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West
Coast
Inland
Navigation
District

5-Year
Strategic
Plan

*To preserve and enhance the
commercial, recreational, and
ecological values of District waterways*

2002 - 2007

Prepared for:

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MISSION

To preserve and enhance the commercial, recreational, and ecological values of District waterways.

The West Coast Inland Navigation District (the “District”) is a multi-county special taxing district, comprised of Manatee, Sarasota, Charlotte, and Lee counties, with an estimated 1.1 million people. The District assists in the planning and implementation of waterway projects that promote safe navigation and the enjoyment of water-based activities, such as boating, fishing, and beach recreation.

District programs include maintaining and enhancing public navigation channels and inlets, boating access facilities, waterfront parks, and piers. The District also provides leadership in waterway resource-based stewardship by encouraging boating safety and environmental education through the distribution of boaters’ guides and waterway maps. District programs enhance the regional economic base while preserving the environment and the quality of life in Southwest Florida.

With an annual budget of approximately \$2 million, the District currently operates by assessing only 25% of its statutorily allowable millage rate. With reduced federal funding, the local sponsors of the nation’s inland navigation systems are now being required to shoulder a larger portion of the maintenance costs of waterway systems. A focused effort is now required to accomplish the District’s current duties and responsibilities in an efficient and cost effective manner. This strategic plan reflects an effort to allow the District to continue to serve its member counties as a fiscally responsible community partner.



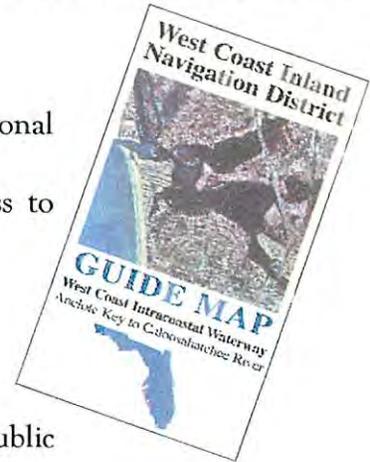
The West Coast Inland Navigation District, comprised of Manatee, Sarasota, Charlotte, and Lee Counties, was created by the Florida Legislature to assist local communities in maintaining their public waterways.

PUBLIC BENEFITS

The GICW is one of Florida's most valuable commercial, tourist and recreational resources. The District maintains and preserves this valuable community resource and also provides numerous other benefits to the Southwest Florida community including:

Regional Waterway Management:

- Science-based methodologies and data for comprehensive regional waterway planning and management.
- Pinpoint areas in need of dredging to provide or improve access to navigable waterways.
- Protect submerged habitat.
- Streamline the permitting process to reduce project costs.



Permitting:

- Reduce the administrative costs of maintaining and enhancing public waterways.
- Streamline current laws and regulations associated with obtaining permits.

Inlets:

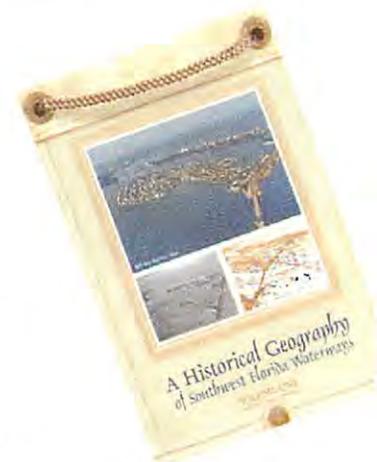
- Improve inlet navigation and resource enhancement for public recreation.
- Strengthen the local tax base.
- Promote economic development and tourism.
- Provide upland storm protection.

Emergency Management:

- Reduce community vulnerability to natural disasters or other catastrophic events.

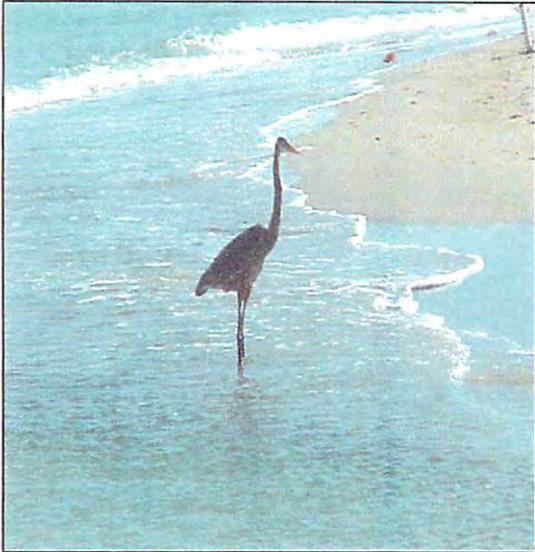
Infrastructure Maintenance and Improvements:

- Maintain waterway channels and ancillary infrastructure to help people safely enjoy Southwest Florida's bay waters.
- Increase recreational opportunities for citizens and boaters by exploring public uses of District properties.



Dredge Material Management:

- Spot dredging to reduce environmental impact.
- Restore wetlands, bird nesting islands, and seagrasses through innovative techniques that recycle and reuse dredged material.

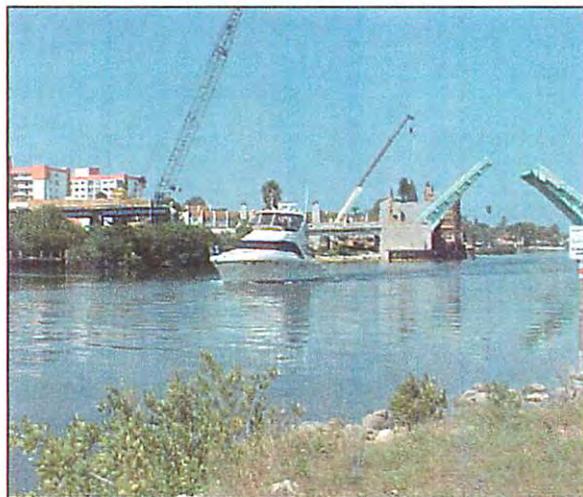
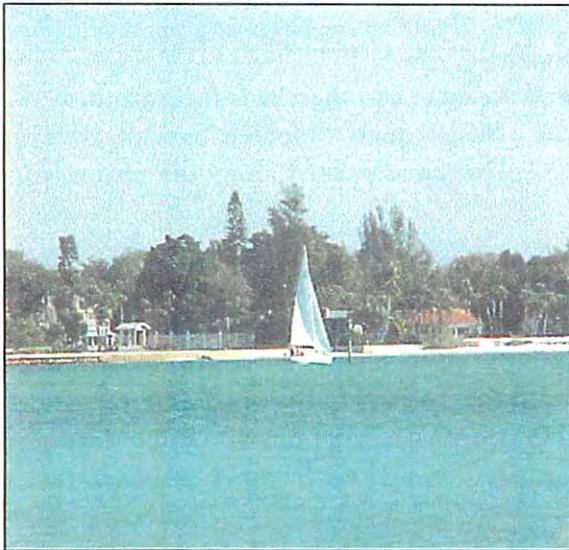


Sustaining the Environment:

- Reduce the need for additional regulations through education programs that foster resource stewardship.
- Protect resources by providing marked navigation channels to open waters.
- Enhance habitat for native plants and animals.
- Promote community understanding of waterway history and the safeguards needed to maintain a healthy environment and growing communities.

Coordination:

- Generate “value-added” partnerships that bring together the public, industry and government agencies in mutually reinforcing and beneficial efforts.



HISTORY

The District was established by the Florida Legislature in 1947 (Chapter 23370, Florida Laws) to perform the duties of local sponsor to the U.S. Army Corps of Engineers (ACOE) for sharing the cost of the planning, construction, and maintenance of a 152-mile long, 100-foot wide, and nine-foot deep Gulf Intracoastal Waterway (GICW) between the mouth of the Caloosahatchee River, near Ft. Myers, and the Anclote River, north of Tampa.



Prior to the construction of the GICW, the channel hopscotched from one bay to another along sparsely populated mainland shores and virtually deserted barrier islands, punctuated by shallows, oyster bars, and other originally impassible barriers.

The waterway was intended to link natural deep-water sections of bays through a series of man-made channels, thereby providing for the safe passage of commercial goods, and access to commercial fishing grounds. The GICW channel would run through six counties (Pinellas, Hillsborough, Manatee, Sarasota, Charlotte, and Lee) and the need for rights-of-way and dredge disposal areas existed along the entire length of the planned waterway.

Waterway dredging commenced in 1960. The GICW was completed in 1967, at which time the District began maintenance activities. The District's mandate was substantially broadened in 1979 to include programs to improve and maintain public channels "connected" to the GICW, as well as waters that made a significant contribution to waterway traffic or commerce. Additionally, the District was enabled to assist and support member counties in planning and implementing navigation projects, waterway research, erosion and accretion studies, and environmental restoration projects.

