Monroe County Marine Management Strategic Plan

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Prepared by:
South Florida Regional Planning Council
with

Center for Urban and Environmental Solutions at Florida Atlantic University











Executive Summary

Background

Monroe County is experiencing the loss and redevelopment of waterfront marine facilities and their associated businesses and employment. A limited supply of waterfront land and an increasing demand by different uses is leading to loss of the "working waterfront," which includes commercial marinas, boatyards, wet and dry storage, fish houses, commercial fishing vessel dockage and marine-related industries such as boat dealers, boat repair and maintenance services, commercial fishing and tourism. The current trends are conversion of waterfront to non-water dependent uses and privatization of waterfront reducing public water access.

Monroe County retained the South Florida Regional Planning Council (SFRPC) and the Center for Urban and Environmental Solutions of Florida Atlantic University (CUES) to develop the Monroe County Marine Management Strategic Plan to provide a comprehensive strategy for protecting and preserving the working waterfronts of Monroe County. This report presents a coordinated implementation strategy specifying government policies, programs, regulations and legislative measures that will establish the structure to achieve the objective of preserving the working waterfront.

Objectives and Methodology

The project team developed a detailed analysis of the history and culture of the working waterfront in the Florida Keys from the early 20th Century when the fishing industry emerged until the current time, when tourism is the dominant economic generator. The historical perspective was coupled with analysis of previous studies and plans to designed to protect the waterfront, as well as an analysis of the federal, state and local regulations that establish the framework within which new policies must conform.

Analyses of the changes in the demographic makeup of the Florida Keys and the effects of the commercial fishing industry on the economy of the Keys were also performed.

An inventory of all of the marine facilities in the Florida Keys was compiled from a wide range of data sources into a single Geographic Information System Database. Map series including land use, zoning, marine facilities, and aerial photographs are also included.

Interviews were held with stakeholders throughout Monroe County that have interests in the health of the Keys' economy and its regulation. Throughout the interviews, stakeholders repeatedly expressed concern over the rapid loss of public access to the waterfront throughout the Keys. In addition to questions about perceptions regarding

the marine industry, interviewers asked stakeholders about approaches to support or protect the waterfront.

The overarching concern was that the marine industry is threatened and intervention is needed to support these facilities and activities so that public access to the waterfront may be maintained.

Recommendations, Mission Statement and Guiding Principles

To help address these issues, the Monroe County Board of County Commissioners should consider adopting the Mission Statement and Guiding Principles set forth below. Action Steps for implementation have also been developed as part of this study, and should be considered to achieve the guiding principles. At a minimum, the statutory mandates of the Waterway and Waterfront Improvement Act (Act) of 2005 should be given due consideration.

Mission Statement

A sustainable number of public waterfront access points, together with recreational and commercial fishing industries and related support facilities, shall be sustained at various points throughout Monroe County.

Principle 1 – <u>The Waterway and Waterfront Improvement Act of 2005, Ch. 342, Fla. Stat., is fully implemented in Monroe County.</u>

Principle 2 – <u>Monroe County fully participates in the Waterfronts Florida Program</u> established by the Waterway and Waterfront Improvement Act of 2005.

Principle 3 – <u>In addition to the requirements of the Waterway and Waterfront Improvement Act of 2005, a combination of existing tools, strategies, and legal mechanisms works effectively to preserve the working waterfront in Monroe County.</u>

Principle 4 – <u>New strategies are implemented to preserve and enhance the working waterfronts, as well as public water access, throughout Monroe County.</u>

Principle 5 – <u>Public lands along the shoreline, including marinas and boat ramps, provide opportunity for public water access.</u>

Principle 6 – <u>Marine facilities and users are considered in preparedness, hazard mitigation and response efforts with respect to emergency management planning.</u>

Principle 7 – <u>The Stock Island and Key Haven Livable CommuniKeys Master Plan will be fully implemented.</u>

By adopting these principles and implementing the associated action steps, Monroe County will further establish policies and procedures for maintaining the working marine industry and its various components in the Florida Keys, continuing its commitment to the history and culture that makes the Keys unique, and maintaining a valuable resource that is essential to the Keys quality of life.

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Section 1: Introduction

Purpose

Monroe County is experiencing the loss and redevelopment of waterfront marine facilities and their associated businesses and employment. A limited supply of waterfront land and an increasing demand by different uses is leading to loss of the "working waterfront," which includes commercial marinas, boatyards, wet and dry storage, fish houses, commercial fishing vessel dockage and marine-related industries such as boat dealers, boat repair and maintenance services, commercial fishing and tourism. The current trends are conversion of waterfront to non-water dependent uses and privatization of waterfront reducing public water access.

Monroe County retained the South Florida Regional Planning Council (SFRPC) and the Center for Urban and Environmental Solutions of Florida Atlantic University (CUES) to develop the Monroe County Marine Management Strategic Plan to provide a comprehensive strategy for protecting and preserving the working waterfronts of Monroe County. This report presents a coordinated implementation strategy specifying government policies, programs, regulations and legislative measures that will establish the structure to achieve the objective of preserving the working waterfront.

A recreational and commercial working waterfront is defined in the Waterway and Waterfront Improvement Act, Florida Statute Sec. 342.07 (2005) as:

"A parcel or parcels of real property that provide access for water-dependent commercial activities or provide access for the public to the navigable waters of the state. Recreational and commercial working waterfronts require direct access to or a location on, over, or adjacent to a navigable body of water. The term includes water-dependent facilities that are open to the public and offer public access by vessels to the waters of the state or that are support facilities for recreational, commercial, research, or governmental vessels. These facilities include docks, wharfs, lifts, wet and dry marinas, boat ramps, boat hauling and repair facilities, commercial fishing facilities, boat construction facilities, and other support structures over the water."

This definition covers the facilities, vessels, and activities that are addressed in this report. Appendix 1 presents the regulatory environment for addressing the working waterfront in the Legal Overview and General Policies Regarding the Working Waterfront.

Organization of Report

The Monroe County Marine Management Strategic Plan document is organized as follows:

Section 2 describes the state of the marine industry and provides an overview of trends and current perceptions about development and the marine industry in the Florida Keys.

Section 3 provides an inventory of marine facilities and background information about the data. This is followed by an analysis of the economic conditions in the Florida Keys and the marine industry's role in the economy.

Section 4 describes the incentives and programs that are available for preservation of the marine industry in Florida, and discusses the comprehensive plan and land development regulations as they relate to the marine industry.

Section 5 presents the guiding principles that have emerged from the study and the action steps to implement so that the objective of preserving marine activity in the Florida Keys can be achieved.

Acknowledgments

The project team would like to acknowledge the individuals and organizations that participated in the process of developing the Strategic Plan. These include:

Monroe Board of County Commissioners

Mayor Charles McCoy Mayor Pro Tem Murray Nelson Commissioner Dixie Spehar Commissioner George Neugent

Commissioner David Rice

Monroe County Staff

Timothy McGarry, AICP George Garrett
Richard Jones

Without the participation of these individuals, this plan would not be possible. Their assistance is greatly appreciated.

In addition, the Florida Fish and Wildlife Conservation Commission provided funding for this project.

Section 2: Marine Industry in the Florida Keys

Approach for Analysis

The Monroe County Board of County Commissioners (BOCC) acknowledged the urgent need to address the loss of both commercial and recreational "working waterfronts" in the Florida Keys following public meetings in the summer of 2004. The BOCC then directed the County's Marine Resources Department (Department) to prepare a countywide public water access and marina siting plan. At the request of the Department, the project team was engaged to assist in preparing a Marine Management Strategic Plan for unincorporated Monroe County.

As a result of the ongoing loss and redevelopment of marine facilities including commercial marinas and the working waterfront including boatyards, wet storage, fish houses and commercial fishing vessel dockage at an unprecedented rate, the County found it necessary to enact an Interim Development Ordinance deferring the acceptance of development applications that seek development approval for the redevelopment and conversion of marine facilities and working waterfront properties. The BOCC adopted the Interim Development Ordinance at its July 20, 2005 meeting to be effective for 270 days so that the inventory and strategic plan could be prepared.

Responding to the growing perception that public water access is shrinking, not only in Monroe County, but also in many other parts of the state, the Committee on Community Affairs of the Florida Senate compiled a *Working Waterfronts* report, which was released in November 2004. This study posited that public access to boat ramps and marinas may be diminishing due to increases in statewide vessel registrations and conversions of recreational and commercial-fishing working waterfronts from public to private use. Committee recommendations led to the passage of the Florida Waterway and Waterfront Improvement Act of 2005. One requirement of the new law applicable to Monroe County, a waterfront community, is for the Future Land Use Element of the County's Comprehensive Plan to set forth regulatory incentives and criteria that encourage the preservation of commercial and recreational working waterfronts, including public access.

To this end, Monroe County's Comprehensive Plan already requires a Shoreline Use Priorities Plan that sets forth criteria for the siting of water-dependent and water-related uses, such as marinas. Moreover, the County has in place a number of land use zones specifically designated for commercial fishing, such as the commercial fishing village, commercial fishing special district, maritime industries district, among others.

To aid in the development of a public access and marina siting plan and to assist the County in meeting the requirements of the new law, *The Working Waterfronts Report* was developed. This report compiles the current work products of CUES that have been designed to facilitate and support the preparation of the overall Marine Management Strategy Plan, and is included in Appendix 2. The Plan presents a comprehensive and

coherent strategy for achieving the full potential of the marine industry in Monroe County. The overall goal of the project is to address the waterfront redevelopment issues in the Florida Keys and provide recommendations for preserving the working waterfront.

Study Area Description

Monroe County consists of a 120-mile-long archipelago known as the Florida Keys, which is frequently separated into upper, middle and lower divisions. The low-lying islands of the Keys extend from the southeastern tip of the Florida peninsula to the Dry Tortugas and lie between the Gulf of Mexico and the Atlantic Ocean. They are separated from the mainland by Biscayne Bay, Barnes Sound, Blackwater Sound, and Florida Bay.

The study area for this plan is Monroe County from mile marker 126 thru 0 on U.S. 1 and portions of County Road 905 in Key Largo.¹ The County population of 82,413² is spread across only 30 of the 822 islands of the Keys and is connected by 19 miles of bridges.³ People of Hispanic origin (independent of race) made up 16% of residents in 2000, and non-Hispanic whites accounted for another 77%. The remaining 7% of Monroe County residents were of other non-Hispanic races, including Black and African American (4%). The median age of Monroe County residents is 42.6 years. The County's average household size is 2.2, with a per capita income of \$37,901.⁴

It is believed that the Keys evolved from the eroded foothills of the ancient Appalachian mountains into surfaces made up of limestone and fossilized reefs. Over many centuries, a unique system of plants and animals has evolved on the islands and adapted to the warm, subtropical environment of the Keys. Public lands have now been acquired to preserve over 100 endangered and threatened species of the islands such as Marsh Rabbit, Key Deer, and the American Crocodile. In fact, more than 60 percent of the land mass in the Keys is in government ownership. Development pressure on the Keys has also prompted state lawmakers to designate the area a place of "critical concern."

