated computer equipment and personnel with specialized experience as endangered species specialists and soil scientists. The Florida Department of Environmental Protection is providing aerial photography, coastal erosion data, the necessary permits, and dune stabilization methods. The Florida Game and Fresh Water Fish Commission is providing logistical support to the researchers, and the Florida Natural Areas Inventory is providing data on the Cape's natural communities and plant species. Nearly every project examined for this report had some type of in-kind transfer of knowledge and expertise associated with it by virtue of the collaborative nature of the process.

#### Volunteer Assets



Volunteers place cement bags along the banks of the Gulf Intracoastal Waterway in Aransas County, TX to prevent further erosion of the whooping crane's winter nesting grounds.

Volunteer services are vital and still largely untapped assets for environmental projects. A growing number of environmental groups have emerged in the past several decades with highly motivated members willing to assist in coastal restoration projects. In the past it has been difficult for these groups and project implementation agencies to identify ways in which to more effectively collaborate on restoration projects. By actively encouraging work with volunteers, Coastal America has engaged over 300 nonfederal organizations in its activities. Many volunteers have contributed terrific in-kind services. In some cases, 100 hours of volunteer services were contributed. In other instances, thousands of hours were provided. On the Aransas National Wildlife Refuge shoreline protection project in Texas, 38 private sector businesses, three conservation and special interest groups, four organized scouting groups, five Texas state agencies, and seven federal agencies contributed in kind services worth over \$2.4 million. During the program's four-year span, an

additional 500 nonfederal volunteers pitched in, contributing over 7,000 hours of labor. Additionally, on the Cockroach Bay Restoration Project in Florida, nearly 2,000 volunteers were used to plant marsh grasses.

Volunteers can expand project components when funding is limited, and they can markedly reduce the time needed to complete a project. They can also benefit personally. That benefit might be the gratification of beautifying their hometown, protecting their community, learning more about their local coastal resources, or knowing that they did something positive for their environment. Finally, by living near a project, volunteers often ensure its long-term success. They conduct necessary monitoring and maintenance activities. Most importantly, they share ownership in sustained success.

#### The Value of Coastal America's Endorsement

Coastal America's national administrative activities are annually supported by contributions from each of the participating federal agencies. However, while the partnership has no specific appropriations for individual projects or field activities, its endorsement can carry considerable weight when endorsed projects compete with others for the limited federal programmatic funding of the partnership agencies. Members of Coastal America's Principals Group, composed of sub-cabinet level officials of the participating federal agencies, have identified Coastal America endorsed projects as among the highest priority for internal funding within their respective agencies. Thus, the Coastal America endorsement adds value in that a project stands a better chance of being included in the budget request of a partnership agency and receiving programmatic funding.

**Public-Private Cost-Sharing** 

When a non-federal interest is willing to participate in the cost of designing and completing a project, the nonfederal cost share represents a measure of value the interest group is willing to place on the project. Coastal America has an excellent track record in this regard. Over its first five years, almost \$50 million of federal funds has been matched by state, local and private contributions. Private cost-sharing results from agreements born of partnering activities with such conservation groups as Ducks Unlimited, and from industry associations interested in the emerging environmental technologies developed and applied at Coastal America projects. On Texas' southern coast, Ducks Unlimited shared project costs with the State of Texas and the Corps of Engineers. Together they rebuilt an aging water control structure and restored historic estuarine conditions to several state and national wildlife areas.

"We are in a dynamic period of change.
Everyone has something to contribute to the process of decision-making ... By building partnerships and sharing the information about our success stories, we can improve the environment."

Claudine Schneider Chair, Renew America and former U.S. Congresswoman Cost-sharing comes in diverse forms: cash contributions towards project construction; in-kind transfers of labor; or specialized expertise and volunteer services. The percentages used for cost-sharing are often stipulated by the underlying legislation of the lead federal agency or from negotiated partnership arrangements. By offering unique opportunities to develop new and imaginative cost-sharing mechanisms, Coastal America boosts project construction by effectively increasing the numbers of local government and nongovernment partners.

