Waterways Plan for Martin & St. Lucie Counties

A Forum on Marine Transportation

December 19, 2013

Waterways Plan for Martin & St. Lucie Counties

Kim DeLaney, Ph.D.

Strategic Development Coordinator

Treasure Coast
Regional Planning Council

TREASURE COAST
TCRPC
REGIONAL PLANNING COUNCIL
"Bringing Communities Together" Est. 1976

Waterways Plan for Martin & St. Lucie Counties

Overview
& Project Approach

120+ Miles of Waterways

MARTIN MPO

St. Lucie Transportation Planning Organization

MARTIN METROPOLITAN PLANNING ORGANIZATION

FY 12/13 - 13/14

UNIFIED PLANNING WORK PROGRAM

FROM JULY 1, 2012 THROUGH JUNE 30, 2014

St. Lucie Transportation Planning Organization

2300 Virginia Avenue
Fort Pierce, FL 34982
(772) 462-1593
www.stlucietpo.org

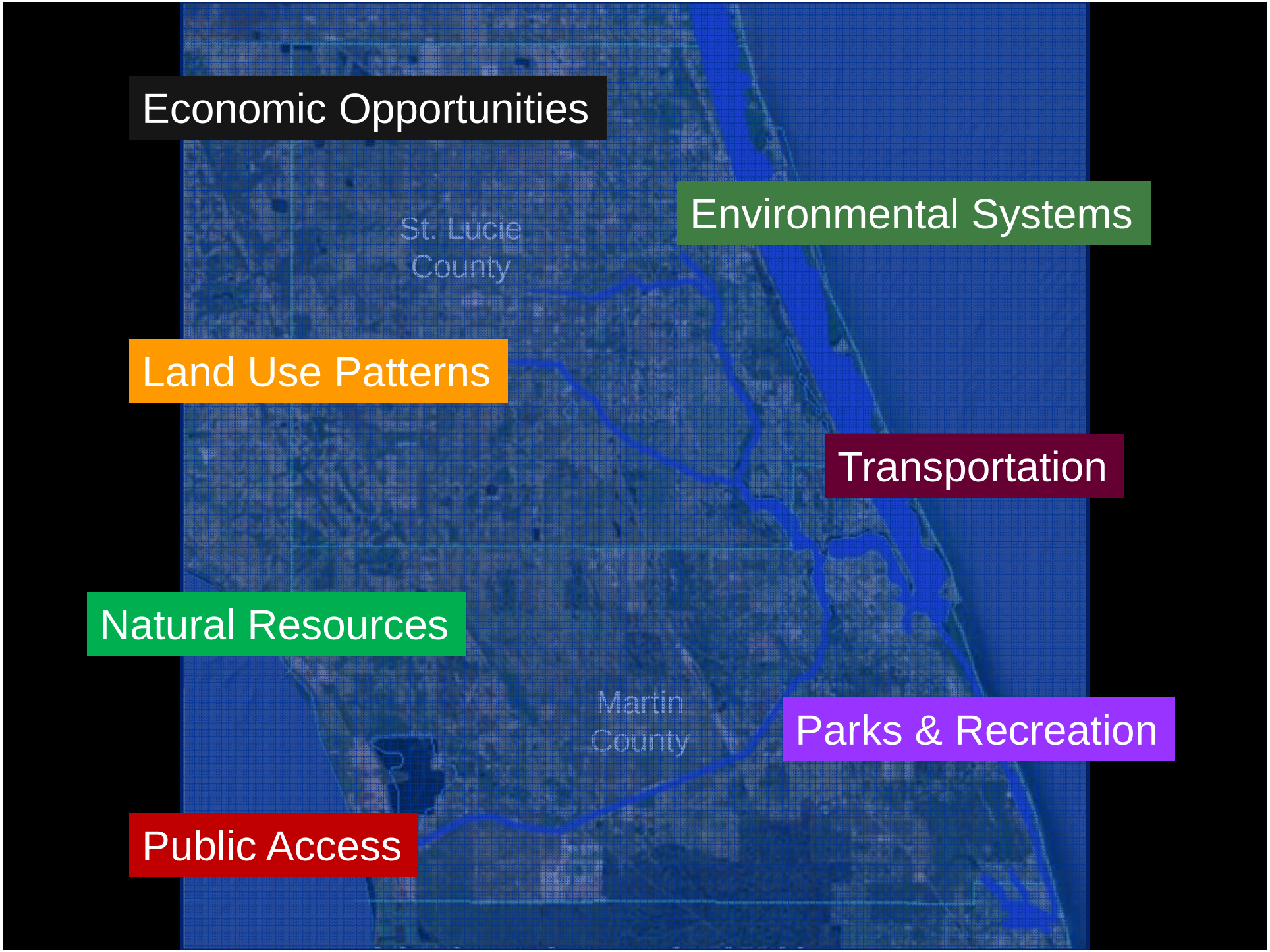
Unified Planning Work Program (UPWP)

FY 2012/13 – FY 2013/14
(July 1, 2012 - June 30, 2014)

Regional Waterways Plan

The Martin MPO will work with the St. Lucie TPO to conduct a study to explore strategies to leverage the economic benefit of the waterways in Martin and St. Lucie Counties, both as a recreation resource and as part of a multi-modal system for the movement of people and freight. This plan has the potential to become a new section of the RLRTP. A stakeholder committee will be assembled prior to, and provide input into, the detailed project scope. The full study scope will be submitted to FDOT and FHWA prior to the contract being let.

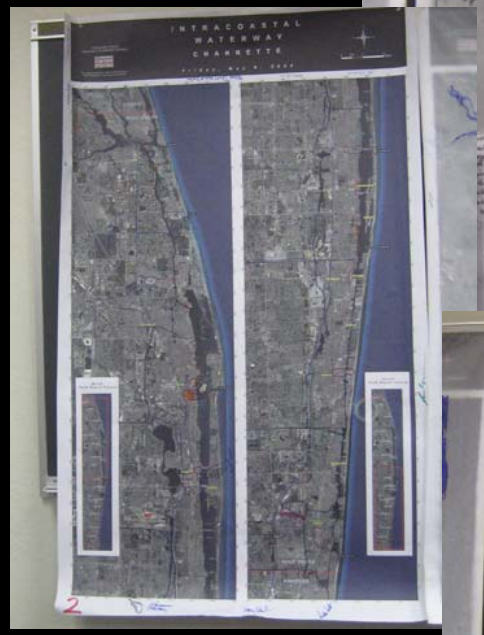
In addition, the TPO will enhance Intracoastal Waterway Planning through the development of a Maritime Management Plan (MMP) with the Martin MPO. The MMP will identify and prioritize the waterway access needs and facilities of the waterway transportation system. The MMP may be utilized to promote and maximize the economic vitality and public benefit of the waterway.


Economic Opportunities
Environmental Systems
St. Lucie County
Land Use Patterns
Transportation
Natural Resources
Martin County
Parks & Recreation
Public Access

Waterways Educational Forums

1	**Marine Transportation**	**December 19, 2013** Thursday (2-5 PM)	**Indian Riverside Park** Frances Langford Dockside Pavilion (2nd Floor) 1707 NE Indian River Drive Jensen Beach, FL 34957
2	**Land Use & Upland Transportation**	**January 8, 2014** Wednesday (2-5 PM)	**Historic City Hall** 315 Avenue A Fort Pierce, FL 34950
3	**Regulation & Management of Waterways**	**January 29, 2014** Wednesday (2-5 PM)	**Stuart City Hall** 121 SW Flagler Avenue (City Commission Chambers) Stuart, FL 34994
4	**Natural Resources**	**February 19, 2014** Wednesday (2-5 PM)	**Morningside Library*** 2410 SE Morningside Blvd. (Room 103) Port St Lucie, FL 34952
5	**Recreation/Cultural/ Educational Activities**	**March 6, 2014** Thursday (2-5 PM)	**Port Salerno Community Center*** 4950 SE Anchor Avenue Stuart, FL 34997
6	**Economic Development**	**April 10, 2014** Thursday (2-5 PM)	**Port St. Lucie Civic Center** 9221 SE Civic Center Place (Room Ruby 1-2) Port St. Lucie, FL 34952

Policy & Design Charrette



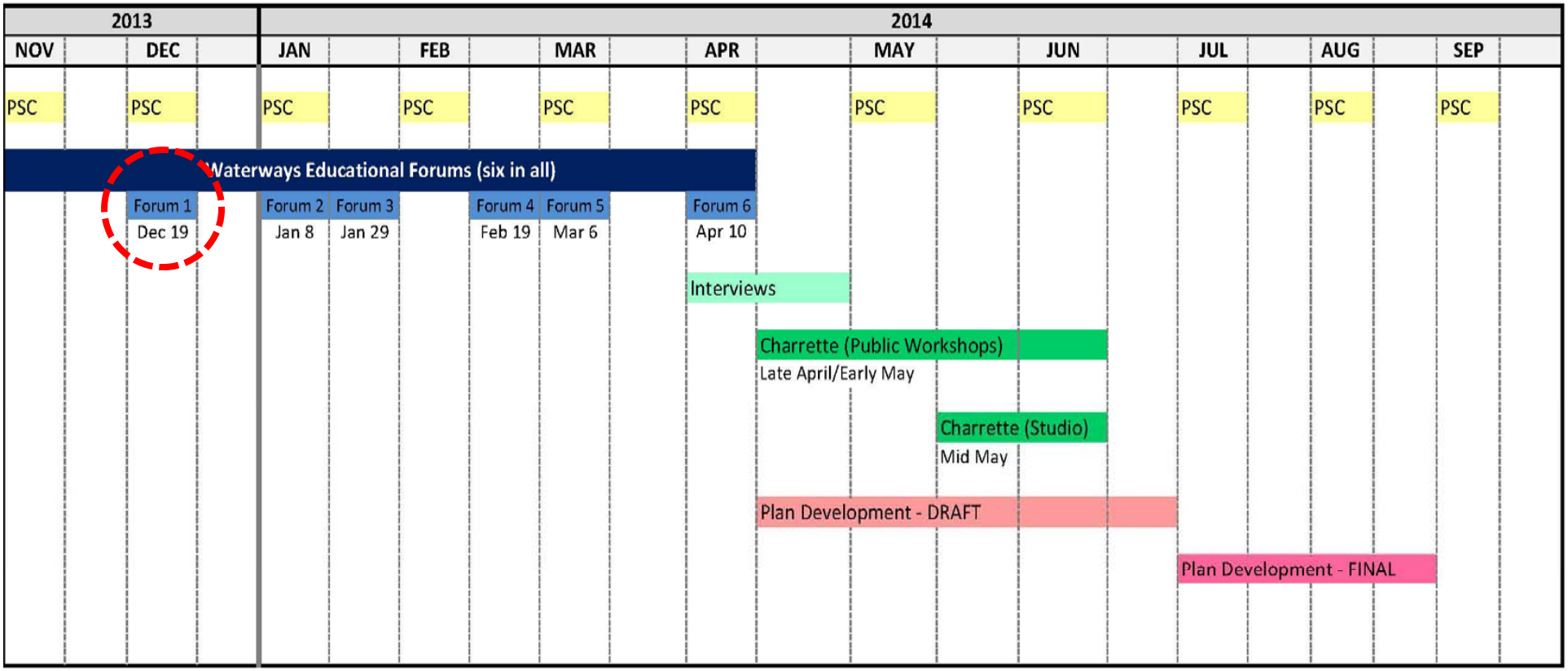
Waterways Plan for Martin & St. Lucie Counties

Project Schedule

Project Schedule

WATERWAYS PLAN FOR MARTIN & ST LUCIE COUNTIES

TENTATIVE PROJECT SCHEDULE



LEGEND	
PSC	Project Steering Committee meeting
Forum	Waterways Educational Forum (six in all)

