2001

Marine Industries Association of South Florida Master Plan

Urban Harbors Institute, University of Massachusetts Boston

FAU Joint Center for Environmental and Urban Problems

Marine Industries Association of South Florida Master Plan

Marine Industries Association of South Florida

University of Massachusetts Boston
Urban Harbors Institute

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An Act Concerning Use Value Taxation Of Commercial Recreational Boating Facilities

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INTRODUCTION

The *Marine Industry Master Plan* was prepared by the Marine Industries Association of South Florida (MIASF) to present a comprehensive and coordinated action agenda for retaining and expanding the marine industry in Broward County. This Master Plan is an extension of a strategic planning process conducted by the MIASF in which the major issues confronting the industry were identified along with an initial strategy to address those issues. This Marine Master Plan is part of that strategy. The plan contains goals, objectives, and actions that respond to several key issues: scarcity of waterfront sites for marine facility expansion, displacement of existing facilities, intergovernmental coordination and industry/governmental cooperation, workforce education and training, and industry image. The purpose of the Plan is to help ensure that the industry remains vital and responsive to current and future demands.

GOALS OF THE MARINE INDUSTRY MASTER PLAN

?? Document the economic importance of the industry, its needs and goals for future growth.

?? Identify sites within the study area with potential to support growth of the marine industry consistent with local economic development and environmental protection considerations.

?? Propose recommendations and models for responding to the industry's needs in public policies, programs, plans, and regulations.

?? Provide a basis for coordinated decisions and cooperative relations among MIASF and county and municipal governments; other applicable regulatory agencies at federal, state, regional, and local levels; and the general public.

?? Develop a marine industry public relations campaign to ensure that the general public, governmental agencies, the business community, and environmental groups have an accurate understanding and favorable impression of the marine industry and its contributions to the community.

?? Increase the amount and types of technical training programs available in South Florida

THE STUDY AREA

The study area for this plan is the waterfront area of the thirteen coastal municipalities with navigable waterways in Broward County. These include the municipalities of Dania Beach, Davie, Deerfield Beach, Fort Lauderdale, Hallandale Beach, Hillsboro Beach, Hollywood, Lauderdale-by-the-Sea, Lighthouse Point, Plantation, Pompano Beach, Sea Ranch Lakes, and Wilton Manors.

The coastal communities of Broward County, and particularly the waterfront areas of Fort Lauderdale and Dania Beach, are at the center of a multi-county area, stretching from Miami-Dade to St. Lucie counties, that features an unequaled concentration of boating activity and facilities (Fig. 1). The waterfront cities of Broward County have been the heart of this industry; the qualities of its facilities and craftsmen have achieved a global reputation.

Figure 1. South Florida Boating Centers

HIGHLIGHTS OF THE REGION

Fort Pierce: Planning for the future of the Port of Fort Pierce is currently under way.

Stuart: "Yachtsman's Paradise." Diverse boating opportunities, boatyards, and marine supply stores. Hosts the Marine Industries Association of the Treasure Coast's annual boat show.

Riviera Beach: Community Redevelopment Plan features a complete waterfront overhaul with strong goals and policies to expand the marine sector.

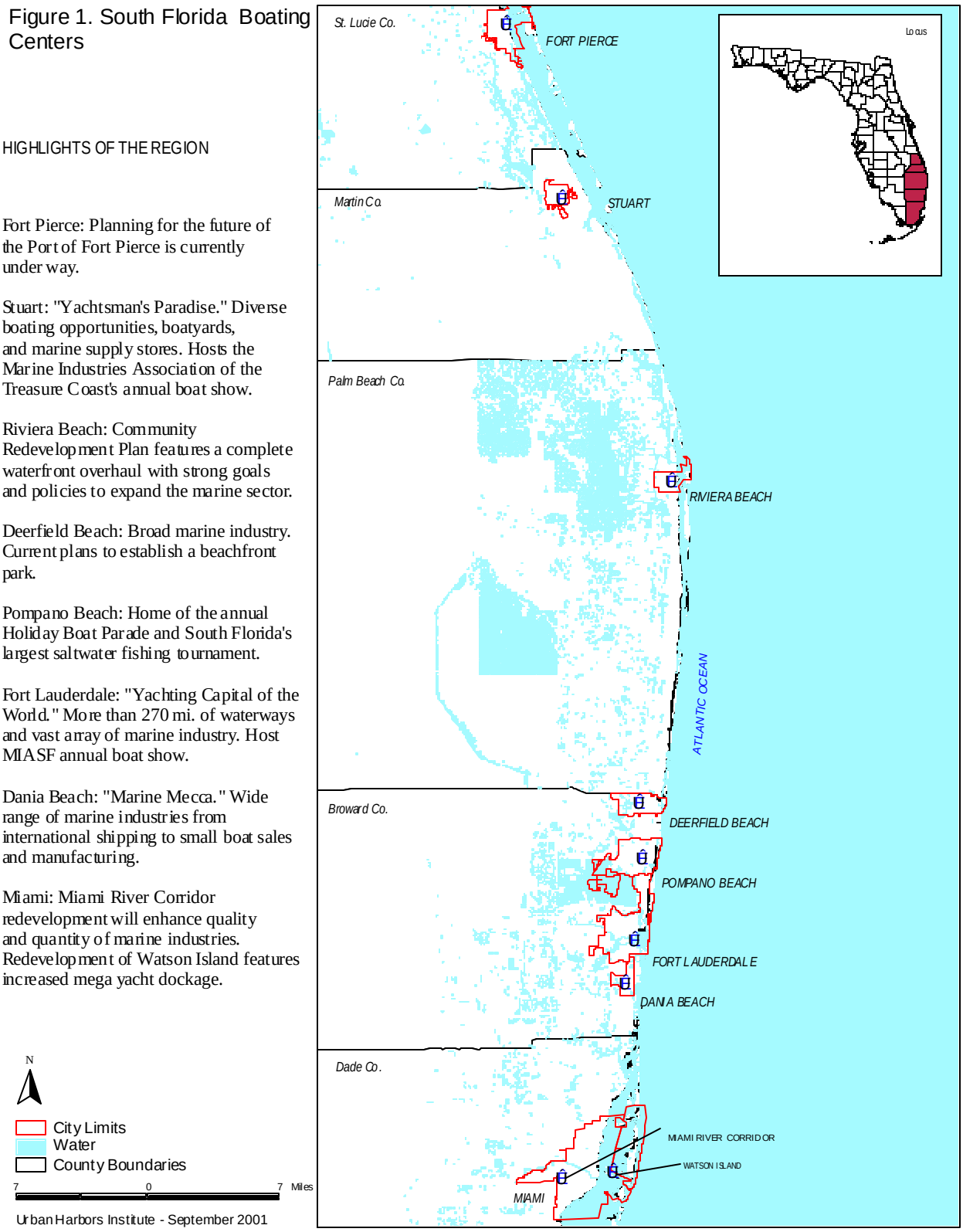
Deerfield Beach: Broad marine industry. Current plans to establish a beachfront park.

Pompano Beach: Home of the annual Holiday Boat Parade and South Florida's largest saltwater fishing tournament.

Fort Lauderdale: "Yachting Capital of the World." More than 270 mi. of waterways and vast array of marine industry. Host MIASF annual boat show.

Dania Beach: "Marine Mecca." Wide range of marine industries from international shipping to small boat sales and manufacturing.

Miami: Miami River Corridor redevelopment will enhance quality and quantity of marine industries. Redevelopment of Watson Island features increased mega yacht dockage.



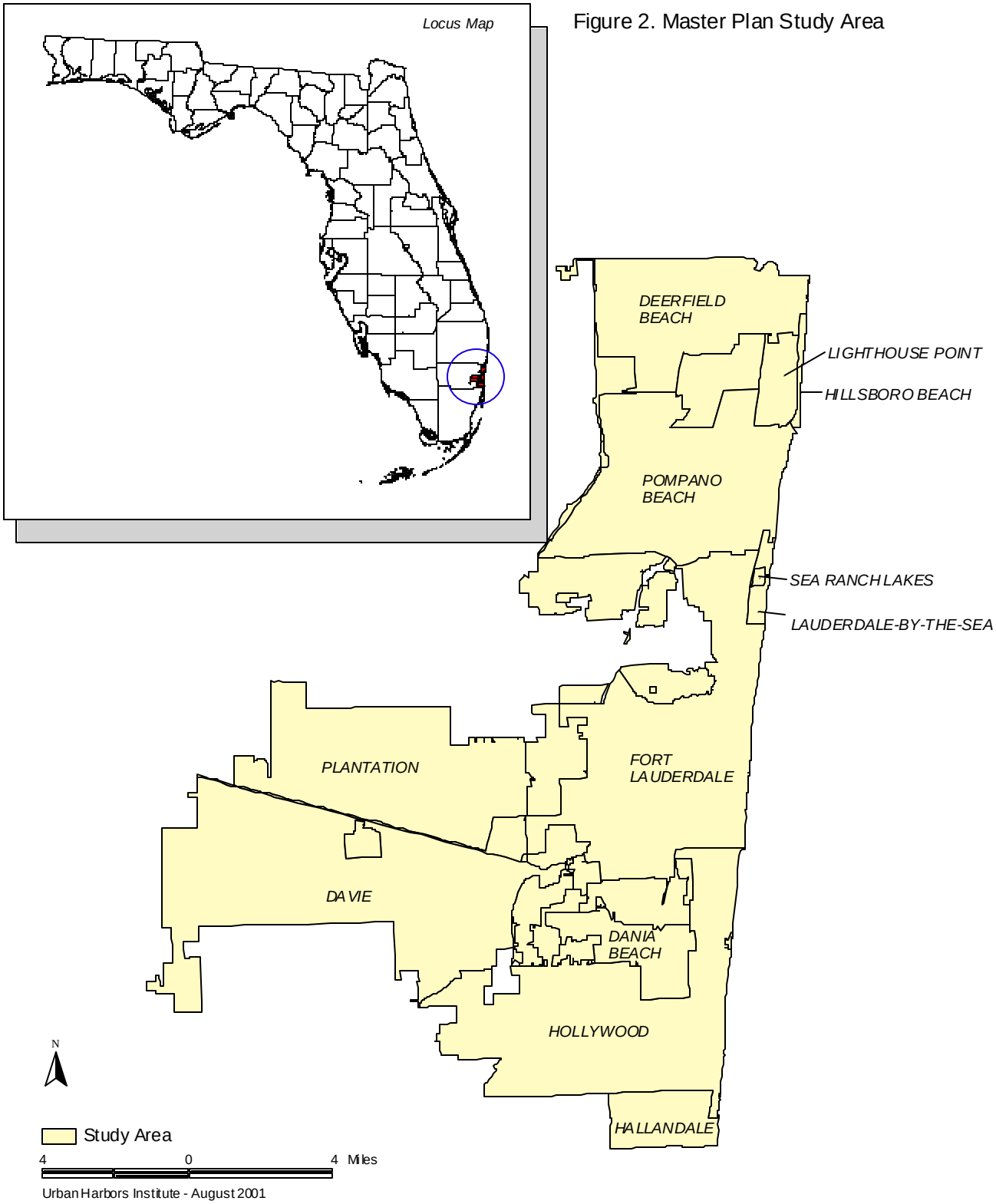


Figure 2. Master Plan Study Area

THE PLANNING PROCESS

The concept of a Marine Industry Master Plan emerged from the Marine Industries Association of South Florida's Marine Industry Summit held on September 29, 1999. Seventy-five community and marine industry leaders met for a half-day, identified critical issues facing the industry, and outlined an approach to address those issues. In 2000, MIASF retained the Joint Center for Environmental and Urban Problems at Florida Atlantic University, which partnered with the Urban Harbors Institute of the University of Massachusetts Boston and the Center for Visual Planning Technology at Florida Atlantic University, to provide policy and technical assistance for the plan.

Preparation of the plan was guided by a Steering Committee of industry representatives and government officials. The Steering Committee met quarterly to set direction and review and provide feedback on data, analyses, and draft proposals. The Steering Committee was assisted by other government and industry experts at working sessions and on task forces focusing on specific issues. The sections of the plan on Industry Workforce and Public Education were prepared independently by two task forces of MIASF members. Their findings and recommendations are incorporated into this Master Plan.

As with most efforts of this type, the planning process itself produced benefits. The process brought together people from industry and government who shared information and perspectives and established enduring working relationships.

During the period of time this Master Plan was in preparation, Port Everglades initiated an effort to update its Deepwater Port Plan, and productive coordination meetings took place with port staff and consultants. The work on the Port Everglades Master Plan is now complete, providing an opportunity to continue coordinating the objectives of the Marine Industry Master Plan with those of the port's plan implementation.

Also during the past year, Broward County undertook completion of its Manatee Protection Plan. There was an opportunity to collaborate with county planning staff to share data and information on the present and future locations of marine facilities and to minimize habitat and endangered species conflicts.

The data and information gathered in support of the plan provides great value beyond being the foundation of the plan's recommendations. Of particular note were the preparations of:

- a complete and accurate database on marine facilities in the study area, and
- digital maps of the natural and built environment and specific information related to the marine industry.

The information can be utilized by the MIASF for a variety of purposes, such as providing member services, recruiting membership, assisting prospective businesses, developing of promotional materials and media information, preparing position papers on issues affecting the industry, and developing responses to government proposals.

MARINE MASTER PLAN STEERING COMMITTEE

Cynthia Chambers	Broward County Department of Planning and Environmental Protection
Ping Chang	South Florida Regional Planning Council
Jenni Clark	City of Fort Lauderdale, Office of Community and Comprehensive Planning
Christopher Clemens	City of Pompano Beach Department of Development Services
Dr. Dick Dodge	Oceanographic Center, Nova Southeastern University; MIASF Board
Susan Engle	EnviroCare, Inc.; CEERI; Boater 101; MIASF Board
Rose Marie Fallon	Broward County Department of Planning and Environmental Protection
Mayor John Fiore	Broward County League of Cities; Mayor of Wilton Manors
Kathryn Glenewinkle	City of Fort Lauderdale Community and Economic Development Department
Joan Goodrich	Broward Alliance
John J. Grady, Jr.	Broward County Marine Advisory Board
Frank Herhold	Marine Industries Association of South Florida
John Hulsey	South Florida Regional Planning Council
Bernard Jones	City of Pompano Beach, Economic Development Department
Jim Karas	Broward County Public and Governmental Relations
Heather Keith	Marine Advisory Board, City of Fort Lauderdale
Martha Lord	Marine Industries Association of South Florida
Peg McPherson	South Florida Water Management District
Scott Miser	Marine Max/Associated Marine Technologies; MIASF Board
Jason Nunemaker	Interim City Manager, City of Dania Beach
Tom Plachter	Lauderdale Marina; MIASF Board
Stephen Queior	Greater Fort Lauderdale Chamber of Commerce
Jennifer Saia	The Sacks Group Yachting Professionals, Inc.; MIASF Board
Al Shamoun	Broward County Department of Planning and Environmental Protection
Eric Silva	South Florida Regional Planning Council
Steve Somerville	Broward County Department of Planning and Environmental Protection
Don Stone	Broward County Department of Planning and Environmental Protection
Sasheen Tavares	Broward County Division of Florida Sea Grant
Norm Taylor	Broward County Office of Economic Development
Susan Tramer	Broward County Planning Council
Chris Wren	City of Fort Lauderdale, Office of Community & Comprehensive Planning

PROFILE OF MARINE INDUSTRY IN BROWARD COUNTY

PHYSICAL CONDITIONS

Home to the "Yachting Capital of the World," Broward County is well recognized for its concentration and vast array of marine services and activities. With an estimated 825 marine industry businesses, Broward County surpasses all other counties in Florida in marine sales with 29 percent of the state's total (Murray 2001). Since 1994, Broward County has consistently ranked third overall, behind Miami- Dade and Pinellas counties, for the total number of recreational watercraft registered in the state.