The islands feature sensitive coral reefs just off the shoreline. The waters are highly productive marine nurseries, resulting in a world-wide diving, fishing, and boating destination. The millions of tourists who visit the Keys provide a major source of employment for local residents. Another appealing element of the Keys is a relaxed lifestyle exhibited by residents and an eclectic mix of artists, writers, musicians, and

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¹ Mile markers are often used as referencing points to provide direction for residents and tourists of Monroe County.

² University of Florida Bureau of Economic and Business Research, 2005.

³ The demographic descriptions of the Keys are based on data from the 2000 U.S. Census and calculated by grouping study areas together based on zip codes.

⁴ Most demographic information is based on the 2000 U.S. Census.

others who contribute to the unique culture. The rich history of the Keys also attracts a fair share of visitors to museums, historical centers, and the town of Key West.

The Upper Keys

The Upper Keys region includes the island areas from Florida City south to Channel 2.⁵ In 2000, this area had a total population of 22,013 residents and 16,978 housing units. About one-third (5,795) of the housing is seasonal, recreational, or occasional use. The Upper Keys are known for numerous restaurants, businesses, beaches, and other natural amenities that provide convenience for residents and fascination for visitors. A map showing the Upper Keys is shown in Figure 1.

The largest of all the islands of the Keys is Key Largo, located south of Florida City and ending at Angelfish Key in the Atlantic Ocean.⁶ Key Largo boasts a population of 12,971 residents and covers 5,186 acres of land. The area is known as the "diving capital of the world" and features two of the most beautiful underwater attractions: John Pennekamp Coral Reef State Park and Key Largo National Marine Sanctuary. Key Largo has a total of 9,694 housing units, 31.2 percent of which are intended for seasonal, recreational, or occasional use. More than 70 percent of the 5,853 housing units are owner-occupied.

Continuing south on U.S. 1, the community of Tavernier⁷ is a place known to be rich in history and character. It has a population of 3,852 residents.⁸ This town was one of the earliest settled regions in the Keys and was used as a launching point for the wrecking industry (salvaging of goods from ship wrecks) prevalent in the 1800s. Tavernier also had a thriving farming industry before the major hurricane of 1935 destroyed the main farming export routes. Today, the community is comprised of a mix of single family and mobile homes, condominiums, small marine-related businesses, and other light industrial uses.

One of the most popular Keys in the Upper Keys region is Islamorada.⁹ It is often referred to as the "sportfishing capital of the world" and attracts tourists worldwide to compete in its many fishing tournaments. An interesting site on Islamorada is Lignumvitae State Botanical Park, the highest point of the Keys at 18 feet above sea level. The 2005 population of Islamorada is 3,485 but this varies considerably, depending on seasonal visitors, as in the rest of the Keys.

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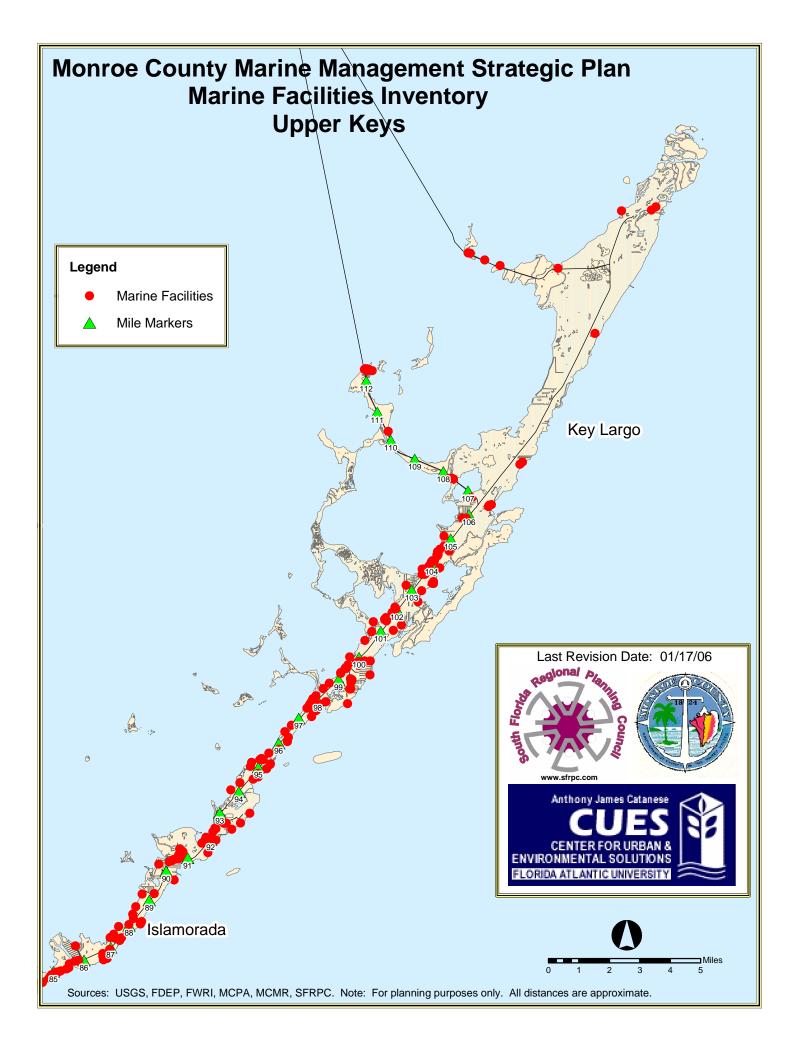
⁵ Near mile marker 73 on US 1 and the islands connected by County Road 905.

⁶ U.S. 1 mile marker 97 to 107 and extending onto County Road 905.

⁷ It is located between mile marker 91 and 97.

⁸ Livable CommuniKeys Master Plan – Tavernier Creek, Monroe County Government.

⁹ Located roughly between mile markers 80 and 85 on U.S. 1.



The Middle Keys

The Middle Keys region¹⁰ runs from Channel 2 to the 7-mile bridge and is often referred to as the "heart of the Keys." It contains an abundance of activities for year-round residents and tourists alike, such as beaches, cinemas, water activities, restaurants, bars, and businesses. The population in this region is 12,030 with most people residing in Marathon. In 2000, there were 9,681 housing units in the Middle Keys, and 5,506 of these units are owner-occupied.¹¹ A map of the Middle Keys is shown in Figure 2.

The less developed portion of the Middle Keys is Long Key,¹² with a population of only 544 residents. At the time of the 2000 U.S. Census, there were 252 of the 767 housing units occupied with nearly 80 percent of them being owner-occupied. A large portion of Long Key is dedicated as a state park, which has become a favorite for campers and nature-seekers. There is an abundance of wildlife onshore and offshore that can be experienced by canoe or nature trails when visiting Long Key State Park.

The City of Marathon¹³ has evolved from a small fishing village into a town with its own airport, business clusters, and visitor attractions incorporated in 1999. It also has many of the common natural habitats of the Keys, such as seagrasses, mangroves, wetlands, and hardwood hammocks. The dredge and fill activities of the 1950s and 1960s were significant in altering the landscape of this area, allowing for greater residential and commercial development. The area has a 2005 population of 10,255 residents, with almost 65 percent of them owning houses in Marathon.

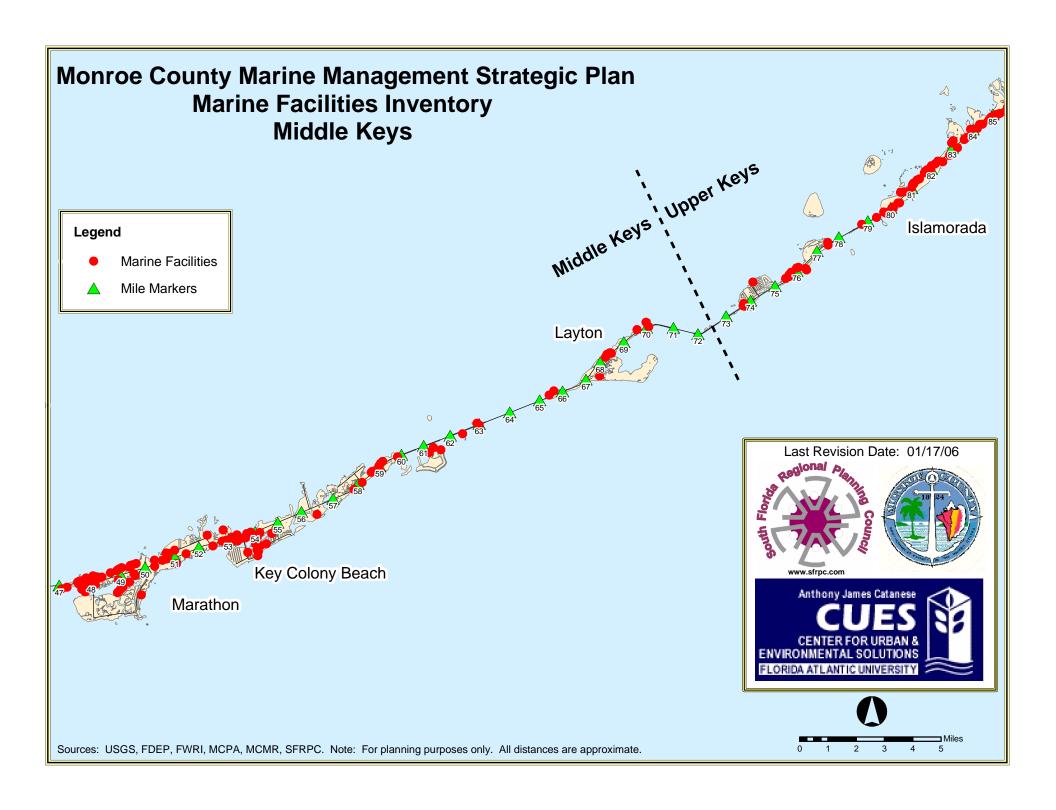
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¹⁰ Begins at mile marker 42 and ends at Craig Key or just before mile marker 73.

¹¹ The zip codes that are considered to be part of the middle Keys are 33001, 33050, and 33051.

¹² This area stretches from mile marker 65 to mile marker 72 at Craig Key.

¹³ Between mile marker 47 and 60.