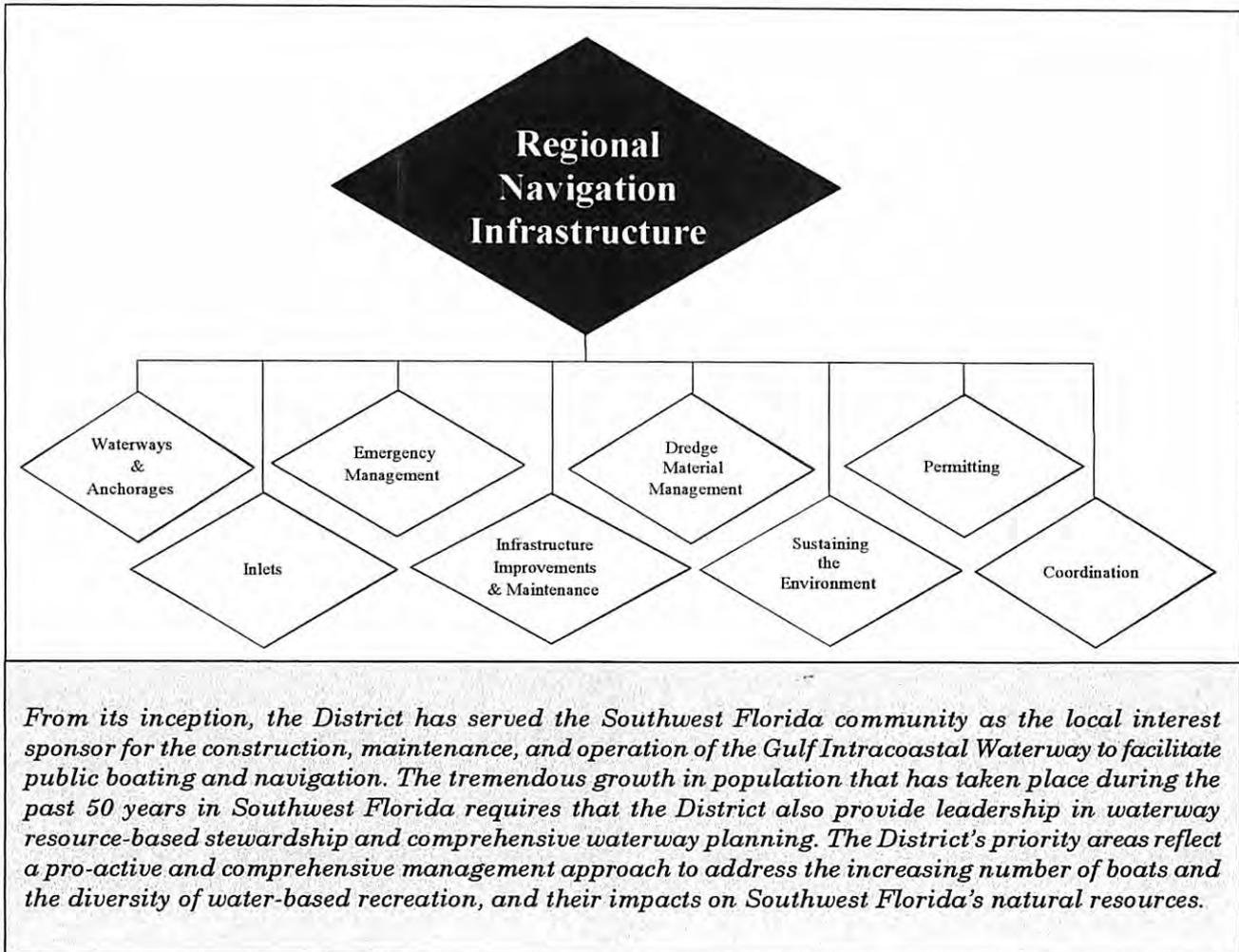


The GICW was originally developed to facilitate commercial shipping to and along the Southwest Florida coast. Today, however, the vast majority of the waterway's function is devoted to transporting boats engaged in recreational activities, such as cruising, nature-viewing, sailing, and fishing.

In 1989, the District was authorized to participate in a greater diversity of waterway-related activities, including the promotion of inlet management, and the posting and maintenance of channel markers and manatee protection speed zone signs. The District has also initiated programs to encourage boating safety and environmental stewardship through the dissemination of boater and waterway guides and resource maps. Recent legislation now allows for the District to partner with counties adjacent to its four-county region.

PRIORITY AREAS

Priority areas encompass the broad range of the District's responsibilities to the Southwest Florida community as mandated in Florida Statutes, Chapter 374 (2000) and Florida Laws 98-526 (1998).



1. Waterways & Anchorages

Recreational boating and fishing make significant contributions to the economy of Southwest Florida, but are dependent on a healthy, high-quality environment and adequate/unrestricted access to open water. The District recognizes the need to maintain a viable waterway system in the face of mounting boating and environmental pressures.

In 1991, the District began working with the National Oceanographic and Atmospheric Administration (NOAA) and Florida Sea Grant (FSG) to develop a waterway boat traffic monitoring geographic information system (GIS) and database to help manage the waterways of Southwest Florida.

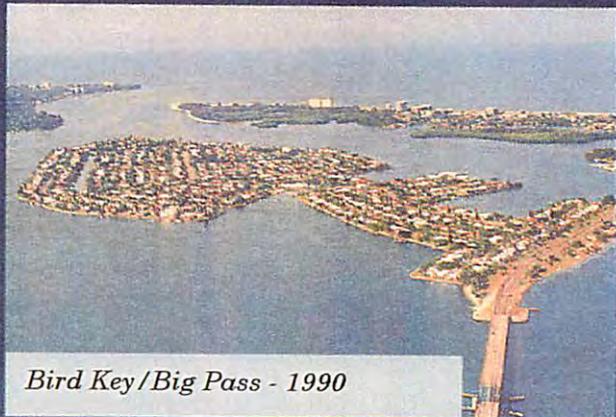
The District's GIS approach to regional waterway management applies a scientific base and site-specific information to the treatment of waterways as integrated transportation systems. The primary objective of this approach is to design and implement a management system for Southwest Florida waterways that is consistent with the legislative mandates of: 1) facilitating safe boating; 2) reducing boating impacts on natural resources; and 3) procuring permits for waterway infrastructure maintenance and improvements.

This management strategy provides for increasing waterway navigability and accessibility, while maintaining environmental quality. The strategy pinpoints areas in need of dredging to improve access to navigable waterways and to protect submerged resources. Surgical dredging in these areas will enhance navigation, safety, and resource protection by removing only the required amount of material necessary to allow for the safe passage of boats currently restricted.

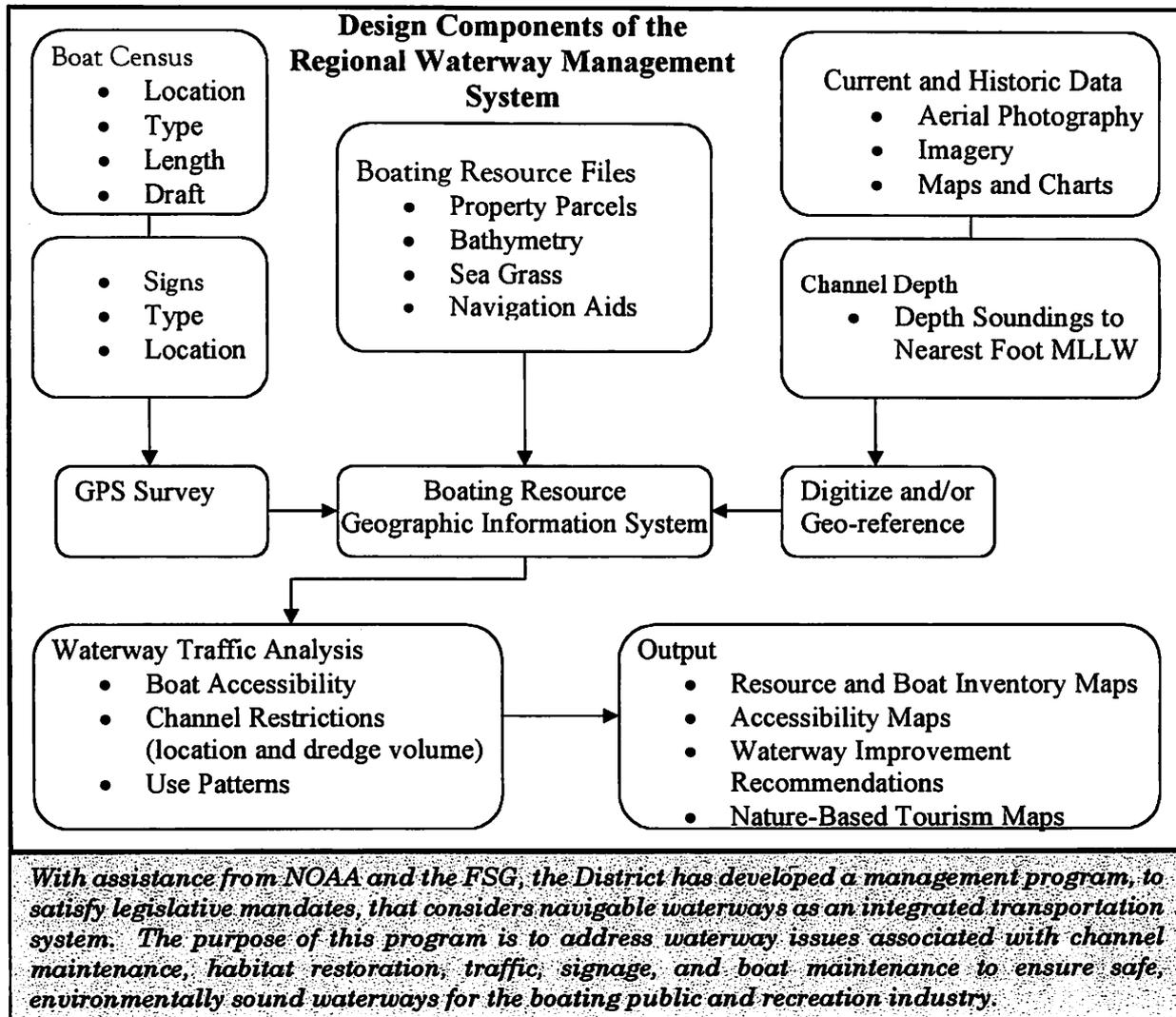


Bird Key/Big Pass - Circa 1927

A unique element of the coastal development process has been the creation of thousands of miles of dredged canals, basins, and access channels that link canal systems with the Gulf Intracoastal Waterway. These waterways were dredged to provide waterfront access for residential developments. In many instances, the original dredged depth depended on the amount of borrow material required, and not on the provision of adequate channel depth for navigation. However, these waterways have become defacto recreational boating arteries that provide passage through sensitive marine habitats to open, deep water.