For purposes of profiling the industry and developing the Geographic Information System for this plan, a database was compiled of marine facilities within the Plan's study area (Figures 3 and 4). Using multiple sources (including the MIASF membership directory; mail and telephone surveys; existing facility databases from the Florida Inland Navigation District, Florida Marine Research Institute, and Broward County, the Embassy Guidebook, and searches of the World Wide Web), 158 marine facilities were identified and catalogued in the study area. For purposes of this project, collection efforts focused on facilities located adjacent to a navigable body of water. While this database is more comprehensive than any individual source on marine facilities available at the time, it is not exhaustive. The listing of these marine facilities is found in Appendix A.

A classification system was developed to best illustrate the functions of these facilities. Table 1 lists the classes and the number of facilities within each class, as well as the number of facilities that can accommodate megayachts—vessels that are 80 feet or longer in length. Each facility was classified based on its primary function or use.

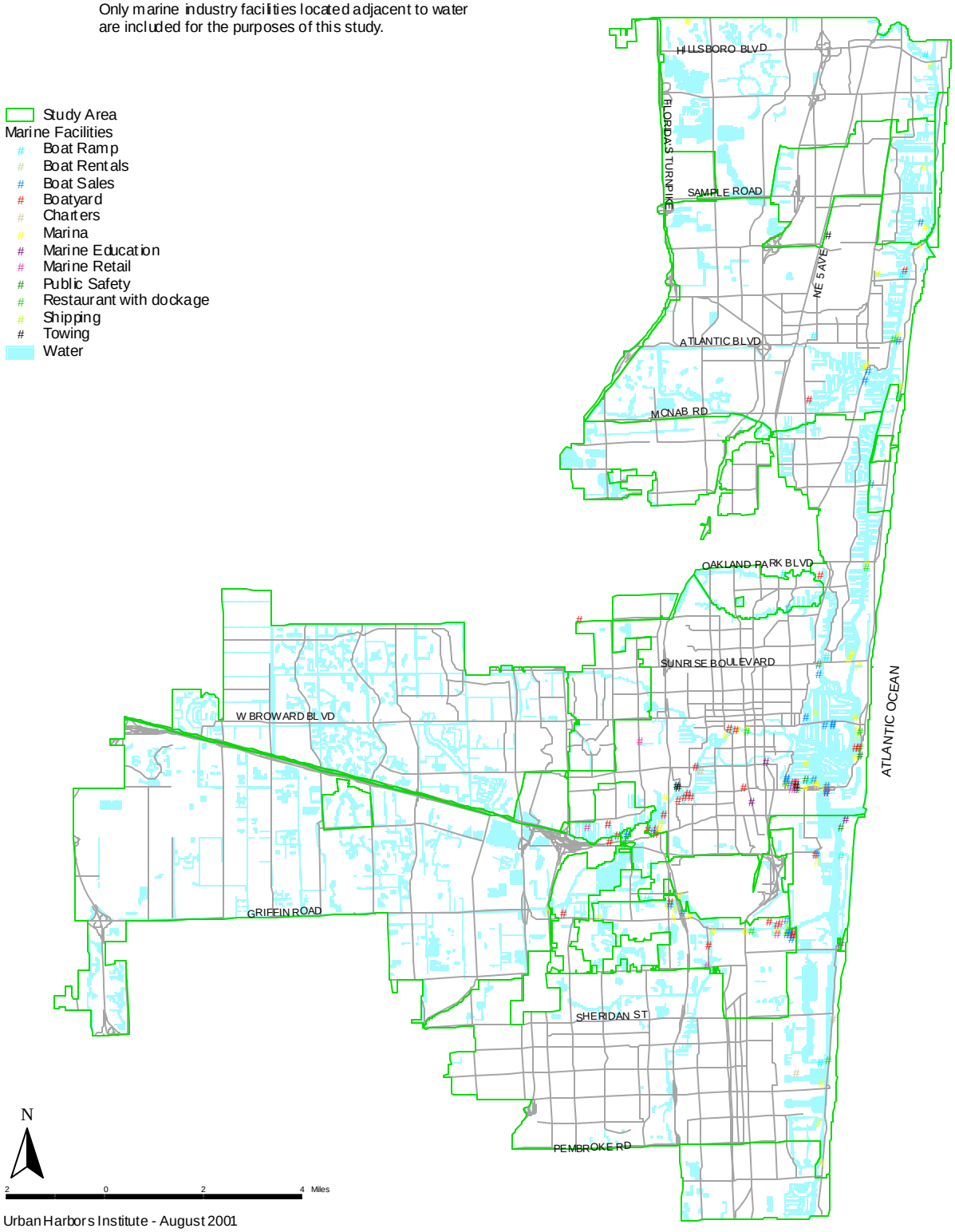
Table 1. Classification of Marine Facilities in Study Area

Classification	No. of Facilities	Percent of Total	No. Accommodating Megayachts
Boat Ramps (Public)	11	7%	0
Boat Rentals	2	1%	N/A
Boatyards	30	19%	16
Boat Sales	30	19%	2
Charters	4	3%	N/A
Marinas	50	32%	23
Marine Education	5	3%	N/A
Marine Retail	7	4%	N/A
Public Safety	3	2%	N/A
Dockside Restaurants	11	7%	1
Towing	5	3%	N/A

The number of publicly accessible boat ramps and landings is another important facility in support of boating in the region. A 1991 study of boaters completed by the University of Miami Boating Research Center estimated that 87 percent of the boats registered in Broward County were under 26 feet in length. Most of the boats in this size range are not stored in water but are trailered to a launch ramp when required. There are an estimated 60 boat ramps within all of Broward County. The accepted standard among marina designers is that a single-lane boat ramp can service 50 launchings and 50 retrievals per day. Therefore, all of Broward County can accommodate approximately 3,000 launchings and 3,000 retrievals per day.

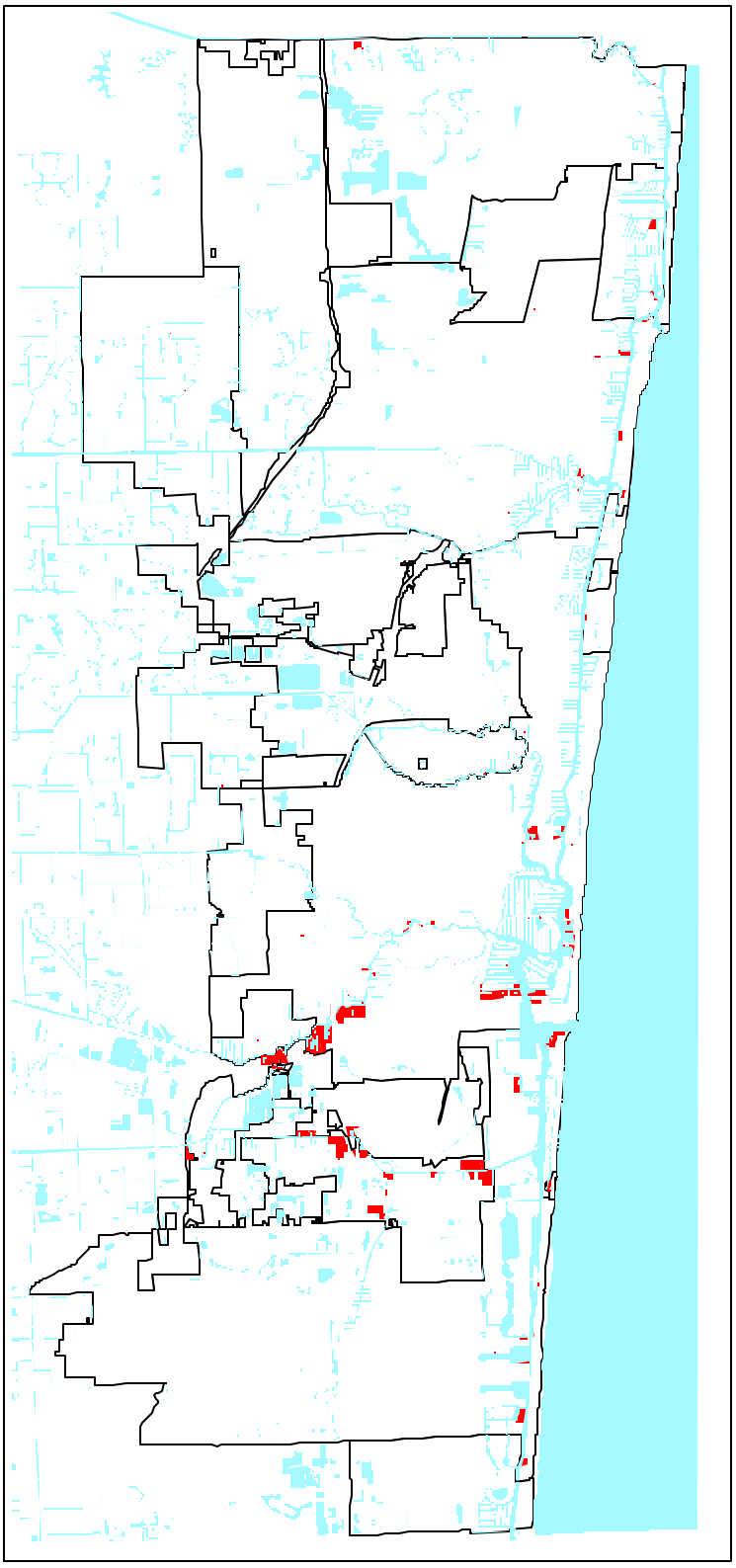
Figure 3. Marine Facilities Located in Study Area

Only marine industry facilities located adjacent to water are included for the purposes of this study.



Urban Harbors Institute - August 2001

Figure 4. Land Parcels in Broward County where Marine Facilities are Located



ECONOMIC CONDITIONS

According to a recent study completed by Thomas J. Murray & Associates, Inc. (Murray 2001), the total economic impact of the recreational marine industry in Broward County in 2000 was estimated at $8.8 billion, providing $3 billion in wages and earnings, and 109,820 full-time jobs.[1] The report ranks the five main sectors of the marine industry according to their level of contribution to the economy. The retail trade sector ranked highest ($3.3 billion), followed by marine services ($1.6 billion), wholesale trade ($1.5 billion), manufacturing ($1.4 billion), and dockage ($1 billion).

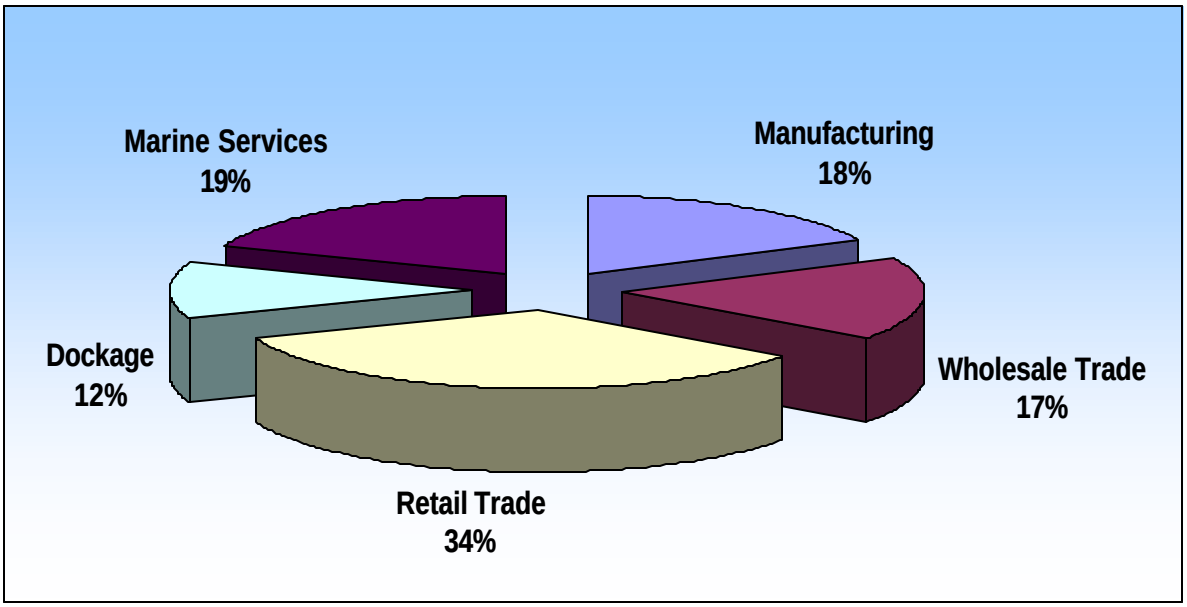


Figure 5. Percent estimated marine gross revenues by sector, Broward County

The Florida Department of Revenue reports the "Kind Code-28 Retail Sales" of the marine trade sector (often referred to as *gross marine sales)*, which accounts for the retail sales by motorboat and yacht category. Gross sales provide the base measure for direct impacts in an economic impact analysis, and also provide a means for assessing growth and making regional comparisons. Kind Code-28 statistics over the past five years indicate that Broward County has consistently led the state in gross sales, with an average of 29 percent of all marine sales in Florida. By comparison, Miami-Dade County, which ranked second behind Broward County, had only 8 percent of the gross sales in the state. For fiscal year 2000, gross marine sales in Broward County totaled $1.4 billion, representing a 64 percent increase over the past five years and a 286 percent increase over the past 10 years. The state as a whole has experienced only a 216 percent increase in the last decade.

[1] The methodology of the study employed the RIMS II input-output model and accounted for direct and indirect impacts of an activity but did not account for induced impacts.