#### TECHNOLOGY TRANSFER

One of the more important contributions of Coastal America is the exchange of scientific information, knowledge, techniques, methods, equipment and experience among partner agencies. Commonly referred to as technology transfer, this element is present in almost every Coastal America project. It often comes in the form of technical assistance provided by individuals in partner agencies. These individuals possess vital expertise in such professional disciplines as wetland restoration, coastal hydrology and project management. Their skills are directly applicable to the types of projects and activities undertaken by Coastal America.

Coastal America's process facilitates identifying and gathering necessary expertise so it can be collectively applied to coastal problems. Such diverse expertise generates innovative solutions to problems of coastal restoration, enhancement and protection. These solutions lead to new techniques in environmental management and restoration efforts. Collaboration among experts of partner agencies also leads to the establishment of standards for environmental management and restoration which, in turn, provide a means of determining whether projects are producing the expected benefits and for efficiently exchanging project data.

#### Technical Assistance

Coastal projects are usually complex. They often require water quality and environmental impact assessments, field monitoring, fisheries and wildlife restoration planning, applied engineering, regulatory assistance, economic and benefit/cost analyses, and many other necessary investigations. No single agency or individual is equipped with all the expertise necessary to meet these project needs. Coastal America's partnership provides needed assistance by identifying and making available crucial technical expertise.

By bringing multiple agencies into the partnership, Coastal America assembles the technical "know-how" to spur effective and collaborative problem-solving. A proposed project, for example, might include elements that would not be considered if a single agency had developed it independently. The Connecticut Coastal Embayments project, for instance, was designed to take advantage of the rehabilitation of high speed rail infrastructure in the northeast. Acting alone, the Department of Transportation may have only replaced physical structures to accommodate newer high speed trains. But drawing on technical assistance from partner agencies, the project was modified to improve adjacent fish and wildlife habitat — primarily wetlands. This was accomplished by restoring and improving the tidal flow and drainage to these wetlands at little or no additional cost, yet with potentially large benefits to the coastal environment.

#### Emerging Techniques in Environmental Management

Techniques for coastal restoration are constantly evolving. In some cases, new techniques are being developed and tested to accomplish restoration in areas not previously attempted. Coastal America's projects can be used as test beds for these new and emerging techniques, especially since the process of collaboratively examining common coastal problems often leads to innovative solutions. As noted by the city manager of Soldotna, Alaska, where an innovative shoreline stabilization project was implemented, "What we learn here - the technology - can be transferred for use at other locations along the river and elsewhere."

In Galveston Bay, Texas, two apparently unrelated coastal problems were simultaneously addressed through such collaboration. Oyster habitat had been declining because of circulation changes in the Bay and the Houston Lighting and Power Company had been experiencing difficulty in finding suitable sites to dispose of its fly ash, a combustion byproduct of coal-fired power plants. The solution was to pelletize the fly ash and create oyster reefs in suitable locations within the Bay. As a result, oyster larvae now attach to these reefs - and grow into healthy, marketable adults. Truly an innovative solution to two real problems! Without Coastal America's endorsement of the Galveston Bay effort, it would have been difficult to gain the cooperation and approval of the various regulatory interests. Coastal America provided regulators with a multi-agency forum, expertise to examine the pros and cons of a new technology, and a working environment in which fresh ideas and techniques are created, tested and expedited.

In the northeast, several of the partnership agencies were working independently of one another with respect to examining submerged aquatic sea grasses in Narragansett Bay, Rhode Island. Coastal America was able to facilitate a collaborative effort whereby the Navy's acoustic detection of submerged vegetation, the Corps' mapping of seagrasses, and the interest of the USFWS and EPA's National Estuary Program in this resource for habitat management purposes were effectively combined. The coordination of these efforts afforded an ongoing dialogue that is now producing habitat mapping to be used for management and new tools for technological advancement by each of the partners as well as state agencies.