Bird Key/Big Pass - 1990



Goal 1. Determine Waterway and Anchorage Conditions

Objective A. Evaluate waterways and anchorages in four-member counties as regional transportation networks and nodes.

- Promote a planning framework that considers the Gulf Intracoastal Waterway, associated passes, and public access channels serving private waterways, basins, and anchorages as an integrated waterway transportation system.

Objective B. Conduct regional waterway and anchorage inventories to collect and update information on waterway conditions.

- Adopt procedures and a timetable to ensure that baseline inventory features, including: 1) boat locations and characteristics; 2) channel bathymetry; 3) signs; 4) boating and waterway infrastructure; and 5) bio-physical waterway characteristics, are kept current.

- Adopt procedures to acquire current parcel and shoreline information from member counties, and acquire contemporary digital imagery from water management districts and member counties.

Objective C. Strengthen methods for collecting and analyzing waterway and anchorage information in four-county area.

- Continue to standardize and refine data collection and analytical procedures used to generate regional waterway management analyses.
- Promote community-based involvement (i.e., "Passwatch") in support of waterway and anchorage stewardship.
- Encourage efforts to strengthen the ways in which vessel registration information is collected and catalogued, and improve the information that is collected about boats and boat owners for security and planning purposes.

Goal 2. Prioritize Waterway and Anchorage Management Needs

Objective A. Use regional waterway and anchorage information to prioritize channel maintenance and management needs.

- Standardize methods to prioritize regional waterway improvements by consolidating findings from countywide waterway management studies into a comprehensive regional assessment.
- Support local and state efforts to improve and expand existing regional waterway management applications by automating the GIS analytical methods and procedures.

Objective B. Use regional waterway management information to develop level-of-service characterizations for waterway transportation segments, distinguishing between public and private portions.

- Recommend management needs of high-use boating locales and transportation segments within the region.
- Recommend relocation of aids to navigation instead of dredging to maintain channel specifications, whenever possible.

Objective C. Provide information to member counties regarding the development of anchorage and harbor management programs.

- Encourage efforts by the Southwest Florida Regional Planning Council's Marine Advisory Committee to ensure that anchorages and harbors are managed in a consistent manner.
- Provide technical assistance to member counties in applying for Special Anchorage Designations by the U.S. Coast Guard, where appropriate.

Objective D. Identify waterway conditions, within adjacent non-member counties, that may impact District waterways.



The GICW is a major artery of commerce by providing deep-water access for commercial fishing fleets located in Ft. Myers and Cortez.

- With partnering agencies, and the assistance of the Southwest Florida Regional Planning Council's Marine Advisory Committee, develop a long-range plan for increasing the navigability of the Okeechobee, and upper Caloosahatchee and Orange River waterways.
- Utilize historic photography and bathymetric information to identify pre-development shoreline and waterway conditions as a basis for recommendations to restore or improve the navigability of the Okeechobee, and upper Caloosahatchee and Orange River waterways.

Goal 3. Broaden the Basis for Federal Cost-Sharing of Waterway Maintenance and Improvements

Objective A. Document the economic benefits derived from commercial and recreational boating and of waterway and anchorage management to the region.

- Support a District-wide economic study to document the commercial benefits derived from maintaining and enhancing the public waterways, and infrastructure for recreational and commercial boating, in cooperation with marine trades associations and other allied interests.

Objective B. Establish a legal basis for policy change to facilitate maintenance and improvements to the Regional Waterway System.

- Identify all existing or potential federal and state (Florida) funding mechanisms for waterway navigation maintenance and enhancements for recreational boating, fishing, and small-scale commercial fishing fleets (this should include funding mechanisms which currently do not appear to contemplate recreational boating, fishing, and small-scale commercial fishing fleet navigation needs, but could be revised to do so). This would include a determination of the procedures required to gain access to existing funding mechanisms, including any collateral environmental or other review processes that may be invoked.
- Identify the federal, state legislative and/or administrative history of existing statutory and administrative waterway transportation funding mechanisms to establish the basis for the exclusion or inclusion of recreational boating, fishing, and small-scale commercial fishing navigation needs.
- Determine changes in statutory language or administrative interpretations that will accommodate funding for the navigation improvement needs of recreational boating, fishing, and small-scale commercial fishing.

2. Inlets

Tidal inlets are very dynamic and commonly show major changes in size and configuration due to natural sedimentation movements from the interplay of ebb and flood tidal currents. Storm events accelerate this process.

Tidal currents create and change channels and spits causing navigable inlets to fill in or move, which results in unexpected navigation hazards, blocked inlets, beach erosion, and/or damage to beach structures.

Studies show that inlets that are not maintained to established criteria are associated with adjacent eroded beaches. As such, the District sponsors projects that enhance inlet navigation and, where possible, restore severely eroded beaches. Inlet and beach stabilization and renourishment efforts help to protect property values, and enhance water-based recreation and tourism.



Southwest Florida is famous worldwide for its beaches. The success of tourism and recreational boating depends upon maintaining safe navigation and a reasonable assurance of beach presence. (Pictured: Lido Beach, Florida after beach renourishment project.)

Goal 1. Maintain Safe Navigation Through Inlet Maintenance

Objective A. Document conditions of inlets and associated beach erosion from existing public survey sources.

- Review existing and alternative state-of-the-art methods to better link inlet management with beach renourishment and to identify those design guidelines where the benefits are the most cost-effective and mutually reinforcing.
- Review Florida Department of Environmental Protection (FDEP) evaluation of present shoreline conditions.

Objective B. Ensure that inlet and beach renourishment efforts reflect a coordinated regional approach and account for natural tidal processes.

- Update the existing rating system to reflect a regional prioritization of projects that account for natural inlet and adjacent beach dynamics.

Goal 2. Maximize the Longevity of Inlet Navigation Improvements

Objective A. Adopt proven inlet management techniques as they become available to increase the longevity of navigation projects.

- Attend Florida Shore and Beach Preservation Agency (FSBPA) meetings and other applicable seminars/conferences on beach renourishment.

Objective B. Create opportunities to educate communities about the many positive and wide-ranging effects of inlet management projects.

- Continue to support the Southwest Florida Beach and Inlet Convocation.
- Develop and distribute a pamphlet that presents the wide range of public benefits derived from inlet stabilization.



Stump Pass has recently been dredged and is currently being studied for implementation of a long-range stabilization plan. Currently, the outer channel of the Pass is unstable and requires local knowledge of shoal locations and tidal currents for safe passage. This is especially true of larger boats that can make the passage only at high tide. Additional signage will remind boaters of the changing conditions and the presence of seagrass beds.

3. Emergency Management

The District is authorized to provide financial support to member counties that are recovering from a state of emergency. Toward that end, the District can assist federal, state, and local agencies, including the Coast Guard, ACOE, and local law enforcement, in providing recovery support in the event of a natural disaster or other emergency. Currently, the District's main role following a disaster is to assure that District waterways are free of debris and that associated infrastructure allows for safe navigation. Additionally, the District maintains land adjacent to waterways, for the ACOE, which can be utilized as staging areas for equipment deployment or debris removal.

The State Legislature has endorsed broad emergency management responsibilities to the District. In keeping with this, one of the District's goals is to expand its role in assisting coastal communities with emergency management planning and coastal security in order to reduce community vulnerability to natural disasters or other catastrophic events. Efforts undertaken by the District to facilitate emergency management and promote coastal security are to be consistent with existing state (Florida Statute 252) and federal programs.

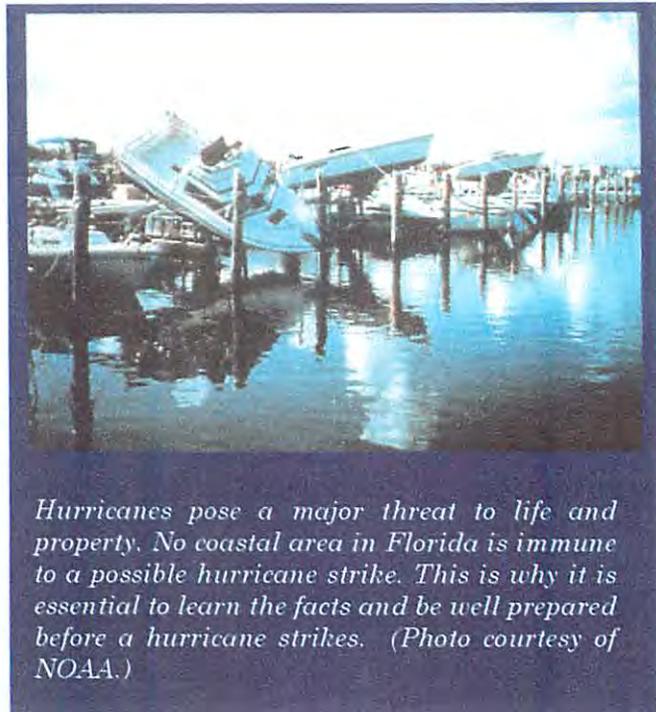
The District views coastal security as a priority area of emergency management. The security of inland waterways and ancillary infrastructure is of special significance to the State of Florida, given the geographic extent and porous nature of our coastline. Coastal communities, ports, and inland waterways must be protected from both natural and human induced events.