Waterways Plan for Martin & St. Lucie Counties

Mark Crosley

Executive Director

Florida Inland Navigational District

A Brief History and Overview of the Intracoastal Waterway and the Florida Inland Navigation District

ATLANTIC

FLORIDA INLAND

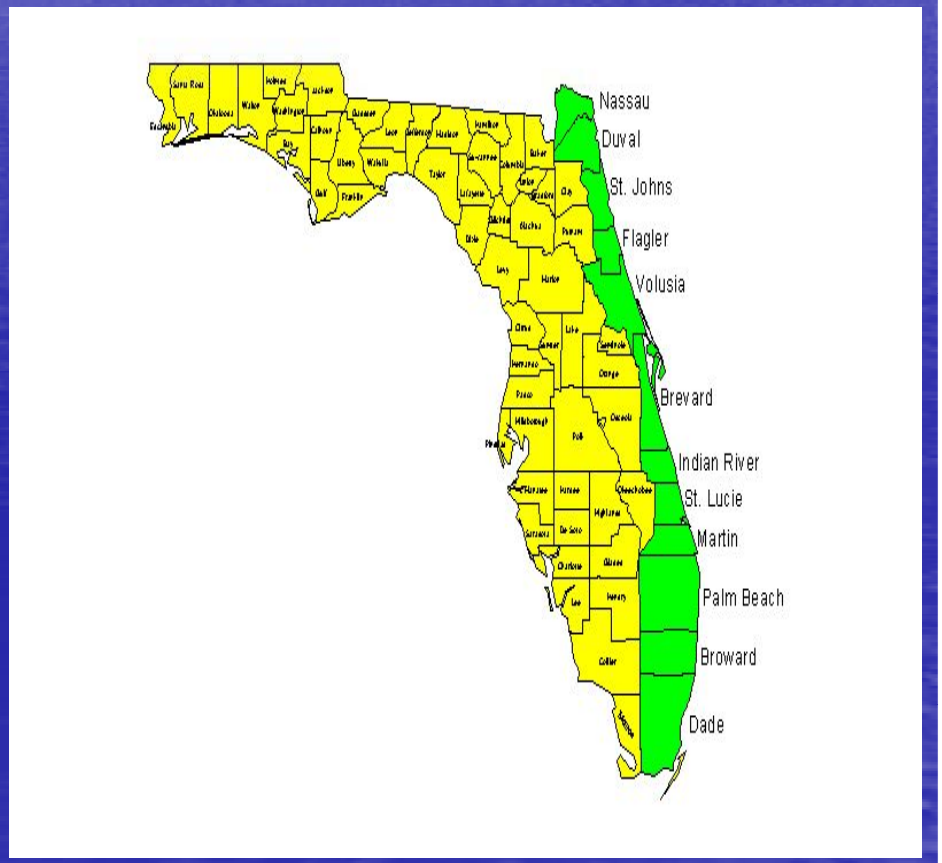
NAVIGATION DISTRICT

INTRACOASTAL

"LOCAL SPONSOR" OF THE ATLANTIC INTRACOASTAL WATERWAY IN FLORIDA

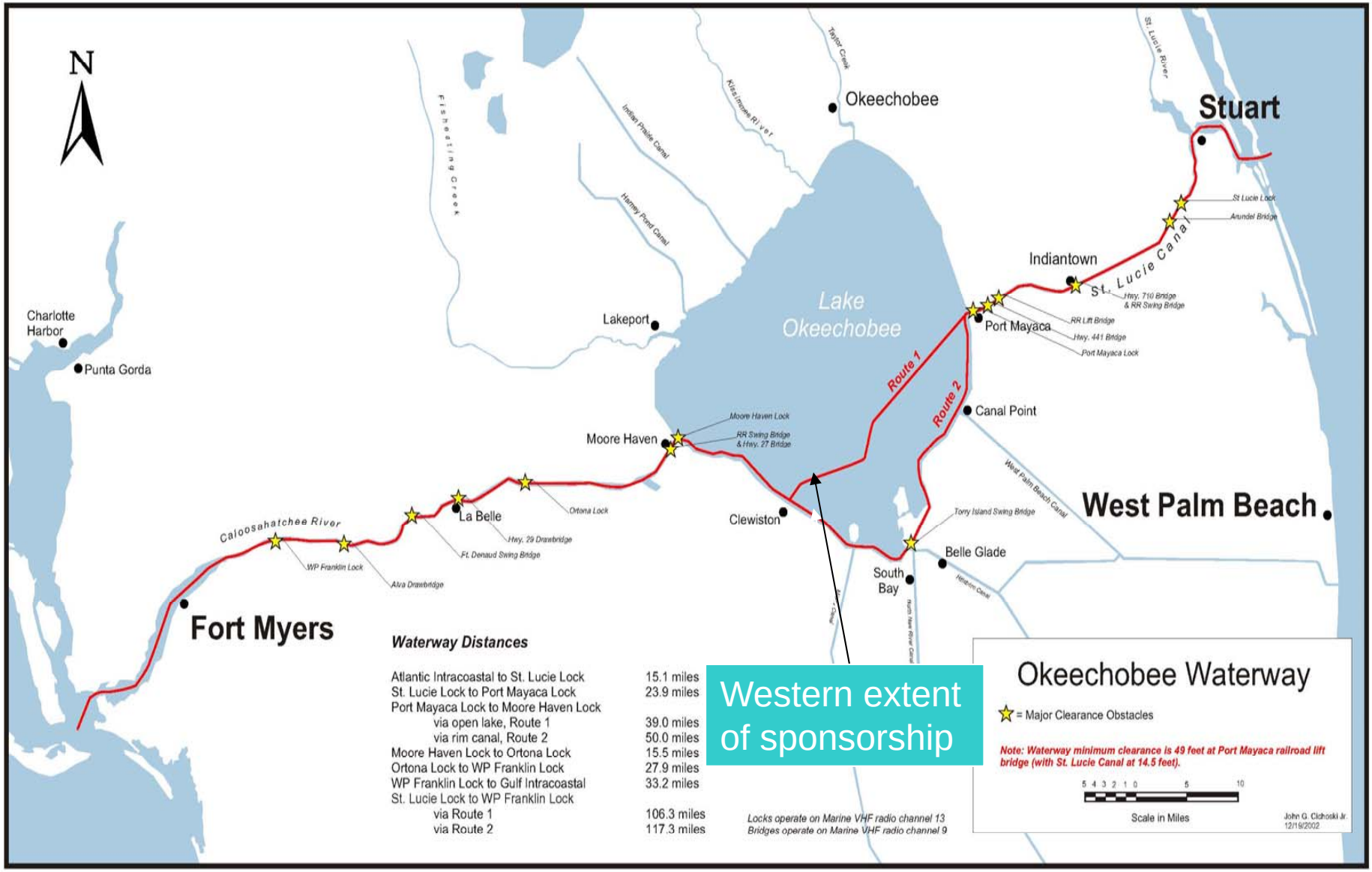
DISTRICT BOUNDARIES

- 12 Appointed Commissioners
- Six staff members
- Levy ad valorem tax
- Administration <2% of budget



DISTRICT PROGRAMS

- Land Acq. & Mgmt.
- Operations
- Assistance Programs
- Public Information

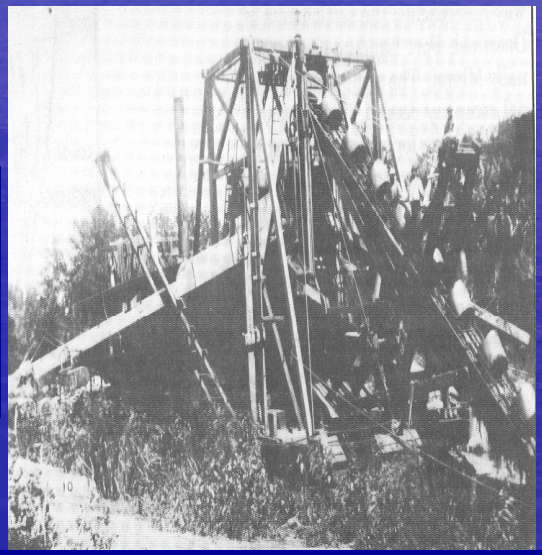

N
Okeechobee
Stuart
Taylor Creek
St. Lucie River
Fisheating Creek
Indian Prairie Canal
Kissimmee River
Harney Pond Canal
St Lucie Lock
Arundel Bridge
Indiantown
St. Lucie Canal
Hwy. 710 Bridge & RR Swing Bridge
Lake Okeechobee
Lakeport
Port Mayaca
RR Lift Bridge
Hwy. 441 Bridge
Port Mayaca Lock
Charlotte Harbor
Punta Gorda
Route 1
Route 2
Canal Point
Moore Haven Lock
RR Swing Bridge & Hwy. 27 Bridge
Moore Haven
West Palm Beach Canal
West Palm Beach
Ortona Lock
La Belle
Clewiston
Tony Island Swing Bridge
Caloosahatchee River
Hwy. 29 Drawbridge
Ft. Denaud Swing Bridge
WP Franklin Lock
Alva Drawbridge
Belle Glade
South Bay
Hillsboro Canal
Fort Myers
Waterway Distances
Atlantic Intracoastal to St. Lucie Lock 15.1 miles
St. Lucie Lock to Port Mayaca Lock 23.9 miles
Port Mayaca Lock to Moore Haven Lock
via open lake, Route 1 39.0 miles
via rim canal, Route 2 50.0 miles
Moore Haven Lock to Ortona Lock 15.5 miles
Ortona Lock to WP Franklin Lock 27.9 miles
WP Franklin Lock to Gulf Intracoastal 33.2 miles
St. Lucie Lock to WP Franklin Lock
via Route 1 106.3 miles
via Route 2 117.3 miles
Locks operate on Marine VHF radio channel 13
Bridges operate on Marine VHF radio channel 9
Western extent of sponsorship
Okeechobee Waterway
= Major Clearance Obstacles
Note: Waterway minimum clearance is 49 feet at Port Mayaca railroad lift bridge (with St. Lucie Canal at 14.5 feet).
5 4 3 2 1 0 5 10
Scale in Miles
John G. Cichoski Jr.
12/19/2002

THE BEGINNING OF THE INTRACOASTAL WATERWAY IN FLORIDA

James L. Colee
(courtesy of the St. Augustine Historical Society).

