

GOAL III A

Promote Safe Navigation

Florida has been blessed with an abundance of beautiful waters, miles of striking coastlines, and overall natural splendor that attracts visitors from around the world. One of the major ways people get out and enjoy this outdoor environment is boating. Florida waterways have seen increased boating and water related recreational activity each year. Ranking first in the nation in registered boaters with 1,027,043 in 2007 and an estimated 2 million by 2060 with an additional 350,000 unregistered boaters actively using Florida's waterways, the state is the number one U.S destination for marine recreation (Sidman, Charles and Associates, 2007). While this has had an overall positive economic affect on the state, contributing more than 18 billion dollars in 2005, increased boating activity has negatively impacted sensitive environmental areas and critical ecological habitats (Sidman, Charles and Associates, 2007). With recent state population projections, waterway usage throughout the state is going to increase, so too will the demand for "enhanced public access, maintenance of waterway infrastructure, public safety, and environmental protection (Sidman, Charles and Associates, 2007)."

Expansive waterways and miles of coastline pose a serious challenge for Florida Law enforcement officials and those that promote safe and responsible waterway use and navigation. Along with the designation of having the most registered boaters of any state, Florida also has the highest number of boating related fatalities annually (FWC, 2008). In 2008 alone, there were 657 reported boating related accidents and 77 deaths (FWC, 2008). Exacerbating the problem is the population growth rate of the state. As population continues to increase, and as more and more boaters find their way onto Florida waterways, so too will the number of boating related accidents and fatalities. Out of the 657 known accidents in 2008, 72% of all operators reported as having had no formal boater education (FWC, 2008). With the expected influx of new boaters from all experience levels, the need arises for increased boater safety education and a concerted effort to promote safe navigation.

Brevard County is second to none in the state when it comes to natural beauty. Extending 75 miles from North to South, the county's abundant natural resources include pristine coastlines and wetlands, native habitats, seagrass beds, an array of wildlife, and an extensive waterway system which includes the Indian River Lagoon, a National Estuary and the most biologically diverse estuary in North America (Fish and Wildlife Research Institute, 2005). Outdoor enthusiast throughout the county, state, and country flock to Brevard County each year to experience and enjoy these unique and diverse natural features. More than 103,000 vessels are registered to residents in the four county area of Brevard, Seminole, Orange, and Osceola, with more than 40,000 in Brevard County alone, a 73% increase since 1985 (Florida Department of Highway Safety, 2008). Along with increased use of county waterways, are increased environmental impacts and stress on sensitive ecological habitats. Promoting safe navigation will help the county achieve that balance between environmental, economic, and recreational priorities it is seeking in developing the Comprehensive Maritime Management Master Plan.

According to the 2008 Boating Accidents Statistical Report, Brevard County ranks 8th out of the top 10 counties for boating related accidents, up one spot from the 2007 report (FWC, 2008). Causes for the reported accidents ranged from alcohol use to no proper look-out, ending in among other things, collisions with other vessels and fixed objects. These numbers and the county's current number eight ranking are likely to increase. Brevard County is experiencing the same population growth as the rest of the state. As more people relocate to the county, the number of new boaters on county waterways will also likely increase. The promotion of safe navigation is not only crucial to the reducing human related accidents, it is also imperative in protecting the County's abundant natural resources. Meeting this challenge will help the county in attaining long term economic vitality while preserving its coastal resources (Sidman, Charles and Associates, 2007).

DRAFT

Potential Funding Sources

Ad Valorem Taxes
Corporate Gross Receipts Tax
Corporate Income Tax
General Sales Tax
Rental Car Tax
Boat Rental Tax
Tourist Development Tax
Watercraft Sales Tax
Real Estate Transfer Tax
Special Assessments Tax
Boater Registration Fees
License Fees
Recreational Fees
General Obligation Bonds
Revenue Bonds
Fines and Penalties
Direct Donations
Coastal Zone Management Administration Awards
Endangered Species Conservation Grants
Wildlife Restoration Grants
Sport Fish Restoration Grants
Boating Infrastructure Grant
Florida Boating Improvement Program
FWS CWPPRA-National Coastal Wetlands Funds
FWS Coastal Program Funds
NOAA Community Based Direct Solicitation
NOAA FishAmerica Foundation
NOAA Marine Debris and Technology Program
The Nature Conservancy
National Estuary Program CPR Grants
Coastal Counties Restoration Initiative
Community Based Marine Debris Prevention and Removal Grants
Coastal Partnership Initiative (FI Coastal Management Program)
NRCS Conservation Innovation Grants
Indian River Lagoon License Plate Fund
Indian River Lagoon Workplan Projects
Florida Inland Navigation District Waterway Assistance Program

Remove Navigational Hazards

Overview of Actions

IIIA1-a Streamline process to identify, investigate, and remove derelict vessels

IIIA1-b Maintain waterway channels through dredging and by posting and maintenance of private aids to navigation

OBJECTIVE IIIA1

Remove navigational hazards

RELATED IRL CCMP ACTIONS

MB-6 Expand and coordinate enforcement of boating safety and resource protection regulations throughout the Indian River Lagoon

PRIORITY PROBLEM

According to the *2008 Boating Accidents Statistical Report*, published by the Florida Fish and Wildlife Conservation Commission, 47% of all boat-related accidents involved running into another vessel, collision with a fixed object, or running aground hard (FWC, 2008). There are approximately 70 miles of navigable waters of the Indian River Lagoon located within Brevard County. Navigational hazards pose a serious threat to commercial and recreational boaters frequenting the IRL and county waterways. Boating is an important economic contributor to the County and derelict vessels are seen as a detractor to the enjoyment of boating on Brevard County waterways. In the 2007 report, *A Recreational Boating Characterization of Brevard County*, the authors posed two questions to boaters who frequent County waters, “what detracts from your boating experience and what is needed to improve your boating experience (Sidman, Charles and Associates, 2007).” Derelict vessels were reported as being both a safety issue and as having a negative environmental impact to the overall enjoyment of the boating experience (Sidman, Charles and Associates, 2007).

Survey responses from the 2007 report indicate that, “the removal of sunken boats and derelicts were of greatest concern to marina users and ramp users respectively (Sidman, Charles and Associates, 2007).” Removing derelict vessels is a time consuming, costly process that can take as long as nine months and up to two years once a derelict vessel has been identified. Improving the way the county handles the process for identifying, investigating, and removing derelict vessels will benefit those boaters two-fold. First and foremost, it will improve the efficiency in which these navigational hazards are removed, advancing boater safety. Secondly, it will enhance boater experience by removing an environmental detractor many boaters feel takes away from their overall enjoyment while boating on Brevard County waterways.

Derelict vessels are not the only navigational hazard affecting boaters throughout Brevard County waterways. Looking back at the *2008 Boating Accidents Statistical Report*, 47% of reported accidents involved a collision with another object (FWC, 2008). Included in the

responses, were accidents and damages related to running aground hard. Sediment build-up is an inevitable occurrence, not only in Florida waterways, but throughout the United States. The US Army Corps of Engineers dredges and disposes of approximately 300 million cubic yards of dredged material annually for navigational improvement and maintenance projects (US. EPA, 2007).