The Lower Keys

The Lower Keys region extends from mile marker 0 in Key West to mile marker 41, just past Little Duck Key on the 7-mile bridge. This area features something for everyone with the obvious focus on water activities, nature tours, historical centers, and vibrant night life. In 2000 the Lower Keys region¹⁴ had a population of 45,486, with more than 75 percent of residents in the City of Key West. There were a total of 24,913 housing units in this region, and 19,589 or 78 percent of them are owner-occupied. It should be noted that the population of the Keys can increase by as much as 35 percent in the winter months and during certain festivities.¹⁵ A map of the Lower Keys is shown in Figure 3.

The northernmost portion of the Lower Keys contains Big Pine Key, No Name Key, Spanish Harbor Keys, Bahia Honda, and Money Key. This area is connected by U.S. 1 mile markers 30 thru 41 and had a population of 5,159. There are 2,320 occupied housing units spanning these islands, with more than 75 percent of them owner-occupied units. It is also notable that habitat conservation is especially important in this region due to the large population of Marsh Rabbit and Florida Key Deer that are found here.

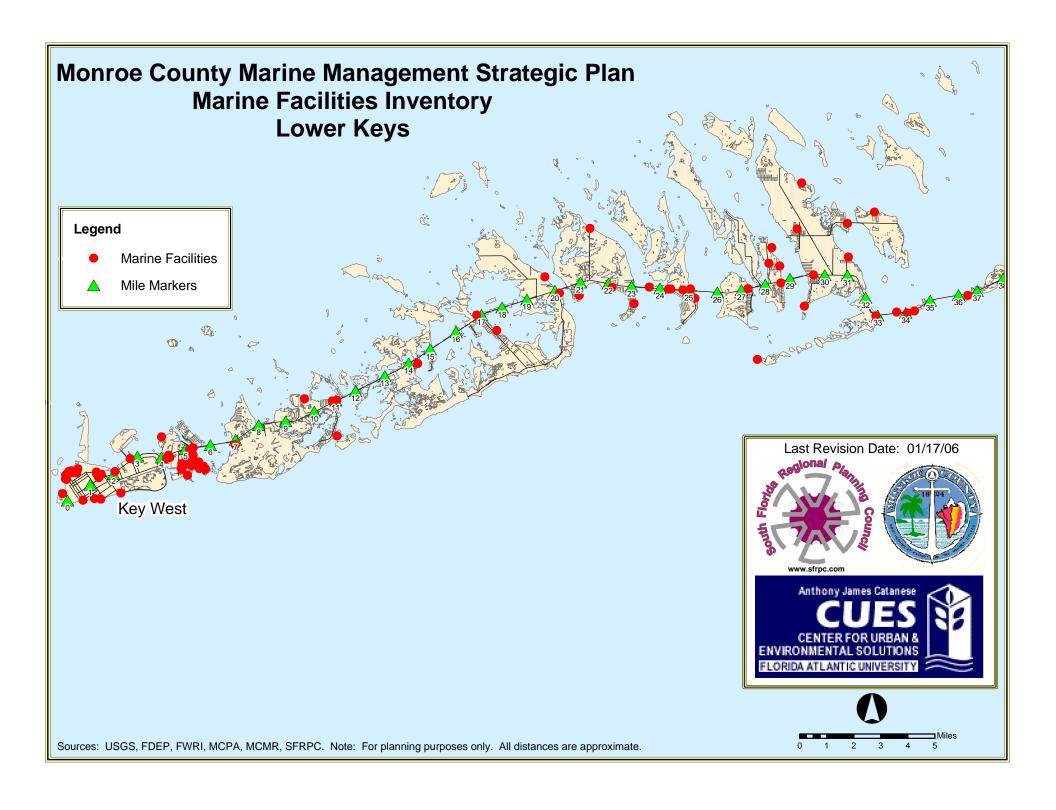
The Keys stretching from Lower Sugarloaf Key (mile marker 16) to Little Torch Key (mile marker 29) has a total population of 6,097. There are 2,742 occupied housing units, with over 80 percent of them being owner-occupied units. The area has a mix of residential, commercial, and vacation-style resorts. This group of islands makes up some of the least developed areas in the Keys and is also known for its unique native wildlife. Berky Bat Tower and Looe Key National Marine Sanctuary are notable landmarks in this area.

Stock Island, located to the north of Key West at about mile marker 5, is the southernmost portion of unincorporated Monroe County. The island is home to an important community of workers and businesses that serve the local economy. More recently, the area has been facing increased pressure to redevelop many of its waterfront industries into upscale residential communities. Of great significance is the fact that this island contains the only industrial, deepwater port remaining in the lower Keys.

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¹⁴ Contains the zip codes of 33040, 33042, and 33043.

¹⁵ Percentage increase was calculated by dividing the housing units for seasonal, recreational, or occasional use by occupied housing units for Monroe County using the 2000 U.S. Census.



In its early history, Key West was the richest city in the nation, but then became one of the poorest nearly a century later. Today, Key West has a bustling tourist economy that attracts visitors with its fascinating history, arts, retail shops, and nightlife. Key West also features a U.S. Naval air station and reserve, an international airport, and a historic seaport district. At one time, the commercial fishing industry was its main economic industry, but today tourism is the main focus of the Key West economy.

History, Culture, and Importance of the Working Waterfront

For purposes of this report, the history of the Florida Keys may be divided into two time periods – 1912-1975 and 1975-2004. In understanding the working waterfront,¹⁶ a particular focus of this study has been to outline the events that highlight the continued presence of the working waterfront as it provides a glimpse into the unique history and culture of the Keys. An attempt was also made to establish a context that can be used to evaluate current issues and challenges facing today's residents of Monroe County. While the earliest time period begins with the completion of Henry Flagler's railroad and his ensuing trip to Key West on the *Rambler*, it should be noted that the importance of the fishing industry was already well established by this time.¹⁷

The progression from this point forward represents an accelerated pace of change for the Florida Keys, brought about by easier physical access to the region and improved commercialization of its resources. This time period (1912-1975) includes the major events that established the framework for how the Keys have evolved over time and provides useful insights into how the major economic industries functioned and prospered during changing economic conditions. This time period concludes with the transition to tourism in the Keys, as the Keys became a leading destination point for vacationers and tourists.

The later history of the Keys (1975-2004) continues the progression of events and changes in development experienced in the region since the 1970s. It should be noted that the designation of Monroe County as an area of critical state concern by the State of Florida is the event that would change the pace and location of any new growth experienced in the Keys.

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¹⁶A recreational and commercial working waterfront has been defined as "a parcel or parcels of real property that provide access for water-dependent commercial activities or provide access for the public to the navigable waters of the state. Recreational and commercial working waterfronts require direct access to or a location on, over, or adjacent to a navigable body of water. The term includes water-dependent facilities that are open to the public and offer public access by vessels to the waters of the state or that are support facilities for recreational, commercial, research, or governmental vessels. These facilities include docks, wharfs, lifts, wet and dry marinas, boat ramps, boat hauling and repair facilities, commercial fishing facilities, boat construction facilities, and other support structures over the water." Waterway and Waterfront Improvement Act, Florida Statute Sec. 342.07 (2005).

¹⁷ Little, Edward J. (2000). An overview of the evolution of the historic seaport at Key West Bight. *Florida Keys Sea Heritage Journal*. Vol. 10, No. 3.

The Working Waterfront Today

Changes in Commercial Fishing

In November of 1994, Amendment Three of the Florida Constitution, otherwise known as the *net ban*, was approved by voter referendum. Under the amendment, it became a crime to use entangling nets in Florida waters and restricted other forms of nets commonly used by the commercial fishing industry. The decision was said to be a virtual death sentence to those who depended on commercial fishing for a living. One fisherman lamented, "It would not surprise me if, in the future, you saw condos along the waterfront instead of fishing boats and ice factories. And all the seafood you eat here will come from Taiwan." In fact, several stakeholders interviewed for this study cited competition from imported seafood as a main threat to the commercial fishing industry in Monroe County. The response of recreational fishermen was quite different, however, since their pay is based on a customer's experience, and a rod and reel are used for landing fish. Understandably, many "sportsmen" celebrated the passage of the net ban and were optimistic about its effects on their business.

An evaluation on the effects of the net ban in 2002 was designed to identify observable changes in the commercial fishing industry and direct linkages to the nature of changing events that occurred simultaneously in Florida's economy, natural environment, and marine resource regulatory process. The report concluded:

The ban has had a dramatic impact on the nature of near-shore commercial fisheries in Florida, primarily through the reduction in landings for several near-shore species. The short-term negative impacts of the net ban have been absorbed by the small-scale commercial finfish businesses. These negative impacts have been manifested by changes in income sources, business management activities, fishing patterns, and species targeted.¹⁹

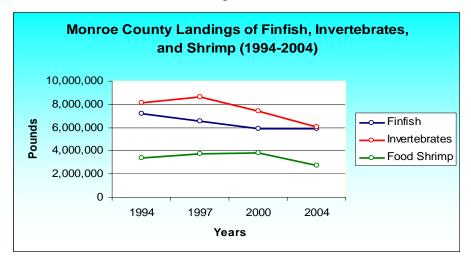
The Florida Fish and Wildlife Conservation Commission has recorded commercial fishing statistics since the adoption of the Florida net ban in 1994. Monroe County data have been examined specifically to provide clues to the status of the commercial fishing industry. In Monroe County, the total finfish landed were 7,210,904 pounds in 1994 compared to 5,911,544 using 2004's estimates, which translates into an 18 percent decrease (Fig. 4).

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¹⁸ Browning, Michael. (Nov. 10, 1994). Net Ban Leaves Towns in Search of New Soul. *The Miami Herald*. Available online from ProQuest Historical Newspapers at http://www.proquest.umi.com.

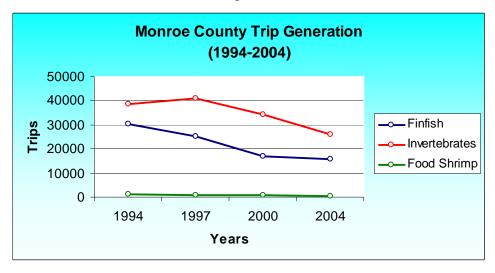
¹⁹ Adams, C., Jacobs, S., and S. Smith. (2002). What happened after the Net Ban? Accessed 6/29/05 at http://edis.ifas.ufl.edu/FE123.

Figure 4



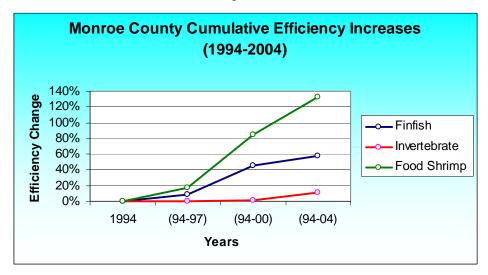
During the same period however, the number of trips pursuing finfish declined by 48 percent (Fig. 5), resulting in an overall increase in pounds per trip.