Data Standardization

One of the more difficult aspects of working in a partnership is adapting to and integrating together the differing procedures of the partner agencies. This is especially true about project specific data generated and used during planning, design and construction. If project data is not standardized, it will be difficult for collaborating agencies to apply it consistently during various project phases. In order to minimize such difficulties, standardization must be done in a way that is useful to everyone involved. This requires the participation of partner agencies in the standardization process and during the project's formulation, design and construction. In the New England Coastal Contaminated Sediments project, several agencies generated standardized Geographic Information System maps based on a collaboratively generated database of recent aquatic sediment chemistry for the areas of concern. All partners now have access to these maps and the database.

"In the end, we will conserve only what we love, we will love only what we understand, and we will understand only what we are taught."

Baba Dioum Senegalese Conservationist

As quoted by Dr. Jerry Schubel, Director New England Aquarium

#### EDUCATION AND OUTREACH

Across the United States, public fascination with coastal ecosystems and their natural inhabitants has new vigor. The wealth of nature videos, films and documentaries has captured a whole new generation of fans — and revived the interest and perhaps memories of older fans. Requests for information and educational materials continue to rise.

The public and private sectors are responding to this demand. Educational materials are being produced for classroom use. General materials have been developed as well. There is also a surge to create organizations and facilities that provide participants with "up-close" wilderness experiences coupled with educational messages. Aquariums and zoos, Sea World, Busch Gardens, Wild Kingdom, African safaris, the Audubon Society's bird watching field trips, whale watching expeditions, sea turtle nesting "watches," eco-camps, excursions, and other forms of ecologically oriented activities are in demand - and growing.

Coastal America is actively responding to this interest by working with facilities to develop educational programs on the importance of our coastal resources. The aim is to ensure that Coastal America's message of sustainable development and coastal ecosystem protection and restoration reaches as many millions of



A living classroom at The New England Aquarium, MA.

Americans as possible. The message is repeated in educational materials prepared by all 11 federal partners, state and local partners and numerous nongovernment partners working closely with one another throughout the country.

Coastal America's national network of Coastal Ecosystem Learning Centers is also an exciting and fairly recent development. (See page 24)

#### Field Studies - The Living Classroom

Coastal restoration, enhancement and protection projects are potential living

classrooms. Students can monitor projects before, during and after completion, and document the changes that occur. They can also work closely with scientists, engineers and project managers to identify information needs during various project phases. Students can watch emerging technologies in environmental management, join long-term monitoring teams, and take advantage of a multitude of research opportunities to fulfill course requirements.

Countering the damaging effects of Hurricane Hugo, the Puerto del Mangler Red Mangrove Restoration project in Puerto Rico recruited student volunteers to clear downed timber and plant mangrove seedlings. Adopting Coastal America's living classroom concept yields significant educational benefits for everyone involved, especially the future stewards of our coastal environments.

#### Interpretive Elements at Project Sites

Accelerating public awareness about the condition of our coastal ecosystems has prompted greater demand for interpretive materials at federal, state and local project sites. Interpretive signs, displays and other educational products describing the flora, fauna and ecologic processes present in a coastal ecosystem restoration site significantly improve public understanding of why it is important to undertake restoration activities. Coastal restoration also yields human benefits that are not widely understood and interpretative materials are an ideal venue for communicating this link between healthy ecosystems and our quality of life. At the Dauphin Island Sea Laboratory, adjacent to Mobile Bay in Alabama, a wetlands restoration project was integrated into an educational program on wetlands. Thousands of visitors now view it each year. On the Kenai River restoration project in Soldotna, Alaska, informative kiosks and signs have been erected near the erosion control projects. These clearly describe the problem and how it was solved together with information on how such a project could be initiated. This serves to educate recreational fishermen who have been the principal causes of the erosion while providing information on creating similar projects in other locations which may have similar problems. To sharpen public understanding and appreciation of our environment, Coastal America promotes the addition of educational elements to restoration projects whenever possible.