There is a concern over the lack of navigational dredging in Brevard County, evidenced in the 2007 study, *A Recreational Boating Characterization of Brevard County*. Making the list of detractors, negating the boating experience, was lack of dredging. Survey respondents reported the problem as a lack of channel dredging or shoaling in the Intercostal Waterway and Banana River channels, and poorly maintained residential canals and creeks (Sidman, Charles and Associates, 2007). The need for more dredging ranked 8th out of 46 issues survey respondents were able to report on in the 2007 study (Sidman, Charles and Associates, 2007). The county dredging program which is primarily restricted to District 2, lacks funding and a long term maintenance schedule. The Florida Inland Navigation District's Waterway Assistance Program has a grant available to local governments for navigation channel dredging, channel markers, and navigational signs (MIASF, 2001). Improvement in navigational dredging will improve boater satisfaction throughout Brevard County Waterways.

Posting and maintaining private aids to navigation is one of those responsibilities that can and does improve navigation and boater safety. There are needs for improvement in the overall compliance with current regulations regarding posting private aids to navigation. These aids not only promote safe navigation, they are also important in protecting natural resources and critical environmental habitat. The posting and maintenance of private aids to navigation, the removal of derelict vessels, and dredging of waterway channels are important issues in promoting safe navigation throughout Brevard County waterways. Improvement in these categories will help Brevard County fulfill its own goals of maintaining and supporting a significant part of its economic well-being, improving recreational experiences, all while preserving the integrity of its coastal resources.

Estimated Costs

Associated costs to remove derelict vessels include approximately \$5,000 per vessel removal, as well as costs and time associated with the permitting process. The costs for posting and maintain signs include charges for signs and installation fees. According to Brevard County Public Works Department, dredging costs can range anywhere from \$12.00 to \$150.00 per cubic yard.

Task IIIA1-a

Streamline process to identify, investigate, and remove derelict vessels

BACKGROUND AND EXPECTED BENEFITS:

The processes to identify, investigate, and remove abandoned and derelict vessels is both costly and time consuming. The entire process to remove as few as eight boats can take as long as nine to 24 months. There are multiple permits that must be acquired as well as a lengthy bid process to establish a contractor to remove these vessels. Streamlining or simplifying this process will make the removal of derelict vessels much more efficient, reduce costs, and help to free up county resources.

PRIORITY:

The working group recommends a priority rating of HIGH.

HOW:

Establish a single point of contact through email, website, or phone number which will be available to the public to identify and report derelict vessels. Post information at all boat ramps and points of entry on reporting derelict vessels and advertise what to do with or about derelict vessels. Lobby for the development of a web enabled system for all statewide marine law enforcement to improve the investigation process and reduce administrative functions. This web system may also be accessed by the county and municipal personnel as well as the general public as a place to review and report derelict vessels. To improve the process for hiring contractors to remove derelict vessels, the working group suggests that Brevard County establish a pre-approved vendor list, develop longer term contracts, and contracts based on services provided rather than costs. To improve efficiency of derelict vessel removal the working group suggests creating partnerships with permitting agencies to streamline the permit process. Lastly, providing a consistent funding source will make the overall process of removing derelict vessels more efficient.

WHO:

Primary:

United States Coast Guard
Florida Fish and Wildlife Conservation Commission
Brevard County
Brevard County Sheriff's Office
City of Melbourne

Secondary:

NOAA
FEMA
United States Army Corp of Engineers
Florida Department of Environmental Protection
St Johns River Water Management District

Florida Inland Navigation District
Indian River Lagoon National Estuary Program
Canaveral Port Authority
Municipalities
Power Squadron
United States Coast Guard Auxiliary
Yacht Clubs

WHERE:

Throughout Brevard County Waterways

MEASURE OF PROGRESS:

1. Timeline based reduction of 50% of the time it takes to identify and remove derelict vessels
2. Consistency and sufficiency of the amount of dedicated funding
3. Reduction in the number of yearly permits and grant applications

RELATED CM3P ITEMS:

IVA Safe and Proper Operation

IVA1-f Alert boaters to navigational hazards, especially fixed objects not visible at night

ESTIMATED COSTS AND IMPLEMENTATION TIMELINE FOR TASK

To be determined

NOTES

Working group members expressed concerned over other submerged navigational hazards and streamlining the process for identifying and removing these as well (i.e. submerged piles). The Group also recommended the county establish "free" program that provides citizens a place to drop off "pre-derelict" vessels, specifically the county dump and one at a working waterfront (Amnesty Program). Lastly, members of WG III recommend the development of a Hurricane Response Plan as a prevention and reduction tool for derelict vessels.

Task IIIA1-b

Maintain waterway channels through dredging and by posting and maintenance of private aids to navigation

BACKGROUND AND EXPECTED BENEFITS:

The county dredging operation is primarily limited to District 2, outside of this district any maintenance dredging is self funded and done through a partnership with an outside agency such as the Army Core of Engineers. Lack of funding to acquire the proper equipment, train staff, and maintenance up keep has limited the amount of dredging the county does and therefore the demand far exceeds the ability to supply the service.

The posting and maintenance of private aids to navigation is essential to boater safety within Brevard County Waterways and is a slow and expensive process. The initial posting, maintenance, and replacement of these signs can be expensive. This creates a negative situation, not only for boaters but for the County's natural resources. Improved maintenance requirements and overall compliance with posting navigational aids will help to promote boater safety and serve to protect the abundant natural resources of Brevard County.

PRIORITY:

The working group recommends a priority rating of MEDIUM.

HOW:

Establish a system for the public to report dredging needs. This can be achieved either through web based applications or a phone number available to the public. The working group suggests the development of a short and long term dredging plan and related maintenance schedule. Establish funding source and/or assessment method and schedule for dredging projects through taxes already collected or an equitable assessment from waterfront property owners.

Advertise regulations in all available media outlets, through homeowner associations, for do-it-yourself posting and maintenance of private aids to navigation. Ensure that all markers are properly permitted, if not, improve compliance through coordination with enforcement entities and seek penalties for failure to maintain private aids.

WHO:

Primary:

United States Environmental Protection Agency
United States Army Corp of Engineers
Florida Inland Navigation District
Canaveral Port Authority
Florida Department of Environmental Protection
Sebastian Inlet District
Municipalities
Brevard County

Marinas

Secondary:

United States Fish and Wildlife Service
NOAA
Patrick Air Force Base
Canaveral Air Force Station
United States Coast Guard
Florida Department of Transportation
Florida Fish and Wildlife Commission
St Johns River Water Management District
Florida Marine Contractors Association
Indian River Lagoon National Estuary Program
Marine Resources Council
Yacht Clubs

WHERE:

Throughout Brevard County Waterways

MEASURE OF PROGRESS:

1. Develop priority plan for short and long term dredging projects
2. Distribution of educational material to home owners, which would include pamphlets, flyers, and other various printed material
3. Develop maintenance reports and schedule and ensure that the report is turned in and evaluated

RELATED CM3P ITEMS:

IB1-b Remove muck from interior waterways (embayments and tributaries)

IVA Safe and Proper Operation

IVA1-f Alert boaters to navigational hazards, especially fixed objects not visible at night

ESTIMATED COSTS AND IMPLEMENTATION TIMELINE FOR TASK

Estimated costs for dredging range from \$12.00 to \$150.00 per cubic yard.

NOTES

The Working Group also recommends establishing an educational program for owners on the use of fertilizers and shoreline stabilization techniques and their impacts on channels and the Indian River Lagoon.