Figure 5



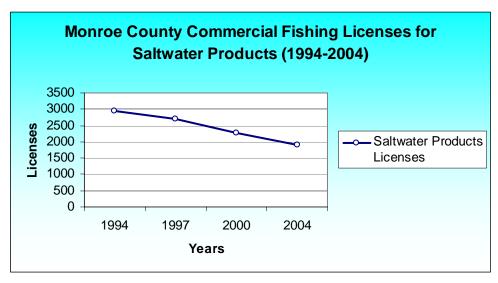
When the total pounds of invertebrates are divided by the total amount of trips made to catch the invertebrates, it was found that the pounds per trip have also increased from 1994 to 2004.

Figure 6



This would suggest that the industry as a whole may be declining, but those that remain in business are becoming more efficient based on landings per trip (Fig. 4). Commercial fishing statistics compiled on food shrimp also show a similar trend. Overall, there has been a 35.7% decrease in the number of commercial fishing licenses held for saltwater products (Fig. 7), representing a decrease in the size of the commercial fishing industry.²⁰

Figure 7



²⁰ Fish and Wildlife Research Institute. Fiscal Year License Summaries, (1994-2004). Accessed 7/22/05 at http://www.floridamarine.org/features.

In early 2000, a survey found that a majority of Monroe County residents favor less tourism and fewer tax dollars spent advertising and promoting it.²¹ While the results were contested by some, it did confirm that some residents perceived that tourism had a diminishing effect on their quality of life. Nevertheless, a number of interviewees for this study acknowledged that tourism as an economic engine is fueled by marine-related industries, especially the recreational working waterfront and related businesses. Still, the huge increase in the number of tourists visiting the Keys has been perceived by some as resulting in the demise of the commercial fishing industry.

Demographics

Changes in Population

The Monroe County population grew tremendously in its early days, from the 1940s through the 1980s, but has stabilized since then (Fig. 8). The largest increase was in the period of 1950 to 1960 when the population of the Keys increased by nearly 18,000 residents.

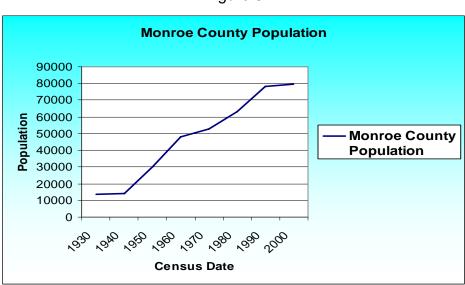


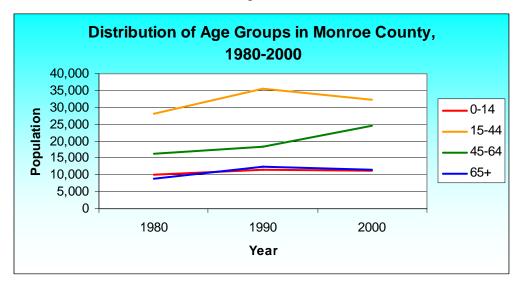
Figure 8

Population projections for the next 25 years are for the county to maintain its current population level. In general, the middle-age population has been growing in the Keys. There has been a slight decrease in the percentage of residents aged 0-14 and 15-44 over the past two decades, and the percentage of residents between the ages of 45-64 has been increasing steadily since 1990 (Fig. 9).

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²¹ Fuss, Lisa. (Feb. 10, 2000). Keys Residents Want Less Tourism, *The Miami Herald*. Available online from ProQuest Historical Newspapers at http://www.proquest.umi.com.

Figure 9



The Florida Keys Community College has seen a decline in college enrollment since 2000.²² School enrollment has declined over the past decade, along with college enrollment.²³ Several stakeholders expressed great concern that this is causing the workforce of the future to abandon the Keys, seeking their livelihoods elsewhere.

Interviews

Interviews were held with stakeholders throughout Monroe County that have interests in the health of the Keys' economy and its regulation. Throughout the interviews, stakeholders repeatedly expressed concern over the rapid loss of public access to the waterfront throughout the Keys. In addition to questions about perceptions regarding the marine industry, interviewers asked stakeholders about approaches to support or protection of the waterfront. Summary responses are provided below.

Government

There was a general consensus among government interviewees that there was a need to protect and improve public access to waterways. Comments include:

 Protection of public access can be achieved in part by adhering to existing zoning designations.

²² Florida Community College System (2001-2005). The Fact Book. Available online at http://www.firn.edu/doe/arm/cctcmis/pubs/factbook/factbook/main.htm

http://www.firn.edu/doe/arm/cctcmis/pubs/factbook/factbook_main.htm.

23 Matley, Alyson. (Aug. 5, 2005). Student numbers unclear, *Keynoter*. Available online at www.keynoter.com.

- Land uses need to be balanced with zoning used effectively to achieve conservation goals. Blue- and green-belting could be used to protect water-dependent uses.
- The County could use 4 cents of the bed tax (tourist impact tax) for affordable housing, as specified by law.
- The government should support existing industries, not condo development.

Several interviewees said that there is political pressure from developers and commercial fishing interests need to "step up politically."

Others thought that some public docks and trap storage areas could be in County ownership or the County could sell or lease property in a co-operative venture back to fishermen. The County could also purchase land, which could then be managed privately. Purchase of Development Rights, Transfer of Development Rights, negotiations, trust funds, land trusts, and Community Redevelopment Areas could all be explored as tools to help preserve the working waterfront.

Marine Industries

Commercial Marine Industry

Some of these stakeholders made the following recommendations:

- The focus should be on getting help from the County to procure land, set up cooperatives or some partnerships with industry.
- The County should remove the moratorium to permit mergers/consolidations.
- They need cooperation from the County to permit and allow commercial fishing upgrades to infrastructure.
- Flexibility in use of land is needed so that owners can subsidize commercial fishing with other uses (condos, etc.).
- Commercial fishing should be treated like family farms with respect to property tax subsidies.

Others do not want the government as a partner and are strongly opposed to this concept. They simply want to be left alone and not hindered, so profits can be realized from commercial fishing. However, there was recognition among some stakeholders that practical solutions are needed for the commercial fishing industry to preserve the lifestyle.

One stakeholder said that deregulation at the state and federal level would give industry time to adjust to all the changes.

Recreational Marine Industry

Stakeholders in this group recommended the following actions:

- The County should pursue the "no net loss" goal to protect displaced marine-related industries.
- The pace of development should be slowed down at the state or local level.
- Key historical areas should be identified to preserve critical working waterfronts, and water access areas should be maintained and protected.
- Preserve the working waterfront as a viable and active part of community.
- Innovative funding mechanisms could be the key to help marine-related industries (e.g., the 2005 Working Waterfronts legislation, Purchase of Development Rights, Transfer of Development Rights, tax deferrals, tax credits/land use plan for marine uses, subsidies).
- Adopt the policy of "no net loss" to ensure no loss of public access or dockage.

In addition, one stakeholder thought that a boating use study should be conducted to determine the percentage of residents who take their boats out, when they go, etc.

Nongovernmental Organizations

These stakeholders said the marine industry should be preserved at all costs. They would recommend tax breaks for employers in marine-industry related businesses. Other land use preservation tools could be employed, such as conservation easements and restrictive covenants.

Good science is needed to protect certain species. One commentator said the federal government was doing "a good job" in this area.

The County may want to purchase more waterfront property for public access purposes.

Other (Developer, Realtor, Media, Citizen)

One commentator in this category recommended that the County could bring more tourists to Stock Island. This would be preferable to an increase in part-time property owners.

Another recommendation was that the County could exercise its regulatory authority without infringing on property rights.

Another respondent recommended government subsidies to help preserve the working waterfront.

Finally, one stakeholder thought that waterfront destinations should be made more accessible to the public. A mix of uses, such as venues in New England along the working waterfront, could be employed to attract residents and visitors alike.

Summary of Interviews

Stakeholder groups generally agreed that escalating property values and associated taxes appear to be the driving force behind the sale and redevelopment of many important waterfront non-residential properties.

Some stakeholders expressed concern that future losses of waterfront facilities will negatively affect the economy and bring an end to marine service industries (e.g., boatyards), commercial marinas which are available to the public, and traditional trades associated with the community character (e.g., commercial fishing and its historical and cultural uses).

The commercial fishing industry is once again particularly vulnerable due to their dependence on waterfront land and increasing operating costs.

Stakeholder groups were less likely to agree about the approach needed to address the loss of working waterfront. Some were sensitive to the need for economic development and were less supportive of aggressive government intervention, while others were conscious of the impact on the historical significance of the marine industry in the Florida Keys, and recognize that the market is not sufficient to sustain the working waterfront without assistance from the government.

Similar Challenges Facing Other Waterfront Communities

Monroe County is part of a larger group of South Florida communities facing pressure to redevelop its waterfront because of its increasing land values. The loss of working waterfront in the Keys has the potential to negatively impact the region's economy as a whole, as well as its own local economy. The loss of publicly accessible waterfront will lower the quality of life experienced by residents and visitors of Monroe County. The County has an opportunity to lead the region with bold, innovative solutions that have plagued South Florida for decades. The limited scale of the Keys provides an excellent opportunity to explore the dynamics of this issue and test how it can be adequately addressed.

While all South Florida communities are facing diminishing access to public waterfront, Monroe County has great potential to lead the way working with the state due to its designation as an area of critical concern. The ability to balance development with the natural world and improve the quality of life experienced by residents and visitors will be a noble challenge.

Section 3: Analysis of Issues

Inventory Maps and List of Data Sources

As part of the Monroe County Marine Management Strategic Plan, an inventory of existing marine facilities was developed by combining several data sets. The project team combined information from six databases and a wide variety of websites. The full listing of sources and the map atlas is presented in Appendix 3.

The inventory combines data regarding each type of facility and matches these to the parcel data of the property appraiser's database to identify the type of business entity that is located on each identified facility. This inventory is planned to be used towards the Future Marina Siting Plan.

The second set of maps shows the future land use for the Upper, Middle, and Lower Keys. The third set of maps shows the current zoning for the Upper, Middle, and Lower Keys.

The reference list of data for the marine facility inventory, the detailed parcel information and the maps indicating locations of each facility are attached in Appendix 3.