Goal 1. Assist Coastal Communities in Preparing for or Recovering From Natural Disasters or Other Waterway Emergencies

Objective A. Provide information to the public regarding: whom to contact; what to do before, during and after; and where to go for assistance, in the event of an emergency.

- Raise community awareness about emergencies through educational materials, presentations to organized groups, boaters clubs, and through press releases.
- Identify shelters, boat evacuation routes, and measures to protect boats.

Objective B. Identify waterway infrastructure, properties, and transportation that can be used to facilitate post-disaster operations.



Hurricanes pose a major threat to life and property. No coastal area in Florida is immune to a possible hurricane strike. This is why it is essential to learn the facts and be well prepared before a hurricane strikes. (Photo courtesy of NOAA.)

- Inventory existing infrastructure (boat ramps and other shoreline dock facilities), available upland properties, spoil islands, and right-of-way that can serve as disaster support areas and recovery stations.
- Identify waterborne transportation (ferries, barges, commercial vessels, etc.) that can be used to transport debris, materials, and people in the event of an emergency.
- Maintain an inventory of contractors that can be called upon to participate in post-disaster operations.

Goal 2. Assist Counties with Emergency Management Planning

Objective A. Adapt the NOAA GIS-based community vulnerability tool to assess community vulnerability to natural disasters or other waterway emergencies.

- Conduct community-wide and regional vulnerability assessments (physical, economic, environmental, and social).

Objective B. Prepare an emergency management plan for waterways and associated infrastructure that is consistent with state and federal programs.

- Identify hazard risk and vulnerability of boats, marinas, anchorages, basins, and waterways to the impacts of those hazards.
- Identify vulnerable areas, evacuation routes, and water-based shelters (anchorages and basins) for boats.
- Distribute a CD-Rom product that contains the information necessary to conduct risk and vulnerability assessments, and to plan appropriate responses.
- Assess the applicability of FEMA assistance programs and implement reimbursement procedures.

Goal 3. Protect and Safeguard the Coastline and Inland Waterways

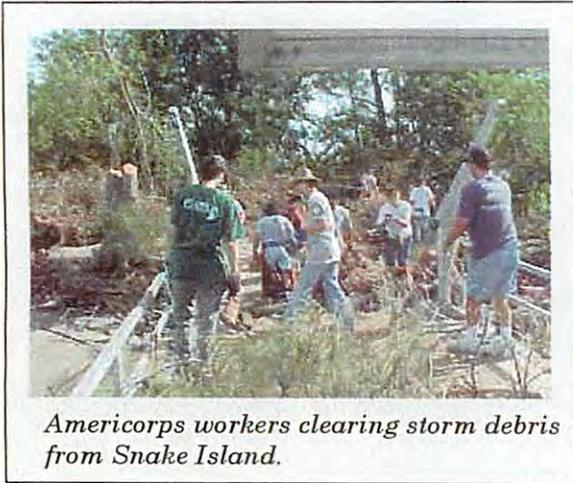
Objective A. Cooperate with local law enforcement to improve waterway security.

- Identify waterway and community infrastructure that requires protection or is a hazard or security risk.
- Support canal community and neighborhood watch groups.

Objective B. Urge the state to consider inland waterway security a high priority issue.

- Coordinate a meeting of federal (USCG), state (FWC Law Enforcement, Emergency Management), regional (WCIND, FIND, inlet districts), and local agencies responsible for policing inlets and inland waterways to identify security issues and needs.
- Help sponsor a legislative strategy to increase state and federal funding to implement measures to strengthen waterway security.

4. Infrastructure Improvements & Maintenance



Americorps workers clearing storm debris from Snake Island.

In recent years, environmental considerations have made the construction, operation, and maintenance of the waterway infrastructure, including channel dredging, stabilizing and maintaining structures connected to waterways, a difficult and expensive proposition. The District is challenged now as never before to meet the responsibilities of its legislative mandates to keep the region's waterways and ancillary infrastructure open and safe for commercial traffic, and for the continued use and enjoyment of thousands of pleasure boaters.

The District is mandated to maintain, enhance, and, where necessary, modify waterway and landside infrastructure (spoil islands, upland properties, and pipeline easements) through maintenance dredging, channel marking, removal of derelict vessels, removal of submerged hazards (broken piling, rock, debris), and the removal of exotic and the reestablishment of natural vegetation on District properties. The District is also responsible for helping to maintain structures connected to the waterway systems. Such ancillary infrastructure includes weirs, jettys, groins, bridges, channel markers, and signs.

Land-based and ancillary waterway infrastructures are important components of permitting and emergency management efforts and, as such, should be included as components (GIS data layers) of the Regional Waterway Management System (Priority Area 1).



Waterway Infrastructure Components

- ***Primary waterway components consist of passes that connect the GICW to open water, the GICW itself, and all adjacent associated public infrastructures.***
- ***Secondary waterway infrastructure consists of public arterials that connect the GICW to private neighborhood canal systems, and quasi-public canals that are residential, but contain commercial facilities (restaurants, fuel), public buildings, or public lands (parks, etc.).***
- ***Tertiary waterway infrastructure components consist of private residential neighborhood canal systems.***

Goal 1. Determine Existing Land-Based and Ancillary Infrastructure Conditions

Objective A. Collect baseline information on District properties and ancillary waterway infrastructure.

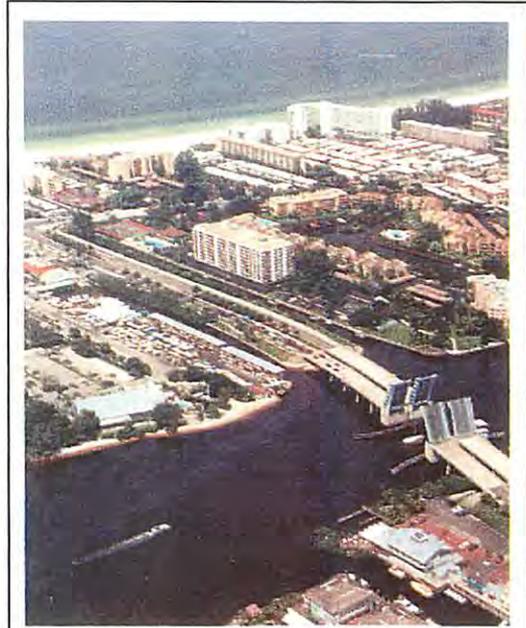
- Inventory ancillary infrastructure (bridges, weirs, groins, rip rap) within the District as a complement to water-based infrastructure as part of Regional Waterway Management System efforts.
- Inventory District-properties including spoil islands. This inventory would include property boundaries, and physical and biological characteristics.
- Adopt procedures and a timetable for updating baseline infrastructure features.

Objective B. Incorporate land-based and ancillary infrastructure features into the existing Regional Waterway Management System.

- Prepare GIS data layers that hot-link photographs and inventory characteristics with locations for District properties and ancillary waterway infrastructure components.

Objective C. Incorporate electronic District archival information with land-based and ancillary infrastructure GIS features.

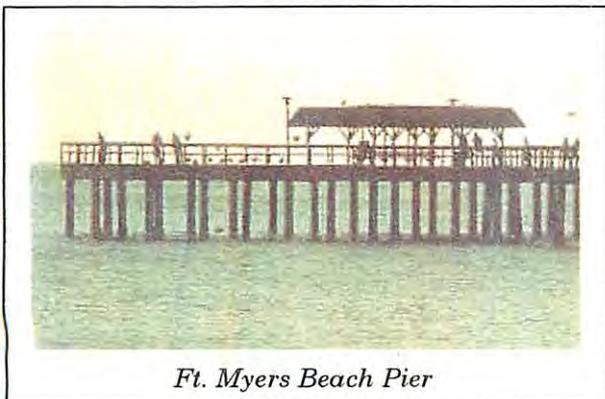
- Link geo-referenced (GIS-based) infrastructure data layers with scanned archival information.



Stickney Point Bridge, Sarasota

Goal 2. Enhance the Management and Security of District Properties and Ancillary Waterway Infrastructure

Objective A. Develop a system to identify, prioritize, and manage the security needs of District properties and for ancillary infrastructure.



Ft. Myers Beach Pier

- Identify those properties that are in greatest need of security improvements.
- Prioritize the security needs of District properties and ancillary infrastructure.
- Evaluate options and legal restrictions to improve site security. This would include a review of applicable city and county ordinances with respect to fencing, lighting, setbacks, and variances.
- Enlist police services to patrol banks, canals, and District properties.

Objective B. Maintain District properties.

- Remove debris and trash, and reduce other potential hazards (mosquitoes, clear invasive/tall vegetation) at sites.

Objective C. Identify security issues and requirements for District properties particularly as they relate to public access and recreational use.

- Evaluate liability and American Disabilities Association (ADA) requirements for public access to District properties.