Increase awareness of navigational hazards

Overview of Actions

- IIIA2-a* Improve signage related to navigation and safety zones
- IIIA2-b* Mark shoals and environmentally sensitive areas
- IIIA2-c* Produce, update, and distribute navigational information in all available media

OBJECTIVE IIIA2

Increase awareness of navigational hazards

RELATED IRL CCMP ACTIONS

MB-8 Establish resource protection zones in the Indian River Lagoon

PRIORITY PROBLEM

Signage throughout Brevard County waterways regarding safe navigation and providing educational information can be confusing, difficult to read, in poor locations, or absent where needed. These signs are critical in making boaters aware of navigational hazards and in protecting important environmental habitat. Continued pressures from boating related activity is negatively impacting many of the coastal resources that attract the multitude of boaters to Brevard County waterways. Increasing awareness of navigational hazards is not only important in advancing boater safety, but also in preserving the ecological integrity of the Indian River Lagoon.

There are multiple agencies posting signs throughout Brevard County waterways. In the 2007 study, *A Recreational Boating Characterization of Brevard County*, one of the principle problems that survey respondents reported relating to infrastructure shortcomings was the lack of, or confusing and poorly maintained channel marks and waterway signs, even indicating that well marked channels signified a reason for selecting a favorite route (Sidman, Charles and Associates, 2007). Among the other responses from survey takers in the 2007 study include the need for better lit channel markers, and clearer, less ambiguous speed restriction signs (Sidman, Charles and Associates, 2007). The results from the boater study clearly indicate a need for the improvement of signage related to navigation and safety zones. This enhances boater satisfaction, reduces confusion, and aids in the protection of coastal resources.

Along with improving signage, marking shoals and other environmentally sensitive areas will help in the promotion of boater safety and in the protection of critical marine and coastal habitat. The Indian River Lagoon is one of the most productive estuaries in North America and the primary habitat of concern is seagrass bed communities (US EPA, 2007). Seagrass beds

offer a wide variety of ecological services, including enhancing water quality by removing nutrients, providing habitat and nursery for fisheries, and are a food source for the endangered Florida Manatee. According to the *2007 National Coastal Condition Report* the largest area of poor seagrass coverage, a 70% loss, within the Indian River Lagoon, extends from Cocoa to the Melbourne/ Palm Bay area in Brevard County (US EPA, 2007). Some of this loss can be attributed to boating related activities. Prop scarring and damage from anchoring are two main contributors of seagrass bed degradation within the Indian River Lagoon. Marking this environmentally sensitive habitat and any others will be essential in maintaining and protecting Brevard County's coastal resources.

There are very few resources available to boaters regarding navigational information. The development of such a resource tool and reaching as many people as possible, utilizing all available media, will help to increase the awareness of navigational hazards throughout Brevard County waterways. The Florida Inland Navigation District currently offers a grant to local municipalities to develop and distribute navigational information. Utilizing this resource, The Marine Industries of South Florida have developed and distributed the Broward County Safe Boating Guide, which includes detailed maps on navigational hazards, and sensitive environmental areas (MIASF, 2001). Producing and distributing this type of material will be critical as the population in Brevard County rises, increasing boating related accidents and intensifying stressors on coastal resources.

In a 2006 survey conducted by Florida Fish and Wildlife Commission, 72% of all boaters in Florida would like to see more educational information regarding safe navigation and understanding navigational rules (FWC, 2006). There is a clear need amongst boaters to address these problems. Confusing or unreadable signage, poorly marked shoals and sensitive environmental habitat, and lack of navigation related information only exacerbates the problem. Boaters and outdoor enthusiasts alike come from all regions to enjoy Brevard County waterways and its unmatched natural beauty. Promoting safe navigation by making boaters aware of navigational hazards and other important environmental habitats will help to ensure that their experiences here are positive. Boating and water-related activities are major economic contributors to Brevard County. Protecting these economic, recreational, and environmental resources will be critical in maintaining and promoting the future growth of the region.

Estimated Costs

Estimated costs include \$70-\$120 per sign for normal formats. Piles are estimated at approximately \$200-\$300, with charges of \$300-\$500 for installation depending on the number of pilings needing to be installed. Marker buoys cost approximately \$250 a piece. County personnel, which include costs for fuel and time, can do most of the install work except pile installation.

Task IIIA2-a

Improve signage related to navigation and safety zones

BACKGROUND AND EXPECTED BENEFITS:

Signage related to navigation and safety zones are important tools in keeping boaters safe. However, these signs can be cumbersome, difficult to understand, in poor locations, or are often unreadable. There are multiple agencies posting multiple signs which can be confusing, even to the savviest of boaters. Improving signage will help to eliminate confusion, increase boater safety, protect natural resources and make boating in Brevard County a more enjoyable experience.

PRIORITY:

The working group recommends a priority rating of MEDIUM.

HOW:

Identifying specific shortcomings with current signage will reveal where and what are, the greatest problems related to current signage. Once these problems are identified, the County can reduce cumbersome sign messages, or change regulations regarding sign postings. Safety zone signage can be made uniform at the state level, at minimum, throughout Brevard County. Using advances in technology, safety zone information can be development for use in GPS units or other various mobile devices. This would eliminate the need for more markers. Essential to this process will be educating boaters. The County along with local organizations such as the Coast Guard Auxiliary and Sail and Power Squadron could collaborate with local educational programs for boat operator certification and to instruct/educate boaters on sign meaning.

WHO:

Primary:

United States Fish and Wildlife Service
Patrick Air Force Base
United States Coast Guard
NASA
Florida Fish and Wildlife Commission
Canaveral Port Authority
Sebastian Inlet
Brevard County
Municipalities

Secondary:

Canaveral Air Force Station
United States Army Corp of Engineers

St Johns River Water Management District
Florida Inland Navigation District
Florida Department of Environmental Protection
Florida Department of Transportation
Seven Seas Cruising Association
Citizens for Florida's Waterways
Marine/ Agricultural Extension Service
Sail and Power Squadron
United States Coast Guard Auxiliary
Yacht Clubs
Marinas

WHERE:

Throughout Brevard County Waterways

MEASURE OF PROGRESS:

1. Identification of all types of County waterway signage.
2. Liaison and establish program with educational coordinators from the Coast Guard Auxiliary and Sail and Power Squadron.
3. Reduction in boating related accidents.
4. Reduction in additional boat prop scarring of seagrass beds.
5. Reduction in boating related manatee mortality.
6. Fewer tickets issued by law enforcement agencies.
7. GPS coordinates developed and adopted.

RELATED CM3P ITEMS:

- IIIA** Promote Safe Navigation
IIIA2-b Mark shoals and other environmentally sensitive areas
IIIA2-c Produce, update, and distribute navigational information in all available media
IVA1-f Alert boaters to navigational hazards, especially fixed objects not visible at night
VA3-a Establish consistent design and placement regulations for signage

ESTIMATED COSTS AND IMPLEMENTATION TIMELINE FOR TASK

Signs costs range from \$70-\$120 for normal formatting, plus installation and maintenance which can be done by County personnel. Costs for printing educational material can be obtained from a local printing company. Implementation timeline is partially dependent upon the coordination with visiting agencies and is to be determined.

NOTES

Task IIIA2-b

Mark shoals and environmentally sensitive areas

BACKGROUND AND EXPECTED BENEFITS:

Many shoals and environmentally sensitive areas in Brevard County waterways are unmarked. Marking these areas is not only important in ensuring boater safety but also in preserving the county's abundant natural resources. Developing signage or additional warning systems to alert boaters of these areas will help to improve boater safety and protect important Indian River Lagoon fishery resources and preserve overall ecosystem health.

PRIORITY:

The working group recommends a priority rating of MEDIUM.