Economic Analysis of Monroe County and the Marine Industry

Water Dependent Industries

There are a number of important business sectors in Monroe County that depend on access to the water. There currently are eighty-five retail and wholesale fish dealers licensed by the Florida Department of Agriculture. Some establishments have multiple licenses, such as major supermarkets. The Florida Fish and Wildlife Conservation Commission (FWC) issues licenses for both charter boats and charter boat captains. Currently FWC has issued seven hundred and ten charter boat captain licenses for Monroe County, although this number contains some duplicates. FWC also has issued 279 charter boat (vessel) licenses. In addition, the National Marine Fishery Service within the National Oceanic and Atmospheric Administration (NOAA) also maintains a list of three hundred and seventy four charter boats in Monroe County for the purpose of fish catch surveys. The Florida Fish and Wildlife Conservation Commission also issues commercial fishing licenses.

Economic Simulation of the Loss of Commercial Fishing in Monroe County

The economic implications of the eventual loss of the commercial fishing industry in Monroe County can be estimated. Commercial fishing has been in decline for a number of years. The commercial saltwater licenses and selected endorsements for licenses have been decreasing for a decade, as indicated in Figure 10, below.

4,500 Saltwater Products Licenses **RS Endorsements** 4,000 3,500 3,000 2,500 2,000 1,500 1,000 500 1990 1992 1994 1996 1998 2000 2002 2004

Figure 10. Monroe County, Commercial Saltwater Licenses, 1990-2004

Source: Fish and Wildlife Research Institute

The dockside value of commercial fish landings also has been decreasing, falling from a high of \$61 million in 1999 to a low of \$38 million in 2001, with a modest rebound to \$45 million in 2004.

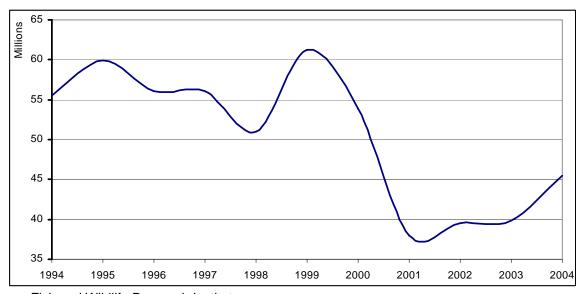


Figure 11. Dockside Value of Commercial Fish Landings, 1994-2004

Source: Fish and Wildlife Research Institute

If this trend continues, a critical point or threshold will be reached where the continuity of the commercial fishing industry will become economically unfeasible. As with the loss of any viable economic activity there will be a cost to the overall economy. This cost can be estimated by using a simulation model.

Policy Insight is an economic and demographic forecasting and policy analysis model developed by Regional Economic Models, Inc. (REMI). The model is calibrated for each of the seven counties in the South Florida region (Monroe to Indian River), and includes a "Rest of Florida" component to enable measurement of the interaction of the regional economy with the rest of the state. It uses a large amount of detailed economic and demographic data to establish a "baseline" forecast for each county out to the year 2050. This forecast, which comes built into the model, projects past trends into the future under a "no change" scenario. The baseline forecast includes expected growth in the population and the economy of the Florida Keys. The user can then choose from a wide array of policy variables to ask "what if" questions about the local economy.

For example, the impact of a large project or a change in tax policy could be evaluated. The most important feature of the model is its ability to capture the "linkages" between the direct changes resulting from a project or a policy and the indirect effects on the rest of the economy. If a new manufacturing facility is built, it generates not only new output to sell, but also employment income and a demand for raw materials, both of which increase the overall impact of the initial change. Indirect and induced impacts are captured by the model and reflected in the overall results.

The model includes employment as a policy variable so that the outcome of changes in the number of jobs associated with the working waterfront can be evaluated in terms of the predicted economic and demographic effects. Policy Insight can therefore generate annual estimates of the total impact or costs associated with a loss of specific marinerelated activities. It does this by comparing the baseline regional forecast with the revised forecast based on hypothesized changes in specific economic policy variables.

Scenario 1

The first scenario we evaluated is based on a steady decline of employment in the commercial fishing industry from 2005 to 2010 to half of its original size, at which point a critical lower threshold would be reached, beyond which the industry would go out of business. By 2010, existing fish houses would also go out of business. The results of the commercial fishing scenario (see Table 1) suggest that the cost to the local economy would reach less than three percent of the gross county product, less than one percent of total personal income and less than two percent of total employment over time. Stated differently, these results say that, when compared to the baseline forecast, the economy of Monroe County would produce almost \$15 million less in output (gross county product) in 2005, at the beginning of the decline in the commercial fishing industry.

Total Gross Regional Product (Billions Fixed 2000\$)

4.5

4.0

3.5

Baseline
Hypothesis

2.5

2005

2010

2015

2020

2025

2030

Figure 12. Scenario 1 - Loss of Commercial Fishing

Source: South Florida Regional Planning Council, REMI Policy Insight 7.0

By the year 2010, when the scenario poses the complete disappearance of commercial fishing, the overall production of goods and services in the Monroe County economy would be \$56 million less than in the baseline forecast. This reduction in the gross county product would represent approximately 1.6% of the total product in 2010. Over time, although the absolute value of the loss of the commercial fishing industry would continue to rise, to about \$125 million in 2030, it would represent a roughly constant share of the overall economy, which is projected to continue growing despite the loss of the commercial fishing industry.

Table 1. Scenario 1 - Loss of Commercial Fishing

Variable	2005	2010	2015	2020	2025	2030
Gross County Product	Φ.4	050	0400	0440	0.4.4.0	# 405
(millions)	-\$1	-\$56	-\$108	-\$110	-\$116	-\$125
As % of County Total	0.0%	1.6%	2.8%	2.7%	2.7%	2.7%
Personal Income (millions)	-\$1	-\$19	-\$47	-\$55	-\$61	-\$72
As % of County Total	0.0%	0.4%	0.8%	0.7%	0.7%	0.7%
Total Employment (jobs)	-18	-747	-1,166	-983	-859	-779
As % of County Total	0.0%	1.2%	1.9%	1.6%	1.5%	1.4%

Source: South Florida Regional Planning Council, REMI Policy Insight 7.0

Similar reductions would occur in the level of personal income and employment in the overall economy as a result of the direct and indirect impact of the loss of commercial fishing.

It is important to keep several things in mind. First, commercial fishing is only one of the components of water-related activities in the Florida Keys. Others such as charter boats and dive boats are not included in Scenario 1. On the other hand, the scenario also makes no assumption about alternative activities that might emerge if commercial fishing were to disappear. In other words, if another economic activity were to take the place of facilities and places of business previously dedicated to commercial fishing, some of the decline shown in the table would be offset by the additional output of substitute economic activity. The scenario as presented presumes the loss of commercial fishing without replacing it with any other activity.

Scenario 2

For a second scenario we assumed that approximately half of the estimated 150 marinas and boat yards in the Florida Keys would be replaced by residential development. The additional assumptions include a loss of related jobs numbering approximately 400, and the building of 750 residential units above and beyond those that are otherwise projected in the baseline scenario on the sites of the converted facilities. These residential units would accommodate an additional 1,275 residents, and these, it is assumed, would find employment in other activities in the Florida Keys.

The results suggest that there would be a long-term increase in the gross regional product, personal income and overall employment in such a scenario, mostly as a result of the new residents and jobs, and the income and demand for goods and services that would result. Almost 1,500 new jobs would generate an additional \$408 million in personal income in the year 2030, contributing to almost 2% increase in the value of output in Monroe County.

Table 2. Scenario 2 - Loss of Marinas and Boat Yards

Variable	2005	2010	2015	2020	2025	2030
Gross County Product						
(millions)	\$0.0	\$4.0	\$18.0	\$38.0	\$63.0	\$85.0
As % of County Total	0.0%	0.1%	0.5%	0.9%	1.4%	1.8%
Personal Income (millions)	\$0.0	\$19.0	\$71.0	\$160.0	\$272.0	\$408.0
As % of County Total	0.0%	0.4%	1.2%	2.2%	3.0%	3.8%
Total Employment (jobs)	-1	46	304	668	1,104	1,488
As % of County Total	0.0%	0.1%	0.5%	1.1%	1.9%	2.6%

Source: South Florida Regional Planning Council, REMI Policy Insight 7.0

Scenario 2 illustrates the fact that when one economic activity is replaced by another, often the new activity competes successfully with the one it replaces. Although some aspects of this scenario could be refined to reflect unique characteristics of the Florida Keys (for example, the likelihood that some of the residential units would be occupied by seasonal residents), the general outcome of the scenario would not change significantly.

In summary, the loss of the entire commercial fishing industry and associated fish houses without any replacement economic activities is estimated to lead to a reduction of approximately 3% in economic output for the Florida Keys over a 25-year horizon. The conversion of half of the marinas and boat yards into residential units, with the corresponding increase of the resident population, could lead to almost 2% in additional economic output for Monroe County.

Observations and Conclusions

As is evident from review of the maps of the land use, zoning and marine facilities that are shown in detail in Appendix 3, concentrations of marine facilities occur throughout the keys. These concentrations or nodes of activity provide an opportunity for preservation activities to be targeted, and policies applied in a manner that will enable the County to meet its multiple objectives of managing growth and preserving the cultural and economic asset that is the marine industry, both commercial and recreational.

The next section discusses the current preservation programs targeting the waterfront.

Section 4: Current Efforts for Preservation of the Marine Industry

Incentives and Programs for the Preservation of the Working Waterfront

The Monroe County regulatory environment extends beyond its own local laws, ordinances, and regulations. The Federal and State government each have adopted legislation to protect certain aspects of the Florida Keys. For example, the Federal Government passed the Florida Keys National Marine Sanctuary and Protection Act in 1990 to protect the environmentally sensitive waters surrounding the Keys. The State of Florida has declared Monroe County an Area of Critical State Concern to address issues dealing with the local economy, environment, and community needs. It was this designation that lead to the creation of a carrying capacity study and a new system for permitting development (the Tier System). An overview of the locally adopted Monroe County Year 2010 Comprehensive Plan is provided at the end of this section. The Comprehensive Plan is described in more detail in Part III because it addresses a variety of concerns of the State, while more specifically addressing the needs and desires of the local community, offering a vision for the future.

Federal Programs

Florida Keys National Marine Sanctuary Protection Act

The water surrounding the Florida Keys is home to a spectacular marine environment, consisting of sea grass meadows, mangrove islands, and living coral reefs. These environments are considered to be equivalent to the tropical rain forests found in other places in the world. Also, the marine environments found in the Keys support rich biological communities that are treasured for their ecological, recreational, commercial, educational, historic, and esthetic value.