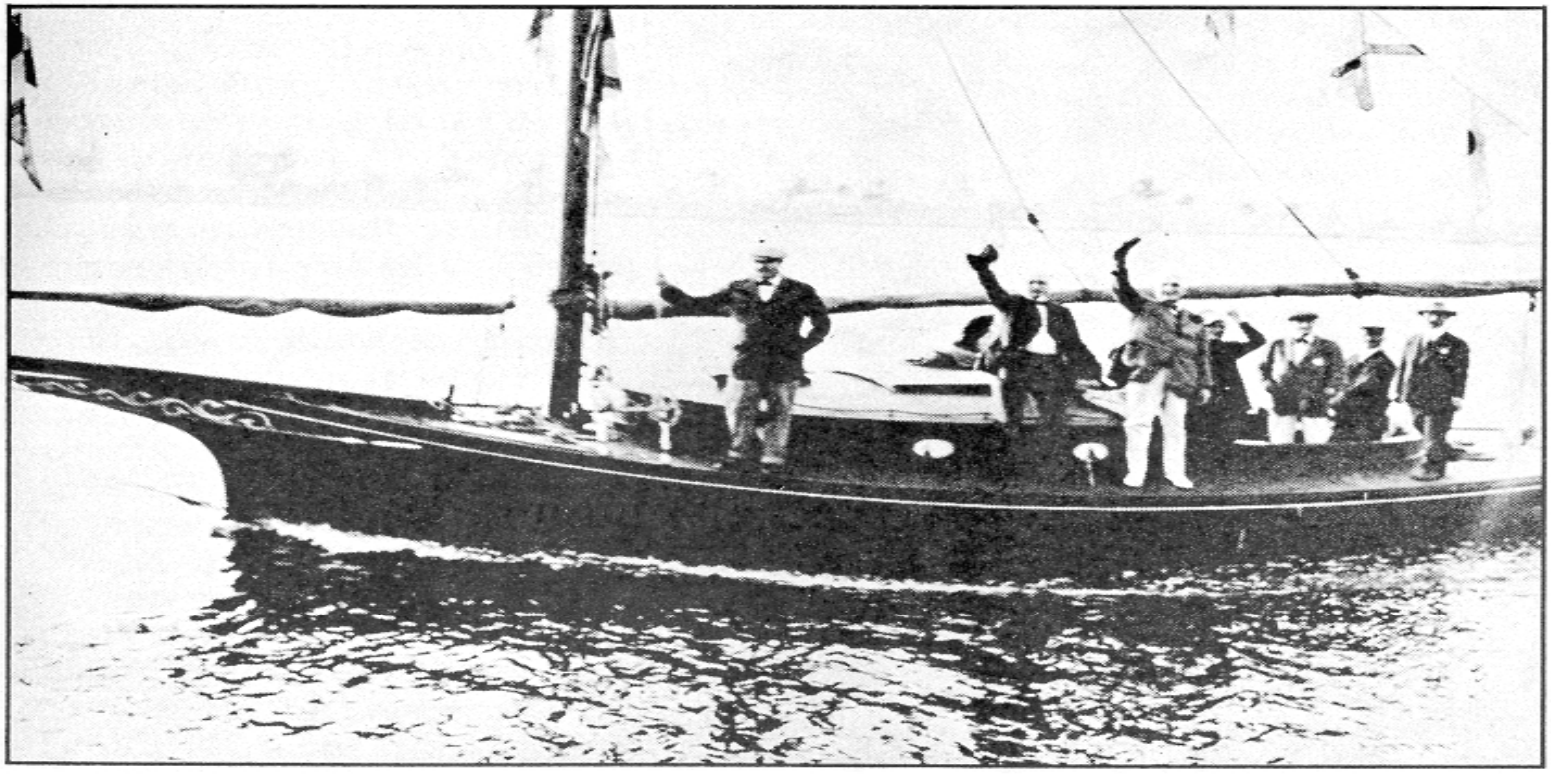
CONSTRUCTED BY A PRIVATE COMPANY, THE FLORIDA EAST COAST CANAL COMPANY BETWEEN 1881 and 1912

A LADDER OR BUCKET DREDGE WAS USED TO CREATE CANALS CONNECTING THE EAST COAST LAGOONS AND RIVERS



THE RESULTING 5 FT DEEP AND 50 FOOT WIDE WATERWAY WAS OPERATED AS A TOLL CANAL

THE BEGINNING OF GOVERNMENT OWNERSHIP OF THE INTRACOASTAL WATERWAY IN FLORIDA

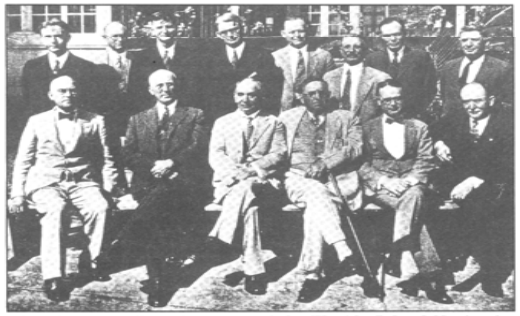


President-elect [illegible] "rescued" by Commodore Brook's yacht *Klyo* after encountering a blockage in the canal channel, January 28, 1921. Brook and [illegible] are at center, waving their caps (courtesy of the Fort Lauderdale Historical Society).

Harry A. Kelsey
(courtesy of the Historical Society of Palm Beach County.)

THE EXISTING WATERWAY WAS OWNED BY HARRY KELSEY, A CANADIAN DEVELOPER WHO WAS CONSTRUCTING THE TOWN OF LAKE PARK IN PALM BEACH COUNTY

THE FLORIDA INLAND NAVIGATION DISTRICT WAS CREATED IN 1927 BY THE FLORIDA LEGISLATURE TO BE THE LOCAL SPONSOR OF THE WATERWAY



First board of Commissioners of the Florida Inland Navigation District, 1928. Seated (left to right): John O. Shares, Frank H. Owen, Chairman Charles F. Burgman, A.W. Young, canal owner Harry S. Kelsey, A.M. Taylor. Standing (left to right): F.G. McMullen, Kelsey's attorney Bert Winters, D.H. Conkling, Frank B. Shutts, D.F. Fuquay, A.H. Brook, board attorney A. A. Green, Stanley Kitching.

CANAL BOND ISSUE PASSES ELECTION ON EAST COAST

Majority In The Eleven Counties For Project Is Four To One

JACKSONVILLE, Fla., June 27. (AP)—A bond issue of $1,800,000 for improvement of the Florida East Coast Canal seems assured. Although only about one-seventh of the qualified voters in the 11 coast counties offered vote in the polls, the majority in favor of the project was about four to one on the face of early returns.

Funds derived from the issue were intended for use of the Florida Inland Navigation District in obtaining right-of-way for the canal.

The proposition decided by the voters yesterday included a plan to turn over the properties so purchased to the federal government, which will in turn expend $4,200,000 to enlarge the canal to a depth of eight feet at average low water and a width of 75 feet at the bottom from Jacksonville to Miami. Government expenditures of $125,000 annually for maintenance also is provided.

Broward county, with a vote of almost 17 to one, endorsed the bond issue of $1,857,000 for the purchase of the East Coast canal properties. The total vote in the county was 1382 for, 127 against. Fort Lauderdale Chamber of Commerce had one of the largest majorities for the

Article from the *Fort Lauderdale Daily News*, June 27, 1928.

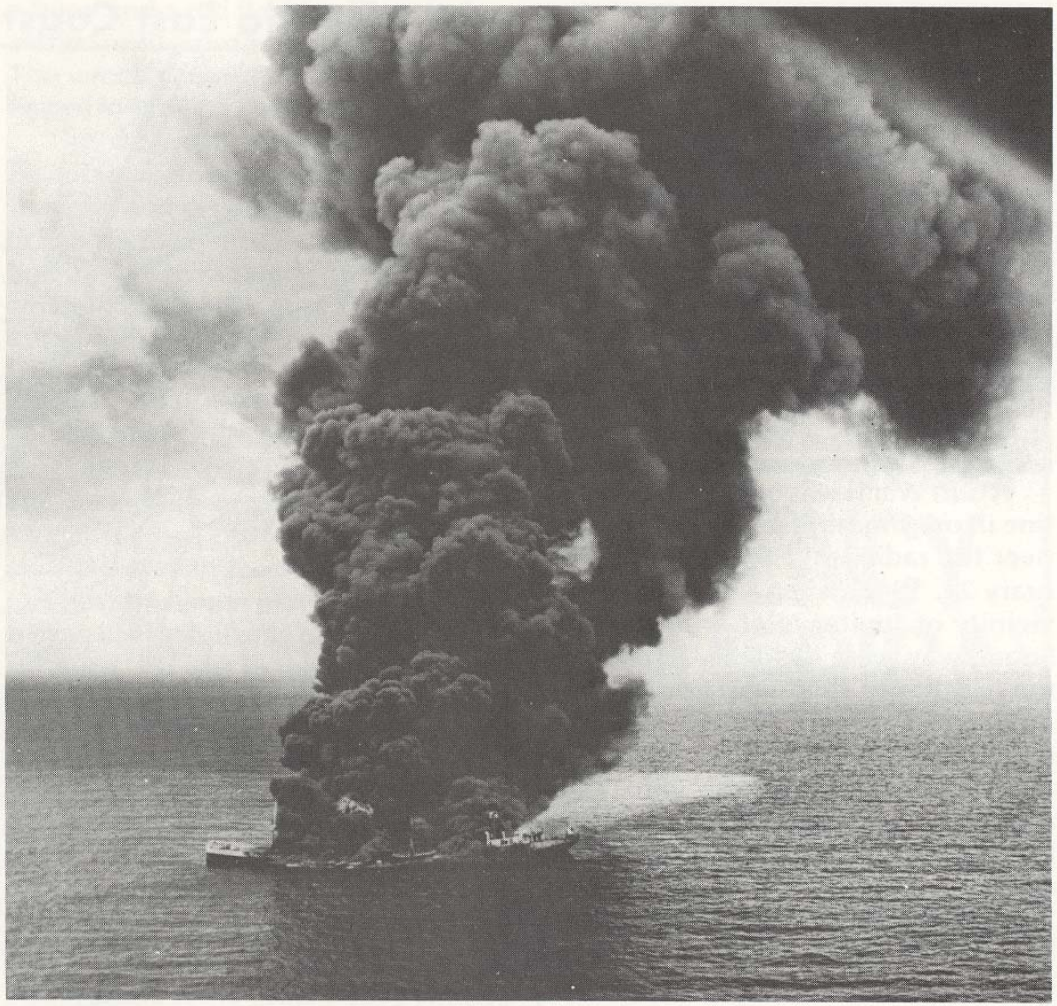
THE DISTRICT PROMOTED THE PASSAGE OF A $1.8 MILLION BOND TO PURCHASE THE WATERWAY FROM KELSEY AND BUY OTHER LANDS REQUIRED FOR THE WATERWAY

1927 GOVERNMENT OWNERSHIP

Waterway enlarged in the 1930's to 100 feet wide and 8 feet deep

1942

Time to make improvements



Potero Del Llanao *was torpedoed on May 13, 1942.*

German submarines off of the east coast of the United States torpedoed many cargo ships, causing Congress to authorize the enlargement of the Intracoastal Waterway to provide a safe and protected route for these ships.