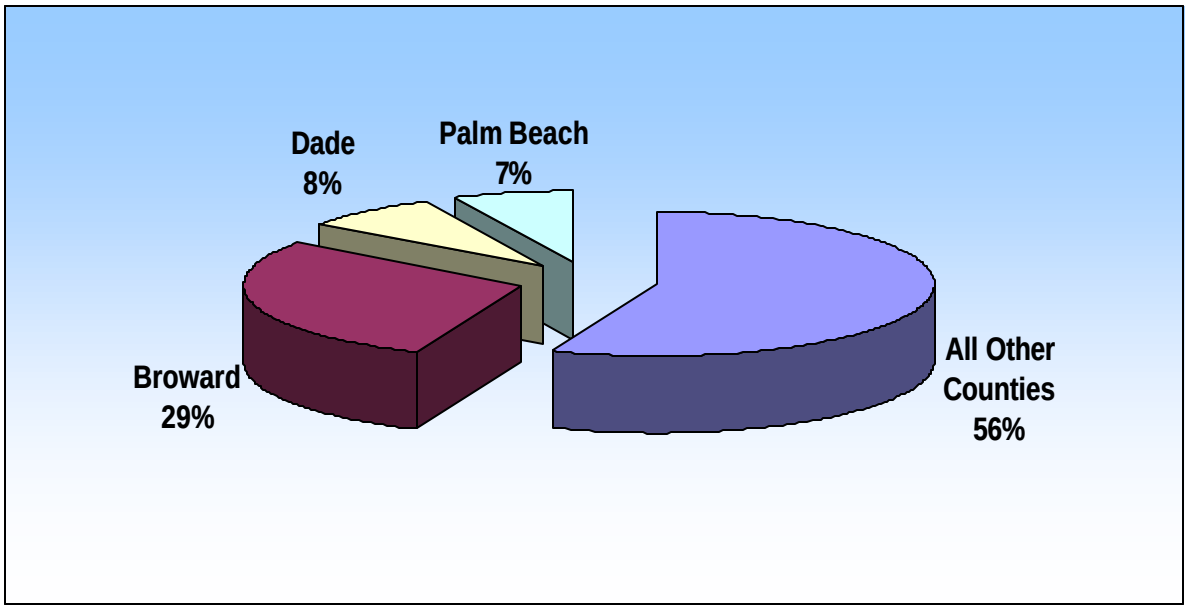


Figure 6. Gross marine sales in Broward County compared to rest of Florida

Boater registrations, boat operation expenditures, and boater frequency provide other indications of marine industry trends. In 1999, 42,555 boats were registered in Broward County and the average amount spent on a boat per year was $5,582, resulting in a total of $238 million in recreational boating expenditures annually. This represents a growth trend from earlier years. In 1996 the total expenditure was $167 million, and in 1994 it was $135 million. The number of registered boats increased three percent between 1994 and 1999, while the average expenditure increased 60 percent. A 1992 study conducted by the University of Miami Boating and Research Center found that boater frequency was greater in Broward County than anywhere else in the state (an average of 56.78 days/year). Boating in Broward is evidently growing in economic importance, as people are willing to contribute an increasing portion of their time and disposable income to the activity.

The growing success of the Fort Lauderdale International Boat Show also demonstrates the level of enthusiasm and economic commitment of boaters. A 1997 economic impact analysis of the Show estimated sales during the event by Broward County companies to be in excess of $126 million and the total sales to be $436 million. The event was popular with boaters across the state and around the globe. Fifty-three percent of all visitors came from outside the Tri-County area (33 percent of those came from outside Florida, and 12 percent were international visitors). Expenditures by these non-local visitors and by exhibitors associated with the show resulted in a direct economic impact of $105.3 million, for a total economic impact of $180.3 million in Broward County alone. As a comparison, the total economic impact of Super Bowl XXV, held in Tampa in 1991, amounted to $132.7 million in 1997 dollars.

Although a vast majority of the boats registered in Broward County are under 26 feet in length, boats in excess of 80 feet—the megayachts—are rapidly increasing in number and in economic importance. It is estimated that 20 percent of the megayachts in the world travel through South Florida each year, spending an average of $236,000 each at local boatyards for a total annual economic impact of half a million dollars per vessel. According to a 1998 study on megayachts conducted by Thomas J. Murray & Associates, the direct economic impact of megayachts on the Tri-County region in 1997 was $287 million. Almost $200 million was attributed to repair and maintenance work on the yachts. During that same year, one of every two yachts listed for sale worldwide was represented by a Broward, Miami-Dade, or Palm Beach broker.

Megayachts have a significant economic impact on the region, and dockage space needs to be provided to foster their visits to south Florida.

WORKFORCE

Workforce development was identified as one of the key goals of MIASF at both the 1999 and 2000 Marine Summits. The marine industry provided 109,820 jobs in 2000, making it among Broward County's largest employment sectors. The job market for trained and skilled workers is strong and is expected to increase as the industry expands.

To address this issue, the MIASF Workforce Development Committee conducted a study to determine present and future marine industry personnel needs and to identify the type of vocational training required to fulfill the industry's future requirements for growth. The Task Force prepared a survey for distribution to the major Broward County boatyards (see Appendix B for survey). Surveys were sent out in November and December 2000. Follow-up phone calls were made to all non-respondents in mid-December, and the study was finalized in January 2001. Of the 31 surveys that were distributed, 42 percent, or 13 boatyards, responded. This response rate enabled estimation of total marine industry needs for the major boatyards in Broward County of approximately 1,000 new positions in the near future.

With nearly 80 percent of current industry jobs in technical fields, technical jobs constitute the largest number of existing positions and future workforce needs for the marine industry in southern Florida. Fifty percent of these technical jobs are outdoors (e.g., fiberglass technicians and yacht painters), 30 percent of the jobs are indoors (e.g., mechanics), and 20 percent are classified as other (e.g., fork lift operators).

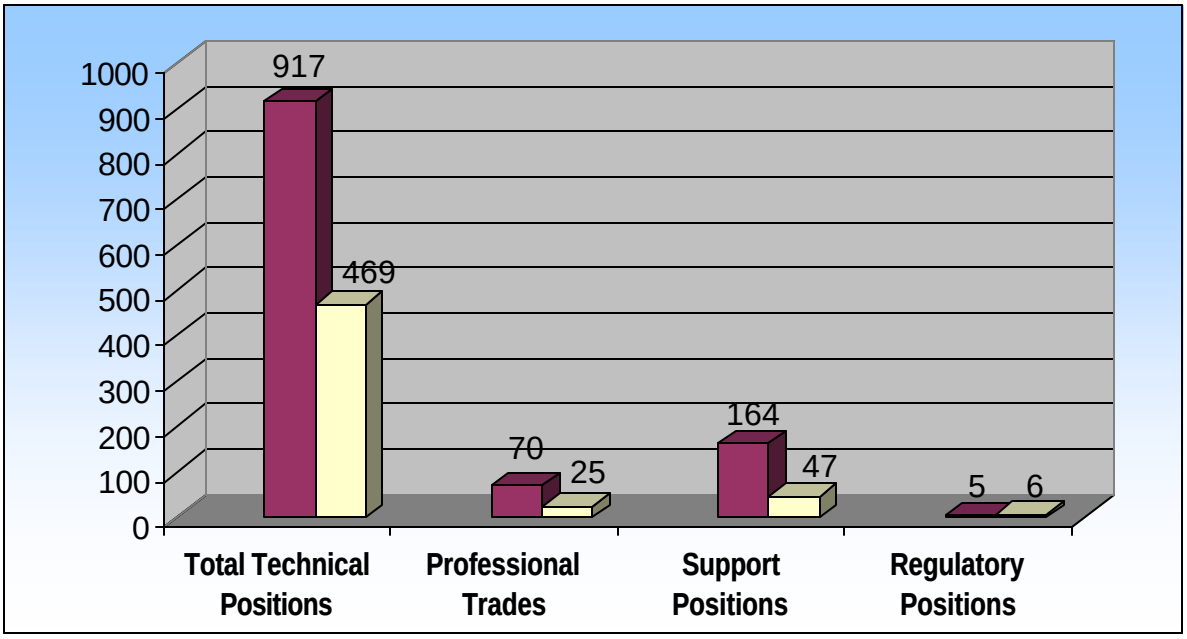


Figure 7. Comparison of current and future marine jobs in Broward County (from survey sample)

Recent MIASF workforce development efforts have focused on partnerships with existing schools to improve training programs, including a partnership with McFatter Technical Center for marine job training. The association sponsors classes at McFatter and internships for candidates as a means to recruit qualified technical workers. The MIASF is working with Boys & Girls Clubs of Broward County to develop the first Admiral's Club, a marine industry-focused facility. MIASF also has established partnerships with New River Middle School and South Broward High School through their marine magnet programs. Partnership activities include career weeks, regattas, Waterway Cleanup, and scholarship programs. McFatter Technical Center's Marine Technology Program added a new marine electronics program in 2001. MIASF worked closely with McFatter in development of this unique "earn & learn" program, which graduated 12 experienced marine electronics technicians this summer. A new class of eight students is enrolled for the fall term.

IMAGE/PUBLIC EDUCATION

MIASF initiated its image/public education campaign as a response to the perceived need to inform the public about the marine industry and its contribution to the community. To address this need, the association wanted to publicize its programs to enhance community awareness of the industry's ongoing contributions to Broward County and its value to the south Florida economy. As a result of discussions at the Marine Summits in l999 and 2000, the association appointed an Image and Public Relations Committee to develop an image campaign.

The committee was charged with developing a vision for promoting the marine industry, particularly its strength and diversity in Broward County. Several target audiences were identified in this image campaign: the general public, corporations, government, environmental groups, boaters, and MIASF members. The task force initiated several programs that they recommended be continued to showcase the industry as part of the image campaign. In its ongoing work, the task force incorporated and communicated the stated policy goals of the organization: Environmental Protection, Boating Safety and Education, Economic Growth & Contribution to the Community, Workforce Development, and a Public Education Campaign. Key projects in four of these areas are described below, with an inventory of current and future projects in Section IV.

ENVIRONMENTAL PROTECTION. In the environmental area, the task force publicizes MIASF's support for the environment through sponsored activities such as the Annual Waterway Cleanup, Clean Boating Partnership, publication of the *Broward Safe Boating Guide*, manatee education programs, and enforcement of boating laws. One example of a successful environmental program is the recent manatee billboard campaign that reminds boaters to watch for manatees in the waterways ("Do you see me? I can't hear you" with a manatee pictured on mobile billboard signs placed in Broward County waterway parks). Future plans include an association exhibit at the International Game and Fish Association museum in Dania Beach and an improved brochure on manatees for boaters.

BOATING SAFETY AND EDUCATION. Boating safety initiatives include MIASF-sponsored boater education Boater 101 program in the public schools, as well as wide distribution of the *Broward Safe Boating Guide.* The Association helps sponsor the Boater 101 program through the nonprofit Center for Environmental Education and Research Inc., thereby ensuring that school age children in Broward County receive important boater education to promote water safety while learning about environmental issues. The Association also produces the Plywood Regatta annually to benefit the Broward marine magnet programs. This popular boatbuilding contest exposes many youth to boating for the first time and enhances marine related programs in the schools. Future plans include an expanded version of the *Broward Safe Boating Guide* with more detailed maps and the addition of a manatee section.

ECONOMIC GROWTH & CONTRIBUTION TO THE COMMUNITY. In the economic area, the MIASF actively supports industry growth, participating with Leadership Broward and Leadership Fort Lauderdale classes to educate the business community about the significant impact of the industry and They also cooperate with the Broward Alliance and City of Fort Lauderdale using the Fort Lauderdale International Boat Show to showcase the area as a prime location for corporate relocations. Future plans include a Biscayne Bay Event with the Volvo Ocean Race, and ongoing VIP boat show tours and work with the Broward Alliance, the Port Everglades Association, and Greater Fort Lauderdale Convention and Visitors Bureau.

There is a need to continue to highlight the significant economic impact of the industry on Broward County, as

noted by the economic impact study completed in February 2001. Florida's marine industry is a $10 billion per year economic powerhouse that provides jobs and revenue to the state and local area. Broward alone produced $8.8 billion in economic output in 2000, demonstrating the industry's economic clout in the local economy. As noted above, Broward County was ranked number one in marine sales, reporting $1.4 billion in retail marine sales in fiscal 2000, or nearly one-third of the $4.9 billion statewide figure.

PUBLIC EDUCATION CAMPAIGN. Within its broader image campaign, the industry publicizes its goals and issues through media releases and alerts, newsletter articles in *Tide-ings*, boat show publicity, and collaborations with the community and governmental officials at local and state levels, as well as state and national marine industry associations. MIASF's annual report summarizes the Association's programs, accomplishments and economic impact. The Association's website, www.miasf.org, is an online repository for industry information and is actively promoted by the Association. The public education committee will continue its work in helping position the industry as a key contributor to the south Florida economy and in communicating the industry's accomplishments and goals to its target audiences.

ISSUES, NEEDS, AND GROWTH OPPORTUNITIES

MEGAYACHTS

The new trend in boats is "bigger, faster, higher tech," according to industry publications. Perhaps the single most economically significant trend has been in the megayacht sector, i.e., yachts longer than 80 feet. The fleet of megayachts has grown to nearly 5,000 vessels worldwide, with an estimated increase of 250 new boats each year. Up to 50 percent of these yachts exceed 100 feet, with the average megayacht constructed in the US today at 115 feet. In 2001, 428 megayachts were under construction worldwide, representing a 30.8 percent increase over the previous year and a 77.6 percent increase since 1997 when megayachts were added to order books. Currently, the U.S. ranks second behind Italy in megayacht construction with 86 yachts under construction in the states and 140 in Italy.

DOCKAGE AND SERVICE FACILITIES

The megayacht industry is experiencing rapid growth, and it is projected that the demand for dockage and for service and repair facilities will exceed supply. Over 100 shipyards worldwide have the capability to service megayachts. Thirty of these are found in the U.S., 16 of which are located in Florida. The number of boatyards with facilities adequate to dry dock the 200 foot and larger fleet is only about 40 worldwide. With both fleet and vessel size increasing, additional facilities capable of handling these large yachts will be needed around the globe.

There is considerable upkeep associated with operating a large yacht; as much as 40 percent of a megayacht's economic impact is attributed to service and repair. The availability of adequate facilities provides the competitive advantage for capturing those revenues. The waterfront cities of Broward County have been the heart of this industry and the excellent global reputation of the region's facilities and quality work provide an ideal base for continuing to strengthen its position in the eastern US and worldwide. A recent study conducted in Palm Beach County concluded that reputation, turnover time, and location affect megayacht boatyard selection as much as, if not more than, low cost bids. One important opportunity currently on the horizon is the potential to develop a megayacht service facility on a vacant parcel in Port Everglades.