The growing threat to these areas prompted the U.S. Congress to enact the Florida Keys National Marine Sanctuary and Protection Act of 1990. Under this Act, the National Oceanic and Atmospheric Administration (NOAA) in the Department of Commerce was directed to develop regulations that would better protect marine resources, lessen duplication of efforts, provide opportunities for increased interagency coordination, and ultimately result in taxpayer savings. This allows specific management practices to be implemented in order to protect, manage, and conserve the living and non-living resources of the Keys, improve water quality and prevent the further degradation of marine habitats. The coral reefs surrounding the Keys face enormous pressure from human activities such as boating, fishing, and diving. Deliberate protection was needed to ensure their long term sustainability.

Marine Zoning

Marine zoning is a management tool widely used around the world to protect sensitive marine resources from overuse and to reduce user conflicts. It is also a major strategy used to communicate permissible uses to those that enjoy the ocean waters for recreation or depend on them for economic production. Designated zones are established by the use of markings such as buoys and enforced by marine-based officers. There are five zone types created by NOAA to assist marine users in the Keys:

- Wildlife Management Areas
- Ecological Reserves
- Sanctuary Preservation Areas
- Existing Management Areas, and
- Special-use Areas

Depending on the zoning designation, the marine users can be substantially limited in the activities that can be legally performed in the Keys' waters. The regulatory action plan designed as a component of the implementation strategy is available to guide any future designations.

Wildlife Management Areas are established to minimize disturbance to sensitive wildlife populations and their habitats. Regulations governing access are designed to protect endangered or threatened species, while providing opportunities for public use. Water use restrictions included no-access buffers, no-motor zones, idle speed only zones, no wake zones, and closed zones.

Ecological Reserves are designed to encompass large, contiguous diverse habitats. They are intended to provide natural spawning, nursery, and permanent residence areas for the replenishment and genetic protection of marine life and to protect and preserve all habitats and species, particularly those not protected by fishery management regulations. These reserves are intended to protect areas that represent the full range of diversity of resources and habitats found throughout the sanctuary. The intent is to meet these objectives by limiting consumptive activities, while continuing to allow activities that are compatible with resource protection. This will provide the opportunity for these areas to evolve in a natural state, with a minimum of human influence. These zones will protect a limited number of areas that provide important habitat for sustaining natural resources such as fish and invertebrates.

Sanctuary Preservation Areas will focus on the protection of shallow, heavily used reefs, where conflicts occur between user groups, and where concentrated visitor activity leads to resource degradation. They are designed to enhance the reproductive capabilities of renewable resources, protect areas critical for sustaining and protecting important marine species, and reduce user conflicts in high use areas. This will be accomplished through a prohibition of consumptive activities within these areas. They have been designated based on the status of important habitat, the ability of a particular

area to sustain and protect the habitat, the level of visitor use, and the degree of conflict between consumptive and nonconsumptive users. The actual size and location of these zones have been determined by examination of user patterns, aerial photography, and ground-truthing of specific habitats.

Existing Management Areas identify areas that are managed by other agencies where restrictions already exist. These zones delineate the existing jurisdictional authority of other agencies (i.e., state parks, aquatic preserves, sanctuaries, and other restricted areas). Management of these areas within the sanctuary may require additional regulations or restrictions to adequately protect resources. Any additional management measurers will be developed and implemented in coordination with the agency having jurisdictional authority. Their function is not to establish another layer of bureaucracy, but to recognize management areas and, at a minimum, to complement the existing management programs, ensuring cooperation and coordination with other agencies.

Special-use Areas are used to set aside areas for scientific research and educational purposes, restoration, monitoring, or to establish areas that confine or restrict activities, such as commercial personal watercraft operations, and establish live-aboard mooring fields. These areas will minimize impacts on sensitive habitats and reduce user conflicts. Special management programs (e.g., monitoring, research, special-use permits, and restoration) can be conducted without impediment in these areas. They can be used to set aside areas for specific uses such as long-term research and monitoring and/or minimizing the adverse environmental effects of high impact activities. These zones will be limited in their length of duration.

Florida Keys National Marine Sanctuary Management Plan

In addition to marine zoning, the Florida Keys National Marine Sanctuary Management Plan has been developed to address many of the issues facing the Keys' marine environment. It uses a predominantly non-regulatory approach by focusing on the need to educate the public, and to provide alternatives that have less impact on the environment. The management strategies include research and monitoring, education and outreach, channel marking, use of mooring buoys, volunteerism, and law enforcement coordination.

State Programs

Area of Critical State Concern

Monroe County was declared an Area of Critical State Concern in 1975 to ensure the long-term sustainability of the Keys. Issues such as protecting the natural environment and character of the Keys were a major concern. Also, the declaration was intended to address concerns for affordable housing, to maintain adequate public facilities, to support a sound economic base, to protect property rights, and to require adequate emergency planning and post disaster planning to ensure public safety. Monroe

County created the Year 2010 Comprehensive Plan to address these concerns, but after a series of legal challenges, the County was ordered to initiate a five-year work program to make planning improvements and to conduct a Florida Keys Carrying Capacity Study to assess the ability of the Keys' ecosystem to protect against the impacts of additional land development activities.

Work Study Program

The Year Six Work Plan Assessment identified six tasks:

- Continue to construct wastewater facilities in accordance with the Monroe County Wastewater Master Plan's focus and schedule of implementation.
- Initiate construction of projects outlined in the Monroe County Stormwater Master Plan.
- Implement the recommendations made in the Carrying Capacity Study.
- Complete the elimination of all cesspits in areas outside of "hot spots."
- Develop a land acquisition plan across the Keys to preserve areas of rich environmental habitat and guide future development.
- Initiate a collaborative process for the adoption of land development regulations and/or comprehensive plan amendments that will strengthen the protection of terrestrial habitat and the preservation and maintenance of affordable housing stock.

Florida Keys Carrying Capacity Study

The Florida Keys Carrying Capacity Study was completed in 2002. The study addressed habitat protection and land acquisition, rate of growth allocation, and affordable housing and funding. In order to ensure habit protection, four guidelines were suggested as a direct result of the study: (1) prevent encroachment into native habitat; (2) continue and intensify land acquisition programs, wastewater management, and restoration efforts; (3) focus on redevelopment and infill; (4) increase efforts to manage resources to effectively preserve and improve the ecological values of the remaining terrestrial ecosystems. The study also recommended that the rate of growth allocation consider the environmental sensitivity of the land based on a Tier System and be accelerated under the condition that affordable housing units be created. It was also recommended that opportunities to create and maintain affordable housing be maximized by creating public/private partnerships and buying affordable housing sites to ensure their affordable status.

Local Programs and Policies

Monroe County Comprehensive Plan

The Monroe County Year 2010 Comprehensive Plan sets forth two goals, which form the basis for protecting the working waterfront and public access to the waterfront. Goal 212 of the 2010 Comprehensive Plan directs the County to prioritize shoreline land uses and establish criteria for shoreline development in order to preserve and enhance coastal resources and to ensure the continued economic viability of the County. Goal 213 of the 2010 Comprehensive Plan directs the County to ensure adequate public access to the beach or shoreline.

Four zoning codes appear to specifically address the working waterfront: Commercial Fishing Area (CFA), Commercial Fishing Village (CFV), Commercial Fishing Special (CFS), and Mixed Use District (MU). The Commercial Fishing Area (CFA) District allows for the most intense commercial fishing operations. There are no restrictions specified for commercial fishing operations in the zoning definition. Commercial Fishing Village also allows for commercial fishing activities but they must be limited in scale. Commercial Fishing Special (CFS) District does not prohibit the commercial fishing operations already in existence, but does not encourage any new commercial fishing activities. The Mixed Use District allows for commercial fishing operations to exist if it can be reasonably integrated with other uses, and is compatible with the character of the community.

The Tier System

The Tier System was created to address the future development of land that is in private ownership and remains vacant today. The Tiers are categorized into 3 levels: (1) Natural Areas, (2) Transition and Sprawl Reduction Areas on Big Pine Key and No Name Key, and (3) Infill Area. Tier I lands can be described as environmentally sensitive lands; Tier II lands are scattered groups and fragments of environmentally sensitive lands on Big Pine Key and No Name Key; and Tier III lands are where a significant portion of land area is not characterized as environmentally sensitive, except for dispersed and isolated fragments of environmentally sensitive lands of less than four acres and meeting certain criteria. Maps depicting Tier designations have been used to overlay onto current zoning maps to determine appropriate use and intensity of future development or redevelopment.

Tier I land will receive first priority for acquisition, Tier II land and patches of tropical hardwood hammock or pinelands of one acre or greater in areas within Tier III land will receive second priority for acquisition, and Tier III lands will be third priority for acquisition, except for acquisition of land for affordable housing, which also shall be a first priority. These areas will be set aside for conservation or retirement of development rights of vacant privately-owned, buildable, platted lots within Tier I and Tier II and the acquisition of scarified and disturbed lands for affordable housing within

Tier III. The Tier system recognizes the critical need for the County to address the imbalance between development expectations of private property owners and the finite carrying capacity of the natural and man-made systems in the Florida Keys.

In unincorporated Monroe County, approximately 53,725 acres of land are subject to the Tier System. Of this acreage, 47,050 acres or 88% of the lands area are classified as Tier I. Approximately 9,785 acres of land have been identified as needing to be acquired, approximately 6,330 acres (or 65%) are classified as Tier I category, 3,363 acres (or 34%) are classified as Tier III and 92 acres (1%) are classified as Tier II.

Rate of Growth Ordinance (ROGO)

The rate of growth ordinance is based upon the ability to safely evacuate the Florida Keys in 24 hours. In 1992, it was determined that 2,550 residential permits could be added and still maintain a 24 hour standard for evacuation clearance time. Monroe County decided that permits would be allocated over a ten-year period (255 each year). In 2001, a detailed study was conducted to determine the time needed to evacuate the Keys in the event of a hurricane. It was determined that 25 hours would be needed to evacuate the keys if a category 3 or higher hurricane was approaching.

Stock Island Planning Initiatives

During the stakeholder interviews conducted for this study, it was agreed that Stock Island is one of the few remaining areas left for the commercial fishing industry in the Florida Keys. The area is considered the most significant hub for this and other maritime industries. This consensus is consistent with other public outreach and community planning processes undertaken by Monroe County Government during the past several years.

Monroe County has expended considerable effort in providing public outreach and gathering input from the Stock Island and Key Haven community as the basis for the Livable CommuniKeys Master Plan for this area. Four public workshops and meetings were held from 2003 through 2005; a survey was mailed to residents, property owners, and interested parties to help determine major issues and concerns; and numerous interviews with individuals and community leaders were conducted. In addition, public comments on drafts of the plan were received throughout the process via the County's website.