#### **ELEMENTS OF SUCCESS: A SUMMARY**

Clear elements characterize Coastal America projects. Every project benefits from the cooperation fostered by the collaborative process. This cooperation occurs at every level of the partnership and often leads to comprehensive solutions to coastal ecosystem management as well as improved coordination of coastal policy among the partners. Projects often benefit from increased scale and funding by combining funding resources, in-kind transfers of technical services and volunteer assistance. Technology transfer is almost always present in Coastal America projects and can take the form of technical assistance, emerging technique development or standardization of practices and the development of interpretive elements. The elements of education and outreach are further benchmarks of Coastal America projects. This report highlights how Coastal America aids individual agencies in meeting their goals and protecting our treasured coasts.

# **A Course For The 21st Century**

The Watershed Approach and Sustainable Development

Coastal Ecosystem Learning Centers

Regional, State and Local Action

Expanding the Knowledge Base

A New Century of Partners

Conclusion

Since its inception in 1992, the Coastal America partnership has enjoyed continued and growing success. Much of this success comes from the addition of new partners at the state, local and federal levels and from the increased involvement of nongovernmental organizations. Coastal America's Principals have developed a Strategic Vision, a road map for Coastal America's partnership into the next century. Two themes are paramount in this Strategic Vision: 1) a steadfast commitment to coastal issues and, 2) the promotion of sustainable development via the watershed approach as a guiding principle for future activities. Five goals, each with corresponding objectives, complement these themes:

- Improve the partnership process and encourage greater collaboration, both within and outside the partnership.
- Expand the partnership process to include the protection and preservation of coastal resources during planning, design, construction, operation, maintenance and rehabilitation.
- Educate the public about the value of healthy, productive coastal ecosystems and their vital ties to our economic well-being.
- Facilitate the transfer of information within the partnership to achieve the protection, preservation and restoration of the nation's coastal ecosystems while simultaneously contributing to a strong economy and quality of life.
- Effectively link our national goals of economic growth, environmental protection and social equity.

#### WATERSHED APPROACH AND SUSTAINABLE DEVELOPMENT

Initiatives in the following four areas will address these goals:

Since coastal ecosystems are affected by every activity that occurs upstream within their drainage basins, i.e., their watersheds, Coastal America has learned that coastal issues are best addressed within a watershed context. Truly comprehensive watershed approaches can only succeed with the collaborative efforts of all parties having jurisdiction over and interest in the resources at stake. Coastal America's approach is comprehensive and unique because its partnership includes not just federal natural resource agencies, but also infrastructure agencies and the military services. This combination offers excellent collaborative opportunities when major infrastructure and military construction projects are developed. It also provides a forum to define sustainable development practices.

This has particular relevance right now. Partner agencies have independently developed strategies to achieve sustainable development in accordance with the Presidents Council on Sustainable Development (PCSD). Additionally, in response to the Government Performance and Review Act of 1993 (GPRA), passed to improve the performance and accountability of federal agencies, partner agencies have established goals and objectives on improving service delivery. Coastal America's Principals believe that partnerships will become an increasingly important aspect of achieving individual agency GPRA goals and their individual PCSD strategies, thus, Coastal America provides an excellent forum in which sustainable coastal restoration can be collaboratively developed and implemented to meet agency goals.

"To protect your rivers, protect your mountains."

Emperor Yu of China

1600 B.C.

Ground water quality, erosion control, urban runoff, upland and coastal habitat protection and restoration, and infrastructure development and rehabilitation are among the many efforts that can benefit from a watershed and sustainable development approach. Such projects will require new partners at all levels, further expanding Coastal America's partner resources and contributing to the continuing success of sustainable coastal restoration and protection.