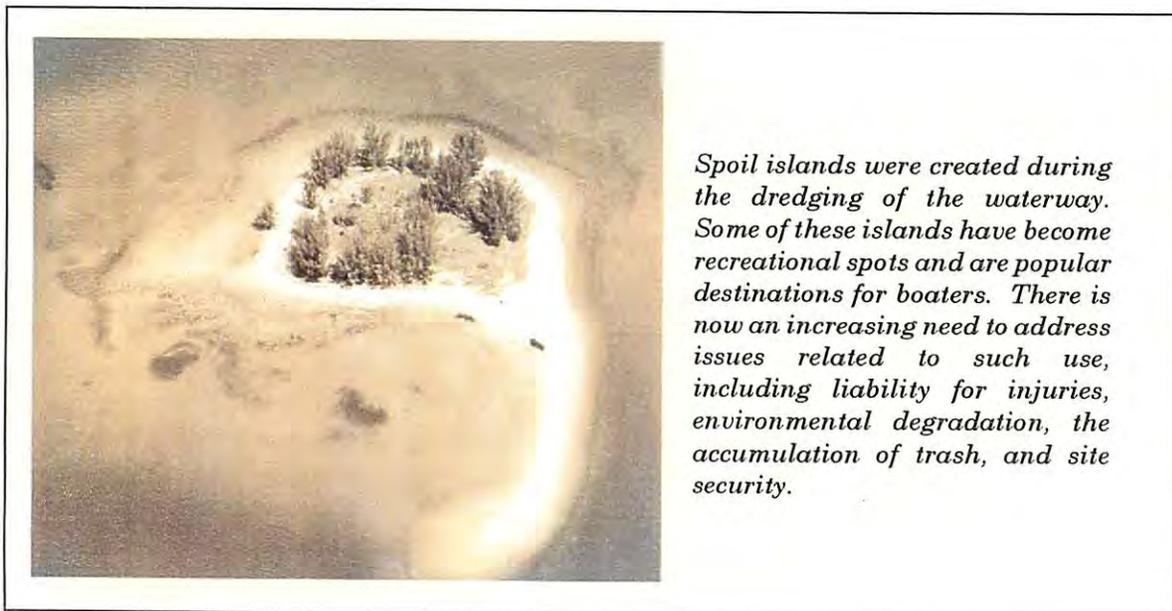
Goal 3. Determine the Recreational Potential of District Properties

Objective A. Evaluate the suitability of sites for public recreation (i.e., parks).

- Identify properties that could accommodate recreational use, and identify uses that are most appropriate to selected sites.
- Determine physical enhancements to District properties necessary to accommodate appropriate recreational uses.
- Document the public benefits and costs derived from opening District properties to public recreation.

Objective B. Select a test site to establish legal/administrative precedent for public recreational use.

- Evaluate legal issues related to opening District properties for recreational use.



5. Dredge Material Management

The District is mandated by the Florida Legislature to act as the local sponsor for the federally authorized GICW navigation project. The responsibilities of a local sponsor include providing lands and easements for disposal of dredged material to the ACOE, and to monitor the effectiveness of handling and containment programs and technologies.

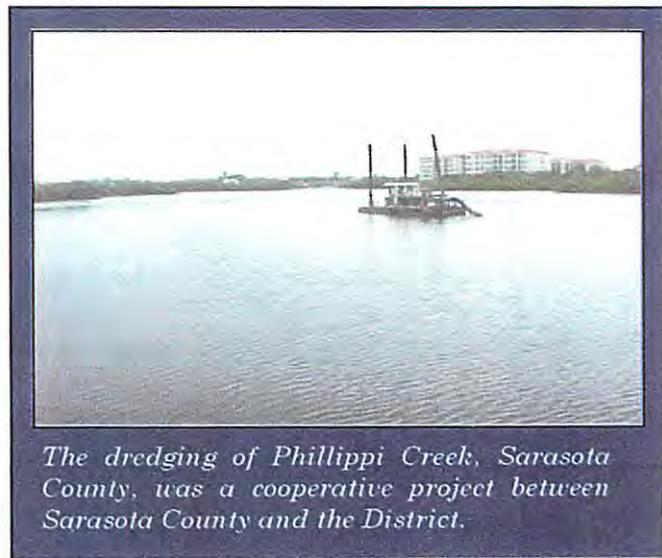
Goal 1. Improve Waterways and Adjacent Ecosystems through the Proper Handling, Containment and Management of Dredged Material

Objective A. Whenever feasible, place beach quality dredged material onto or near beaches.

- Adopt a formal resolution that defines the District's approach to the placement of dredged material on beaches as defined in Priority Area 2, Inlets.

Objective B. Evaluate current and proposed state-of-the-art technologies to contain and monitor dredged material.

- Adopt proven technologies and standards for handling, containing, and monitoring dredged material as they become available.



Objective C. Adopt innovative uses for and reuse of dredged material, and technologies that allow for wider applications for and uses of dredged material.

Goal 2. Evaluate Existing and Future Dredged Material Management Needs

Objective A. Implement a Dredged Material Management System (DMMS).

- Prepare a plan to: 1) objectively evaluate the existing physical condition of the federally authorized channel, and secondary and tertiary waterway linkages, to assess shoaling patterns and dredging needs; and 2) evaluate the capacity of existing sites to accommodate dredged materials, and future siting opportunities.

Objective B. Evaluate waterway dredging needs.

- Review the existing physical condition of the federally authorized channel and secondary public linkages to assess shoaling patterns.
- Segment waterways into six to ten mile long *Operational Reaches* (based on sediment characteristics, pumping distance limitations, and other characteristics).

- Determine the volume of material that can be expected to be dredged from each *Operational Reach* for the next 50-years.
- Determine capacity shortfalls within each reach and make recommendations to address identified shortfalls.

Objective C. Evaluate existing and proposed sites to accommodate dredged material.

- Characterize existing land-side infrastructure for storage potential and requirements (as identified in Priority Area 4, Infrastructure Improvements & Maintenance).
- Utilize an inventory of existing District-owned lands and existing ACOE spoil easements throughout the District to determine parcels feasibility to handle dredged material.
- Determine the capacity of current and available District holdings, and the acreage required to accommodate estimated dredged material volume for the next 50 years.

Goal 3. Initiate a Long-Range Planning Effort for Dredged Material

Objective A. Develop and implement a long-range Dredged Material Management Plan (DMMP) for the GICW within member counties.

- Address 50-year storage capacity deficiencies identified by DMMS analysis (Goal 2).

Objective B. Develop detailed management plans for each dredged material management area.

- Utilize results from Infrastructure Maintenance and Improvements property evaluations, the Regional Waterway Management System, and the DMMS.

Goal 4. Promote Community Recognition that Dredged Material is a Valuable Reusable Resource

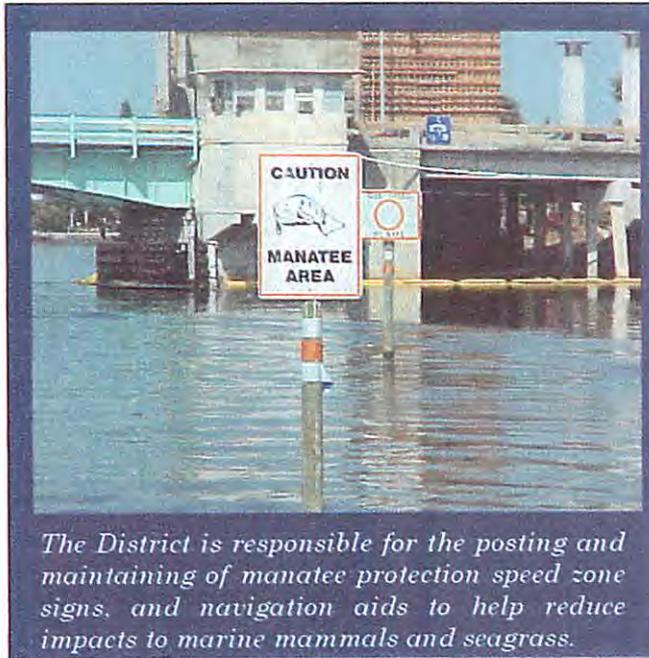
Objective A. Promote the distribution of information to the public that explains the positive aspects of dredging (i.e., to maintain and enhance waterways), and its many community uses.

- Prepare and distribute a pamphlet that describes the dredging process, history, community benefits from dredging, and the many uses of dredged materials.

Objective B. Obtain regulatory agency feedback and disseminate information to the general public regarding upcoming dredging projects, and maintenance issues.

- Utilize the Southwest Florida Regional Planning Council's Marine Advisory Committee as a public liaison.

6. Sustaining the Environment



Sustaining the environment for future generations is an important component of the District's mandate and management program. The District recognizes that programs to foster stewardship are a more effective way to reduce boating impacts than additional rules and regulations. As such, District programs stress the ecological aspects of the waterways and promote efforts to encourage safe boating, environmental understanding and stewardship, and voluntary compliance of existing regulations through education. Towards this end, the District has sponsored the development and distribution of products that promote boating safety and navigation, identify sensitive marine habitat, and further our understanding of waterway history and the safeguards needed to maintain a healthy environment and growing coastal communities.

The District has also sponsored self-regulatory management initiatives that include the establishment of a Regional Harbor Board and a Marine Advisory Committee, to address emerging waterway issues through mediation. Important results of this effort include: 1) a system that evaluates popular recreational anchorages according to management needs - active or passive; 2) a model harbor ordinance for the establishment of eco-friendly anchorages; and 3) maps and guides that promote wise use of anchorage and bay resources. The State of Florida recognized the District for its role in this successful self-regulatory initiative by presenting the WCIND and program partners with the Year 2000 Environmental Sustainability Award.

Goal 1. Promote Environmental Stewardship within the Coastal and Boating Communities

Objective A. Increase public awareness of and access to existing waterway resource information.

- Make available to the public regional waterway management and boater information through the development of web-based applications that allow waterway management map atlases and boaters' guides to be displayed and downloaded from the internet.
- Make available to the public boating safety and environmental information through a resource library.

Objective B. Develop educational products that foster environmental stewardship.

- Publish an updated guide to District waterways that represents the waterways as a comprehensive regional transportation system.
- Revise and publish the District Boaters Guide.

- Develop short public service announcements for radio and/or TV that discuss boating safety tips and eco-friendly boating practices.

Objective C. Strengthen community involvement to improve waterway conditions in canal systems.