Both the current (October 2005) draft of the Stock Island and Key Haven Livable CommuniKeys Master Plan ("Master Plan," p. 19) and its companion volume, the Stock Island Harbor Preservation/Redevelopment and Intra-Island Corridor Enhancement

Plan²⁴ ("Harbor Plan," p. 17), set forth the *Community Vision Statement* as derived from these public outreach, planning, and feedback processes:

In the year 2024 we envision [...]

A diverse island community rich in residential, commercial, cultural, and recreational opportunities; where families and friends live and work together in vibrant neighborhoods. A place that maintains an affordable cost of living for people of all income levels with an emphasis on housing; that fosters a sustainable, local economy consisting of a working waterfront and a distinctive mix of commercial and industrial activities that complement the community; where recreational and community facilities enhance the cultural fabric of the neighborhoods; where its citizens understand the importance of and acknowledge the responsibility to protect our vital natural resources; where a strong sense of civic pride contributes to an ever improving quality of life (emphasis added).

With respect to preserving commercial fishing on Stock Island, the local community has voiced its opinion that commercial fishing should be preserved in the Safe Harbor/Peninsular "port" area. A variety of uses should be encouraged to attract desirable development and create diverse housing types that can support workers in the commercial fishing industry. Residents favor removing unsightly debris from the community, raising design standards, and reinforcing Stock Island's character as a "fishing village."

A number of planning objectives also emerged during the development of the Master Plan:

- Maintain affordable housing while providing a mix of housing options;
- Enhance the community identity as a "commercial fishing" community;
- Provide space for a working waterfront and its supporting industries;
- Provide and improve waterfront access;²⁵

Provide off-street parking for vehicles and boats; and

• Provide improved public facilities, including cultural and recreational facilities and activity centers.

It should be noted that the Master Plan is not designed to replace the County's Year 2010 Comprehensive Plan. Rather, it acknowledges that the community character, culture, and economy of Stock Island are intrinsically linked to the water and working

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²⁴ Wallace Roberts and Todd, LLC. Final Report dated November 30, 2005. This "Harbor Plan" will be Volume 2 of the Stock Island and Key Haven Livable CommuniKeys Master Plan.

²⁵ According to the CommuniKeys Plan (Oct. 2005 draft, p. 12), the County does not own shore-land on either Stock Island or Key Haven. This significantly limits the County in initiating the development of new publicly owned and operated shoreline access points or additional boat ramps. The one public boat ramp (located ocean-side on US 1 at approximate mile marker 5.5) is owned by FDOT for the launching of smaller boats and has very limited parking facilities.

waterfront. The Master Plan, together with the Harbor Plan, focus on the specific needs of the community by serving as a proactive planning tool with action items that must be implemented to achieve the desired development and community vision.

The Harbor Plan provides excerpts of the Year 2010 Comprehensive Plan regarding the anticipated long-term character of the port area. Specifically, the policies and objectives stated in the Ports, Aviation, and Related Facilities section of the Comprehensive Plan (Element 5, Objective 502.1, *et seq.*) are designed and intended to ensure the preservation, enhancement, and long-term viability of this critical working waterfront.

Also noteworthy are additional objectives relating to community awareness, involvement, and support, such as:

- Providing updates to the community on all aspects of plan implementation and the status of public projects in the planning area; and
- Establishing a committee to advise the Planning Commission on project proposals within the planning area, especially along the US 1 Corridor.

Taken together, these plans provide a detailed framework for sustaining the commercial fishing industry on Stock Island, while preserving and enhancing the distinct and desirable community character and a thriving working waterfront. By adopting the guiding principles and actions steps of the Marine Management Strategic Plan and implementing the many and varied plan recommendations, the Community Vision for Stock Island should be realized.

The Waterway and Waterfront Improvement Act of 2005

This section summarizes the provisions of the 2005 Waterway and Waterfront Improvement Act, Ch. 342.03, et seq., Florida Statutes, relevant to the Monroe County Marine Management Strategic Plan. The Act provides mechanisms and imposes mandates for Florida's local governments with respect to preserving and improving public water access and the working waterfront. The Act also establishes incentives, such as property tax deferral, for marine-related business/property owners to continue in that enterprise.

Public Access

- Public access must be addressed and encouraged in every future land use plan.
- Public access to waterways must be indicated in the recreational and open space element.

• Public access is encouraged in sovereign submerged lands by the Board of Trustees for the Internal Improvement Trust Fund.

Business Owners

- Allows property owners to defer ad valorem taxes and non-ad valorem assessments; provided that application and notification is made; and providing that the rate of deferral is specified, and that taxes, assessments, and interest deferred constitute a prior lien on the property. Yearly deferrals cannot be granted if the amount of deferred taxes, non-ad valorem assessments, and interest plus the total amount of all other unsatisfied liens on the property exceed 85 percent of the assessed value of the property. (Other restrictions can be found in 197.304).
- Can lease or use submerged lands to the extent that it is not contrary to the public interest, and subject to limitations in ss.253.68-253.75, for aquaculture activities.

Waterfronts Florida Program

- Establishes the Waterfronts Florida Program within the Department of Community Affairs. This program has been designed to implement the Waterfronts Florida Partnership Program in coordination with the Department of Environmental Protection. The program provides financial assistance to waterfront communities.
- The purpose of the program is to provide technical assistance, support, training, and financial assistance to waterfront communities in their efforts to revitalize waterfront areas. Effort will be directed in the following areas: (a) protecting environmental and cultural resources, (b) providing public access, (c) mitigating hazards, (d) enhancing the viable traditional economy
- Financial assistance may be provided to a limited number of eligible local governments to develop local plans to further the purpose of the program.
- Information and technical assistance will also be made available for preserving traditional recreation and commercial working waterfronts.

State Government

• Requires the Department of Environmental Protection and water management districts to adopt programs to expedite the processing of wetland resource and environmental resource permits for marina projects that reserve at least 10 percent of available boat slips for public use.

- Requires the Department of Environmental Protection to develop procedures and requirements governing the Waterfronts Florida Partnership program eligibility, application procedures, and application review.
- The Department of Environmental Protection must help implement the efforts of the Waterfronts Florida Program.
- The Board of Trustees of the Internal Improvement Trust Fund shall encourage the use of sovereign submerged lands for water-dependent uses and public access.
- Allows submerged lands and water column to be leased or used for aquaculture activities.
- The Department of Environmental Protection, in coordination with the Fish and Wildlife Conservation Commission must undertake a study evaluating the current use of state parks for purposes of recreational boating and identify opportunities for increasing recreational boating access within the state park system.

Local Government

- Requires future land use plan element to include criteria to encourage the preservation of recreational and commercial working waterfronts; including public access to waterways within those items indicated in a recreational and open space element.
- Must provide an annual report to the Fish and Wildlife Conservation Commission enunciating the state's interest in maintaining recreational and commercial working waterfront (certain counties can be exempted).
- Allows counties to adopt tax deferral ordinances for recreational and commercial working waterfront properties if the owners are engaging in the operation, rehabilitation, or renovation of such properties.
 - The ordinance must designate the type and location of working waterfront property for which deferrals may be granted, must specify that such deferrals apply only to taxes levied by the unit of government granting the deferral.
 - The ordinance must specify that any deferral granted remains in effect regardless of any change in authority of the county or municipality to grant the deferral
 - The ordinance must require that the use and ownership of the property as a working waterfront must be maintained over the period for which the deferral is granted.

- If the application for deferral is granted on a property that is located in a community redevelopment area, the amount of taxes eligible for deferral shall be reduced.
- The recreational and open space element of a comprehensive plan must indicate areas where public access to waterways can be achieved.
- The coastal management element of a comprehensive plan must include strategies that will be used to preserve recreational and commercial working waterfronts.
- Allows submerged lands and water column to be leased or used for aquaculture activities.
- Allows Waterfront communities to apply for the Waterfronts Florida Partnership and gain the benefits thereof.
- Counties that demonstrate through an annual detailing accounting report of vessel registration revenues that at least \$1 of the registration fees were spent on boating infrastructure shall only be required to transfer the first \$1 of the fees to the Save the Manatee Trust Fund.

Fees

Revises the distribution of vessel registration fees to create a trust fund used for making grants to fund public launching facilities for. Specifically, \$1 of the Manatee Trust Fund is remitted to the state for deposit into the Marine Resources Conservation Trust Fund to fund a grant program for public launching facilities, giving priority to counties with more than 35,000 registered vessels.

Definitions Under the Act

Recreational and commercial working waterfront means a parcel or parcels of real property that provides access for water-dependent commercial activities or provide access for the public to the navigable waters of the state. Recreational and commercial working waterfronts require direct access to or a location on, over, or adjacent to a navigable body of water. The term includes water-dependent facilities that are open to the public and offer public access by vessels to the waters of the state or that are support facilities for recreational, commercial, research, or government vessels. These facilities include docks, wharfs, lifts, wet and dry marinas, boat ramps, boat hauling and repair facilities, commercial fishing facilities, boat construction facilities, and other support structures over the water.

Aquaculture means the cultivation of aquatic organisms and associated activities, including, but not limited to, grading, sorting, transporting, harvesting, holding, storing, growing, and planting.

Aquaculture Activities means any activities, as determined by board rule, related to the production of aquacultural products, including, but not limited to, producing, storing, handling, grading, sorting, transporting, harvesting, and aquaculture support docking.

Waterfront Community means a municipality or county that is required to prepare a coastal element for its local government comprehensive plan.

Section 5: Recommendations for Preserving the Working Waterfront

Mission Statement, Guiding Principles, Strategies and Actions Steps

Monroe County is experiencing the loss and redevelopment of waterfront marine facilities and their associated businesses and employment. A limited supply of waterfront land and an increasing demand by different uses is the driving force behind the apparent change in waterfront properties. One challenge is the loss of the 'working waterfront,' which includes commercial marinas, boatyards, wet and dry storage, fish houses, commercial fishing vessel dockage, and marine-related industries such as boat dealers, boat repair and maintenance services, commercial fishing, and tourism. The current trend is a transition to non-water-dependent uses (e.g., condominiums) and exclusive use (e.g., private marinas).

To help address these issues, the Monroe County Board of County Commissioners should consider adopting the Mission Statement, Guiding Principles and Action Steps for implementation as set forth below. At a minimum, the statutory mandates of the Waterway and Waterfront Improvement Act (Act) of 2005 should be given due consideration.

Mission Statement

A sustainable number of public waterfront access points, together with recreational and commercial fishing industries and related support facilities, shall be sustained at various points throughout Monroe County.