HOW:

An annual county wide inventory of seagrass bed mapping will help to ensure the marking of this critical habitat. This process can be in collaboration with the FWC, FDEP, and SJRWMD. Related surveys are currently done periodically by these agencies and their partners. Once the environmentally sensitive areas have been inventoried and identified, universal marker signage can be developed to reduce confusion and improve boater safety. Advise the United States Coast Guard of the location of shoals, seagrass beds, and other environmentally sensitive areas. Use advances in technology to provide GIS and GPS points to mobile satellite and map making devices reducing the need for more markers.

WHO:

Primary:

US Coast Guard
Florida Fish and Wildlife Commission
St Johns River Water Management District
Indian River Lagoon National Estuary Program
Florida Department of Environmental Protection
Brevard County

Secondary:

United States Fish and Wildlife Service
NOAA
United States Army Corp of Engineers
NASA
Florida Department of Agriculture
Florida Inland Navigation District
Canaveral Port Authority
Sebastian Inlet District
Municipalities
Marine Resources Council

WHERE:

Throughout Brevard County Waterways

MEASURE OF PROGRESS:

1. Reduction in seagrass loss and scarring.
2. Reduction in boat related manatee mortality.
3. Reduction in groundings.
4. GIS polygon shp. files provided for GPS use.

RELATED CM3P ITEMS:

- IIIA** Promote Safe Navigation
- IIIA2-a** Improve signage related to navigation and safety zones
- IIIA2-c** Produce, update, and distribute navigational information in all available media
- IVA1-f** Alert boaters to navigational hazards, especially fixed objects not visible at night
- VA3-a** Establish consistent design and placement regulations for signage

ESTIMATED COSTS AND IMPLEMENTATION TIMELINE FOR TASK

To be determined

NOTES

The working group also suggested a “Sticks in, Sticks out” program for the IRL. Where applicable, if a new sign goes in, one must come out.

Task IIIA2-c

Produce, update, and distribute navigational information in all available media

BACKGROUND AND EXPECTED BENEFITS:

There is currently only one published map for Brevard County Waterways widely available to the public. The Boating and Angling Guide to Brevard County, produced cooperatively with the FWC, is a map of the Intercoastal Waterway illustrating main channels, seagrass beds, boat speed zones and other important information for boaters. Producing, updating, and distributing navigational information will help to improve boater safety and aid in the protection of Brevard County natural resources. Utilizing all available media opportunities to distribute this information will increase the ability to reach the approximately 40,000 registered boaters in Brevard County and thousands of others from surrounding counties.

PRIORITY:

The working group recommends a priority rating of MEDIUM.

HOW:

The working group recommends a detailed survey on the types of navigational information available to the public and how they can improve on this information as well as reach more boaters through greater distribution by utilizing all available media. The Working Group recommends making navigational information part of the licensing school experience. Navigational information can be distributed when registering a boat in Brevard County. Information regarding navigation could be made widely available at multiple boat ramps and marinas. Improve the Boating and Angling Guide to Brevard County. Utilize local educational institutions to expand media coverage. And lastly, the Working Group recommends engaging local volunteer and civic organizations to promote and distribute navigational information.

WHO:

Primary:

NOAA
United States Coast Guard
Florida Inland Navigation District
Florida Fish and Wildlife Commission
Brevard County

Secondary:

United States Army Corp of Engineers
Florida Department of Environmental Protection
Canaveral Port Authority
Brevard County Sheriff's Office
Municipalities
Marine Resources Council
Citizens for Florida Waterways
Marine/ Agriculture Extension Service

Sea Grant
Sail and Power Squadron
USGC Auxiliary
Yacht Clubs
Marinas

WHERE:

Throughout Brevard County and surrounding regions

MEASURE OF PROGRESS:

1. Develop materials and secure funding.
2. The printing and distribution of navigational material.
3. Involvement and collaboration with local media outlets including television and print news organizations.

RELATED CM3P ITEMS:

- IIIA*** Promote Safe Navigation
IIIA2-b Mark shoals and other environmentally sensitive areas
IVA1-f Alert boaters to navigational hazards, especially fixed objects not visible at night

ESTIMATED COSTS AND IMPLEMENTATION TIMELINE FOR TASK

To be determined

NOTES

The WG expressed the need to evaluate the effectiveness of educational materials which could potentially be conducted through the FIT science education department. Other concerns from Working Group members were based on the difficulties of using different media to effectively advertise.

GOAL V A

Coordinate Planning Efforts with Local, Regional, and State Governments

Coastal areas are typically rich in natural resources. Because of the abundance of coastal resources, they often face and are more susceptible to stressors, both natural and anthropogenic in nature. The coast is the place where the land meets the sea, making it vulnerable to wave, wind, and tidal energy, with currents that are constantly removing and depositing sediments to and from different locations (Pawlukiewicz, Michael, 2007). Storms, increasing in severity, are exacerbating those coastal erosion processes, wreaking havoc on coastal ecosystems. Coastal areas are a naturally changing place, constantly shifting through these natural forces. Add to the equation anthropogenic impacts and many important and critical coastal resources are faced with serious threats.

Social and economic factors bring concentrated population growth and land development pressures to coastlines (Pawlukiewicz, Michael, 2007). Coastal areas have always been places of population growth. They are economically critical to coastal towns and regions and the abundant resources offer everything from jobs to recreation and make attractive places for vacationers looking to enjoy those natural resources. Development and infrastructure continue to expand in coastal communities throughout the country, further impacting coastal ecosystems, from upland terrestrial habitat to wetlands and coastal salt marshes. This coastal development is also susceptible to those same natural processes. Erosion is slowly reducing the size of barrier islands where million dollar homes are built along the coastline with little protection. Making coastal development and infrastructure more vulnerable are major storm events such as hurricanes and nor'easters (Pawlukiewicz, Michael, 2007). The 2004 and 2005 hurricanes seasons are reminders of just how devastating these events can be. Coastal regions in Alabama, Florida, Louisiana, Mississippi and Texas were devastated with 2,280 deaths and damages of approximately \$100 billion in 2005 alone (Pawlukiewicz, Michael, 2007).

This influx of permanent and seasonal visitors along with the natural stressors placed on coastlines; make coastal planning practices critical to the protection of both the human and natural elements found within coastal areas. The goal is to balance the protection of human development and infrastructure while preserving the integrity of coastal resources during coming decades when sea level rise may accelerate substantially. This means smarter planning, maintaining open space while allowing the public to access the abundant natural resources that coastal areas present. Coastal planning is critical to Florida, one of the fastest growing states in the country. According to the United States Census Bureau, the current population of the state is 18,328,340, a positive percent change of 14.7% from April 1 2000, to July 2008 (US Census, 2009). The continued population growth of the state will make coordinating planning efforts between local, regional, and state governments critical in the protection and preservation of the state's natural resources.

Brevard County has one of the fastest growing populations in Florida. The positive percent change in population has been documented as 12.7% over an eight year period from

April 1, 2000 to July 1, 2008 (US Census, 2009). The Florida Office of Economic and Demographic Research reported the population of Brevard County is expected to increase from 556,213 people in 2008 to 587,900 people by 2015 (Florida Office of Economic and Demographic Research). With the anticipated growth in population, the County must coordinate planning efforts between diverse municipalities and with regional and state governments. This coordination will help Brevard County achieve its goal of balancing the economic, recreational, and environmental resources which make the county such an attractive place to live.

Currently, there are 16 municipalities located within Brevard County. Each has its own planning department and a vision for the future growth of their city. Brevard County, with a planning department of its own, also has a vision for promoting future growth within the county. On a larger scale, the county falls within the East Central Florida Regional Planning Council, a division of the state's Department of Community Affairs. As the population within this region grows, coordination between the planning departments at all levels will be critical. Key to improving the coordination between local, regional and state planning agencies and other related agencies, will be an increase in the type and speed of information shared among the various levels of bureaucracy. Coordination and communication will enhance the county's ability to balance the expected population growth and subsequent development while maintaining its coastal resources.