- Sponsor programs, such as the Cape Coral “Canal Watch,” to engage residents who live along canal systems to systematically clean and maintain residential canals.

Objective D. Determine the effectiveness of current and proposed boater education products to promote safe boating, foster environmental stewardship, and to satisfy the needs of area boaters.

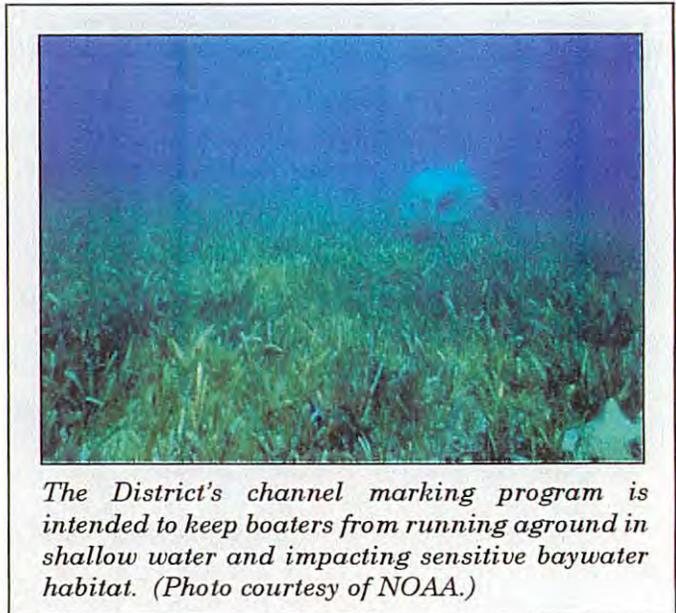
- Develop methods to assess boaters’ current awareness of safety and environmental issues, product usefulness, and information needs.
- Encourage the U.S. Coast Guard and local Power Squadrons to participate in programs to evaluate boating products intended to foster environmental stewardship.

Objective E. Promote environmental stewardship to first-time boat buyers and boaters that are new to the coastal community.

- Sponsor a boating and fishing workshop for boat dealers and local Marine Industry Association members.

Objective F. Support boating workshops for the public, resource managers, and policy makers.

- Sponsor and participate in a yearly waterway and anchorage management conference.
- Continue to sponsor and participate in the Southwest Florida Marine Advisory Committee activities.



The District's channel marking program is intended to keep boaters from running aground in shallow water and impacting sensitive baywater habitat. (Photo courtesy of NOAA.)

Goal 2. Promote Safe Boating and Navigation

Objective A. Install and maintain appropriate manatee speed zone signs and channel markers.

- Utilize Regional Waterway Management System information to develop a management application to evaluate the delineation and placement of boating speed zones.

Objective B. Evaluate the need for a shallow water resource marking program that includes establishing “no motor zones” and “limited access zones,” where appropriate.

- Review other similar programs in Florida for potential applications.
- Determine criteria and need for additional “no motor zones” or “idle speed zones.”

Objective C. Increase public awareness of sensitive marine habitat through information-based signs.

- Within each major estuary area, assist in the development of signs specifically designed for individual boat ramps and marinas depicting how to avoid damage to local seagrass beds, as well as the locations of oyster beds, and other fragile habitat.
- Work with member counties and marinas to place and maintain these signs.

Objective D. Evaluate the effectiveness of signs and navigation aid programs.

- Assist in efforts to monitor the effectiveness of speed zones and channel enhancements in improving boater compliance and reducing seagrass impacts.

Goal 3. Protect, Enhance, and, Where Possible, Restore Native Habitat Vital to the Ecological Function of the District Waterways

Objective A. Support efforts to eliminate invasive species and to restore natural upland habitat.

- Reduce invasive vegetation coverage in areas containing or linking significant native habitats.
- Include exotic removal in all new development projects.
- Encourage the removal of exotics and the maintenance of native vegetation on adjacent private lands.

Objective B. Support efforts to maintain the existing extent of submerged aquatic habitat.

- Assist in the maintenance of intertidal unvegetated habitats (i.e., mud flats and salt flats).
- Assist in the restoration and maintenance of saltwater marsh habitats, freshwater wetland systems, oyster beds, and seagrass beds.

Goal 4. Explore Ecological Enhancements to District-Owned Properties

Objective A. Implement a pilot project to evaluate the environmental quality of District-owned properties.

- Conduct an inventory of native plant habitat and endangered species on District properties (i.e., birds, gopher tortoises). Map the location and presence of gopher tortoises, exotic and native birds, and other flora and fauna. Rank and evaluate properties according to prime habitat potential.

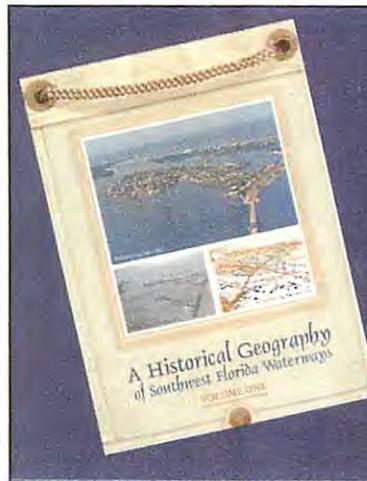
Objective B. Develop a strategy to remove exotic flora and reestablish native flora on District properties determined to have prime habitat potential.

- Evaluate alternate methods to control exotic pests and plants.

7. Permitting

The District coordinates the maintenance dredging of navigation channels and the posting of manatee speed zone signs. Before channel maintenance can be performed, or a sign posted, the ACOE and the Florida Department of Environmental Protection (FDEP) must issue a permit or an exemption determination. Without such permits or authorizations, the District cannot contract with firms to perform the necessary channel maintenance. The process of obtaining permits, however, can be quite lengthy and consume the majority of the total project costs. Therefore, in 1999, the District decided to seek a general permit for small scale, routine dredging projects.

The standardized databases and methodology developed as part of the RWMS (Priority Area 1, Waterways & Anchorages) now allow for the District to apply for a General Permit (GP) that addresses maintenance needs for many sites or projects, that either singly or



Volume One of the "Historical Geography of Southwest Florida Waterway" series utilizes historical, environmental, cultural, and geographic information to document the last 100 years along the Sarasota Bay shoreline and waterways. Volume Two (due to be published in 2002) documents shore and waterway changes between Fort Myers and Naples. Both publications were sponsored by the District.

cumulatively have a minimal adverse impact on the water resources of the District. The intent of the GP is to streamline the process of obtaining the necessary permits for the maintenance dredging of public navigation channels. A general permit for many projects will reduce the costs associated with acquiring a permit for each specific project, and will allow the District to initiate comprehensive science-based waterway management in Southwest Florida.

Goal 1. Reduce the Time and Cost of Implementing Maintenance and Improvement Projects

Objective A. Increase the number of multi-site projects that qualify for a GP.

- Require that the DEP develop a rule granting the District a GP by Petitions to Initiate Rulemaking.
- Follow up on the District's October 2000 Petition to Initiate Rulemaking.

Goal 2. Identify and Characterize Pre-development Waterway Conditions and Historic Dredging

Objective A. Acquire historic photography and documents to support permit applications.

- Scan, geo-reference, and mosaic historic photography for District areas.
- Determine waterway conditions (pre-development shoreline, improved and natural canal systems), from historic photography, and digitize into GIS data layers.

- Scan historic permits into the District’s electronic archival information management system.
- Acquire historic information from the National Archives, the National Oceanic and Atmospheric Administration, and other sources regarding shoreline, bathymetry, and seagrass beds.

Goal 3. Identify and Rank Future Permitting Needs

Objective A. Keep Regional Waterway Management System GIS databases current.

- Update air photos, charts, deeds, files, maps, and surveys relating to the District.
- Update parcels, waterway conditions, boat locations, and characteristics as identified in the Waterway Management priority area.

Objective B. Establish a system to evaluate and classify proposed projects to identify administrative procedures and the permit type most appropriate to facilitate implementation.

Goal 4. Monitor and Ensure the Success of the Established Permitting Process

Objective A. Strengthen post-dredging management programs to include greater community involvement to maintain or improve waterway conditions in canal systems.

- Determine baseline water conditions and monitor long-term water quality in canal systems.
- Support efforts such as the Cape Coral “Canal Watch” and the “Florida Yards and Neighborhoods Program” to organize and train local waterway residents to systematically engage in cleanup activities.

Objective B. Promote education programs that enhance the success of the permitting process.

- Sponsor training programs so that DEP and Aquatic Preserve managers will become familiar with the RWMS methods, GIS framework, and datasets used to prioritize permitting needs.
- Promote and distribute the “Historic Geography of Southwest Florida Waterways Volume Two: Cape Haze to Cape Romano” publication.
- Support efforts to compile current and historic information for an additional “Historic Geography” volume that covers the northern portion of the District from the Manatee River to Anclote Key.

8. Coordination

The achievement of sustainable waterway use in Southwest Florida will require unprecedented partnering and regional coordination of management and planning that transcends political boundaries, bureaucratic hurdles, and narrow agency jurisdictions. A framework must be created to ensure that waterway management efforts are coordinated, implemented, and provide long-term protection of public investments, security, and natural values. It is essential, therefore, that the District coordinate closely with federal, state, regional, and local stakeholders to sustain Southwest Florida's coastal ecosystems and a quality boating lifestyle. Stakeholders include, but are not limited to: 1) boating public; 2) member and adjacent counties; 3) local and state governments; 4) federal, state and regional agencies; and 5) state and federal legislators.

Important elements of a coordinated regional management approach for sustainable waterway use include: 1) anticipating the need for coordination; 2) identifying and establishing common goals among coordinating entities; and 3) negotiating appropriate coordinating protocols. Proper and timely coordination with stakeholder groups will strengthen the ability of the District to perform its services to local communities.