Principle 1 – <u>The Waterway and Waterfront Improvement Act of 2005, Ch. 342, Fla. Stat., is fully implemented in Monroe County.</u>

ACTION STEPS

- (1) As soon as practical, but not later than the next Evaluation and Appraisal Report, include the following elements in the Monroe County Year 2010 Comprehensive Plan.
 - (a) An amended Future Land Use Element that includes regulatory incentives and criteria to encourage the preservation of recreational and commercial working waterfronts.²⁶

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²⁶ Section 342.07(2) of the Act provides:

- (b) An amended Recreation and Open Space Element that presents a comprehensive system of public and private sites for recreation, including public access to beaches, open spaces, waterways, and other recreational facilities.
- (c) An amended Coastal Management Element based on updated studies, surveys, and data and which is consistent with current resource plans prepared and adopted under general or special law.
 - i. A Shoreline Use Component within the Coastal Management Element must identify public access to beach and shoreline areas and must address the need for water-dependent and water-related facilities, including marinas, along shoreline areas.
 - ii. The Shoreline Use Component must also include strategies for preserving recreational and commercial working waterfronts.
- (2) Consider adopting an ordinance that grants ad valorem tax deferrals for recreational and commercial working-waterfront properties if the property owners are engaging in the operation, rehabilitation, or renovation of such properties (subject to guidelines specified in the Act). (Municipalities are also authorized to enact similar ordinances.)
 - (a) Ad valorem tax deferrals and non-ad valorem assessments may be authorized in general for recreational and commercial working waterfront properties.

[T]he term "recreational and commercial working waterfront" means a parcel or parcels of real property that provide access for water-dependent commercial activities or provide access for the public to the navigable waters of the state. Recreational and commercial working waterfronts require direct access to or a location on, over, or adjacent to a navigable body of water. The term includes water-dependent facilities that are open to the public and offer public access by vessels to the waters of the state or that are support facilities for recreational, commercial, research, or governmental vessels. These facilities include docks, wharfs, lifts, wet and dry marinas, boat ramps, boat hauling and repair facilities, commercial fishing facilities, boat construction facilities, and other support structures over the water.

- (b) The ordinance must designate the type and location of working-waterfront property for which deferrals may be granted, and must specify that such deferrals apply only to taxes levied by the unit of government granting the deferral.
- (c) The ordinance must specify that any deferral granted remains in effect regardless of any change in authority of the county or municipality to grant the deferral.
- (d) The ordinance must require that the use and ownership of the property as a working waterfront must be maintained over the period for which the deferral is granted.
- (e) If the application for deferral is granted on a property that is located in a community redevelopment area, the amount of taxes eligible for deferral is to be reduced.
- (3) Coordinate with the Florida Department of Environmental Protection and the Florida Fish and Wildlife Conservation Commission (FWC) to inventory and evaluate the use of state parks (e.g., Bahia Honda State Park and John Pennekamp State Park) for the purposes of recreational boating and identify opportunities for increasing recreational boating access within the state park system. (A related provision under the Act is that the State Board of Trustees of the Internal Improvement Trust Fund is to encourage the use of sovereign submerged lands for water-dependent uses and public access.)
 - (a) Identify appropriate locations for the expansion of existing recreational boating access, as well as areas for new recreational boating access.
 - (b) Consider environmental and wildlife values in addition to cost estimates of proposed expansions and new construction of boating facilities at state parks.
- (4) Demonstrate through an annual detailed accounting report to FWC of vessel registration revenues that at least \$1 of each vessel registration fee was spent

on boating infrastructure. If this is shown, the County transfers only the first \$1 of each fee to the Save the Manatee Trust Fund.

Principle 2 – <u>Monroe County fully participates in the Waterfronts Florida Program established by the Waterway and Waterfront Improvement Act of 2005.</u>

<u>ACTION STEPS</u>

Participate in the Waterfronts Florida Program within the Florida Department of Community Affairs. This initiative provides financial assistance to waterfront communities.²⁷ Effort is to be directed in the following areas:

- protecting environmental and cultural resources,
- providing public access,
- mitigating hazards, and
- enhancing the viable traditional economy.
- (1) Obtain available information and technical assistance for preserving traditional recreational and commercial working waterfronts.
- (2) Apply for support, training, and financial assistance under the program in the effort to revitalize waterfront areas.
- (3) Seek available financial assistance under the program to develop local plans in furtherance of program goals and objectives.

Principle 3 – <u>In addition to the requirements of the Waterway and Waterfront Improvement Act of 2005, a combination of existing tools, strategies, and legal mechanisms works effectively to preserve the working waterfront in Monroe County.</u>

<u>ACTION STEPS</u>

(1) Adhere to existing policies in the Monroe County Year 2010 Comprehensive Plan and zoning regulations that set waterfront use priorities. For example:

²⁷ Under the 2005 Act, "waterfront community" means a municipality or county required to prepare a coastal element for its local government comprehensive plan.

- (a) Goal 212 of the Monroe County Year 2010 Comprehensive Plan directs the County to prioritize shoreline land uses and establish criteria for shoreline development to preserve and enhance coastal resources and to ensure the continued economic viability of the County.
- (b) Goal 213 of the Year 2010 Comprehensive Plan directs the County to ensure adequate public access to the beach or shoreline.
- (c) Four zoning designations specifically address the working waterfront in unincorporated Monroe County: Commercial Fishing Area (CFA), Commercial Fishing Village (CFV), Commercial Fishing Special (CFS), and Mixed Use (MU).
- (2) Continue to ensure adequate enforcement and successful implementation, through intergovernmental coordination, of the following:
 - (a) Florida Keys National Marine Sanctuary Protection Act
 - (b) Marine Zoning
 - (c) Area of Critical State Concern
 - (d) Florida Keys Carrying Capacity Study
 - (e) The Tier System
 - (f) Livable CommuniKeys Program for Big Pine/No Name Key, Tavernier, Key Largo, and Stock Island/Key Haven
- (3) Explore the use of licensing and user fees for visitors in conjunction with an education program on use of marine facilities and their importance to the Florida Keys.

Principle 4 – <u>New strategies are implemented to preserve and enhance the working waterfronts, as well as public water access, throughout Monroe County.</u>

<u>ACTION STEPS</u>

(1) Pursue and adopt a "No Net Loss" policy to protect both public access and displaced marine-related industries.

- (2) Examine the feasibility of using Transfer and/or Purchase of Development Rights to address the No Net Loss goal. For example, the County could buy development rights on privately owned marinas to keep them from being redeveloped into condominiums.
- (3) Focus on the commercial nodes of water-dependent marine-related uses throughout the Keys for government to purchase outright with potential lease-back to fishing cooperatives or other industry partnerships.
- (4) Develop viable partnerships with the private sector to help preserve the working waterfront.
- (5) Explore a countywide bond issue as a source of funding to improve existing county parks and public boat ramps to enhance recreational boating access.
- (6) Acquire land through the Monroe County Land Authority for waterfront access and waterfront uses. Land could also be aggregated for resale with the condition that the land be used only for waterfront access and waterfront uses.
- (7) Consider other tools and mechanisms such as:
 - (a) subsidies for the commercial industries similar to those available to agriculture
 - (b) tax credits
 - (c) conservation easements
 - (d) restrictive covenants
 - (e) fees and permits
 - (f) a toll on US 1
 - (g) flexible land use
 - (h) land trusts
 - (i) blue- and green-belting
 - (j) community redevelopment area designation
- (8) Partner with the Florida Department of Transportation to study the volume

of trailerable boats entering Monroe County to help characterize boat use and the capacity of the Keys to accommodate and provide services to these boaters.

Principle 5 – <u>Public lands along the shoreline, including marinas and boat ramps, provide opportunity for public water access.</u>

ACTION STEPS

- (1) Preserve, protect, and enhance all existing public access opportunities, sites, and facilities along the shoreline. (This is in addition to the mandates of the Waterway and Waterfront Improvement Act of 2005 that address public water access, as noted above.)
- (2) Consider linking access points or nodes throughout the Keys using a variety of economic and commercial activities (e.g., shoreline restaurants and attractions, boat tours, ecotours) and transportation modes (e.g., bus, water taxis, bicycles, boats). People should be made aware of access points via improvements in signage and information about public transportation to these destinations, which may offer a mix of uses.
- (3) Transform parcels of the shoreline currently planned for more intense development into space for activities that are water-dependent or water-related with green space that enhances habitat and public access.
- (4) Encourage the use of waterfront property for habitat restoration, public access, or where appropriate, job-producing, water-dependent commercial activity that is compatible with environmental protection.
- (5) Plan for future opportunities for new public recreational and educational experiences on public lands, causeways, and public parks abutting the shoreline. Public lands include local, state, and federal access points. Responsible use of the waterfront is subject to carrying capacity. In addition, infrastructure in these areas should accommodate existing and future public needs.

Principle 6 – <u>Marine facilities and users are considered in preparedness, hazard mitigation and response efforts with respect to emergency management planning.</u>

ACTION STEPS

- (1) Conduct an in-depth countywide vulnerability assessment of multiple hazard risks that is geographically detailed and comprehensively addresses the waterfront and the social and economic dimensions of the marine industry.
- (2) Coordinate and expedite training for local private and not-for-profit service providers, which play important roles in the recovery and long-term planning processes.
- (3) Develop a public information program to inform consumers of hazard risks and potential strategies, such as secure mooring, removal of vessels from high hazard areas, and emergency planning.
- (4) Participate in proposed state review of coastal high hazard programs and policies that impact the County's barrier islands.
- (5) Revise long-term policies and plans regarding hazard mitigation/postdisaster redevelopment of working waterfront facilities.
- (6) Consider land acquisition as a hazard mitigation measure in areas most vulnerable to storm surge.

Principle 7 - <u>The Stock Island and Key Haven Livable CommuniKeys Master Plan will be fully implemented.</u>

ACTION STEPS

- (1) Complete and adopt the plan.
- (2) Acquire waterfront property, preferably with existing infrastructure to support commercial fishing.
 - Explore and pursue partnerships and funding sources for land acquisition.
 - Lease acquired commercial fishing property back to a broad-based coalition of commercial fishing interests, such as a co-op.

- Require easement agreements for commercial fishing on waterfront property through the development/redevelopment approval process.
- Amend the Land Development Regulations to eliminate the list of permitted uses that are not consistent with the purpose of the zoning district.²⁸
- (3) Implement the recommendations of the Master Plan Volume 2 (i.e., the Harbor Preservation/Redevelopment and Intra-Island Corridor Enhancement Plan).

By implementing these action steps, Monroe County will establish policies and procedures for maintaining the working marine industry and its various components in the Florida Keys, continuing its commitment to the history and culture that makes the Keys unique, and maintaining a valuable resource that is essential to the Keys quality of life.

²⁸ Commercial fishing is permitted in both the Maritime Industrial zoning classification and the Mixed Use District on Stock Island, but this is of concern because those zones also allow for commercial and residential uses.