Potential Funding Sources

Ad Valorem Taxes
Corporate Gross Receipts Tax
Corporate Income Tax
General Sales Tax
Rental Car Tax
Boat Rental Tax
Tourist Development Tax
Watercraft Sales Tax
Special Assessments Tax
Boater Registration Fees
Facility Permit Fees/ Monitoring Fees
Inspection Certification Fees
License Fees
Recreational Fees
Wetland Permit Fees
Fines and Penalties
Coastal Zone Management Administration Awards
Endangered Species Conservation Grants
Florida Boating Improvement Program
NOAA Marine Debris and Technology Program
Coastal Partnership Initiative (Fl Coastal Management Program)
NRCS Conservation Innovation Grants
Indian River Lagoon License Plate Fund
Indian River Lagoon Workplan Projects
Florida Inland Navigation District Waterway Assistance Program

Improve the speed of information flow within and between agencies

Overview of Actions

- VAI-a* Implement one stop permitting arrangement for infrastructure
- VAI-b* Produce guidance material for people trying to obtain permits to include what information will need to be gathered and estimated costs for the information
- VAI-c* Establish a county permit coordinator to specialize in marine permitting
- VAI-d* Simplify the overall permitting process

OBJECTIVE VAI

Improve the speed of information flow within and between agencies

RELATED IRL CCMP ACTIONS

No related actions.

PRIORITY PROBLEM

Communication between multiple levels of bureaucracy can be cumbersome and often very time consuming. There are 16 municipalities, each with their own localized government, county government, and multiple state and federal agencies all operating within Brevard County borders. Sharing information is critical to any successful procedure and the more efficient the process is of getting the right information to the right places, the more successful government will be when dealing with critical public issues. Streamlining and improving the speed of information flow between multiple government agencies will help Brevard County achieve a balance of protecting and enhancing the economic, recreational, and environmental resources that make the county such an attractive place to live.

One of the main goals in improving the speed of information flow will be streamlining the permit system. Currently, the natural resources permitting process from start to finish can be lengthy and burdensome. The typical application goes through multiple offices at various levels of government before any decision can be made. The information needed to make that decision can take weeks to circulate to the proper agency. Implementing a one stop permitting arrangement for any natural resource related issue can help improve the speed of information flow and enhance the overall efficiency of the permitting process, reducing time and saving county resources.

The permitting process is cumbersome, involving multiple steps. Many applicants often turn in incomplete applications, tying up resources, and increasing the time it takes for a decision to be reached. Developing a step by step guidance document could help to minimize those mistakes. Currently, there is information regarding environmental permits on the Brevard County Government website. However, there is no step by step guidance document walking the applicant through the permitting process. Producing this material can improve the speed of

information flow by guiding the applicant to the right agency at each step of the process, eliminating redundancy and freeing up county resources.

Currently the permit applicant must seek approval from multiple agencies at multiple levels, including the United States Army Corp of Engineers, FWC, St. John's River Water Management District, and Brevard County Natural Resources. While much of the regulatory backlog lies outside of the County's jurisdiction, establishing a county permit coordinator to specialize in environmental permitting can help to free up county resources and improve the flow of information between applicants and regulatory agencies. The permit coordinator can improve communication by acting as a liaison between the proper agencies, making sure the right information finds its way to the right people. Establishing this position would improve the efficiency of the permitting process, reducing the time it takes for the applicant, as well as improving the lines of communication between multiple agencies.

The ultimate goal is to simplify the overall permitting process. The redundancy cannot be overstated; it is a cumbersome, lengthy process. The speed at which necessary information flows between and within multiple agencies is time-consuming, and seemingly unhurried. For many residents applying for permits, it can be months before a decision is made. Improving the rate at which information is communicated between and within government agencies will help to make the permitting process more efficient and aid in freeing up county resources. Achieving the goal of balancing Brevard County's economic, recreational, and ecological resources cannot be achieved unless there is an improvement in the rate at which information flows between and within multiple government agencies.

Estimated Costs

Estimated costs involve expanding the duties of a current position or the creation and hiring of a new position within Brevard County government. The costs to produce and print guidance documents can be gathered from contacting local printing agencies.

Task VA1-a

Implement one stop permitting arrangement for infrastructure

BACKGROUND AND EXPECTED BENEFITS:

Infrastructure is defined as any structure built in the water or at the land/ water interface. Before construction can begin the applicant must file permit applications through the Brevard County Office of Natural Resources and the Planning and Zoning Office, amongst others. Permits must also be filed at the State and Federal level making the permitting process potentially lengthy and cumbersome. A one stop permitting arrangement would reduce costs and time for both the County and the applicant.

PRIORITY:

The working group recommends a priority rating of MEDIUM.

HOW:

All pertinent information and requirements for the permitting process at all regulatory levels should be gathered and assessed. Determine the responsible one-stop agency and the key interface between all levels of government. Hire a permitting ombudsman, funded by all agencies, to resolve problems and guide applicants through the permitting process. Increase communication between permitting agencies by having a representative from each, attended regularly scheduled meetings to review all permit applications as a unit. Secure funding for any new position(s) that may be necessary to implement the one-stop permitting arrangement.

WHO:

Primary:

United States Fish and Wildlife
United States Army Corps of Engineers
Florida Fish and Wildlife Conservation Commission
St. Johns Water Management District
Florida Department of Environmental Protection
Brevard County

Secondary:

United States Environmental Protection Agency
Municipalities
United States Coast Guard

WHERE:

Throughout Brevard County

MEASURE OF PROGRESS:

1. A funding source secured and established.
2. Agreement or collaboration from all necessary regulatory agencies.

3. Compilation of all permitting information in a database format.
4. Establishment of a one-stop permitting program.

RELATED CM3P ITEMS:

- VAI-b*** Produce guidance material for people trying to obtain permits to include what what information will need to be gathered and estimated costs for the information
- VAI-c*** Establish county permit coordinator to specialize in marine permitting
- VAI-d*** Simplify the overall permitting process

ESTIMATED COSTS AND IMPLEMENTATION TIMELINE FOR TASK

Estimated costs would be based on a similar full time position level within Brevard County government.

NOTES

The Working Group suggests following a plan similar to the one implemented in Dade County. Dade County adopted an operational agreement with the Florida DEP to implement state regulations in conjunction with their own. Thus state and local permitting procedures remain under county jurisdiction thus reducing the process. The Working Group also addressed the inherent redundancy among several of the tasks related to simplifying the permitting process. The working group suggests that Tasks *VAI-a, b, c, d* can be completed as one. Successful completion of one of these tasks, inherently accomplishes many of the essential goals of the others.

Task VA1-b

Produce guidance material for people trying to obtain permits to include what information will need to be gathered and estimated costs for the information

BACKGROUND AND EXPECTED BENEFITS:

There is currently very few, if any, guidance documents dedicated to directing applicants through the permitting process. The procedure can be cumbersome and time consuming, often taking months for applicants to finalize all that is needed for a permit to be approved. Producing guidance material would make the permitting process more efficient by reducing time, saving costs, and freeing up resources of all parties involved.

PRIORITY:

The working group recommends a priority rating of HIGH.