#### COASTAL ECOSYSTEM LEARNING CENTERS

With 50 percent of the U.S. population living within 50 miles of the coast, and that number expected to climb to 70 percent by the year 2050, it is important that Americans become more aware of our coastal ecosystems and of our strong dependence on them. It is particularly important that young Americans, the future stewards of our coasts, understand how they can help or harm the environment along our shorelines.

This report highlights several case studies featuring educational components. Because of their importance to Coastal America projects, and growing public desire to learn more about coastal ecosystems, the Coastal America partnership has established a network of Coastal Ecosystem Learning Centers at existing aquariums and science centers around the country. This network is a vital conduit for reaching beyond project-related educational activities to address the quickly escalating requests from the public for more information and materials about coastal ecosystems.

The Coastal Ecosystem Learning Center network aims to extend and help maximize the effectiveness of government, tribal and private entities in identifying learning opportunities and encouraging their development and distribution. It further aims to creatively and cost-effectively achieve educational goals through the coordinated use of existing partner resources. Already Coastal America's federal partners are providing expert speakers, publications, lesson plans, exhibits and films, among numerous other resources. This extension of the federal partnership is creating an efficient and effective coastal information network for the public. Especially exciting was a 1998 satellite downlink from the historic National Ocean Conference in Monterey, California. Rather than just reaching the hundreds attending the conference, the program reached many thousands because of its simultaneous broadcast at Learning Centers across the country. Beginning in 1996, with the New England Aquarium in Boston, there are now nine Coastal Ecosystem Learning Centers. They include: the Florida Aquarium in Tampa; the Mystic Aquarium in Connecticut; the National Aquarium in Baltimore; the New York Aquarium in Brooklyn; the Monterey Bay Aquarium in California; the Texas State Aquarium in Corpus Christi; the Hatfield Marine Science Center in Newport, Oregon; the Alaska Sealife Center in Seward; and the New England Aquarium in Boston.

Building on Coastal America's collaborative spirit, there is active interest in further developing the network among these and future learning centers. There may, for instance, be traveling exhibits conveying the protection and restoration efforts of the partner agencies, joint educational materials and videos, and coordinated monitoring programs. As the network expands, the Learning Centers can also potentially work as hubs for smaller, regional facilities, significantly extending the reach of critical educational programs.

"This learning center is going to be a golden opportunity to help give the public a much greater understanding of the connection of the coastal environment to our economy and to our lives ... and I think it will be a wonderful model of what we can do all around the nation."

John F. Kerry U.S. Senator (MA)

New England Aquarium CELC Designation, 1996

#### REGIONAL, STATE AND LOCAL ACTION

State, local and tribal government agencies have joined Coastal America almost from its inception. This is not surprising, given the jurisdictions involved and the level of valuable local knowledge they can provide. The participation of nongovernmental organizations (NGOs) also produces many tangible benefits, including technical review, skilled assistance, volunteer labor and funding. Such benefits are reflected in several case studies included in Appendix A of this report.

Perhaps the most significant benefit of NGO participation is long-term. NGO members share pride of ownership in projects and learn a great deal about the projects themselves. This educated commitment often triggers a whole new awareness of ecosystem restoration and protection. In the long run, this may be the greatest benefit of all. Coastal America is actively seeking more NGO participation in its projects, and looks ahead to integrating their initiatives with those of existing partners.

Each year Coastal America hosts a national retreat in which the administrative and technical aspects of the partnership are discussed and recommendations made for consideration by the Principals. One of the most significant recommendations from the 1997 retreat was the request for additional regional support. The Principals agreed to fully examine each of the regional implementation teams and assess their administrative needs. Coastal America's Coordination Office has since provided the Principals with a status report and regional needs assessments. The Principals have agreed to support such specific regional recommendations as drawing on existing federal agency programs to fill a critical work need or designating an individual from within a partner agency to fill that need full-time. Through such efforts the Principals continue to demonstrate their commitment to the partnership and the value of interagency collaboration.