The adequacy of dock space and service facilities for megayachts is an increasing concern in Broward County. While investors have expressed a willingness to provide start-up capital for additional facilities, locations on navigable waterways suitable for new or expanded facilities are limited. Facilities in Fort Lauderdale have lost megayacht business to places such as Jacksonville, Savannah, and the Bahamas because of present capacity of the existing facilities. There is growing concern that if Broward County does not continue to develop new and expanded dockage and repair facilities, it will decline as a premier destination for megayachts.

While fast becoming a serious problem for megayachts, demand for boat storage and dockage is a problem for boats of all sizes in South Florida. Marina operators frequently report that they turn away potential customers who are looking for space.

THE COMPETITION FOR WATERFRONT LAND

Waterfront land is a relatively limited commodity and, since there is an almost universal desire to be located near the water, the consequence is intense competition for waterfront property and high real estate values. These physical and economic conditions present a challenge to both maintaining and expanding water-dependent businesses and industries.

In recent years, waterfront development and redevelopment have been characterized more by mixed-use commercial and residential projects rather than by traditional commercial and industrial water-dependent uses. The newest facilities accommodating megayachts in South Florida often combine dockage and limited waterfront services with residences, restaurants, and commercial uses occupying the upland. The proposed redevelopment of Watson Island in Miami is an example. The City of Miami, which owns 24 waterfront acres at the south end of Watson Island, recently sought proposals for development of the property. The development package selected by the city features two large-scale hotels and related landside development, with 48 slips along the waterfront. This type of development is attractive because it maximizes economic return to the city. While the new dockage will attract additional megayachts to the region, the site's full potential for marine-related uses is lost. This type of development highlights two challenges facing the marine industry: (1) support services and businesses need to grow proportionally with an increase in vessels, and (2) waterfront land needed for at least some of that growth is being committed to other uses.

The high value of real estate, the high cost of dredging and marine construction, combined with complex permitting, make it difficult for marinas and boatyards to compete in the open market. These factors have caused some marine facility owners to sellout to developers who seek to use the waterfront land for condos and other more lucrative, less regulation-challenged, less vulnerable business ventures. One example, Chinnock Marine, recently sold its 2.5-acre New River location to a residential developer.

MARINE INDUSTRY WORKFORCE

Any expansion in number or size of marine facilities in the region will require an increase in the workforce. Within the megayacht industry, in particular, qualified craftsmen and trained crew members are already in short supply. One repair facility outside of South Florida reported that, while there is a shortage of facilities and demand is high, they were operating at 50 percent capacity because of a shortage of skilled labor. As discussed in the previous section, a recent MIASF survey indicates that as many as 1,000 new technical positions may be needed by the major boatyards in the near future.

PROTECTING AND PROMOTING THE MARINE INDUSTRY: INCENTIVES AND REGULATORY MEASURES

There are several avenues for addressing the issues identified through the strategic planning process. Some of these provide initiatives that the Marine Industries Association and its members can carry out independently by committing appropriate attention and resources. Many require coordination and collaboration with government and other institutions. A variety of public programs, plans, and regulations influence economic development and the use of land and water resources. The industry can advance its goals by utilizing opportunities offered by these programs and integrating its objectives with public policies, plans and regulations.

GOVERNMENT PROGRAMS AND INCENTIVES

A number of government programs provide opportunities and incentives that could assist with retention, expansion, and strengthening of the marine industry. As appropriate, MIASF should encourage municipalities and developers to explore the utility of these programs, which offer funding for creating and implementing redevelopment plans for marine industry expansion, acquiring land for public waterfront access and access amenities such as parks, boat ramps, and transient boat dockage, and acquiring land for additional municipal marine facilities. Through careful design and implementation, these programs can provide not only necessary funding, but also a framework whereby MIASF can develop an organized network of government agencies and public-private partnerships, working together to bolster and sustain the industry.

URBAN INFILL AND REDEVELOPMENT PROGRAM

The Urban Infill and Redevelopment Program is authorized by the Growth Policy Act of the Florida Statutes (F.S.§163.2511-§163.2526) and administered by the Florida Department of Community Affairs. The program provides financial assistance to local governments for the purposes of economic development, job creation, housing, transportation, crime prevention, and neighborhood revitalization. To qualify for program assistance an area must meet certain criteria as outlined in F.S.§163.2514(2). For example, the area must have public services, a portion of the properties must be substandard, vacant, or abandoned, more than 50 percent of the area must be within 0.25 miles of a transit stop, and the area must include or be adjacent to a community redevelopment area, brownfield, enterprise zone, or Main Street program; or it must be designated an urban redevelopment and/or infill area. Documentation that an area meets these five criteria is the most important part of the application process. Grants are issued once a year and are available for either planning (up to $50,000) or implementing plans (up to $300,000). Urban Infill designation can enable an area to receive priority for public investments in infrastructure, services, development, and compatible development.

A copy of the Planning Grant Application and the Combined Implementation Grant Application may be obtained through the Department of Community of Affairs' website at www.dca.state.fl.us/fhcd. Complete program rules can be found in F.A.C. 9B-69.

CASE STUDY: MIAMI RIVER CORRIDOR

The 5.5 mile Miami River Corridor has been designated for urban infill and redevelopment by Miami-Dade County and the City of Miami. The Miami River Corridor was selected because of its location and historical significance as the economic epicenter of what is now the City of Miami. The purpose of the designation was to develop short- and long-term goals to improve local conditions for residents along the corridor and to enhance the commercial viability of the area, giving priority to development on vacant parcels and the redevelopment of underused or substandard sites. Both the city and county have taken steps and adjusted their policies to facilitate high quality urban infill development and redevelopment. It is believed that revitalization of this area will serve as an economic catalyst for the region. The Miami River Commission, established in 1998, is leading the revitalization in partnership with the City of Miami and Miami-Dade County. While the urban infill and redevelopment plan is in the development phase, tentative plans for the Miami River include dredging, a continuous riverwalk with parks, and retention of existing marine industries located on the corridor. Adoption of an Urban Redevelopment Plan for the Miami River will make the area eligible for a variety of state funds.

COMMUNITY REDEVELOPMENT ACT

The Community Redevelopment Act (F.S. §163.330-§163.462) authorizes municipalities to designate areas as "redevelopment areas" and to carry out redevelopment activity in recognition of the need to eliminate and prevent conditions of slum and blight, to improve property values, and to enhance the tax base.

A major incentive for designating a Community Redevelopment Area (CRA) is that the funding source for redevelopment comes from Tax Increment Financing (TIF). TIF enables a municipality to use the additional property taxes generated by a new development to pay for certain development expenses. With TIF, a city captures the additional property taxes generated by the development that would have gone to other taxing jurisdictions and uses the "tax increments" to finance the development costs. In other words, it is a means of borrowing against the approximate gain a project should bring.

Redevelopment funds obtained by TIF or other state or federal sources are used for public improvement projects that support new economic development in a CRA. An advisory committee is established to prioritize improvement projects in the redevelopment area.

In order for a city to establish a CRA successfully, it must prove that the area meets the conditions of the law, demonstrate a public commitment to redevelopment, and provide for a coordinated planning process among local and county governments. To carry out redevelopment activity, the Community Redevelopment Act assigns a variety of powers to a municipality. Most of these powers may be delegated to a Community Redevelopment Agency, others may remain vested in the city commission.

CASE STUDY: RIVIERA BEACH

The City of Riviera Beach City Council created the Riviera Beach Community Redevelopment Agency in 1974. In 2001, a Redevelopment Plan Modification was approved by the city and the Community Redevelopment Agency pursuant to the Redevelopment Act. The CRA, including portions of Singer Island, is comprised of 858 acres of land including the Port of Palm Beach's 188 acres. There are approximately 1,700 households and a population of over 5,100 residents.

The redevelopment program will feature a complete waterfront overhaul with the expansion of existing boat repair yards, yacht sales, and other marine industry businesses, which will train and employ local residents for high-skilled jobs. Lockheed Martin's high-tech marine engineering and construction facility will expand to allow additional on-site engineering staff. A new marine commercial zone adjacent to the boatyards and fronting on Broadway will consolidate the current marine sales businesses along with new marine businesses, all jointly marketed as the most concentrated and comprehensive marine trade area in Florida (and all with the ability to demonstrate their products in the ocean less than 10 minutes away). Additionally, 1,500 wet and dry slips will be rebuilt over time, with the assistance of city-sponsored overall dredging permits, to accommodate larger yachts visiting Riviera Beach's ideal boating location and services. The ability to expand the size of the city's existing waterfront properties and the marine commercial district is due in large part to the Plan's major infrastructure project, the relocation of US-1. The creation of a new US-1 "Parkway" 600 feet to the west (away from Lake Worth), expands the almost one and one-half miles of waterfront by 70 acres.

The goals and objectives of the Riviera Beach Redevelopment Plan are well crafted to achieve the waterfront improvements. One particular noteworthy goal is *to pursue the planning and development of the 'Working Waterfront and Marine Facilities' in order to create opportunities for uses such as high quality boat building, repair and other marine industry uses requiring easy access to the ocean, to encourage support businesses for the marine industry, and to provide priority for businesses with dependence on the proximity to deep water.* Specific objectives of this goal match the objectives of the MIASF Marine Master Plan and may provide similar possibilities for marine development in Broward County. Objectives include:

1. To identify, select, and encourage the highest quality, experienced marine-related businesses to remain, or locate, in Riviera Beach.
2. To approve land use techniques, joint marketing and advertising strategies, land acquisition and disposition strategies, overall environmental studies, and permit applications to support, expedite, and provide incentives for the opening or expansion of these high quality marine-oriented businesses.
3. To approve the policies that requires owners and operators of businesses in the "Working Waterfront" to implement, to the greatest extent possible and practical, the CRA's training and employment programs, and to assist with economic programs that expand the "high-skilled" employment opportunities of Riviera Beach residents.
4. To use the CRA/city auspices to initiate and consolidate city-wide dredging, shore-line construction, environmental studies, design, permitting, funding, and lobbying to expedite the redevelopment and expansion of the waterfront facilities.
5. To expedite the review of the existing City of Riviera Beach marina facilities (and economics) and to recommend the alternatives available to optimize the program, the economic return and disposition of the facilities, and to enhance both the boating and tourism (fishing, diving) opportunities, as well as the marketability of the onshore development parcels.

FLORIDA INLAND NAVIGATION DISTRICT WATERWAYS ASSISTANCE PROGRAM

The Waterways Assistance Program is a grant program established in F.S. §374.976 and administered under the provisions of F.A.C. 66B-2. The grant is available to local government agencies including municipalities, counties, port authorities, and special taxing districts. Eligible projects, in order of priority, include navigation channel dredging, channel markers, navigation signs or buoys, boat ramps, docking facilities, fishing and observation piers, waterfront boardwalks, inlet management, environmental education, law enforcement equipment, boating safety programs, beach renourishment, dredge material management, environmental mitigation, and shoreline stabilization. The amount of funding is equal to and limited by the amount of tax revenue that the Navigation District receives from the applicant's county.

FLORIDA COMMUNITIES TRUST/FLORIDA FOREVER PROGRAM

The Florida Communities Trust (FCT) (F.S. §380.501-§380.515) is a non-regulatory agency within the Department of Community Affairs led by a Board, which includes the Secretaries of Community Affairs and Environmental Protection in addition to four public members appointed by the Governor and the Senate. FCT undertakes, coordinates, or funds activities and projects which help bring local comprehensive plans into compliance and help implement the goals, objectives, and policies of the conservation, recreation and open space, and coastal elements of these plans. The Trust corrects undesirable development patterns, reserves land for later purchase, participates in and promotes innovative land acquisition methods, and provides financial assistance to local governments, state agencies, and non-profit organizations to conduct such projects and activities and/or to create programs that further the objectives of the Trust. Urban waterfront restoration projects are among the types of projects that FCT might fund, although the purpose of these projects specifically is to restore deteriorating urban waterfronts for public use and enjoyment. All projects must include provisions for public access.

FCT uses funds from the Preservation 2000 Act and the Florida Forever Act to make grants to local governments and non-profit environmental organizations that are tax exempt under section 501(c)(3) of the United States Internal Revenue Code. Funding for FCT recently transitioned from the Preservation 2000 Act to Florida Forever, which provides an additional $30 million annually to the program. Eligible applicants may apply for up to 10 percent of the advertised amount of Florida Forever funds available. This past year, the Trust announced that up to $66 million in bond proceeds were available, so the award

limit for the 2001 grant cycle was set at $6.6 million. Counties with populations greater than 75,000 and municipalities with populations greater than 10,000 are required to provide a minimum match of 25 percent of the total project cost. Applicants may submit multiple applications as long as the combination of awards applied for does not exceed the 10 percent limit. The program determines the appropriateness of proposed improvements on a case-by-case basis in the application evaluation process. Administrative procedures for applications are found in F.A.C. 9K-7 and 9K-8. The Trust differs from other acquisition programs because it focuses on local government-selected sites. The grant recipient holds title and manages lands purchased with FCT dollars.

WATERFRONTS FLORIDA

The Waterfronts Florida Program, directed by the Department of Community Affairs, is designed to provide support to communities to revitalize and renew declining waterfront districts. The Waterfronts Florida Program runs on a biennial cycle, and project funding and technical support is dispersed over two years to support the development or implementation of strategic plans for waterfront revitalization. Applicants must be a coastal county or city or a local non-profit organization working in partnership with government. The applicant must support a local program manager and agree to form a waterfront working committee representing a broad range of stakeholders.

The Waterfronts Florida Program encourages communities to consider and emphasize environmental and cultural resource protection, support of the viable traditional waterfront economy, hazard mitigation, and public access to working waterfronts and coastal resources. Grant recipients receive technical assistance, training, and $35,000 in financial assistance.

BROWNFIELD REDEVELOPMENT

The Brownfield Redevelopment Act (F.S. §376.77-376.875) is intended to encourage and direct the reuse of abandoned or idle commercial or industrial land where redevelopment is complicated by actual or perceived environmental contamination. Florida's Brownfields Program was created to assist local governments and the person responsible for cleanup and redevelopment with the remediation and sustainable reuse of contaminated and abandoned or underused sites. A property is designated a "brownfield site" or "brownfield area" by the local government with jurisdiction over the property and upon approval by the Department of Environmental Protection DEP.