Goal 1. Determine the Effectiveness of Local, Federal, and State Processes that Impact District Mandated Programs and Activities

Objective A. Define standards and procedures to establish proper intergovernmental coordination by relevant stakeholders.

Objective B. Establish a database that identifies all stakeholders relevant to the District and appropriate methods, timing, and contacts for intergovernmental coordination.

- Establish a task force, as outlined in L.O.F. 98-526(5)(g), of appropriate parties to assist in the development of a Waterway Coordination Plan (WCP). Request that each member or adjacent county provide one WCP task force member and alternate to assist in the development of a WCP.

Goal 2. Promote Cooperative Agreements and Partnerships with Local, Federal, and State Agencies to Facilitate Waterway Planning and Management

Objective A. Encourage member and adjacent counties, and other appropriate governmental entities to incorporate Regional Waterway Management into their comprehensive planning efforts.

- Use the WCP as the basis to facilitate adoption of uniform standards for waterway management activities by the FDEP.
- Promote cooperative agreements with Florida Inland Navigation District (FIND) and other similarly situated navigation districts in order to promote common goals, such as enhanced access to federal funding and cost-sharing opportunities.

Objective B. Coordinate with the Southwest Florida Regional Planning Council's Marine Advisory Committee to identify pressing waterway management issues and needs.

- Explore partnerships with Glades and Hendry Counties for the purpose of improving the navigability and environment of the Okeechobee Waterway and Upper Caloosahatchee River systems.

Objective C. Strengthen the collaborative partnership with Florida Sea Grant's Cooperative Extension Services.

- Initiate a regional program development effort, involving Sea Grant agents in Southwest Florida, and using the Cooperative Extension Service, State Major Program "Florida Yards & Neighborhoods," to promote waterway community involvement to enhance the boating environment in residential canal systems.
- Initiate discussions with Collier County to stimulate future county participation in District programs.
- Promote Charlotte and Collier County participation in the FSG/District regional waterway management project.
- Establish partnerships with Glades and Hendry Counties to facilitate planning and management of Okeechobee and Upper Caloosahatchee Waterways.

Objective D. Continue the collaborative partnership with the Southwest Florida Regional Planning Council.

- Continue membership and support of the Southwest Florida Regional Planning Council's Marine Advisory Committee.

Objective E. Cooperate with local, federal, and state officials and agencies to meet waterway management, and safety and security needs.

- Participate with local, state, and federal law enforcement agencies to identify, facilitate and/or coordinate steps to protect our coastline, bay resources, and coastal communities.

Objective F. Secure agreements with ACOE and FDEP to evaluate and prioritize sediment management and inlet management projects.

- Pursue funding agreements that allow the District to participate in federally authorized project management.

Objective G. Coordinate with federal, state, and local agencies to prevent or reduce infrastructure and property damage, and loss of life that could result from a natural disaster or other catastrophic event.

Objective H. Strengthen ties with local boating and Marine Industries Association members.

- Promote Environmental Stewardship and Safe Boating through partnerships with Southwest Marine Industries Association members.

Goal 3. Promote Waterway Community Involvement to Enhance the Boating Environment along Waterways and Throughout Residential Canal Systems

Objective A. Establish a regional program to work with waterfront communities to promote canal system stewardship.

- Enlist the assistance of FSG, the RPC, the South Florida Water Management District (SFWMD), the Southwest Florida Water Management District (SWFWMD), and local governments to promote waterway community involvement.
- Investigate partnerships with the city of Cape Coral to promote and expand their "Canal Watch" program.

Objective B. Promote public involvement in efforts to improve the region's waterway environment.

- Provide for the training of local waterway residents to systematically engage in waterway and canal cleanup activities.
- Provide for the training of volunteers to collect and process water and sediment samples for long-term water quality monitoring.

Objective C. Establish links between environmental improvement efforts along waterways and throughout canal systems and existing state major programs, such as "Florida Yards and Neighborhoods" for interagency cost sharing.

Goal 4. Coordinate Activities and Waterway Information Flow among Federal, State, and Local Agencies

Objective A. Coordinate the distribution and acquisition of geographic information with member and adjacent counties, and stakeholder agencies.

- Catalog and make available an Internet-based resource center and clearinghouse to member and adjacent counties.
- On-line and/or catalogued information should include boater safety, regional waterway management GIS data, and historical waterway information.

Goal 5. Coordinate with State Rulemakers to Establish Legislative Support for District Programs and Activities

Objective A. Promote cooperative agreements with similarly situated agencies and waterway districts to establish the economic rationale in support of elevating recreational boating to a "high priority" issue for federal authorization and cost sharing of waterway management projects.

- Implement agreements with the ACOE to allow the District to supplement and be reimbursed for funding of federally authorized projects or substitute local funding for these designed/permitted projects that may be under or unfunded.

Objective B. Participate with federal, state, and local officials and agencies to meet waterway security needs.

- Coordinate with federal, state, regional, and local law enforcement agencies to define and implement steps to ensure the security of District coastline, bay resources, and coastal communities.

LEGISLATIVE MANDATES

The following excerpts are taken from Chapter 98-526 Laws of Florida (1998) and Part 1 from Chapter 374, Florida Statutes (2000). These legislative mandates represent the basis for District authority and program areas.

F.S. 374.975(1) - The Legislature hereby recognizes [not authorizes] the continuing need for inland navigation districts to undertake programs necessary to accomplish the purposes of construction, maintenance and operation of Florida's inland waterways pursuant to s. 107 of the federal River and Harbor Act of 1960 (33 U.S.C. 577).

F.S. 374.975(2) - To undertake, as outlined in this act [s. 107 of the federal River and Harbor Act of 1960], additional programs designed to alleviate the problems associated with the districts waterways.

F.S. 374.975(3) - develop long-range plans for the maintenance of the intracoastal waterway.

F.S. 374.976(1)(a) and L.O.F. 98-526(5)(b) - The district may act as local sponsor for any project designated as a section 107, "River and Harbor Act of 1960" project authorized and undertaken by the U.S. Army Corps of Engineers and, in this regard, may comply with any or all conditions imposed on local interests as part of such project.

L.O.F. 98-526(5)(d) - The district may furnish assistance and support to member counties in planning and carrying out public navigation projects of a purely local or regional nature. Such assistance and support, if financial in nature, shall be granted only after a finding by the board that such a project contributes to public navigation in the area in which it is located.

L.O.F. 98-526(5)(g) - The district is authorized to create advisory bodies to assist local governments in the development of county and multi-county anchorage management programs.

L.O.F. 98-526(16)(a) - The district is authorized to collect, compile, and to furnish to the Secretary of Army, the Secretary's officers or agents, appropriate information on the counties within the district's boundaries bearing on the advantages, benefits, and increased usefulness that may be expected to accrue to the public and to the counties traversed by said waterway by reason of any improvement or extension thereof, that has previously been or may subsequently be authorized by said United States Congress.

L.O.F. 98-526(16)(b) - The district is authorized to expend its funds for publicizing to other governmental agencies the completion by the United States of all or any portion of the intracoastal waterway and related waterways and its availability and utility to watercraft, and to distribute information as to route, channel, depth, and facilities of said waterway and such other information and data as may, in the opinion of the board, be desirable or useful to give then public full information regarding the waterway and to promote its use in navigation.

F.S. 374.976(1)(b) - The district may sponsor or furnish assistance and support to member counties and local governments within the district in planning and carrying out beach renourishment and inlet management projects. Such assistance and support, if financial in nature, shall be contributed only after a finding by the board that inlet management projects are a benefit to public navigation in the district and that the beaches to be nourished have been adversely impacted by navigation inlets, navigation structures, navigation dredging, or a navigation project. Such projects will be consistent with Department of Environmental Protection approved inlet management plans and the statewide management plan pursuant to s. 161.161. Inlet management projects that are determined to be consistent with Department of Environmental Protection are declared to be a benefit to public navigation.

F.S. 374.976(1)(c) - The district is authorized to aid and cooperate with Federal Government, state, member counties, and local governments within the district in planning and carrying out beach renourishment [and] inlet management directly related to the waterway. The district is also authorized to enter into cooperative agreements with the United States Army Corps of Engineers, State, and member counties, and to covenant in any such cooperative agreement to pay part of the costs of acquisition, planning, development, construction, reconstruction, extension, improvement, operation, and maintenance of such projects.

L.O.F. 98-526(5)(c) - The district may act as local sponsor for any beach nourishment project in the district approved and undertaken by the U.S. Army Corps of Engineers and/or Florida Department of Environmental Protection or its successor, provided the board of commissioners of the district shall first find that such project, is a benefit to public navigation in the district.

F.S. 374.976(1)(c) - The district is authorized to aid and cooperate with Federal Government, state, member counties, and local governments within the district in planning and carrying out boating safety projects, directly related to the waterway. The district is also authorized to enter in cooperative agreements with the United States Army Corps of Engineers, state, and member counties, and to covenant in any such cooperative agreement to pay part of the costs of acquisition, planning, development, construction, reconstruction, extension, improvement, operation, and maintenance of such projects.

F.S. 374.976(2) - All financing assistance and support furnished by the Florida Inland Navigation District and the West Coast Inland Navigation District to member counties and local governments within the district shall require matching funds. Such matching funds shall be clearly identified and enumerated as to amount and source. Such financial assistance and support, except as provided pursuant to paragraph (1)(a) and except for a project approved in a county that is recovering from a state of emergency under chapter 252, shall not exceed the proportional share of ad valorem tax collections from each county.