TODAY

FLORIDA ICW STATS

406 Miles in Length

Florida/Georgia Border to Crossbank in the FL Keys

Project Design Depth
12' MLW, FL/GA border to Ft. Pierce
10' MLW from Ft. Pierce to Miami
7' MLW from Miami to Crossbank
8' for the OWW

500,000 cyds. per year of dredging

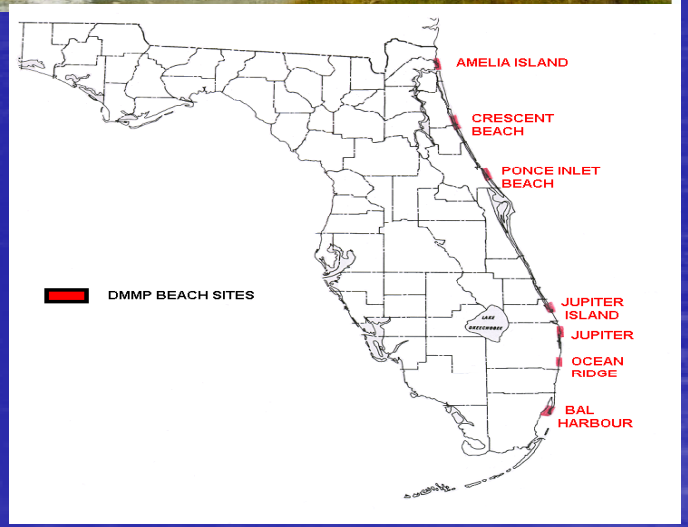
Est. $12-$14 Million annually to maintain at optimum functionality

LAND ACQUISITION AND MANAGEMENT

22,000 acres of Right of way lands

35,000 acres for Dredged Material Management

3,500 acres for Long Term Dredged Material Management



LONG RANGE DREDGED MATERIAL MANAGEMENT PLAN

FOR THE ATLANTIC INTRACOASTAL WATERWAY IN FLORIDA

DREDGED MATERIAL MANAGEMENT PLAN RESULTS

OVER THE NEXT 50 YEARS

ICW MAINTENANCE DREDGING WILL PRODUCE

- 12.5 MCYDS. OF BEACH QUALITY MATERIAL ONTO 8 BEACH SITES
- 12.5 MCYDS. OF NON-BEACH MATERIAL INTO 54 UPLAND CONTAINMENT SITES

SUMMERHAVEN BEACH

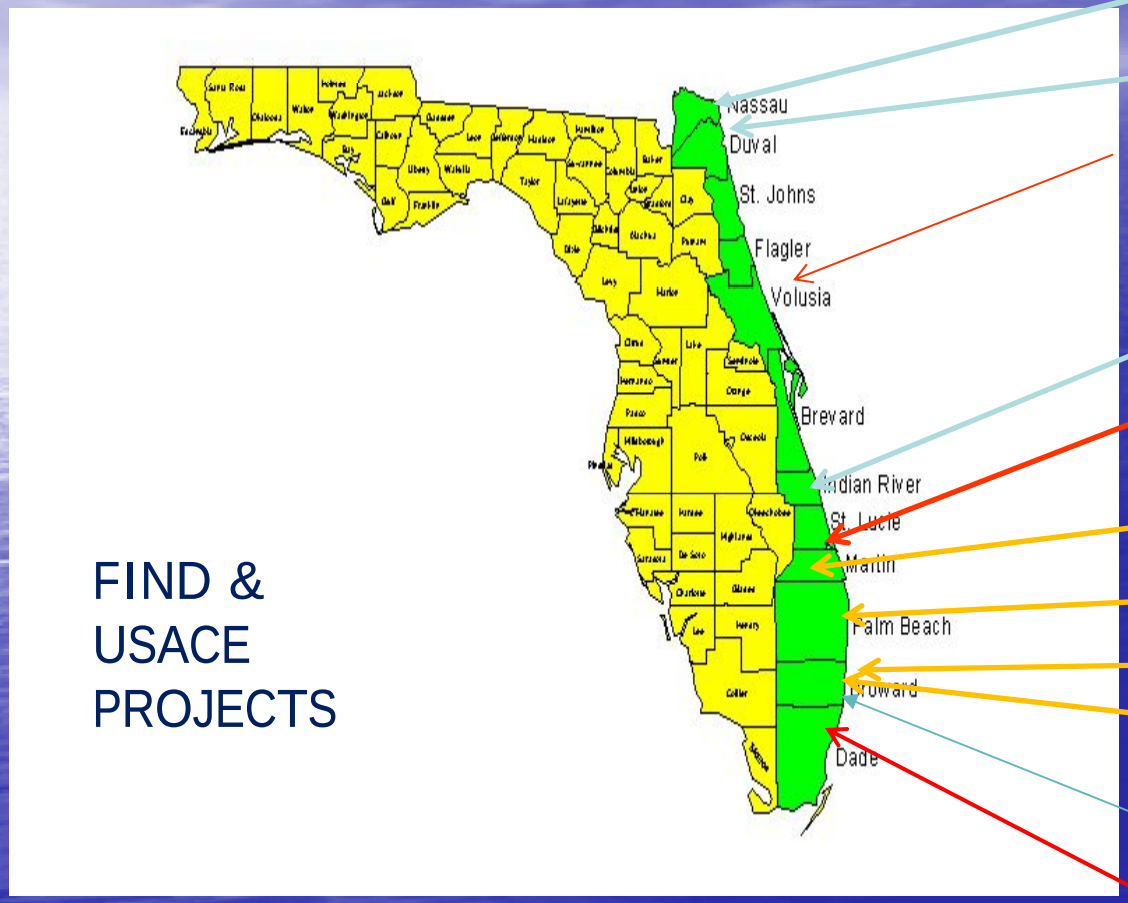
DREDGED MATERIAL PLACEMENT IN UPLAND CONTAINMENT SITE DU-2

FIND Owned
Channel
ICW Right-of-Way

DMMA DU-2

CURRENT & UPCOMING ICW PROJECTS

Blue 2012, Red 2013, Orange 2014+



FIND & USACE PROJECTS

Construction Site NA-1 $3M

Maintenance Dredging Sawpit $3 M

Dredging Vicinity of Ponce Inlet IWW $2.5 M

DMMA IR-2 Construction $4M

OWW & Crossroads Dredging $1 M

Construction of DMMA O-7 $4M

IWW Deepening Palm Beach $7M

Broward Reach 1 $5M

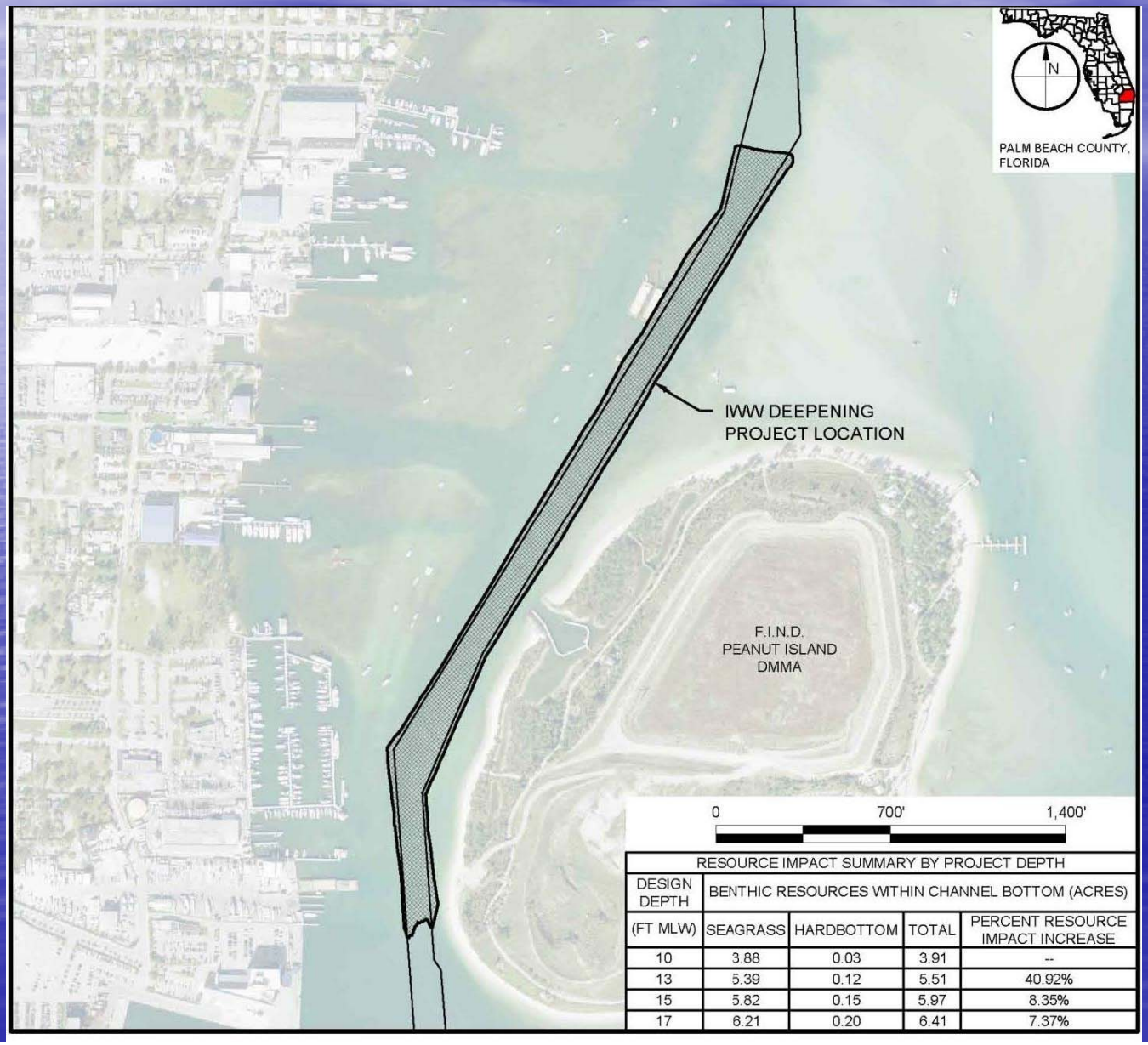
IWW Deepening Broward $18M

Deepening of the Dania Cut Off Canal $5.5M

Maintenance Dredging Vicinity of Bakers Haulover Inlet $1 M

$12-$14 Million per year on average for maintenance and improvement

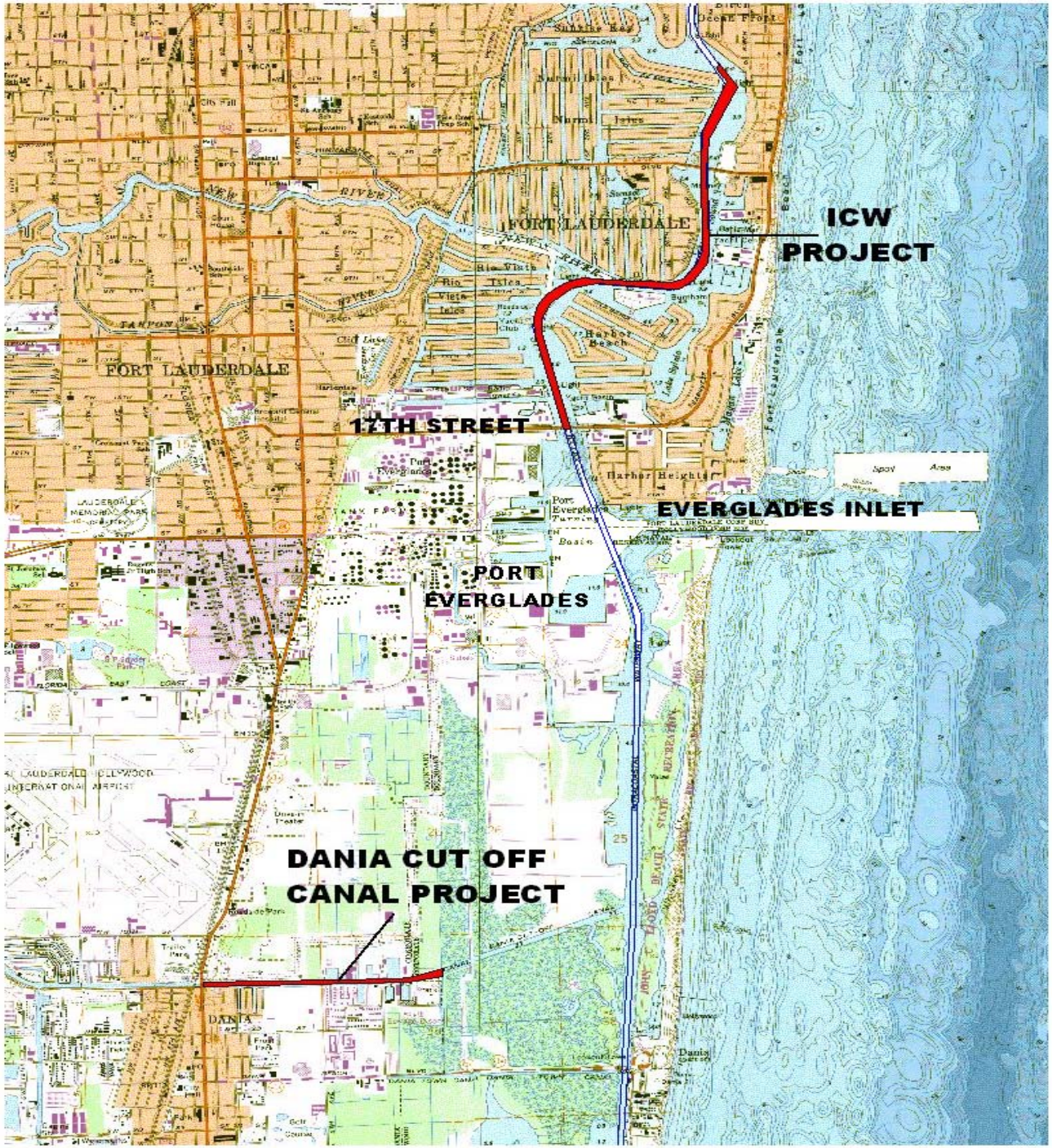
IWW Deepening Project Palm Beach County



RESOURCE IMPACT SUMMARY BY PROJECT DEPTH				
DESIGN DEPTH	BENTHIC RESOURCES WITHIN CHANNEL BOTTOM (ACRES)			
(FT MLW)	SEAGRASS	HARDBOTTOM	TOTAL	PERCENT RESOURCE IMPACT INCREASE
10	3.88	0.03	3.91	--
13	5.39	0.12	5.51	40.92%
15	5.82	0.15	5.97	8.35%
17	6.21	0.20	6.41	7.37%