The redevelopment and reuse process consists of identification, evaluation and prioritization of a site, remediation, marketing, and finally redevelopment of the site. There are two ways a site can be designated a brownfield (F.S. §376.80(2)(a)-(b)): (1) a person who owns or controls a potential area may request a site be designated a brownfield if that person agrees to clean up and redevelop the site, at least 10 new jobs are created as a result, the proposed uses are consistent with the local comprehensive plan, appropriate public notice is provided, and financial assurances are in place; or (2) a local government may designate a brownfield area by a resolution. To obtain designation, the property owner responsible for site rehabilitation must enter into an agreement with DEP and with the approved local pollution control program. Specific elements of this agreement are listed in F.S §376.80(5). Successful completion of all aspects of a brownfield site rehabilitation agreement relieves a property owner and his/her successors of further cleanup liability. Potential brownfield sites that are subject to enforcement or corrective action under CERCLA or RCRA are not eligible for participation in the state's brownfield program.

Numerous state financial, regulatory, and technical incentives exist for the redevelopment and sustainable reuse of brownfield sites. State incentives include a loan trust fund, a loan guarantee program, a job bonus refund program, a 35 percent tax credit, a sales tax refund, and liability protection. Pursuant to F.S. §376.84, local governments are encouraged by this act to use financial, regulatory, and technical assistance incentives to facilitate and promote rehabilitation of brownfield sites. Examples of these incentives include exemptions and lessening of state and local review requirements, zoning incentives to reduce review requirements for redevelopment, and waiver of transportation impact fees and permit fees.

FLORIDA BOATING IMPROVEMENT PROGRAM

The Florida Boating Improvement Program is administered by the Florida Fish and Wildlife Conservation Commission. The program provides funding to counties (and municipalities through the counties) for projects designed to serve the needs of recreational boating on coastal and inland waters. Coastal counties with a high level of boating activity from nonresidents receive special emphasis. The program is funded from a portion of the revenue collected from fuel taxes. Funds may be used to pay for projects related to recreational boating, such as public launching facilities. Eligible activities include master planning, project engineering, development, new construction, expansion, or renovation of facilities. The program solicits new proposals in January of each year.

Another fund, supplied from a portion of vessel registration fees, provides money directly to the counties for these same purposes. Counties receive a portion of the total funds based on each county's total number of registered vessels. The county can expend these funds for boating-related activities and facilities at their discretion.

DIFFERENTIAL TAXATION

Use value taxation, i.e., taxing property at the value of its current use rather than its highest use value, could be effective in preserving existing marine-dependent uses. This is the technique employed by many agricultural and forestry land and historic preservation programs around the country, including Florida. The traditional method of property tax assessment is based on a property's market value at full development potential. It is likely that some boatyard properties, for example, are taxed a rate reflecting the property's highest and best permitted use. Use value taxation could reduce the tax burden for businesses on properties that could be developed more intensively. If property taxes are a significant portion of a business's fixed costs, this could be an effective tool for reducing the pressure to convert to another use. To discourage real estate speculation, use value taxation programs often include a recapture penalty, which requires the savings in taxes to be paid if and when the land is sold or converted to a higher use. State enabling legislation would be required to extend use value taxation to marine-dependent uses in Florida. An example of such legislation introduced (but not enacted) in the Connecticut General Assembly and supported by the Connecticut Marine Trades Association is included in Appendix C.

PURCHASE OF DEVELOPMENT RIGHTS AND TRANSFER OF DEVELOPMENT RIGHTS

A technique used often in open space conservation efforts is the purchase of a property's development rights by the government or other organization. In the case of marine properties, the value of development rights purchased would be the difference between the value of the land in water-dependent use and its highest value as determined by the market. The property owner receives payment for the unrestricted value of the property and the land is permanently committed to water-dependent use. Implementation of such a program requires a government, nonprofit, or other entity willing to purchase and possess the property rights and a source of funds with which to make the purchase.

A variation of the above is a regulatory technique known as transfer of development rights (TDR). Under a TDR program, some of the development potential of a parcel of land is transferred to another parcel. Its purpose is to restrict the allowable uses on a subject property while compensating the owner for that restriction. Rather than selling the property for redevelopment, TDR provides the owner with the

opportunity to sell a portion of the property's development rights, which is then used by the purchaser to increase development on another parcel of land. It has potential for preserving existing marine facilities in those instances where a marina or boatyard is located on property that could be redeveloped legally for higher value uses. The marine use is preserved while its owner receives the value of the site's development potential.

A TDR program is usually supplemental to a municipality's zoning regulations. Areas of the community from which development rights may be sold are designated as "transfer zones." Land where these rights may be used is designated a "receiving zone." The success of a TDR program is dependent on economics. First, market demand for increased development must exist in the designated receiving area. Second, the price a buyer is willing to pay for additional development rights must be enough of an incentive for the seller to convey the rights.

COMPREHENSIVE PLANS AND LAND DEVELOPMENT REGULATIONS

The State of Florida has a sophisticated and comprehensive land planning and land development regulatory system. Local governments are responsible for preparing comprehensive plans that, among other things, guide the use of land, water, and resources. These local plans are required to be consistent with the State Comprehensive Plan (Chapter 187, Florida Statutes), state administrative regulations, South Florida's Regional Policy Plans, and the Broward County Planning Council's Countywide Plan. Local comprehensive plans are updated annually and undergo a formal evaluation and appraisal process every seven years. Proposed amendments to plans are normally considered twice a year and may be initiated by local government officials or by a property owner. The procedure for amending plans affords ample opportunity for public participation.

Local comprehensive plans are comprised of a number of elements each addressing an aspect of the physical development of the community. Two elements are of particular relevance to the goals of the Marine Industry Master Plan. These are the Future Land Use Element and the Coastal Management Element. These sections contain the principles, goals, policies, and recommendations regarding the use of land and water within the community.

The land use element proposes the future distribution, location, and extent of different land uses, which reflect analyses of need, land characteristics, availability of services, and the community's economy. Future land use is depicted on a Future Land Use Map and guided by goals, policies, and objectives.

All of the communities within the study area are required to include Coastal Management Elements in their comprehensive plans to guide the balanced utilization and preservation of coastal zone resources. The shoreline use component of these elements must address the need for water-dependent and water-related facilities along the shoreline. The Coastal Management Element may also provide criteria and standards for prioritizing shoreline uses, giving priority to water-dependent uses.

These plans are implemented through locally adopted land development regulations, capital improvement programs, and other mechanisms. Local government land development regulations and all development, whether public or private, must be consistent with the adopted comprehensive plan.

GOALS, OBJECTIVES, AND ACTION RECOMMENDATIONS

This section presents goals, objectives, and recommendations for addressing the principal issues and opportunities facing the industry.

GOVERNMENT PROGRAMS AND INCENTIVES

GOAL: Take advantage of the opportunities and incentives available in government programs and powers to ensure that the marine industry will continue to be a vital part of the region's economy, employment base, and quality of life. Work closely with public officials and agencies to coordinate and integrate the industry's objectives with these public programs.

INTERGOVERNMENTAL COORDINATION

MIASF understands that it is in the industry's best interest to coordinate and integrate its objectives as much as possible with those of the state, county, and local governments. The industry's ability to prosper and expand is dependent in part on public policies, regulations, and decisions made at all levels of government. The marine industry's importance to south Florida's economy and lifestyle needs both deserve to be reflected in public policies and programs affecting the use of coastal land and water resources. At the same time, this industry also recognizes the importance of protecting the integrity and quality of the coastal and marine environments.

This master plan serves as a basis for the MIASF's approach to the government and the public. The plan presents basic information on the industry, outlines the issues affecting the future of the industry, and provides a responsible set of recommendations for the future.

RECOMMENDATION: Use the MIASF's Marine Master Plan as a basis for a discussion with the Florida Coastal Management Program about the issues affecting the future of the marine industry and the consistency of the industry's goals and objectives with those of the federal and state coastal management laws and policies. Encourage the Program to renew emphasis on marine-dependent economic development policies and strategies.

RECOMMENDATION: Continue to work with staff of the Broward County Department of Planning and Environmental Protection on implementation of manatee protection goals, objectives, and policies.

RECOMMENDATION: Continue to coordinate with the staff of the Broward County Planning Council and the staff of the Broward County Department of Planning and Environmental Protection throughout the process of amending local plans and land development regulations.

RECOMMENDATION: Participate on task forces and committees of the South Florida Regional Planning Council and the South Florida Water Management District on issues of economic development, land use, and environmental protection.

RECOMMENDATION: Work closely with the Port Everglades Department of Broward County on the implementation of the new Deepwater Port Master Plan and on future updates of the Plan.

RECOMMENDATION: Work with environmental agencies and clean water advocacy groups to promote strategies and practices designed to reduce marina and boater impacts on the coastal environment.

GOVERNMENT PROGRAMS ADDRESSING REDEVELOPMENT

RECOMMENDATION: The government programs described in Section III.A. of this plan provide opportunities and incentives that could be employed effectively for retaining, expanding, and strengthening the marine industry. As appropriate, MIASF should work with municipal and state government and landowners to explore the utility of these programs. There are potential opportunities for funding to prepare and implement redevelopment plans for marine industry expansion; to acquire land for public waterfront access and related amenities such as parks, boat ramps, and transient boat dockage; and to acquire land for municipal marine facilities. Through careful design and implementation, these programs can provide not only necessary funding, but also a framework whereby MIASF can develop an organized network of government agencies and public-private partnerships, working together to bolster and sustain the industry.

RECOMMENDATION: As an example, MIASF should consider working with the City of Dania Beach to prepare and (re)submit a Waterfronts Florida Partnership Grant application under the Waterfronts Florida Program to the Florida Coastal Zone Management Office. The target area is the Dania Cut-Off Canal and surrounding land area, including areas in Hollywood and Port Everglades. This area is ideal for the focused planning and revitalization objectives of this program. Partner with Florida Atlantic University's Joint Center for Environmental and Urban Problems to prepare the proposal.

DIFFERENTIAL TAXATION

RECOMMENDATION: Reexamine the efficacy of Use Value Taxation for retaining critical waterfront uses such as boatyards and explore with local and state elected officials the possibility of adopting legislation that enables qualified waterfront properties to have property tax assessments based on current use.

LOCAL COMPREHENSIVE PLANS AND LAND DEVELOPMENT REGULATIONS

GOAL: Elevate the significance of the marine industry in local comprehensive plans and land development regulations by adding or refining goals, objectives, policies and other provisions to give adequate and proper priority to marine-dependent uses in suitable locations.

The municipal and county planning and regulatory authorities can be used effectively to protect and promote water-dependent development. Policies in state, county, and regional plans support giving highest priority to water-dependent uses on suitable waterfront sites. This policy objective is present to varying degrees in most of the local comprehensive plans in the study area (and in some of the land development regulations). The general and specific recommendations that follow are designed to incorporate or strengthen provisions in local plans and regulations for protecting the future of marine-dependent uses.

It is recognized that proposals to amend local government plans and regulations require expenditure of public agency staff time and financial resources. Proposed amendments must be supported with planning analyses and meetings held with the public and affected landowners. It is in the proponent's interests to contribute to the effectiveness of these processes with technical, financial, and/or political support.

The following recommendations are designed to both help preserve existing facilities and accommodate future expansion. For the latter, the plan also presents a methodology for identifying sites with suitability for marine-dependent development (Sec. IV.E.)

GENERAL RECOMMENDATIONS

OBJECTIVE: Propose regulatory, legal, and economic mechanisms to retain existing and encourage new marine-related use of the waterfront.

RECOMMENDATION: Work with the local planning agency in each community to consider amending the comprehensive plan, as necessary, to include provisions and features that protect and preserve existing marine-dependent sites and give priority to these uses at suitable waterfront locations.

1. In the definitions section, include specific definitions of the types of uses to be protected and promoted.
2. In the Land Use Element, include policies giving priority to marine-dependent uses in appropriate waterfront locations.
3. In the Land Use Element, include objectives regarding specific amendments to be made to the land development regulations.
4. On the Future Land Use Map, depict areas where marine-dependent uses are to be protected and encouraged.

   Utilize the GIS maps, database, and methodology developed for this Marine Industry Master Plan as the basis for identifying areas.

RECOMMENDATION: Work with the local planning agency and local governing body in each community to discuss amending the land development regulations to implement the objectives and recommendations relating to the marine industry in the comprehensive plan. These may include adding the following types of provisions and features, as appropriate:

1. In the definitions section, specific definitions of the categories of uses or specific uses for selected district regulations.
2. New or amended zoning district(s) allowing only marine-dependent uses and supporting facilities.
3. New or amended mixed-use zoning district(s) with criteria to protect/promote marine-dependent uses.
4. Marine-dependent overlay district.

   Model language for each recommendation above is provided below.

RECOMMENDATION: Provide a copy of the Marine Industry Master Plan to the state land planning agency and meet with the agency staff to discuss the Plan's objectives and the strategy pertaining to local comprehensive plans and land development regulations.

OBJECTIVE: Seek to achieve greater coordination and relationship between the Land Use Element and Coastal Management Element of the local Comprehensive Plan.

RECOMMENDATION: Work with the local planning agency in each community to discuss integrating and coordinating the objectives of the Coastal Management Element with the Land Use Element. The Coastal Management Element is required to have and frequently does have strong language regarding the appropriate use of the waterfront. This emphasis is not always evident or reflected in the Land Use Element of the plan.

Amendments referred to in the above two recommendations can be made to existing elements (Land Use Element and Coastal Management Element) and/or be compiled into a dedicated sub-element incorporated

into the local comprehensive plan in an appropriate location. The specific purpose of the sub-element would be to maintain and promote marine-dependent activities in specified areas. This technique reduces ambiguity over the desired future use of the area that arises from multiple and sometimes conflicting policy objectives of the comprehensive plan. The sub-element would become the point of reference in the plan for future regulatory amendments and decisions.

RECOMMENDATIONS SPECIFIC TO FORT LAUDERDALE

CITY OF FORT LAUDERDALE COMPREHENSIVE PLAN

The Coastal Management Element recognizes that priority should be given water-dependent uses and that existing facilities should be protected. The Land Use Element does not reflect or reinforce this emphasis, beyond accommodating specific uses such as commercial recreation and marinas in a couple of land use categories. The Land Use Element does contain specifics on other objectives, e.g., increasing residential development in the Downtown RAC, that provide a basis for giving similar attention to marine-based activities.

Given the built-out condition of the city, a significant issue for the marine industry is likely to be displacement of existing facilities. While the Coastal Element of the Plan contains several statements suggesting existing marine uses be protected, there is no guidance as to how this might be implemented.

RECOMMENDATION: The policies of the Future Land Use Element and Coastal Management Element of the Comprehensive Plan should be augmented to recommend review criteria be incorporated in the land development regulations that would preserve opportunities for future water-dependent development and prohibit the displacement of an existing water-dependent use with a non-water-dependent use.

For example, a new policy would recommend that it be unacceptable to:

- Locate a non-water-dependent use at a site that
- has been identified for a water-dependent use in the comprehensive plan or the land development regulations, or
- is physically suited for a water-dependent use for which there is a reasonable demand; and
- replace an existing water-dependent use with a non-water-dependent use; and
- diminish the site's ability to accommodate future water-dependent uses.