HOW:

Conduct a County wide survey of permit applicants to identify deficiencies in the process, the lengthiest requirements, and general satisfaction with the overall process and improvements that can be made. Determine a responsible party to gather and assess all pertinent information and requirements regarding the permitting process and improve collaboration of and between all regulatory agencies. Once gathered, permitting information can be compiled into a database and improvement through simplification and standardizing of the current requirements can be achieved. These are large tasks but could be completed in unison with other VAI tasks. This information can also be used in the creation of a “helpline” which applicants can call and receive guidance through the permitting process. It can also be used in the development of a better website or a “turbo-app” type software application to guide the applicant through the process. Funding must be secured and established.

WHO:

Primary:

United States Fish and Wildlife
United States Army Corps of Engineers
Florida Fish and Wildlife Commission
St. Johns Water Management District
Florida Department of Environmental Protection
Brevard County

Secondary:

United States Environmental Protection Agency
Educational Institutions (FIT, UCF, UF, BCC, etc.)
Florida Marine Contractors Association
Marine Industries of Brevard County

WHERE:

Throughout Brevard County

MEASURE OF PROGRESS:

1. Completion of user survey.
2. Identification of the responsible party to gather all pertinent information.
3. Creation and establishment of the “helpline.”
4. A 25% reduction in the time of permit approval.

RELATED CM3P ITEMS:

- VAI-a*** Implement a one stop permitting arrangement for infrastructure
VAI-c Establish county permit coordinator to specialize in marine permitting
VAI-d Simplify the overall permitting process

ESTIMATED COSTS AND IMPLEMENTATION TIMELINE FOR TASK

Estimated costs involve the amount of staff time and resources used to gather all pertinent information. Producing and printing costs can be obtained by contacting local printing company.

NOTES

The Working Group also addressed the inherent redundancy among several of the tasks related to simplifying the permitting process. The working group suggests that Tasks *VAI-a, b, c, d* can be completed as one. Successful completion of one of these tasks, inherently accomplishes many of the essential goals of the others. The working group recommends an application that would guide the applicant through the permitting process by a series of questions, similar to “turbo-tax” type software. Once all questions are answered, a completed permit application is presented to the applicant.

Task VAI-c

Establish a county permit coordinator to specialize in marine permitting

BACKGROUND AND EXPECTED BENEFITS:

Establishing a Brevard County permit coordinator would accomplish much of what is suggested under this objective. The coordinator could serve as a one stop permitting station, and a “guide” for the process. The position duties would need to be integrated into an existing workload or the position would need to be created. This arrangement could reduce the time frame for permits to be completed and processed, thus reducing costs and saving resources for all parties involved.

PRIORITY:

The working group recommends a priority rating of LOW.

HOW:

Create and establish a job description and detailed list of all responsibilities. Determine if it is possible to fill the position with current staff. The individual should have prior knowledge of multi-agency permitting requirements. Identify all parties involved, both indirectly and directly, in marine permitting. Determine a budget, if funding not available, look to more creative resource acquisition (i.e. graduate student). Municipalities could contribute funding from money saved for permitting process and personnel.

WHO:

Primary:
Brevard County

Secondary:

WHERE:

Throughout Brevard County

MEASURE OF PROGRESS:

1. Department position identified and funding source secured.
2. Copy of written job description and list of responsibilities.
3. Identification or hiring of responsible party.

RELATED CM3P ITEMS:

- VA1-a*** Implement a one stop permitting arrangement for infrastructure
- VA1-b*** Produce guidance material for people trying to obtain permits to include what what information will need to be gathered and estimated costs for the information
- VA1-d*** Simplify the overall permitting process

ESTIMATED COSTS AND IMPLEMENTATION TIMELINE FOR TASK

Estimated costs would be based on a similar full time position level within Brevard County government.

NOTES

The Working Group also addressed the inherent redundancy among several of the tasks related to simplifying the permitting process. The working group suggests that Tasks *VA1-a, b, c, d* can be completed as one. Successful completion of one of these tasks, inherently accomplishes many of the essential goals of the others.

Task VA1-d

Simplify the overall permitting process

BACKGROUND AND EXPECTED BENEFITS:

The ultimate goal of the previous three tasks is to simplify the overall permitting process. Applicants must file multiple permits through multiple agencies at multiple levels for marine related permits. The procedure is lengthy and can be expensive for both the applicant and the county. Simplifying the process would make applying for marine permits more efficient, cost effective, and free up resources for all parties involved.

PRIORITY:

The working group recommends a priority rating of MEDIUM.

HOW:

Identify party(s) responsible for gathering all pertinent information regarding requirements specific to each department and each regulatory/ permitting agency. Use the information to develop a database accessible to the public, create a flow chart, or develop a “turbo-app” like technology to guide applicant through the permitting. Identify and secure funding.

WHO:

Primary:

United States Army Core of Engineers
Florida Fish and Wildlife Conservation Commission
St. Johns Water Management District
Florida Department of Environmental Protection
Brevard County

Secondary:

United States Environmental Protection Agency
United States Fish and Wildlife
Municipalities

WHERE:

In Brevard County, with coordination throughout the region and state.

MEASURE OF PROGRESS:

1. Funding secured.
2. Responsible party(s) identified and information compiled.
3. Creation of flow chart, turbo-application.
4. A 25% reduction in the time it takes for permit approval.

RELATED CM3P ITEMS:

- VAI-a*** Implement a one stop permitting arrangement for infrastructure
- VAI-b*** Produce guidance material for people trying to obtain permits to include what what information will need to be gathered and estimated costs for the information
- VAI-c*** Establish county permit coordinator to specialize in marine permitting

ESTIMATED COSTS AND IMPLEMENTATION TIMELINE FOR TASK

To be determined

NOTES

The Working Group recommends a “turbo-tax” type application that would guide the applicant through the permitting process by a series of questions and responses. Once all questions are answered, a completed permit application is presented to the applicant. The Working Group also addressed the inherent redundancy among several of the tasks related to simplifying the permitting process. The working group suggests that Tasks *VAI-a, b, c, d* can be completed as one. Successful completion of one of these tasks, inherently accomplishes many of the essential goals of the others.

Maintain consistency with county and municipality generated comprehensive plans

Overview of Actions

VA2-a Modify existing Comprehensive Plan to encourage retention of working waterfronts

OBJECTIVE VA2

Maintain the consistency with county and municipality generated comprehensive plans

RELATED IRL CCMP ACTIONS

No related actions.

PRIORITY PROBLEM

Changes in Florida's land use regulations and related forces in an ever shifting economy are affecting coastal development and threatening the vitality of commercial and recreational working waterfronts. According to the Working Waterfronts Report issued by the Department of Community Affairs, the marine industry brings in approximately 14.1 billion dollars in economic revenue and is responsible for over 180,000 jobs throughout the state (FL, Dept. of Community Affairs, 2004). The increasing value of coastal and waterfront property has put pressure on working waterfronts. These small businesses do not have the money to compete with developers as working marinas and boatyards are giving way to luxury condos who want to offer boat slips to their residents (FWC, 2006). Recreational and working waterfronts contribute to more than just the economic vitality of the state. These places are part of the cultural heritage and character of the state. "Old Florida" is part of the charm that attracts the multitude of visitor to the state each year (Florida Planning Toolbox, 2009).

Working waterfronts are defined as "water edged places where people go to work, play, and visit" (Florida Planning Toolbox, 2009). In 2006, Florida State Legislature enacted legislation that requires local governments to revise their state mandated comprehensive growth management plans to include the retention of working waterfronts (Florida Planning Toolbox, 2009). Brevard County has multiple municipalities with working waterfront property. Revising the Comprehensive Growth Management Plan to encourage the retention of working waterfronts through cooperative efforts will provide some consistency between the county and municipality generated comprehensive plans.