Broward IWW Deepening Project

Dania Cutoff Canal Deepening Project



ECONOMICS OF THE

ATLANTIC INTRACOASTAL WATERWAY

IN FLORIDA

COMMERCIAL ECONOMICS OF THE ATLANTIC INTRACOASTAL WATERWAY IN FLORIDA

- CARGO TRANSPORTED
  1.7 MILLION TONS
  97% Fuel Oil

- TOTAL CARGO VALUE
  $0.5 Billion

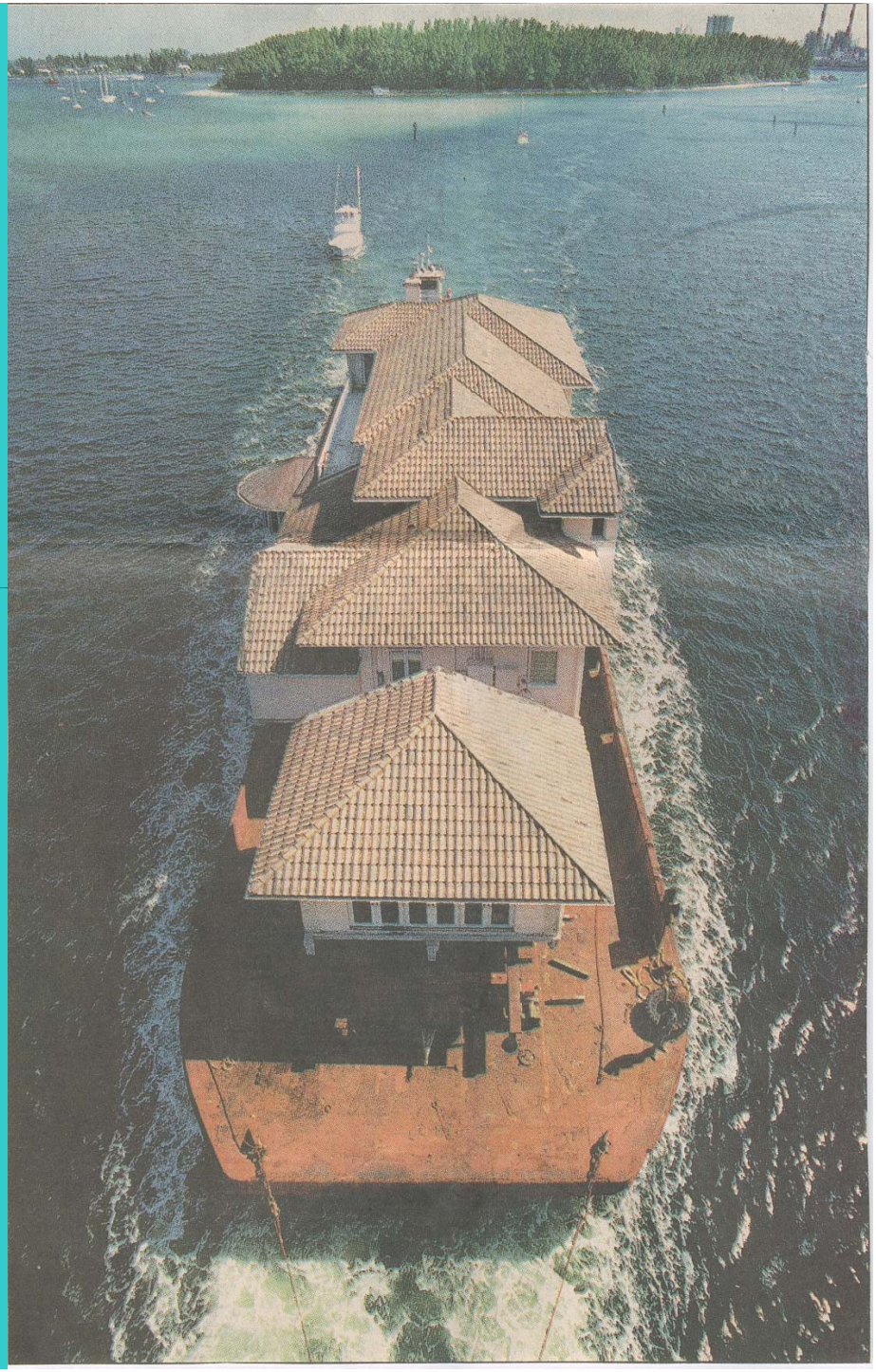
- TOTAL ECONOMIC OUTPUT $0.6 Billion

- TOTAL PERSONAL WAGES $68 Million

- TOTAL JOBS
  4,869

OVERSIZED CARGOS

- HOUSES
- BRIDGE PILINGS
- ROCKET BOOSTERS
- LARGE GENERATORS



Some Interesting Statistics on Mega-yachts:

•A mega-yacht vessel may spend up to 10% - 15% of the original purchase price on annual operations & maintenance! (i.e. $100M vessel = $10M-$15M per year in expenses)

•By the year 2020, there will be a 75% increase in the number of vessels benefitting from increased project depth (i.e. -15' MLW)

•By 2030, every 10 years there is a projected 50% increase in the number of vessels benefitting from project deepening

•Majority of the world fleet are based in the Atlantic Ocean, with 85% shifting between the Caribbean and Mediterranean oceans.

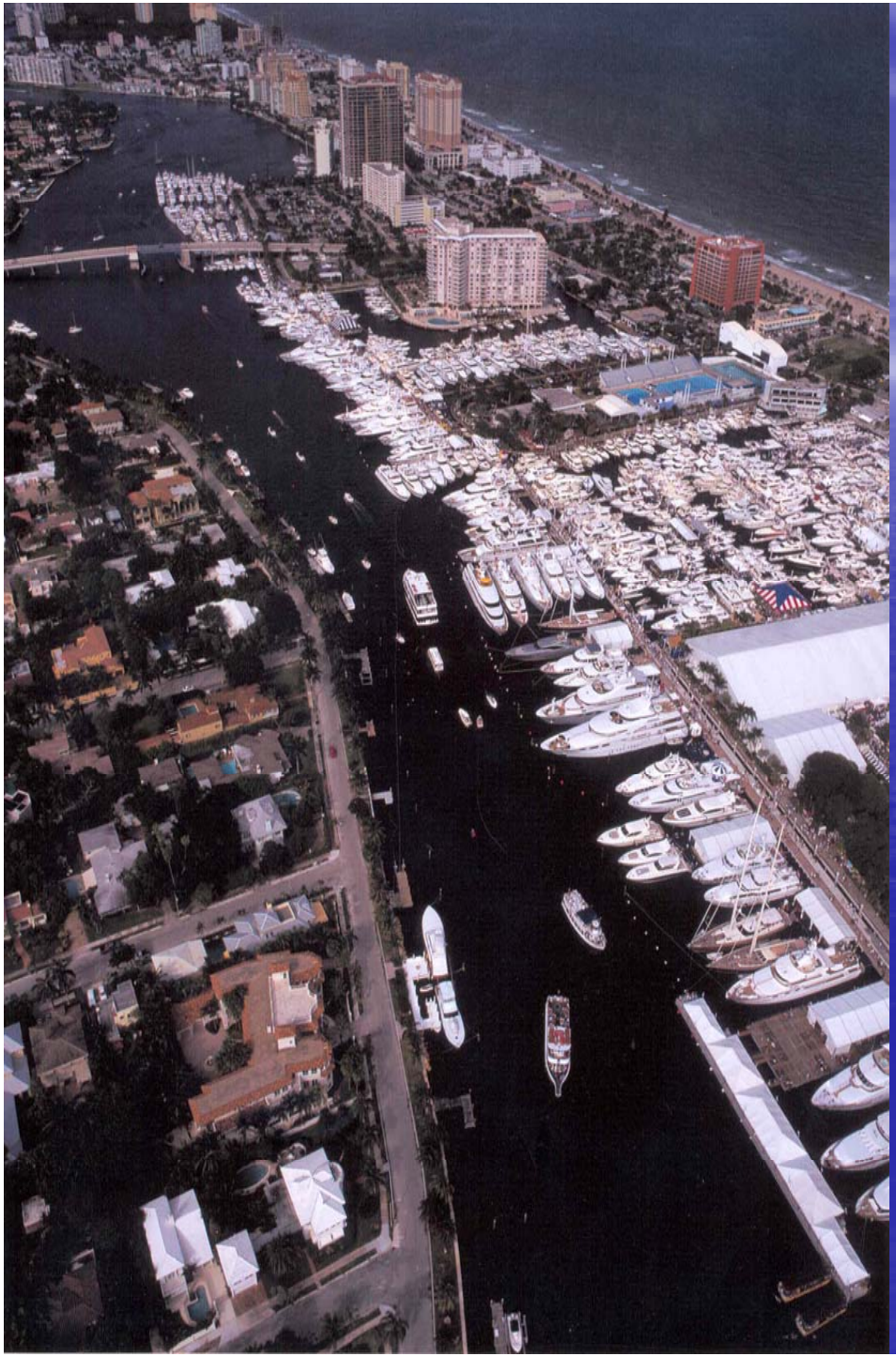
•South Florida is generally NOT an owner destination but is one of the most important areas in the world for securing crew, provisions, repair and services.