This plan policy would be implemented through new provisions in the Unified Land Development Regulations. This displacement policy and regulation can be made applicable to all existing marine uses or just within certain identified areas.

Objective 1.3 of the Coastal Management Element recommends using standards in the plan for prioritizing shoreline uses giving priority to water-dependent uses. The evaluation measure is to record the number of development permits issued for water-dependent uses.

RECOMMENDATION: Add an evaluation measure that records the number of permits issued for projects that displaced or reduced water-dependent facilities. Add this same evaluation measure to the Coastal Management Element's Policy 1.4.2.

Fort Lauderdale is a marine center, yet no land use classification promotes marine-commercial or marine-industrial uses.

RECOMMENDATION: Create a land use category in addition to Commercial, Industrial, and Commercial Recreation for marine uses. The bulk of the marine uses cluster in three or four areas which makes it feasible to map such areas. This category would not necessarily be limited only to marine uses, but its emphasis would clearly be on these and complementary (or at least nonconflicting) uses. The category could also be applied to areas where these uses are to be encouraged in the future. A "marine center overlay" would be an alternative mechanism.

RECOMMENDATION: Include as permitted uses more distinct or additional marine uses in the appropriate land use categories. For example, for the Commercial category, include "commercial and recreational boating facilities." For the Industrial category add: "Boatyards, dry docks, and other facilities related to the construction, servicing, maintenance, repair or storage of vessels."

RECOMMENDATION: As a complement to the above, in appropriate land use categories, includes a reference to the policies that give priority to water-dependent uses on the waterfront.

UNIFIED LAND DEVELOPMENT REGULATIONS (ULDR)

The provisions of Fort Lauderdale's ULDR are quite good in terms of encouraging and protecting water-dependent uses. The various marine-related uses are allowed in a large number of zoning districts either as permitted or conditional uses.

RECOMMENDATION: Extend the requirement of section 47-23.8.C to the B-1 district. This provision currently makes the B-2, B-3, and I districts "water-dependent use" districts where properties in those districts abut navigable waters. The B-1 district contains a large number of marine facilities. This is consistent with the idea of creating and maintaining areas where marine-dependent uses cluster.

RECOMMENDATION: As an addition, complement, or alternative to the above, establish a waterfront overlay district on all property abutting a navigable waterway and in appropriate commercial or industrial districts. This provides an effective mechanism for applying water-dependent use criteria, prohibitions on displacement of existing marine uses, setbacks, and other standards for protecting and promoting marine-dependent uses without changing the underlying zoning provisions. It is also compatible with and supports implementation of the "sub-element" approach suggested for the Comprehensive Plan.

RECOMMENDATION: Extend the purpose of the 20 foot yard requirement in section 47-23.8.B.1. to include support of water-dependent uses on nonresidential and multifamily properties. Within this area, in designated districts, no development is allowed except for landscaping and facilities in support of water-dependent uses. In appropriate locations, this can provide some additional space for vessel support and public access.

RECOMMENDATIONS SPECIFIC TO THE CITY OF DANIA BEACH

DANIA BEACH COMPREHENSIVE PLAN

The Dania Beach Comprehensive Plan is quite supportive of the marine industry. User definitions are specific and inclusive, there is an abundance of land in classifications that accommodate and promote marine uses, and the policies of the Land Use Element and Coastal Management Element give priority to water-dependent uses.

DANIA BEACH ZONING CODE

Dania Beach's code is specific as to the uses allowed by right, by special exception, and prohibited. "Sec. 4.20 Application of regulations. (d) Any use not specifically listed in the Schedule of Regulations as a permitted use or a special exception use is prohibited in all zoning districts. Any doubt as to whether or not a particular use is allowed either as a permitted use or a special exception use shall be resolved against the approval of such use."

Consequently, districts whose purposes are compatible with various types of uses in the marine industry may not accommodate those uses unless specifically listed.

RECOMMENDATION: The uses allowed in each district should be reviewed in relation to the types of uses comprising the marine industry (especially those for which there is a shortage of or a demand for sites) and selected uses added to districts as appropriate.

The IROM district has a very strong purpose statement advocating marine-related uses. However, the district allows a range of industrial, research, commercial, and office uses as well as marine uses. To promote water-dependent uses effectively, a district such as this needs specific criteria to give priority to marine uses over the other eligible uses.

RECOMMENDATION: The district could be strengthened and greater predictability produced by adding a water-dependent use provision giving priority to marine-related uses on sites within the district that abut navigable water. Criteria for judging the acceptability of development proposals other than water-dependent uses could include:

?? use does not displace or diminish an existing water-dependent use;

?? site is not suitable for a water-dependent use;

?? use is part of and complements a water-dependent use;

?? use is compatible with surrounding water-dependent uses and the waterfront character of the area.

RECOMMENDATION: The same water-dependent use provisions suggested above for the IROM district would be useful for other zoning districts that abut navigable waterways.

RECOMMENDATIONS SPECIFIC TO POMPANO BEACH

POMPANO BEACH COMPREHENSIVE PLAN

The plan has excellent Objective and Policy statements concerning water-dependent uses. Its policies clearly give priority to marine-dependent uses on waterfront property not used for residential purposes, protect existing areas zoned for marine commercial uses, and recognize the importance of marine uses to the community's economy.

The plan also does an excellent job of identifying water-dependent uses, the specific activities occurring at each site, and the locations. This serves to reinforce the importance of these uses.

ZONING CODE

In its M-1 and M-2 zoning districts, Pompano Beach has created exclusive use districts where the only uses allowed are commercial marinas and associated marine uses. Marinas are allowed in two other business districts along with a range of other uses.

RECOMMENDATION: Several areas within the city offer potential for redevelopment for marine uses. These properties (see Figure 10) should be considered for appropriate rezoning to allow for these uses.

MODEL AMENDMENTS

The following is provided as model language for potential amendments to Local Comprehensive Plans and Land Development Regulations. In many cases, local plans and regulations have some existing provisions related to prioritizing water-dependent use of the waterfront. Actual proposals to amend plans and regulations will require a clear understanding of the community's intent, selecting the appropriate provisions, and tailoring the specific language to be compatible and work effectively with existing provisions. For many provisions, the model provides more than one option. The models are provided only as a starting point for drafting plan provisions and regulations. Local counsel should always be consulted when drafting language for compliance with state law.

PROVISIONS FOR LOCAL COMPREHENSIVE PLANS

DEFINITIONS

In the definitions section, define marine industry-related terms that are used in the plan. Without defining terms, references in the plan lack precision and are subject to interpretation. Defined terms may either be broad inclusive terms such as "water-dependent use", "marine-dependent use", or "water-related use", or be more specific, defining uses such as "marina", "boatyard", etc. The choice depends on how specific the plan's policies and objective are.

WATER-DEPENDENT USES:

Activities which can be carried out only in, or adjacent to water areas because the use requires access to the water body for: waterborne transportation including ports or marinas; recreation; electrical generating facilities or water supply. (From F.A.C. 9J-5). Or

Those uses and facilities which require direct access to, or location in, marine or tidal waters and which therefore cannot be located inland. [Including but not limited to: marinas, recreational and commercial fishing and boating facilities, waterfront dock and port facilities, shipyards and boat building facilities, and water-based recreational uses.]

WATER-RELATED USES:

Activities which are not directly dependent upon access to a water body but which provide goods and services that are directly associated with water-dependent or waterway uses. (From F.A.C. 9J-5). Or

A use in whose principal goods and services are derived from water- or waterfront-dependent activities, or a principal portion of the goods or services it provides are designed to be used in connection with such activities.

MARINA:

Waterfront facility that provides services and storage capacity for 10 or more boats in slips, at moorings, or in racks (dry storage). Or

A business providing docking facilities or boat berths and accessory services and facilities. Or

A business having frontage on navigable water providing for a fee docking facilities or moorings for boats and accessory service and facilities such as boat sales, rental and storage, marine supplies and equipment, marine engine and hull repairs, construction and outfitting of pleasure craft, fuel and oil, electricity, fresh water, ice, shower and laundry facilities, and an on-premises restaurant.

BOATYARD:

A facility whose function is the construction, repair, or maintenance of boats, which may include provisions for boat storage and docking while awaiting service.

YACHT CLUB:

A club whose primary function is to further the enjoyment of yachting and which may consist of meeting facilities, storage facilities for boats, boating equipment belonging to members, dining and docking facilities, and anchorages or moorings.

LAND USE CLASSIFICATION/FUTURE LAND USE MAP

Ideally, a land use classification for marine-dependent uses could be established and mapped for areas where there are concentrations of these uses or where the community desires these uses to be located. More commonly, marine-dependent uses are among a host of uses that are classified as commercial or industrial. If

the latter is the case, it is important that marine-dependent uses be specifically listed among the allowed uses. Another option is to create and superimpose a marine-dependent overlay on existing land use designations in appropriate locations.

POLICIES GIVING PRIORITY TO MARINE-DEPENDENT USE

Include in the plan policies giving priority to marine-dependent uses in appropriate waterfront locations. It is particularly important that these policies be included in the Land Use Element of the plan.

- Give high priority and preference to uses and facilities which are dependent upon proximity to the water or the shorelands immediately adjacent to marine and estuarine waters.
- Promote the development, reuse, or redevelopment of existing waterfront sites, giving highest priority and preference to water-dependent uses.
- Promote through local planning, development, and regulatory programs, the use of existing developed shorefront areas for water-dependent uses.

In the Land Use Element, include objectives regarding specific amendments to be made to the land development regulations.

Utilize the GIS maps, database, and methodology developed for this Marine Industry Master Plan as the basis for identifying areas. This is described in Section IV.E. and in the data provided as Appendix D of this plan.

PROVISIONS FOR LAND DEVELOPMENT REGULATIONS

Land development regulations vary greatly in style and complexity, but all are based on traditional zoning concepts and devices. The evolution of a community's development and economy necessitates periodic revision of zoning regulations to remain effective and consistent with current objectives. A review of a community's land use regulations for waterfront areas is likely to confirm that the regulations were not written to protect and promote marine-dependent uses, but to accommodate them. This is not adequate at a time of increasing land values and pressure from competing uses of waterfront property. The following types of provisions and features will help the community protect its water-based economy and increase predictability of future land uses.

DEFINITIONS

In the definitions section, define marine industry-related terms used in (or to be added to) the regulations. It is more important here than it is in the comprehensive plan to be as precise as possible in choosing the terms to define and their definitions. It is more likely that regulations will need to discern, for example, marina from boatyard, based of the nature of the activities associated with each (and therefore appropriate dimensional requirements and performance standards). However, two approaches are possible. One, include a broad definition of water-dependent uses, or two, list all desired and expected water-dependent uses individually. See examples of definitions under comprehensive plan above.

ZONING DISTRICT(S) ALLOWING ONLY MARINE-DEPENDENT USES

A new or amended zoning district that allows only a specified type of use or select list of uses.

It is always important to begin with a statement of purpose for the zoning district:

Purpose

Waterfront properties are a valuable and limited resource. It is the city's/town's policy to control the uses and intensity of development in the [water-dependent use] district to enhance the value of waterfront land for the intended purpose of retaining and encouraging commercial uses which depend on a waterfront location while protecting natural resources. Or

To reserve a substantial portion of the waterfront for uses which are water-dependent, such as marinas and boatyards, and to protect water-dependent uses from other competing, but incompatible uses.

Permitted Uses

The following uses are permitted in the [exclusive water-dependent use] district:
[List is illustrative]

- Marine repair services and machine shops;
- Marine products, wholesaling, and retailing;
- Marine supplies and services and ship supply;

- Marine industrial welding and fabricating;
- Shipbuilding and facilities for construction, maintenance, and repair of vessels;
- Marine transport services, including ferries, public landings, commercial vessel berthing, and excursion services;
- Boat repair yards;
- Boat storage facilities;
- Facilities for marine pollution control, oil spill cleanup, and services of marine sanitation devices;
- Retail and service establishments, which are primarily marine related;
- Professional, business or general offices, which are principally marine related;
- Accessory uses customarily incidental and subordinate to the location, function, and operation of permitted uses.
- Special exception uses:
- Restaurants and other eating and drinking establishments, provided they are part of a marine-related use, and
- Off-street parking lots and garages provided they are a part of a marine-related use.

ZONING DISTRICT(S) ALLOWING A MIX OF USES WITH CRITERIA TO PROTECT/PROMOTE MARINE-DEPENDENT USES

Differs from above in that a broader range of uses, including non-marine-dependent uses are allowed. The non-marine-dependent uses must be selected carefully and include criteria to control them. It is likely that most of the waterfront districts in existence are mixed-use districts, probably without the protections and incentives. The advantages are that other uses may provide important revenue to support the water-dependent activity or be functionally complementary, the district can cover a broader area of the waterfront, and mapping is easier.

Such regulations usually specify that a minimum percentage of the land area or building be devoted to water-dependent uses or limit their total size. The waterfront portion of the parcel is usually reserved for water-dependent uses only. Sometimes non-water-dependent uses are restricted to the upper floors of buildings, reserving the ground floor and lot area exclusively for water-dependent uses. Residential use is often prohibited as it is generally considered to be incompatible with marine-dependent activities.

Purpose

The purpose of the [mixed-use waterfront] district is to protect marine industries by enhancing existing water-dependent uses and allow development compatible with an active commercial waterfront. Mixed-use developments, which contribute to the preservation and enhancement of water-dependent uses and which comply with the waterfront design criteria of the regulation, will be considered by special exception.

Permitted Uses

The following uses are permitted in the [exclusive water-dependent use] district:
[List is illustrative]

- Marinas, water-based recreational uses, docks, and port facilities;
- Recreational and commercial boating facilities;
- Shipyards, boat building, and marine repair facilities;
- Passenger and freight terminals for ferries, excursion boats, water taxies, and boat rental facilities; and
- Marine research labs.
- Accessory uses which are incidental to and customarily associated with the principal water-dependent use of the premises shall be permitted, including the sale of marine equipment or products, sail lofts, boat storage racks, dockside facilities for fuel, restrooms, and laundry facilities for overnight patrons.

Special Exception uses

The following uses are permitted by special exception provided that the review criteria are met:
[List is illustrative]

- Restaurants and taverns;
- Offices not to exceed .25 Floor Area Ratio when located on the second floor or above;
- Hotels; and
- Retail establishments and personal and business services.

Review criteria:

1. The special permit use shall result in the preservation and enhancement of existing water-dependent uses;
2. The special permit uses, structures, and parking shall be located on the portion of the parcel that is within 50 percent of the lot depth from the street line.