Brevard County must inventory all existing working waterfront locations. This will provide county and city planners with sufficient information to carry out the revision of the comprehensive plan. Critical to the retention of working waterfronts will be the use of various incentives and regulations such as overlay and performance zoning, or creating special waterfront districts (Florida Planning Toolbox, 2009). Possible incentives include special value-assessments for water dependent uses, tax deferral programs, density bonuses, expedited state and local permitting for water dependent uses, and harbor infrastructure improvements (Florida Planning Toolbox, 2009). Initiating these incentive and regulatory programs will help

the county to achieve a balance between accommodating for the development of waterfront property and mixed uses of working waterfronts and access points.

Working waterfronts are critical in maintaining the cultural identity of Brevard County. Realizing that the loss of working waterfront property meant the loss of a viable economic source, fisherman in Port Salerno used their own money to secure access to working waterfront property by signing a long-term lease for county owned waterfront property (FWC, 2008). Florida's coastal population will continue to squeeze out these traditional working waterfronts unless changes are made, beginning with revising the Comprehensive Growth Management Plan. Losing existing working waterfront property is not only impacting economic revenue but is slowly eliminating a major part of the cultural heritage of the Indian River Lagoon.

Estimated Costs

Amount of staff time and resources, to be determined.

DRAFT

Task VA2-a

Modify existing Comprehensive Plan to encourage retention of working waterfronts

BACKGROUND AND EXPECTED BENEFITS:

Losing working waterfronts is not only an economic loss for the county; it is also losing an important part of the state and local history. In 2005 and 2006, Florida State Legislature enacted legislation that requires local governments to revise their state mandated comprehensive growth management plans to encourage the preservation of working waterfronts. Retaining and encouraging the development of more working waterfronts will be important financially and for the preservation of a significant portion of Brevard County's cultural identity.

PRIORITY:

The working group recommends a priority rating of HIGH.

HOW:

In an effort to be more inclusive, to preserve more, and encourage the development of working waterfront areas, the Working Group recommends a more comprehensive definition of a working waterfront. An inventory of existing working waterfront infrastructure will provide information needed to make critical decisions about the future growth of the county. To encourage retaining and development of working waterfront property, special tax districts or tax credits could be created. Develop plans for leasing public property to private enterprise or other public/ private partnerships designed to encourage retention or development of working waterfront property. Develop a strategic plan focused on the overall economic development of working waterfronts, to drive the changes needed in the Comprehensive Plan. Ensure funding by offering seed money to businesses for land.

WHO:

Primary:

Florida Department of Community Affairs
Canaveral Port Authority
Florida Department of Agriculture
Florida Regional Planning Council
Brevard County

Secondary:

St. Johns Water Management District
Florida Fish and Wildlife Commission
Florida Department of Environmental Protection
Florida Marine Contractors Association
Municipalities
Marine Industries Association of Brevard County
The Nature Conservancy
Citizens for Florida's Waterways
Marine/ Agricultural Extension Service

Marine Resources Council
Sierra Club
Educational Institutions (BCC, FIT, UF, UCF)

WHERE:

Throughout Brevard County

MEASURE OF PROGRESS:

1. Identification of current working waterfront properties.
2. Establishment of a short-list of private partners.
3. No net loss of existing working waterfront properties.
4. Language in Comprehensive Plan regarding working waterfront maintenance over the coming decades; to include considerations for periods of accelerating sea level rise.

RELATED CM3P ITEMS:

- IIC** Preserve and increase waterfront destination opportunities accessible by land and by water (e.g., parks, piers, restaurants, and resort-type destinations)
- IID** Retain working waterfronts, including commercial fishing outlets, boatyards, and marinas
- IID1-b** Explore more effective coastal and waterfront development practice
- IID1-d** Investigate including waterfront restaurants with dockage in working waterfront designation

ESTIMATED COSTS AND IMPLEMENTATION TIMELINE FOR TASK

Hundreds of hours of staff time at various levels.

NOTES

The Working Group recommends the initiation of strategic planning or additions to the Comprehensive Plan involving all aspects of waterfront development, natural resource protection, and emergency response to impending sea level rise.

Improve consistency of ordinances and regulations pertaining to waterway use between jurisdictions

Overview of Actions

VA3-a Establish consistent design and placement regulations for signage

VA3-b Apply Manatee Protection Plan equally statewide

OBJECTIVE VA3

Improve consistency of ordinances and regulations pertaining to waterway use between jurisdictions.

RELATED IRL CCMP ACTIONS

No related actions.

PRIORITY PROBLEM

Florida boaters have the right to travel freely throughout the state's coastal waterways, rivers, and lakes. Regulations regarding waterway use, regulatory sign placement, and verbiage can differ from one jurisdiction to another. This inconsistency can lead to problems with safety and compliance among Florida's approximately 1 million registered boaters (Sidman, Charles and Associates, 2007). Within Brevard County's 16 municipalities alone, there are more than 40,000 registered boaters (Department of Highway, 2008). Improving the consistency of ordinances and regulations pertaining to waterway use between jurisdictions will help to improve boater safety and protect the integrity of Brevard County's coastal resources.

In 2008 Brevard was among the top ten counties for boater accidents (FWC, 2008). Within County waterways there are multiple agencies ranging from federal to the local level, posting multiple signs in multiple locations. There are many inconsistencies between the various signs including verbiage and placement. This detracts from the overall experience had by boaters out enjoying the County's waterways, makes boating activities less safe, and can lead to the degradation of natural resources. Boaters responded in a 2007 survey that there was significant concern about the need for the improvement in the consistency of signage going as far as declaring that well-marked channels signified a reason for selecting a favorite travel route (Sidman, Charles and Associates, 2007). Water related activities are a major economic contributor to Brevard County. Improving safety measures will help to promote the responsible use of this resource and protect critical environmental habitat.

Manatees, a federally endangered species, can be found throughout coastal Florida year round. Their range extends from the Apalachicola River in the West, to Jacksonville in the East. They can be found in a variety of habitats including freshwater, brackish water, and coastal and estuarine habitat (Van Meter, Victoria, 1989). The manatee has become a major source of recreational opportunities, not only for the people of Florida, but throughout the country. People travel to Florida from all over the United States for the opportunity to dive with these gentle giants of the water. While there have been no studies on the economic value of manatees, people

travel from all over the country for an opportunity to “dive with a manatee,” bringing tourism dollars into the state.

Protecting the manatee has become an important job for the state and coastal communities. In an effort to provide guidelines to protect and promote the recovery of endangered species, the Endangered Species Act of 1973 required that each listed animal have a recovery plan (FWC, 2007). The Florida Manatee Recovery Plan was first written by the USFWS in 1980 and most recently updated in 2007 (FWC, 2007). This plan was the impetus behind the 1989 decree by Governor Lawton Chiles to declare 13 key counties in Florida as critical to the survival of the manatee and a directive that these counties must develop their own county-wide Manatee Protection Plan (FWC, 2007). Each county plan had to include all relevant manatee information which was used to develop guidelines regarding waterway use, including speed zones and rules for infrastructure. The 13 key counties range from the north part of the state to the south and along both east and west coasts, making each plan highly variable. The changes in rules and regulations on a county by county basis can be difficult for boaters to follow as they travel throughout the state. Applying a manatee protection plan equally throughout all of Florida would help to reduce some confusion among boaters regarding rules and regulations pertaining to manatee protection.