•Mediterranean area increasingly utilized for alternative "service location"

•Moving from a 40' vessel to a 160' vessel equates to 5x increase in average annual mechanical revenue, 12x increase in non-mechanical revenue,

DISTRICT RECREATIONAL WATERWAY STATISTICS

- 278,391 Registered Vessels
- Thousands of Visiting Vessels
- Registered Vessels make 16 Million Vessel Trips per year



RECREATIONAL ECONOMICS OF THE ATLANTIC INTRACOASTAL WATERWAY IN FLORIDA

- **TOTAL ECONOMIC OUTPUT**
  $14.7 Billion
- **TOTAL PERSONAL WAGES**
  $4.4 Billion
- **TOTAL JOBS**
  113,849
- **TOTAL PROPERTY VALUES**
  $19.4 Billion

DECREASE IN WATERWAY ECONOMICS

IF MAINTENANCE DREDGING CEASED AND THE WATERWAY RETURNED TO A 3 FOOT CONTROLLING DEPTH

- DECREASE IN ECONOMIC OUTPUT $8.1B (53%)
- DECREASE IN PERSONAL WAGES $2.3B (52%)
- DECREASE IN JOBS 61,733 (52%)
- DECREASE IN PROPERTY VALUES $5.4B (28%)

INCREASE IN WATERWAY ECONOMICS IF MAINTENANCE DREDGING WAS INCREASED TO CONSISTENTLY PROVIDE A 10 AND 12 FOOT CONTROLLING DEPTH

- INCREASE IN ECONOMIC OUTPUT $2.8B (18%)
- INCREASE IN PERSONAL WAGES $720M (16%)
- INCREASE IN JOBS 17,807 (15%)
- INCREASE IN PROPERTY VALUES $1.9B (10%)

WATERWAY

ACCESS

ASSISTANCE PROGRAMS

1. Public Navigation Channel Dredging.
2. Public Navigation Aids & Markers.
3. Inlet Mgt. Projects Beneficial to Public Navigation.
4. Public Shoreline Stabilization of District Waterways.
5. Acquisition & development of Public DMMA or Commercial/Industrial Access.
6. Waterway Signs & Buoys.
7. Acquisition & Improvements to Public Boat Ramps & Launching Facilities.
8. Acquisition & Improvements to Public Boat Docking & Mooring Facilities.
9. Derelict Vessel Removal.
10. Waterway-related Environmental Programs & Facilities.
11. Public Fishing & Viewing Piers .
12. Waterfront Parks & Boardwalks.
13. Maritime Mgt. Planning.
14. Waterway Safety Programs & Equipment.
15. Beach Renourishment Adversely Impacted by Navigation.
16. Environmental Restoration, Enhancement , or Mitigation.
17. Other Waterway-related Projects.

SINCE 1986

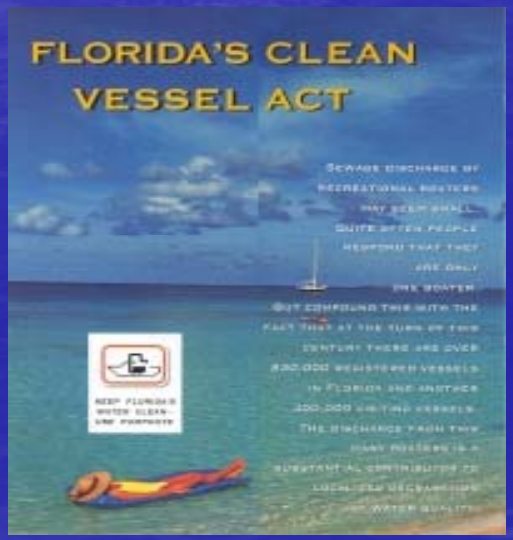
$175 MILLION IN DISTRICT ASSISTANCE

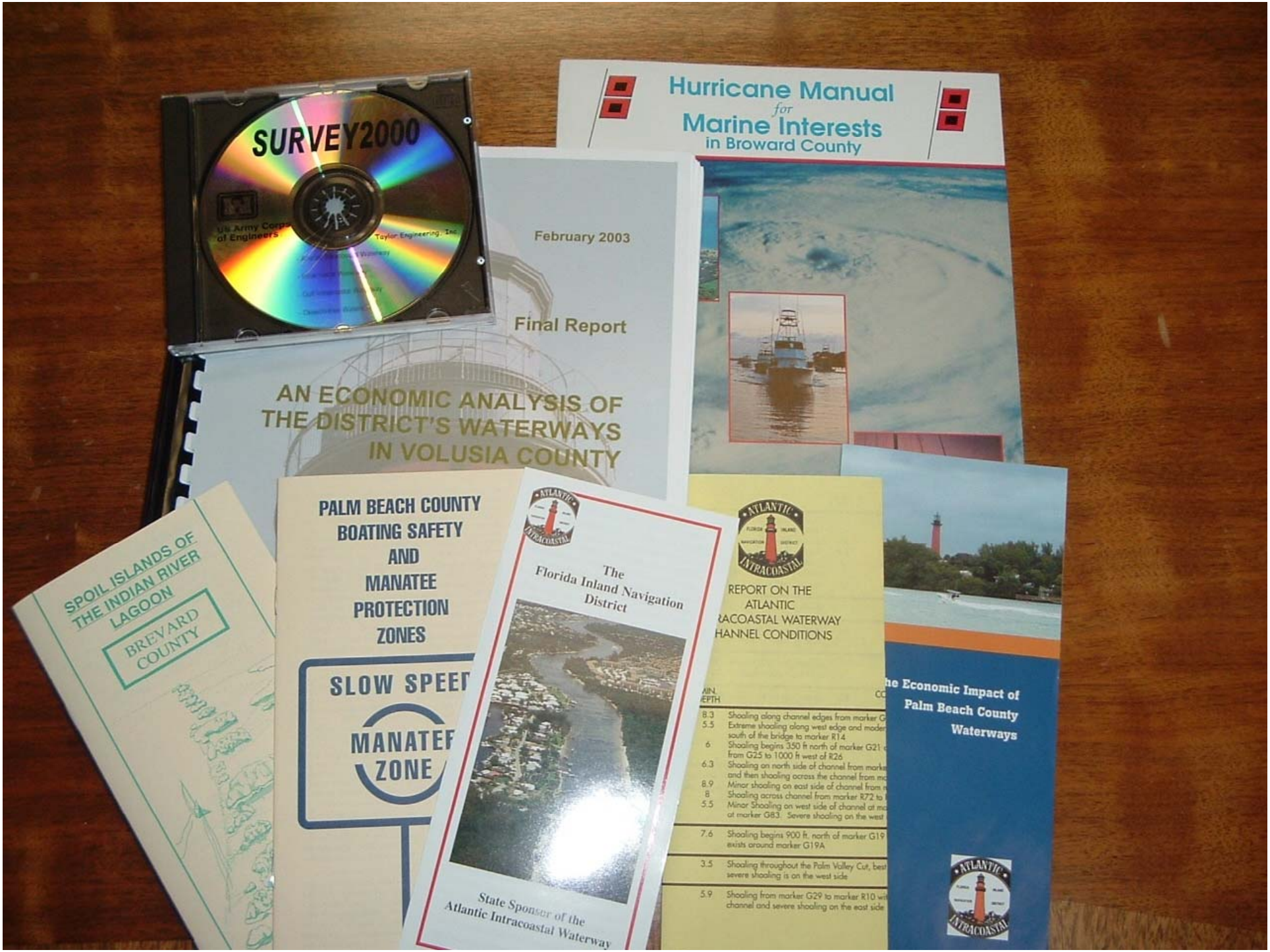
971 PROJECTS

$656 MILLION IN WATERWAY IMPROVEMENTS

WATERWAY CLEAN UP PROGRAMS

- Debris/Litter Clean ups
- Derelict Vessel Removal
- Spoil Island Restoration and Enhancements




SURVEY2000
U.S. Army Corps of Engineers
Taylor Engineering, Inc.
February 2003
Final Report
AN ECONOMIC ANALYSIS OF THE DISTRICT'S WATERWAYS IN VOLUSIA COUNTY
Hurricane Manual for Marine Interests in Broward County
SPOIL ISLANDS OF THE INDIAN RIVER LAGOON
BREVARD COUNTY
PALM BEACH COUNTY BOATING SAFETY AND MANATEE PROTECTION ZONES
SLOW SPEED
MANATEE ZONE
The Florida Inland Navigation District
State Sponsor of the Atlantic Intracoastal Waterway
REPORT ON THE ATLANTIC INTRACOASTAL WATERWAY CHANNEL CONDITIONS
The Economic Impact of Palm Beach County Waterways

ENJOY YOUR FLORIDA WATERWAYS

Waterways Plan for Martin & St. Lucie Counties

A. Jeffrey Weidner

Strategic Development Manager

Florida Department of Transportation (District IV)

FLORIDA

Freight, Logistics & Passenger Operations

FLORIDA DEPARTMENT OF TRANSPORTATION

Martin/St. Lucie County Waterways Plan Forum

December 19, 2013

Agenda

- ✓Strategic Intermodal System
  - ✓Background
  - ✓Local Designations
  - ✓Waterways Criteria
- ✓Port of Ft Pierce
  - ✓Existing Use
  - ✓Existing Projects
  - ✓The Future

Florida's Strategic Intermodal System (SIS) is a transportation system that . . .

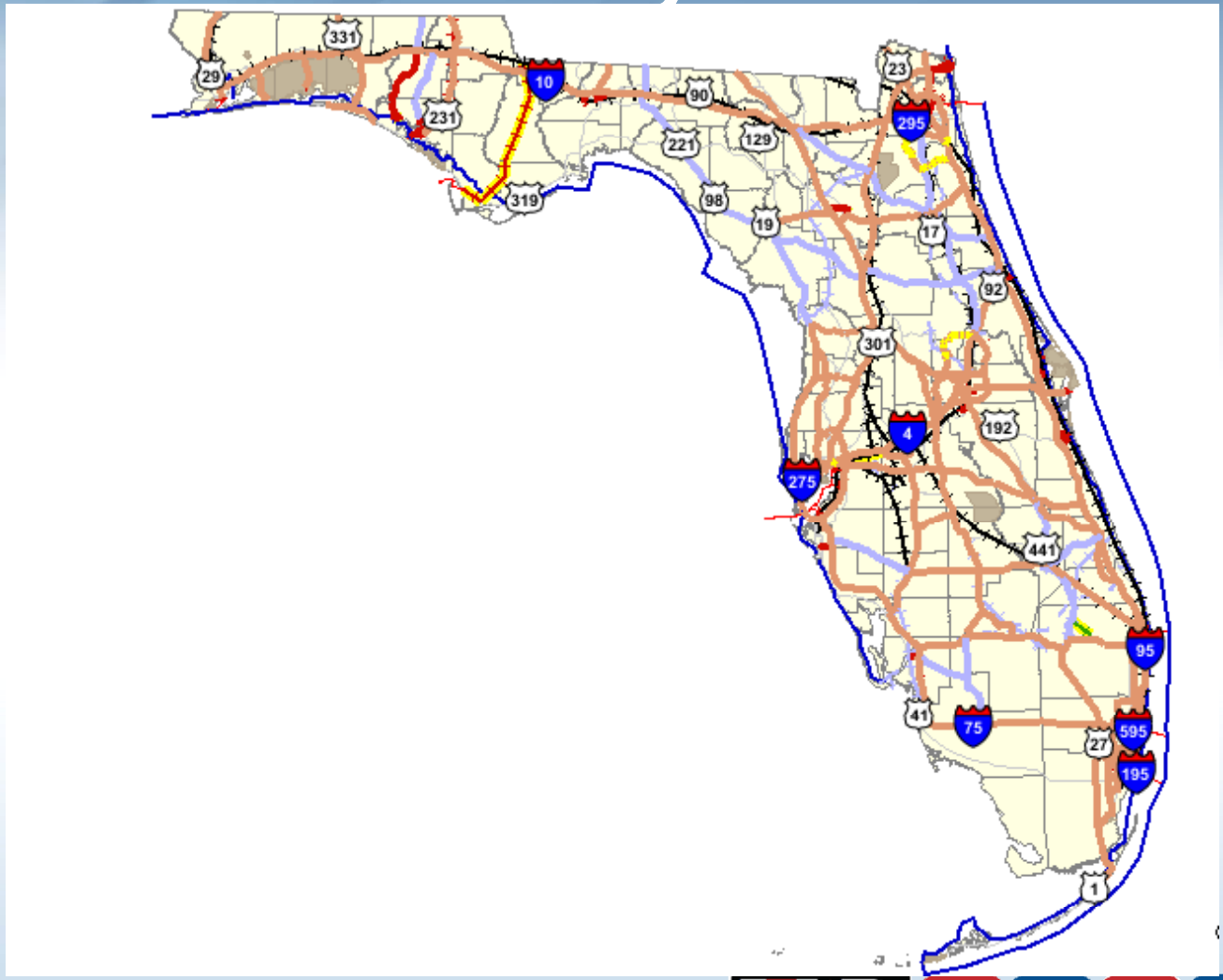
- **Strategic** Includes facilities of statewide and interregional significance
- **Intermodal** Contains all forms of transportation for moving both people and goods, including linkages that provide for smooth and efficient transfers between modes and major facilities
- **System** Integrates individual facilities, services, forms of transportation (modes) and linkages into a single, integrated transportation network

The current designated SIS is a network of high-priority transportation facilities which . . .