Special exception uses will not be approved:

1. On a site that is: (a) physically suited for a water-dependent use, or (b) has been identified for water-dependent use in the comprehensive plan or land development regulations.
2. If it displaces an existing water-dependent use; and
3. If it would substantially reduce or inhibit existing access to marine or estuarine waters.

MARINE-DEPENDENT OVERLAY DISTRICT

An overlay district is a mapped zone that imposes requirements in addition to those of the underlying zoning district. It applies a common set of regulations to an area that might cover all or portions of several zoning districts.

The overlay might impose additional restrictions on waterfront development without changing the remaining permitted uses. It may add requirements to reduce the negative impacts of proposed development on water-dependent uses. Such new requirements would relate to the project's impact on maintaining and promoting water-dependent uses in effect, adding disincentives for locating certain (non-water-dependent) uses on waterfront sites.

The advantages of this approach is that existing land use regulations can remain as is and it is relatively easy to create and map. An overlay district could also add one or more additional uses, i.e., water-dependent uses, to the several districts it overlays.

District boundaries

The [water-dependent use] overlay district shall lie between the mean high tide line and a line 300 feet upland (or to the first public way) between X and Y.

MARINE INDUSTRY WORKFORCE

RECOMMENDATION: The MIASF Committee members should continue to review various training venues that provide training and certifications in the trade, such as the American Boat Builders and Repairers Association (ABBRA), the American Boat and Yacht Council (ABYC), and the International Marina Institute (IMI). The objective is to introduce these groups to the various local vocational centers in an effort to bring courses to south Florida that are normally only available in the northeastern U.S.

RECOMMENDATION: Continue working to raise the visibility of marine industry careers in south Florida

MARINE INDUSTRY IMAGE/PUBLIC EDUCATION

MIASF AND THE ENVIRONMENT

RECOMMENDATION: Continue to provide manatee related education, including articles in MIASF newsletter and in Soundings Trade, op-eds in south Florida publications, manatee mascot appearances at all MIASF events, distribution of manatee key chains and boater-oriented manatee information at all major industry events, a symposium to educate boaters about the manatee issue, and raised awareness of threat to waterway access.

RECOMMENDATION:
Sponsor Annual Waterway county-wide Cleanup effort and arrange for press conference to garner publicity and attract support of VIPs. Strive to attract business and community sponsors.

RECOMMENDATION:
Proceed with the following planned activities: exhibit at International Game and Fish Association Museum, improved Manatee brochures for boaters, WWCU – 25th Anniversary of MIASF signature environmental event, sale of manatee key chains at Fort Lauderdale International Boat Show (FLIBS) and area boat shows, Waterway Access Symposium, and expanded Broward Safe Boating Guide reprint with improved maps and a manatee section.

BOATER SAFETY AND EDUCATION

RECOMMENDATION: Continue ongoing efforts and further develop proposed plans, including Boater 101 integration with school curriculum, Holiday Boat Parade participation, manatee brochure for boaters; update in early 2002 *Safe Boating Guide* annual publication, boating safety classes through US Power Squadrons, Coast Guard Auxiliary Hurricane flotilla plan publicity, co-sponsorship of Manatee Billboard program with a press conference launch, and participation in Spring Boat Show.

RECOMMENDATION: Proceed with the following planned activity: annual update and distribution of *Broward Safe Boating Guide* to the public.

EDUCATION AND WORKFORCE

RECOMMENDATION: Continue ongoing and planned activities, including support for Boys and Girls Club Admiral's Club through the Steering Committee, internships with the industry,(learn and earn program at McFatter Technical Center) and New River Middle School and South Broward High School partnerships throughout the year.

RECOMMENDATION: Proceed with the following planned activities: Marine Industry Careers Promotion, career and workforce content additions to the MIASF website, (marine industry is among largest employers in Broward, responsible for 109,000 jobs in 2000), brochure, career and workforce content additions to the MIADF website, and School Board Career Counselor Education Program

ECONOMIC IMPACT AND INDUSTRY STRENGTH

RECOMMENDATION: Continue ongoing and planned activities, including VIP Tours at Ft Lauderdale International Boat Show, articles similar to the *Urban Land* waterfront development article, support for megayacht facility in Port Everglades, Annual Marine Summits with City of Ft. Lauderdale, new memberships and strategic alliances, Broward Alliance, Port Everglades Association, and Aventura Marketing Council, Annual Meeting, and feature articles on the economic impact of Broward County's marine industry.

RECOMMENDATION: Use the Winterfest Boat Parade to communicate MIASF's key role in the community.

RECOMMENDATION: Proceed with the following planned activities: reprint, distribute, and publicize economic impact brochure; Fort Lauderdale welcome center display; avenues for corporate and community outreach; Leadership Broward and Leadership Fort Lauderdale presentations in 2002; formal campaign—in partnership with Broward Alliance, Chamber of Commerce, Convention and Visitors Bureau, others—with spotlight on Fort Lauderdale lifestyle, status as yachting capital and Venice of America, the premier international destination for yachts; IGFA Kiosk (interactive exhibit showcasing marine industry); Winterfest Boat Parade; Chamber of Commerce Trustee/BOG and Broward Alliance; Investor Council involvement; Boat Show VIP tours; Speakers' Bureau expansion; Miami-Dade Campaign; and Volvo Ocean Race in Miami.

SITES WITH POTENTIAL FOR INDUSTRY EXPANSION IN THE CITIES OF FORT LAUDERDALE, DANIA BEACH, AND POMPANO BEACH

DESCRIPTION OF METHODOLOGY

SOFTWARE

The GIS analysis was carried out using ArcView GIS 3.2 for Windows that is produced by the Environmental Systems Research Institute, Inc. (ESRI).

DATA

The data were acquired from a number of sources. The relevant metadata can be found in the Appendix D.

ANALYSIS

SUITABLE SITES FOR THE DEVELOPMENT OF MARINE FACILITIES

For the cities of Dania Beach and Fort Lauderdale, a multiple step analysis was undertaken in order to ascertain where there were parcels of land that could potentially be developed as marine facilities. Different marine facilities require different physical or locational conditions. Initially, a set of criteria were selected that would generally indicate a site's suitability for future water-dependent development. These were:

- Land use
- Proximity to water
- Zoning

By using these criteria iteratively to select land parcels, it is possible to narrow the search gradually. This was achieved through the following steps:

STEP 1 – LAND USE. The analysis first selected all parcels within the study area that are vacant. The other opportunity for marine-industry expansion is parcels that are currently underdeveloped or ripe for redevelopment No land use data provides this information, so sites with potential for redevelopment were identified at a subsequent stage by people familiar with these opportunities.

STEP 2 – PROXIMITY TO WATER. Some types of marine facilities require direct access to a canal, river or the Intracoastal Waterway; e.g., a boatyard that repairs large vessels. However, other types may simply require a location "near" a waterway. Therefore, vacant sites adjacent to the water, as well as vacant sites within 300 feet of a waterway, were selected for analysis.

STEP 3 – ZONING. Zoning regulations will determine the uses for which a site can be used. Zoning designations for the vacant parcels were reviewed to determine which are already in a zone accommodating marine facilities and those that could be developed as marine facilities if the zoning were amended.

NOTE. Water depth was not used in the selection criteria because of the lack of reliable digital data. Also, while depth is limiting for some uses, it is not necessarily limiting for all potential marine uses.

RESULTS

This analysis resulted in three classes of land parcels:

- Undeveloped waterfront sites in zones suitable for marine facility operations;
- Undeveloped sites within 300 feet of water located in zones suitable for marine facility operations; and

?? Undeveloped sites that are on or near to water but are located in zones not currently suitable for the development of marine facilities.

It was then necessary to reduce further the selected parcels. This was achieved by discarding those that had unsuitable road access, were too small for marine facilities, were located on or near freshwater lakes and rivers, and those that were located in close proximity to existing residential units.

An additional class of parcels was created based on observation made by local officials. These are largely sites that have become suitable for redevelopment due to a change in ownership or other factors.

The parcels that are deemed as suitable are shown in Figures 8, 9, 10, and 11. The legend for these maps is:

GREEN – Undeveloped waterfront sites that are properly zoned and represent new sites for expansion and require little or no regulatory or plan changes.

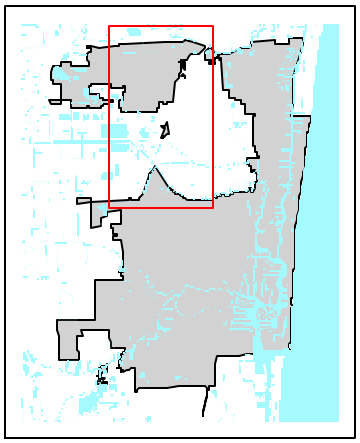
YELLOW – Undeveloped sites that are located near to water and that are properly zoned. These represent new sites for expansion as facilities that do not require a waterfront location (e.g. boat storage). Little or no regulatory changes would be required.

RED – New sites that are suitable for development but would require regulatory changes in zoning.

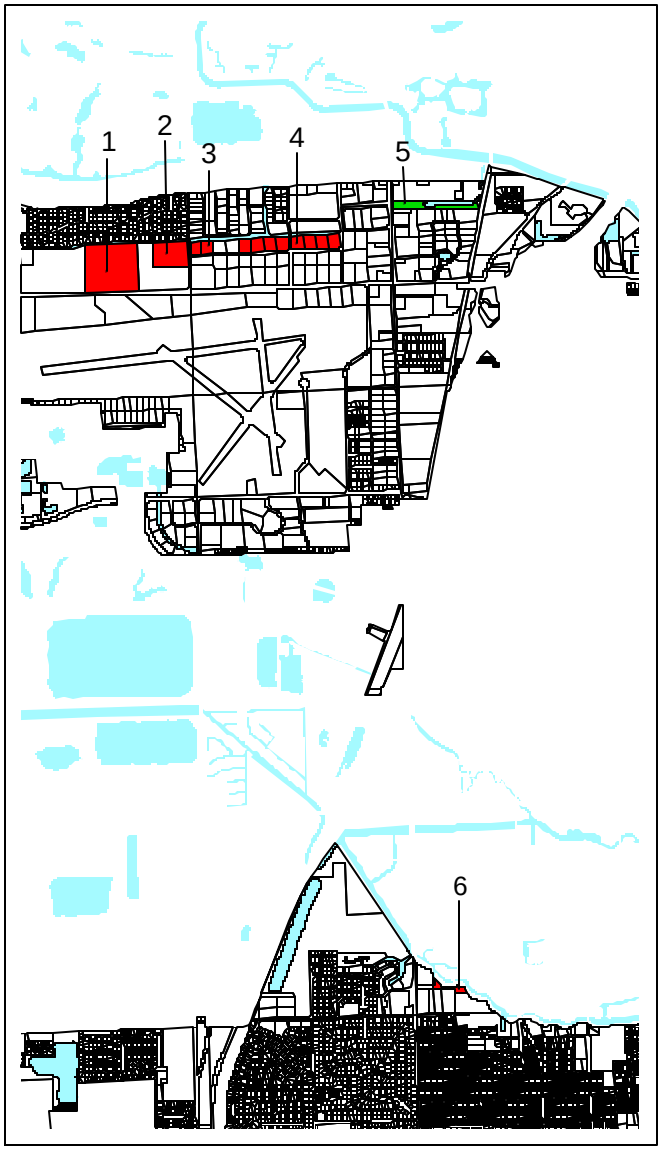
DARK BLUE – Sites that have been deemed suitable by local officials for development or redevelopment.

All these parcels represent sites that could potentially be developed as marine facilities. Their suitability for a particular type of facility operation can only be determined when other factors are taken into account. Some of these parcels may be suitable for small boat marine operations but not suitable for dealing with megayachts, for example. Local factors such as bridge clearance, possible expansion of dredging programs and local economic considerations will all effect any development potential. The GIS analysis provides a model for site selection and produces a short-list of possible sites that can then be further refined when local knowledge is taken into consideration.

Figure 8. Sites Potentially Suitable for the Development of Marine Facilities in Northern Fort Lauderdale



Fort Lauderdale



Green - Undeveloped waterfront sites that are properly zoned and represent new sites for expansion and require little or no regulatory or plan changes.

Yellow - Undeveloped sites that are located near to water and that are properly zoned. These represent new sites for expansion as facilities that do not require a waterfront location (e.g. boat storage). Little or no regulatory changes would be required.

Red - New sites that are suitable for development but would require regulatory changes in zoning.

Dark Blue - Sites that have been deemed suitable by local officials for development or redevelopment.

N

Properly Zoned and Adjacent to Water
Properly Zoned and Within 300ft of Water
Not Properly Zoned and Adjacent to Water
Potential for Development / Redevelopment
Parcels
Water

1 0 1 Miles

Urban Harbors Institute - September 2001

Table 2 Fort Lauderdale Selected Parcel Data

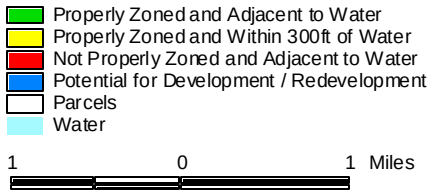
No	Acres	Zoning	Existing Land Use	Future Land Use	Physical Constraints	Regulatory Constraints	Comments
1	37.38	Community Facility	Upland Forest *Parking lot in NE corner. Field in NW corner. Some roads. Some mining / construction in SW*	Employment Center	Not connected to ICW. Major dredging required.	Zone Change necessary	Good sites for upland support or storage; no access to navigable water
2	12.90	Community Facility	Upland Forest *Partly parking lot in NW. Road running N-W through middle. Small building in S of parcel*	Employment Center	Not connected to ICW. Major dredging required.	Zone Change necessary	Upland support or storage
3	2.11 2.28 **4.39**	Airport Industrial Park	Upland Forest *Undeveloped scrubland / trees*	Employment Center	Not connected to ICW. Major dredging required.	Few	Upland support or storage
4	2.56 2.60 2.61 2.63 2.60 2.62 2.72 2.67 **21.01**	Airport Industrial Park	Upland Forest *8 undeveloped parcels of scrub / trees divided down the middle by a road so 4 parcels to E and 4 to W*	Employment Center	Not connected to ICW. Major dredging required.		Upland support or storage. Abutting development compatible
5	7.68	Commercial Center	Upland Forest *Woodland*	Employment Center	Not connected to ICW. Dredging required.	Dimensional requirements	Good site for upland support
6	4.54	Residential Multifamily	Rangeland *Developed (commercial?) at W end. Opposite residential. Undeveloped area extends beyond parcel boundary*	Medium-high (25) Residential	N Andrews Ave Bridge (3.6ft clearance)	Zone and Land use change necessary	Mixed-use with boating facility
7	14.23	Community Facility & Business	*Large complex to S. Developed (offices?) to NW. Parcel extends as strip to NE.*		Broward Blvd bridge (3.5ft clearance). To be demolished.	Few	Waterfront. If bridge demolished, good site for marina
8	1.01 0.25 0.99 9.44 2.22 3.75 **17.66**	Business	*Multiple parcels with roads, many buildings (commercial?) and some undeveloped woodland*		Broward Blvd bridge (3.5ft clearance). To be demolished.	Few	Waterfront. If bridge demolished, good site for marina, storage or marine retail

No	Acres	Zoning	Existing Land Use	Future Land Use	Physical Constraints	Regulatory Constraints	Comments
9	3.86	General Industrial	Upland Forest *Woodland. Boatyard to E of parcel*	Industrial	Access through adjacent residential neighborhood is problematic.	Few	Waterfront. Site is suitable for marina, boatyard or boat launch; access through adjacent residential neighborhood is problematic.
10	11.57 14.80 7.07 6.30 **39.74**		Commercial *N parcel already residential. Middle parcel is residential to W and industrial / parking lot to E. Southern parcels – one is developed (commercial?), other is partly residential and woodland*			Zoning unknown	Waterfront. Northern area largely developed as residential and marine facility. South-west area suitable for marine facility.
11	~20.10		Forest *Woodland with boat ramp access (?) at W end*			Zoning unknown	Waterfront. Good site for boatyard or marina
12	~2.20 ~0.28 ~1.68 ~0.05 **4.21**		Spoil Area Spoil Area Spoil Area Undeveloped in Urban *W parcels are partly road and partly used (storage site?). E parcels are woodland and this extends beyond parcel boundary. Access unknown.*	Industrial Industrial Industrial Industrial	Part on lake. Dredging required	Zoning unknown	Waterfront. On lake but close to canal. Road access unknown. Suitable for upland storage or marine retail
13	3.07 3.86 **6.93**	Business	Commercial *Already developed with buildings and parking lot. Perhaps marina. Reported to be in foreclosure and now owned by the bank.*			Few	Waterfront. Existing marine facility. Suitable for redevelopment as marina or marine facility.