Estimated Costs

To be determined

Task VA3-a

Establish consistent design and placement regulations for signage

BACKGROUND AND EXPECTED BENEFITS:

Brevard County waterways are utilized by boaters not only from the five county region, but from all over the state. Waterway signs can be cumbersome, difficult to understand, in poor locations or just unreadable. They can differ from county to county throughout the state. Establishing consistent design and placement regulations would provide a safer boating experience for visitors of Brevard County Waterways and help to protect the county's abundant natural resources.

PRIORITY:

The working group recommends a priority rating of MEDIUM.

HOW:

First, the working group recommends indentifying all inconsistencies regarding signage throughout multiple jurisdictions. Then identify regions where consistent design and placement has been Implemented. Apply existing Brevard County regulations and design for signage throughout the region and state. The working group recommends developing consistent guidelines and regulations for signage outside of county jurisdiction. Lastly, establish a penalty for non-compliance across regional jurisdictions.

WHO:

Primary:

United States Army Core of Engineers
United States Coast Guard
Florida Fish and Wildlife Conservation Commission
Florida Inland Navigation District
Brevard County

Secondary:

Department of Homeland Security
Patrick Air Force Base
United States Fish and Wildlife
West Coast Inland Navigation District
Florida Marine Resources Council
Municipalities

WHERE:

Throughout Brevard County

MEASURE OF PROGRESS:

1. Review existing signage and identify areas of inconsistency
2. Choose and/ or develop standards, and coordinate with state and local agencies

3. Improvement in the quality of signage throughout the county as measured by standardization and boater surveys.

RELATED CM3P ITEMS:

IIIA2-a Improve signage related to navigation and safety zones

ESTIMATED COSTS AND IMPLEMENTATION TIMELINE FOR TASK

This should be doable in a relatively short time frame. Estimated costs for signs range from \$70-\$120 for normal formatting, plus installation and maintenance which can be done by County personnel.

NOTES

Work has been done at the state level to standardize signage. The Florida Fish and Wildlife Commission, along with US Fish and Wildlife have produced and published, “Guidelines for Posting Uniform Waterway Markers in Florida’s Waterways.”

Task VA3-b

Apply Manatee Protection Plan equally statewide

BACKGROUND AND EXPECTED BENEFITS:

Currently, there are 15 separate county Manatee Protection Plans that have either been approved by the state or in the development and approval process. Due to the numerous variables affecting Manatee counts, health, and vitality, regulations and community vision differ from one county to the next. Florida boaters have the privilege of being able to travel intrastate throughout an extensive waterway system. Often regulations are not the same and can be contradictory from one county to the next. This can be confusing to boaters of all levels of experience. A uniform, state Manatee Protection Plan could help to alleviate this confusion and provide a more enjoyable experience for all boaters as well as continue to protect the threatened Florida Manatee.

PRIORITY:

The working group recommends a priority rating of LOW.

HOW:

The Working Group concluded that a single state plan would not be beneficial to boaters, outdoor enthusiasts, or in the best interest and protection of the Florida Manatee. There are too many variables that affect manatee population status from county to county. Identifying regional differences and similarities and adjusting plans accordingly to what may work the best would be advantageous. Biogeographic information on manatee distribution and abundance should be collected and distributed throughout the region to make educated decision regarding Manatee Protection Plans. Revise the Brevard County Manatee Protection Plan in light of most recent data, reducing restrictions on waterway related development and use as justifiable.

WHO:

Primary:

United States Fish and Wildlife
United States Environmental Protection Agency
National Science Foundation
Florida Fish and Wildlife Commission
Florida Department of Environmental Protection
Educational Institutions (BCC, FIT, UF, UCF)

Secondary:

Florida Regional Planning Council
Brevard County
Marine Resources Council
Citizens for Florida Waterways
Sea Grant
Save the Manatee Club

WHERE:

This should be done throughout state, with Brevard County coordinating efforts between other MPP jurisdictions as necessary.

MEASURE OF PROGRESS:

1. Evaluation of the effectiveness of various aspects between County plans.
2. Development of matrix or database.
3. Satisfaction among all stakeholders.

RELATED CM3P ITEMS:

VA Coordinate planning efforts with Local, Regional, and State Governments

ESTIMATED COSTS AND IMPLEMENTATION TIMELINE FOR TASK

County staff time and resources, to be determined.

NOTES

Many within the Working Group feel that this task may not be practical at a state level. Perhaps regional plans may be more efficient. Also discussed was developing a database or matrix of all county MPP's. This would be used as a management tool for developing new plans or updating and revising existing ones. To offset costs, this could be done by a local graduate student.

Implement a marine task force to aid in local and regional coordination efforts and help implement the Comprehensive Maritime Management Master Plan.

Overview of Actions

No actions associated with this objective.

OBJECTIVE VA4

Implement a marine task force to aid in local and regional coordination efforts and help implement the Comprehensive Maritime Management Master Plan. The task should include representatives from all agencies with law jurisdiction on Brevard County waterways, as well as from recognized advocacy organizations, stakeholder groups, and municipalities.

RELATED IRL CCMP ACTIONS

No related actions.

PRIORITY PROBLEM

Implementing a marine task force to aid in local and regional coordination efforts and put into action the Comprehensive Maritime Management Master Plan will help Brevard County attain the goal of balancing and protecting important economic, recreational, and environmental resources. Agencies at all levels of government operate within Brevard County. A multifaceted group will help to coordinate between multiple levels of government and non-governmental entities. Communication between and within regulatory agencies is often lacking in the speed at which information is communicated, making it difficult to coordinate efforts involving critical issues. Improvement in the coordination effort will make Brevard County government more efficient in dealing with these significant issues and aid in protecting the integrity of its coastal resources.

Implementing the Comprehensive Maritime Management Plan will help to improve the overall quality of Brevard County waterways and help promote the importance of maintaining and improving the county's economic, recreational, and ecological resources. Brevard County is blessed with an abundance of natural resources, making the county an attractive place for both visitors and those looking to relocate. Population growth in addition to the millions of visitors to the Brevard County coast places stress on critical environmental resources. The Comprehensive Maritime Management Plan is aimed at protecting these abundant coastal resources and ensuring Brevard County waterways can be enjoyed by everyone for generations to come.

Estimated Costs

Estimated costs include the required time investment by public and private entities, to be determined.

Increase awareness of Homeland Security policies and activities

Overview of Actions

No actions associated with this objective.

OBJECTIVE VA5

Increase awareness of Homeland Security policies and activities.

RELATED IRL CCMP ACTIONS

No related actions.

PRIORITY PROBLEM

Understanding Homeland Security policies and activities will aid in promoting effective communication and coordination between proper law enforcement and governmental agencies. Due to its global role in the defense industry and U.S. space initiatives, with much of this infrastructure in coastal areas, Homeland Security's goal in Brevard County is to, "provide residents, businesses and industries, non-profit organizations, and local governments the education and support necessary to reduce the loss of life and human suffering; to minimize property damage; and to protect environmental sensitive areas from all types of disasters through a comprehensive, risk-based, all-hazard emergency management program (Homeland Security, 2008)." Operating within Brevard County is America's Waterway Watch. This is a combined effort between the United States Coast Guard and its Reserve and Auxiliary components (America's Waterway Watch). The goal of this organization is scan the coast and assist in the domestic front of the War on Terrorism (America's Waterway Watch). Coordinating and communicating effectively with Homeland Security will help to promote the balance of the economic, recreational, and ecological resources that are so critical to a viable future for Brevard County.

Estimated Costs

To be determined