- Includes the state's largest and most significant commercial service airports, spaceport, deepwater seaports, freight rail terminals, passenger rail and intercity bus terminals, rail corridors, waterways and highways; and

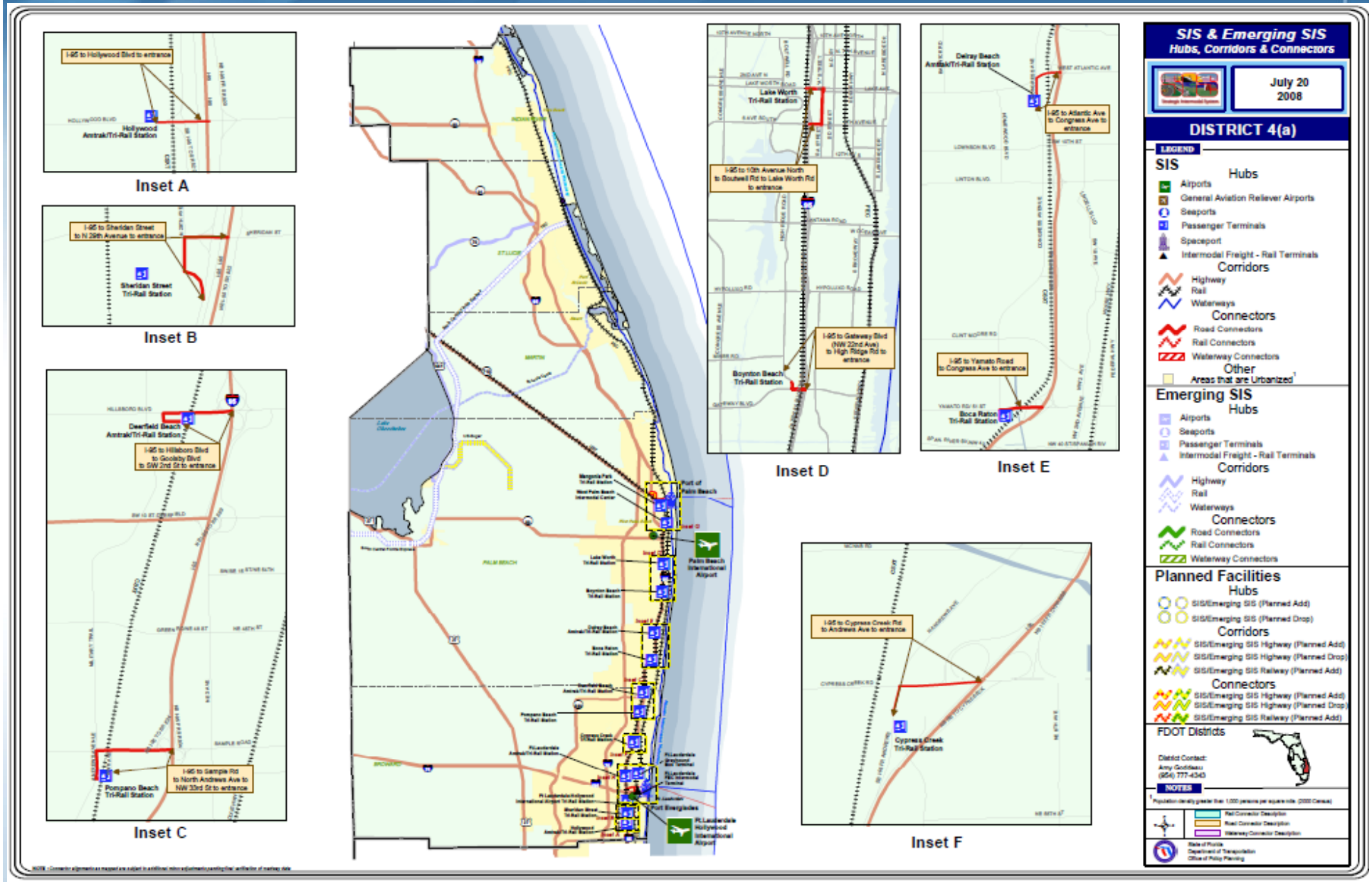
- Carries more than 99 percent of all commercial air passengers and cargo, virtually all waterborne freight and cruise passengers, almost all rail freight, 89 percent of all interregional rail and bus passengers, and 55 percent of total traffic and more than 70 percent of all truck traffic on the State Highway System.

Florida SIS Map of Highway and Waterway Facilities

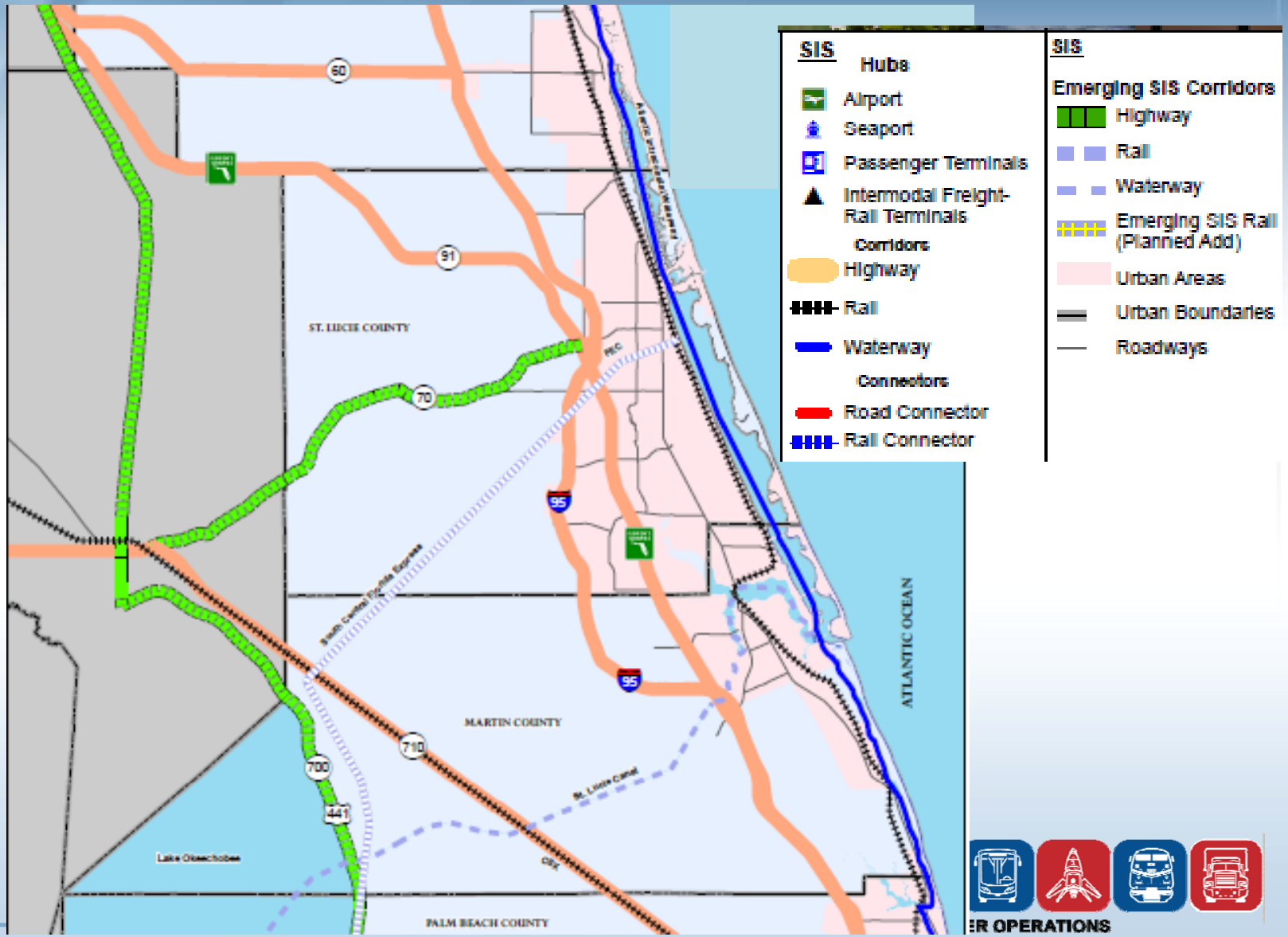


OFFICE OF FREIGHT, LOGISTICS & PASSENGER OPERATIONS

District Four SIS Facilities



SIS Facilities
St. Lucie County & Martin County



Martin/St. Lucie SIS Facilities

Hubs – None

Corridors

- Highways
  1. I-95
  2. Turnpike
  3. SR 70 from Turnpike to I-95
- Waterway
  1. Atlantic Intracoastal Waterway and shipping lanes
- Freight Rail Corridors
  1. FEC Line from Miami to Jacksonville
  2. CSX Line from Mangonia Park to Auburndale
- Passenger Rail Corridors –
  1. Amtrak (on CSX tracks) from Mangonia Park to Auburndale

Connectors - None

Martin/St. Lucie SIS Facilities

Emerging SIS

- Highway Corridor –
  1. SR 70 from SR 710 to Turnpike
  2. US 441 from SR 80 to SR 60
- Freight Rail Corridor – South Central Florida Express
- Waterway Corridor – Okeechobee Waterway from Gulf of Mexico to Atlantic Ocean Intracoastal waterway

SIS Waterways Designation

Table 2. Revised SIS and Emerging SIS Criteria and Thresholds for Waterways

SIS Component	Emerging SIS Component
Coastal Shipping Lanes and Intracoastal Waterway Designated intracoastal waterways or coastal shipping lanes handling international waterborne trade? OR Inland Waterway: Deep Draft Size Criteria (must meet both of the following) • Authorized depth of waterway ≥ 12 feet • >0.25% of U.S. total – annual total waterway freight tonnage Inland Waterway: Shallow Draft Size Criteria (must meet both of the following) • Authorized depth of waterway < 12 feet • ≥0.25% of U.S. total – annual domestic waterway freight tonnage	**Must meet either size or economic connectivity criteria** Inland Waterway: Deep Draft Size Criteria (must meet both of the following) • Authorized depth of waterway ≥ 12 feet • >0.05% of U.S. total – annual total waterway freight tonnage Inland Waterway: Shallow Draft Size Criteria (must meet both of the following) • Authorized depth of waterway < 12 feet • ≥0.05% of U.S. total – annual domestic waterway freight tonnage Economic Connectivity Criteria *Key industry employment* (must meet one of the following) • ≥0.05% of U.S. total – employment of industries dependent on waterborne transportation* (within 1 mile) • Located in a county or city within a designated Rural Area of Critical Economic Concern and ≥0.01% of U.S. total – employment of industries dependent on waterborne transportation* (within 1 mile)

* Industries dependent on waterborne transportation include agricultural and forestry (NAICS 11); mining (NAICS 21); and trade and logistics (NAICS 42, 48, 49)

Eligible Projects

Waterway Corridors

SIS Project Categories	Projects Eligible for Funding	Projects Not Eligible for Funding	Notes
Capacity Projects	Marking or dredging shipping channels in the immediate vicinity of SIS seaports; designation, identification, and improvement of shipping lanes within 12 miles of the Florida coast for purposes of avoiding hazards or unfavorable impacts of sea transport movements.	Projects beyond the territorial sea of the United States (12 miles from the coast).	Encourage coordination with the Army Corps of Engineers

Waterway Connectors

SIS Project Categories	Projects Eligible for Funding	Projects Not Eligible for Funding	Notes
Capacity Projects	New connectors; locks; dredging; widening.		