KEY:

Properly Zoned and Adjacent to Water
Properly Zoned and Within 300ft of Water
Not Properly Zoned and Adjacent to Water
Potential for Development / Redevelopment

Figure 9. Sites Potentially Suitable for the Development of Marine Facilities in Southern Fort Lauderdale



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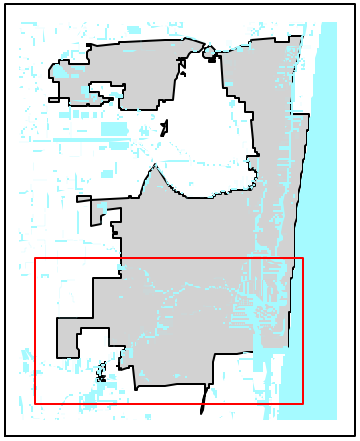

Fort Lauderdale

Green - Undeveloped waterfront sites that are properly zoned and represent new sites for expansion and require little or no regulatory or plan changes.

Yellow - Undeveloped sites that are located near to water and that are properly zoned. These represent new sites for expansion as facilities that do not require a waterfront location (e.g. boat storage). Little or no regulatory changes would be required.

Red - New sites that are suitable for development but would require regulatory changes in zoning.

Dark Blue - Sites that have been deemed suitable by local officials for development or redevelopment.

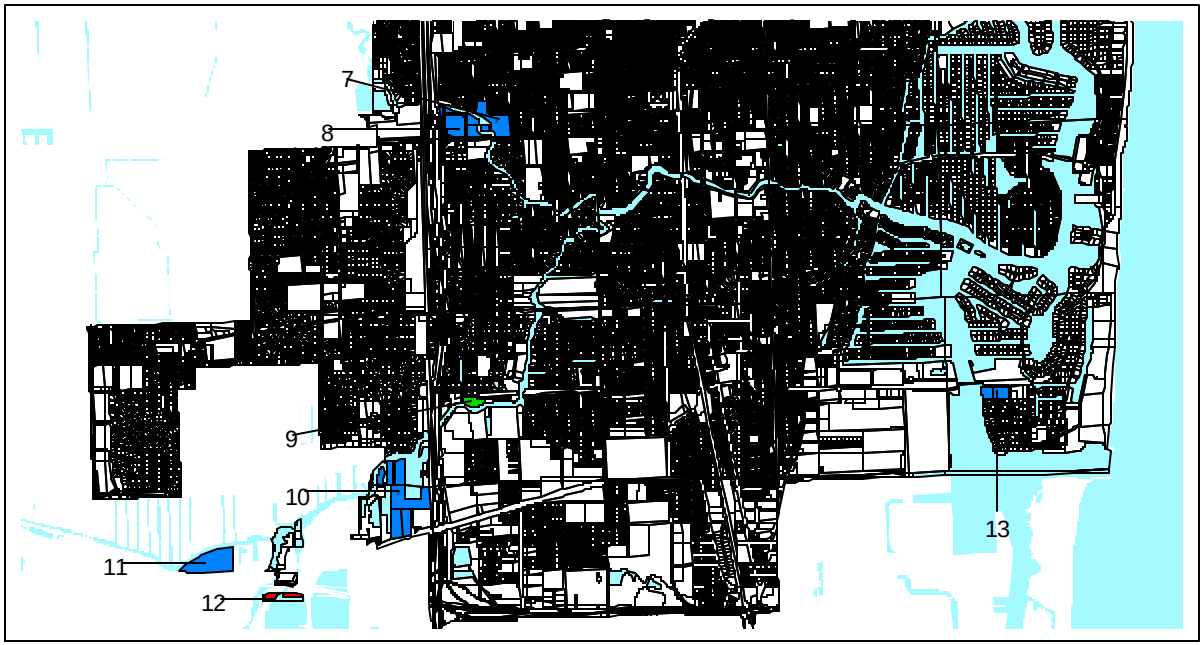

TABLE 3 Dania Beach and Hollywood/Port Everglades Selected Parcel Data

No.	Acres	Zoning	Land Use	Physical Constraints	Regulatory Considerations	Comments
1	0.26	I-ROM	Zoned Not for Agriculture *Small woodland area between storage area (industrial?) and road*	I-95 bridge (11ft clearance)	Dimensional requirements	Waterfront. Possible expansion opportunity for adjacent uses
2	0.21	C-3	Vacant Industrial *Partly road. Wooded area outside parcel to NW by marina*	US 1 bridge (12ft clearance)	Dimensional requirements	Waterfront. Possible expansion opportunity for adjacent marine facility
3	12.76	C-3	Vacant Industrial *Empty parcel. Partly water. Residential area to N*	US 1 bridge (12ft clearance)	Special exception; district excludes boat manufacturing	Property is landward of existing marine facilities. Service or storage potential.
4	6.72 0.63 **7.35**	I-ROM C-3	Zoned Not for Agriculture Zoned Not for Agriculture *Large southern parcels used for boat storage. Perhaps part of Harbor Marine. N parcel has slips and few land storage boats*	US 1 bridge (12ft clearance)	Few	
5	0.31 0.43 **0.74**		Vacant Residential Vacant Residential *Narrow strip of woodland between road and water*	US 1 bridge (12ft clearance)	Dimensional requirements	
6	1.02 1.38 **2.40**	C-3 C-3	Vacant Residential Zoned Not for Agriculture *N parcel has building & parking lot. S parcel used for storage (cars?)*	US 1 bridge (12ft clearance)	Few	
7	5.99	C-3	Zoned Not for Agriculture *Track on S of parcel. Perhaps fields. 2x power lines running N-S across parcel? Small building*	US 1 bridge (12ft clearance)	Few	
8	1.08		Zoned Not for Agriculture *Narrow strip of woodland between road and water*	US 1 bridge (12ft clearance)	Dimensional requirements	Potential dockage. Likely environmental considerations
9	0.11	C-4	Vacant Residential *Small building. Parcel on much larger parcel of empty land.*	US 1 bridge (12ft clearance)	Dimensional concerns, but could be combined with abutting property	Across street from waterway. Adjacent to large commercially developed parcel
10	9.19	C-3	Vacant Industrial *Scrubland and woodland with some tracks / paths. Small inlet*	US 1 bridge (12ft clearance)	Few	Appears to have excellent potential

No.	Acres	Zoning	Land Use	Physical Constraints	Regulatory Considerations	Comments
11	0.03 0.06 0.02 **0.11**		Vacant Residential Vacant Residential Vacant Residential *Three small woodland parcels between road and water*	US 1 bridge (12ft clearance)	Dimensional requirements	Waterfront. Possible small boat access.
12	3.11	I-G	Agricultural *Farmland? 3x tracks running N-S through parcel*		Few	Adjacent to above parcel. Similar conditions.
13	21.45	RS8000	Agricultural *Large parcel of undeveloped land. Small parcel of woodland to SW not included in parcel*		Marine uses would require a change of zoning	Excellent potential. Mixed-use development most likely with water-dependent uses along the canal.
14	4.54	I-G	Agricultural *Narrow strip of land with marine facility to E of parcel. Limited waterfront*			Appears to have good potential for expansion.
15	0.23 0.16 **0.39**	I-ROM I-ROM	Vacant Residential Vacant Residential *Two narrow strips. N strip is boat storage*		Dimensional requirements	Expansion potential for adjacent marine uses
16	2.88	I-ROM	Zoned Not for Agriculture *Woodland*		Few	Appears to have good potential.
17	4.62	I-G	Zoned Not for Agriculture *Mixed woodland and open land*		Few	Appears to have good potential.

PORT EVERGLADES/HOLLYWOOD

18	27.00		Port Authority property *Woodland. W of parcel is woodland. Huge area to E of parcel is undeveloped but may not be Dania*			Excellent site for mega yacht service and repair facility

KEY:

Properly Zoned and Adjacent to Water
Properly Zoned and Within 300ft of Water
Not Properly Zoned and Adjacent to Water

Figure 10. Sites Potentially Suitable for the Development of Marine Facilities in Dania Beach

Green - Undeveloped waterfront sites that are properly zoned and represent new sites for expansion and require little or no regulatory or plan changes.

Yellow - Undeveloped sites that are located near to water and that are properly zoned. These represent new sites for expansion as facilities that do not require a waterfront location (e.g. boat storage). Little or no regulatory changes would be required.

Red - New sites that are suitable for development but would require regulatory changes in zoning.

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Figure 11. Sites Potentially Suitable for the Development of Marine Facilities in Pompano Beach.

Dark Blue - Sites that have been deemed suitable by local officials for development or redevelopment.

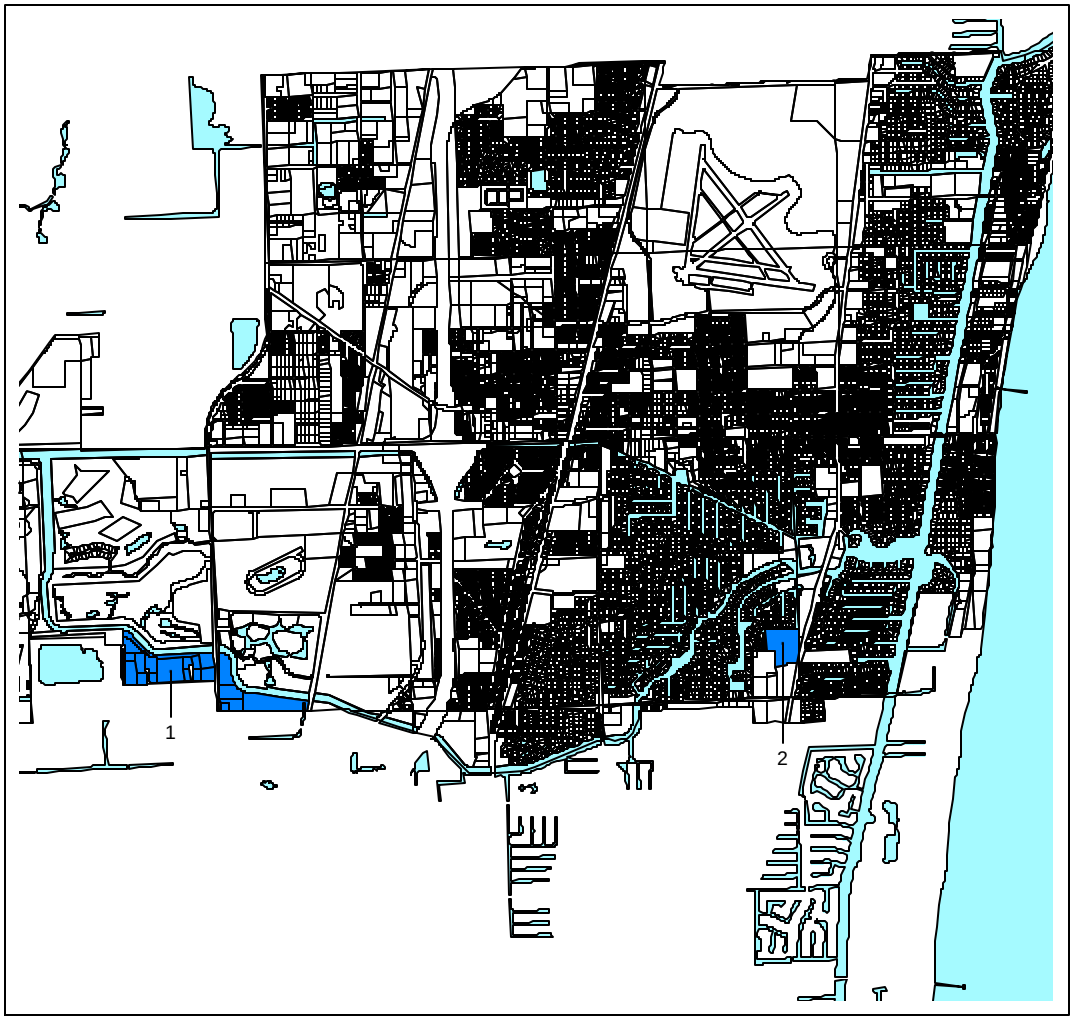

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Table 4 Pompano Beach Selected Parcel Data

No.	Acres	Zoning	Land Use	Physical Constraints	Regulatory Considerations	Comments
1	5.62 1.42 4.64 3.32 2.15 3.00 1.78 11.76 1.72 1.59 1.90 1.91 4.02 3.33 7.12 5.79 3.43 1.51 17.61 83.62	I-1 B-3 B-4 PU	Gateway Industrial: Largely commercial development.	Dam at the intersection of Cypress Creek Canal and Dixie Highway	Zoning changes	Waterfront. Far from Intracoastal Waterway. Good construction or storage potential.
2	18.53	B-3	Winn Dixie	Narrow canal	Dimensional requirements	Waterfront. Good location. Existing shopping center is underutilized.

KEY:

Properly Zoned and Within 300ft of Water

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