L.O.F. 98-526(8)(a)-(f) -The district shall obtain by gift, donation, purchase, or condemnation and shall furnish to the United States: [summarized below]

(a) required right-of-ways said board shall determine necessary pursuant to requirements for constructing and maintaining the waterway...

(b) required areas for the deposit of spoil material in connection with the work of improving, constructing, and maintaining the waterway...

(c) any property, property rights, easement, and interest in property, outside of right-of-ways and designated spoil areas that may be necessary for the construction, maintenance, and operation of a canal to be constructed within a right-of-way...

(d) such lands, easements, rights-of-way, and spoil disposal areas as may be required to effectuate the purpose and intent of all acts of the United States Congress...with a view to providing a project depth of 12 feet...and in connection with the subsequent maintenance of [the] waterway...

(e) is authorized to contract for the purchase of any property acquired by [the District] and to pay the purchase price in installments or deferred payments...said contract may provide for the payment of interest as provide by general law.

(f) funds used for the purchase of right-of-way, spoil areas, and other property shall be obtained by said board either from a tax levy, or levies...or borrowed upon its obligations...

L.O.F. 98-526 (14)(a) - The district is authorized to assume and relieve the United States from the cost and expense of construction, reconstruction, maintaining, and operating any bridge. [The WCIND] board is authorized to contract with the board of commissioners of any county in the district to the end that said county board of county commissioners shall assume responsibility for the construction, reconstruction, maintenance, and operation of bridge[s]...

L.O.F. 98-526 (14)(c) - The district is authorized to exercise the power of eminent domain in securing any lands and rights-of-way necessary for any bridge or bridge approach roads...

L.O.F. 98-526 (17) - The district is authorized to pay all or part of the cost of dredging performed on the waterway by the United States, to construct dikes, bulkheads, and levees, to construct ditches and pipelines for the control of water discharged by dredges, to reconstruct, modify, or relocate, bridges, docks, wharfs, and other structures, including water and sewer lines and appurtenances, electric and telephone lines and appurtenances, gas transmission and distribution lines and appurtenances, or to pay for same, and to do all other work necessary to produce economies in meeting the conditions imposed by the local interests...

L.O.F. 98-526(5)(a) -The WCIND] is authorized to obtain by donation, purchase, or condemnation and convey without costs to the United States the necessary rights -of-ways for a project together with suitable areas for the deposit of spoil material in connection with the work and its subsequent maintenance, all as contemplated and required by the Congress of the United States and those acting by its authority. Nothing herein contained shall be construed to prohibit said board from expending of money as its discretion may be deemed proper for any purpose authorized, contemplated or required to carry out any work authorized by any acts of Congress.

L.O.F. 98-526(9) - Is authorized to exercise the right of eminent domain, and may condemn for the use of said district or other proper public agencies all lands, easements, rights-of-way, areas for deposit for spoil material, and property rights of every description required for the public purpose and powers of said district herein granted. The district is authorized to secure possession of lands, easements, rights-of-way, areas for spoil deposit material and other property rights...

L.O.F. 98-526(21) - The district is authorized to enter in to agreements with the Department of Transportation, the board of county commissioners of any county in the district, or both, or any other person, corporation, or agency, federal, state or local, public, private in connection with financing, alteration, and construction of any bridge approach or roadway or other structure and said parties are hereby specifically authorized to enter into such agreements with each other respecting responsibility for acquisition of right-of-way, for construction and maintenance of any bridge structure and approach required to be provided or modified because of the construction of the intracoastal waterway.

F.S. 374.975(3) - ...develop long-range plans for spoil disposal.

F.S. 374.976(1)(c) - The district is authorized to aid and cooperate with Federal Government, state, member counties, and local governments within the district in planning and carrying out public navigation, local and regional anchorage management, beach renourishment, public recreation, inlet management, environmental education, and boating safety projects, directly related to the waterway. The district is also authorized to enter in cooperative agreements with the United States Army Corps of Engineers, state, and member counties, and to covenant in any such cooperative agreement to pay part of the costs of acquisition, planning, development, construction, reconstruction, extension, improvement, operation, and maintenance of such projects.

F.S. 374.976(1)(d) - The district is authorized to enter into cooperative agreements with navigation-related districts to pay part of the costs of acquisition of spoil disposal sites.

F.S. 374.975(3) - Develop long-range plans for maintenance of the intracoastal waterway and for spoil disposal.

F.S. 374.976(1)(d) - The District is authorized to enter into cooperative agreements with navigation-related districts to pay part of the costs of acquisition of spoil disposal sites.

L.O.F. 98-526(9) - The District is authorized to exercise the right of eminent domain, and may condemn for the use of said district or other proper public agencies all lands, easements, rights-of-way, areas for deposit for spoil material, and property rights of every description required for the public purpose and powers of said district herein granted. The District is authorized to secure possession of lands, easements, rights-of-way, areas for spoil deposit material and other property rights...

F.S. 374.976(1)(c) - The District is authorized to aid and cooperate with Federal Government, state, member counties, and local governments within the district in planning and carrying out . . . environmental education . . . directly related to the waterway. The district is also authorized to enter in cooperative agreements with the United States Army Corps of Engineers, state, and member counties, and to covenant in any such cooperative agreement to pay part of the costs of acquisition, planning, development, construction, reconstruction, extension, improvement, operation, and maintenance of such projects.

F.S. 374.976(1)(e) - The district is authorized to enter into cooperative ecosystem management agreements with the Department of Environmental Protection pursuant to c. 403.075.

F.S. 374.977 - Each inland navigation district shall be responsible for posting and maintaining regulatory markers, as approved by the Department of Environmental Protection, for manatee protection speed zones. Such responsibility shall not be limited to the intracoastal waterway, but shall include all waters within each members county for which regulatory markers must be posted.

L.O.F. 98-526(5)(e) - The district is authorized to participate with any local, state, or federal agencies in research, study, or test programs as to the impact, both physical and biological, of waterway construction, maintenance, and operation, including, but not limited to, erosion, accretion, and marine and shoreline vegetation.

L.O.F. 98-526(5)(f) - The district is authorized to assume sponsorship, or to act with other agencies, in environmental restoration and enhancement projects, seeking to protect, restore and enhance, water quality, aquatic habitat, and other marine oriented conservation and environmental values in the navigable waters in the district. Such activities may include studies and work to restore damage to the aquatic environment caused by construction or maintenance of navigation channels, or similar works.

L.O.F. 98-526(5)(18) - The district is authorized to prosecute in behalf of itself or others any administrative procedures necessary to be followed to carry out any activities authorized or contemplated by this act and to pay the reasonable expenses thereof, including, but not limited to, any bulkhead line and dredge and fill procedures required by law to be completed. The district may contract with other agencies or public or private persons to perform any such activities on its behalf.

F.S. 374.976(1)(b) - The district may sponsor or furnish assistance and support to member counties and local governments within the district in planning and carrying out beach renourishment and inlet management projects. Such assistance and support, if financial in nature, shall be contributed only after a finding by the board that inlet management projects are a benefit to public navigation in the district and that the beaches to be nourished have been adversely impacted by navigation inlets, navigation structures. navigation dredging, or a navigation project. Such projects will be consistent with Department of Environmental Protection approved inlet management plans and the statewide management plan pursuant to s. 161.161. Inlet management projects that are determined to be consistent with Department of Environmental Protection approved inlet management plans will be declared to be a benefit to public navigation.

F.S. 374.976(1)(c) - The district is authorized to aid and cooperate with Federal Government, state, member counties, and local governments within the district in planning and carrying out public navigation, local and regional anchorage management, beach renourishment, public recreation, inlet management, environmental education, and boating safety projects, directly related to the waterway. The district is also authorized to enter in cooperative agreements with the United States Army Corps of Engineers, state, and member counties, and to covenant in any such cooperative agreement to pay part of the costs of acquisition, planning, development, construction, reconstruction, extension, improvement, operation, and maintenance of such projects.

F.S. 374.976(1)(d) - The district is authorized to enter into cooperative agreements with navigation-related districts to pay part of the costs of acquisition of spoil disposal sites.

L.O.F. 98-526(5)(e) - The district is authorized to participate with any local, state, or federal agencies in research, study, or test programs as to the impact, both physical and biological, of waterway construction, maintenance, and operation, including, but not limited to, erosion, accretion, and marine and shoreline vegetation.

L.O.F. 98-526(5)(f) - The district is authorized to assume sponsorship, or to act with other agencies, in environmental restoration and enhancement projects, seeking to protect, restore and enhance, water quality, aquatic habitat, and other marine oriented conservation and environmental values in the navigable waters in the district. Such activities may include studies and work to restore damage to the aquatic environment caused by construction or maintenance of navigation channels, or similar works.

L.O.F. 98-526(5)(g) - The district is authorized to create advisory bodies to assist local governments in the development of county and multi-county anchorage management programs.

L.O.F. 98-526(5)(h) - The district is authorized to enter into interlocal agreements with adjoining coastal counties to implement the purposes and projects authorized in this Act, chapter 374, Florida Statutes, and applicable general law within the boundaries of the cooperating county or counties. The agreement shall also make provision for the continued construction or maintenance of district projects with in a cooperating county or counties in the event an agreement is terminated.

L.O.F. 98-526(21) - The district is authorized to enter in to agreements with the Department of Transportation, the board of county commissioners of any county in the district, or both, or any other person, corporation, or agency, federal, state or local, public, private in connection with financing, alteration, and construction of any bridge approach or roadway or other structure and said parties are hereby specifically authorized to enter into such agreements with each other respecting responsibility for acquisition of right-of-way, for construction and maintenance of any bridge structure and approach required to be provided or modified because of the construction of the intracoastal waterway.