Having a network of individuals ready to participate gives a strong boost to Coastal America's projects. Also important is the standardization of procedures and techniques that comes about as these individuals work together. When permits are required, for instance, individuals who participate in the process gain vital knowledge about how individual agencies conduct such reviews. When applied to future projects, that knowledge can significantly bolster the flow of information and streamline the process.

#### EXPANDING THE KNOWLEDGE BASE

Similarly, new techniques in ecosystem management, developed and applied via Coastal America projects, strengthen the knowledge base. Participants in Coastal America projects can draw on this knowledge base in the form of technical assistance from partner agencies. In addition, the Coastal America Coordinating Office further disseminates this knowledge by conducting workshops on technology transfer and publishing reports about techniques being applied across the country. The familiarity and experience gained by participating in and managing large scale collaborative projects is of great continuing benefit. By bringing people with the necessary expertise together, the partnership process ensures that valuable time and resources are skillfully directed and that start-up time and necessary follow-up are minimized.

#### A NEW CENTURY OF PARTNERS

An early task in a multiagency collaboration is to identify every individual who will be participating. This can be very time consuming, especially the first time such a project is undertaken. But once a few projects have been completed, a certain familiarity exists among those involved. Knowledge of the capabilities of other individuals and agencies necessarily grows as more and more projects are completed. In a similar manner, individuals active in Coastal America build a network that works as a knowledge base from which to launch new activities. Coastal America's regional implementation teams help expand the network by bringing representatives of partner agencies together to review and endorse potential projects.

Regional team members can then identify projects that they or their colleagues may be able to support, thereby expanding the network further. Over time this network grows and becomes ever more viable through the trust and cooperation experienced among the partner agencies — a continuing stream of benefits often results. The lasting success of Coastal America lies in the continued expansion of this network, not only among the federal partners, but from among the continuing and new contributions of state, local, tribal, and nongovernmental groups.

Coastal America vigorously promotes active involvement at the federal, state, local, tribal, and private levels. Participation at each of these levels is the hallmark of Coastal America. The case studies offer good examples of the variety of Coastal America projects. All of these projects were adopted and endorsed by regional implementation teams. One course is for a federal agency to sponsor a project, to take the lead in generating support and collaborative assistance from other federal, state, local, tribal, and nongovernmental partners. The project is then submitted to the regional implementation team for consideration as a Coastal America project. Alternatively, the regional team can identify coastal problems and align the necessary support from within its member agencies. The success of this process depends on participation at all levels.

#### **CONCLUSION**

Collaboration enables Coastal America partners to benefit from opportunities and overcome problems with the goal of developing more creative, cost-effective and successful coastal projects. Sharing information, pooling resources and combining management skills and expertise are all benefits of integrating federal resources with state, local, tribal, and nongovernment efforts. The partnership process provides enhanced project funding, technology transfer, and education and outreach capabilities.

In just six years, the partnership has developed and initiated over 350 collaborative coastal restoration projects in 26 states and 2 territories. These projects were developed and implemented with nearly 300 nonfederal partners whose financial and in-kind contributions nearly matched those of the federal partners. The federal investment is close to \$50 million. Coastal America projects are helping to restore thousands of acres of wetlands, reestablish hundreds of miles of spawning streams, and protect coastal birds, fish and marine mammals and their habitats, while enabling infrastructure development vital to America's economy.

Willingness to participate in the process, from both an individual and institutional perspective, represents a change from normal government business practices. In some instances, individuals have volunteered their own time to make coastal projects a reality. Above all else, it is through commitment, both personal and institutional, that Coastal America has seen great success. The individuals are too numerous to mention, but their dedicated effort speaks for itself. We owe them a debt of gratitude for their tireless work toward coastal restoration, enhancement and protection. It clearly demonstrates that together we can accomplish more than any of us can accomplish alone. Coastal America welcomes additional federal, state, local, tribal, and NGO participation. To become involved, contact the Coastal America Coordinating Office or the chair of the appropriate regional implementation team. (See Appendices B & C).

# **Appendix A**

Selected Coastal America Project Case Studies