Small County Dredging Program is another Funding opportunity

Port Operations Area

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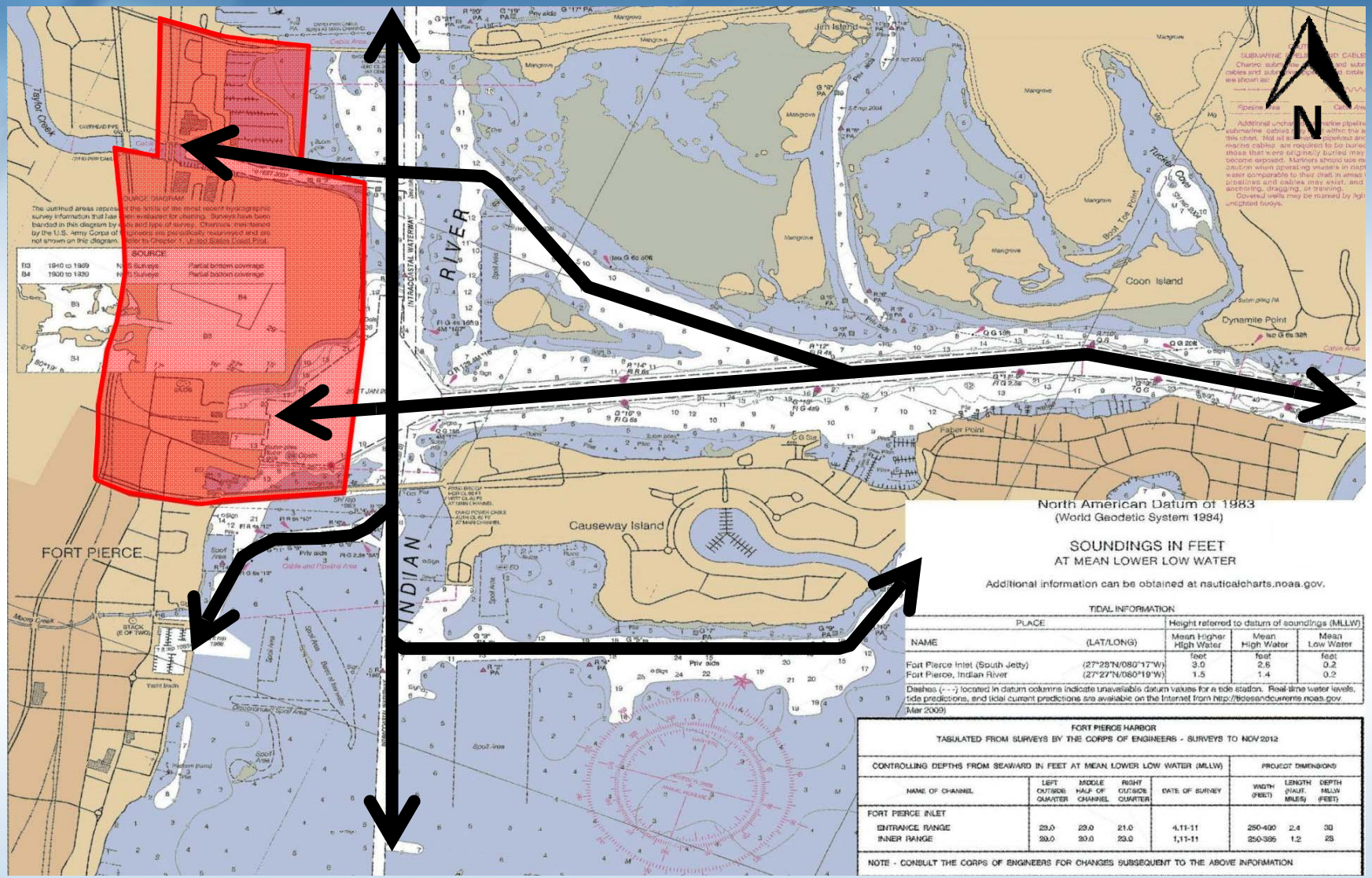
ADJACENT NAVIGATION FACILITIES



PLACE		Height referred to datum of soundings (MLLW)		
NAME	(LAT/LONG)	Mean Higher High Water	Mean High Water	Mean Low Water
		feet	feet	feet
Fort Pierce Inlet (South Jetty)	(27°28'N/080°17'W)	3.0	2.6	0.2
Fort Pierce, Indian River	(27°27'N/080°19'W)	1.5	1.4	0.2

Dashes (- - -) located in datum columns indicate unavailable datum values for a tide station. Real-time water levels, tide predictions, and tidal current predictions are available on the Internet from http://tidesandcurrents.noaa.gov
Mar 2009

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)					PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	MIDDLE HALF OF CHANNEL	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
FORT PIERCE INLET							
ENTRANCE RANGE	29.0	29.0	21.0	4.11-11	250-400	2.4	30
INNER RANGE	29.0	20.0	23.0	1.11-11	250-395	1.2	25

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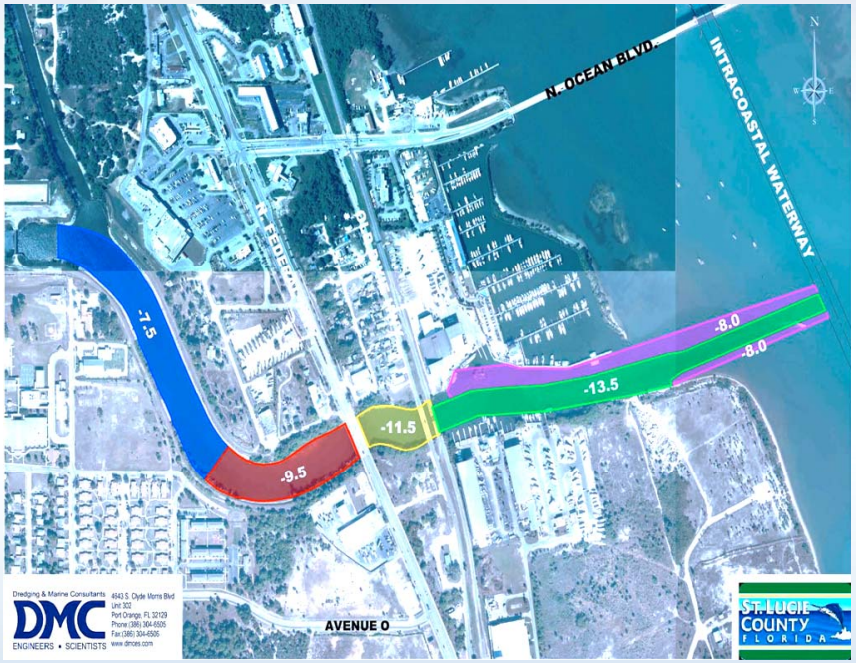
The 2002 Master Plan: Successes

Taylor Creek Dredging

Project Update to be given by Don West, St. Lucie County



STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

FLP OFFICE OF FREIGHT, LOGISTICS & PASSENGER OPERATIONS

The 2002 Master Plan: Successes

2nd Street – Port Roadway Reconstruction

Project Update to be given by Don West, St. Lucie County

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Emergency Dredging

Fort Pierce Harbor Dredging

- Funded as part of Taylor Creek Dredging
- Currently in progress
- Reuse of material in City Marina

Port Existing Conditions

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Port Existing Conditions

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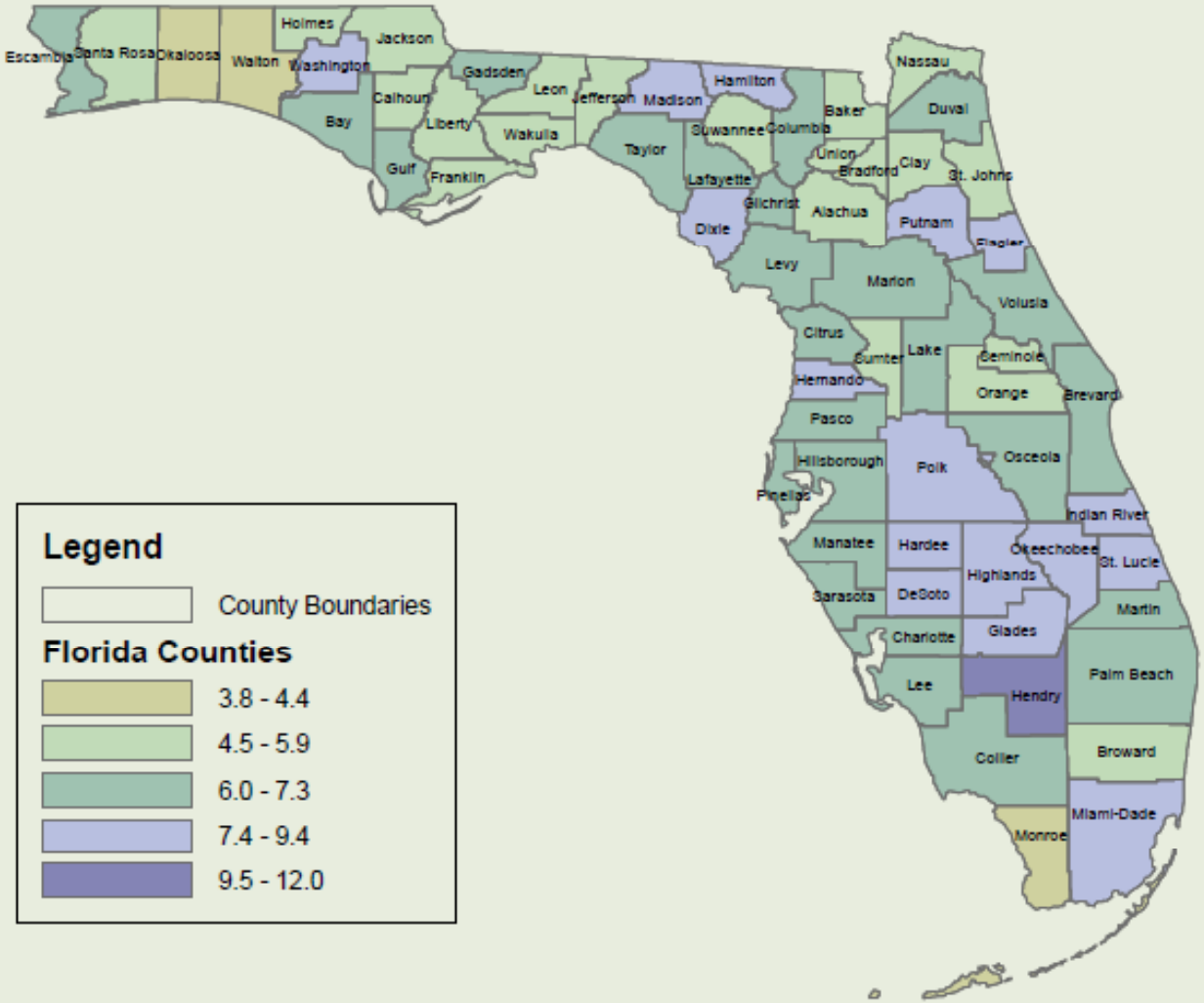
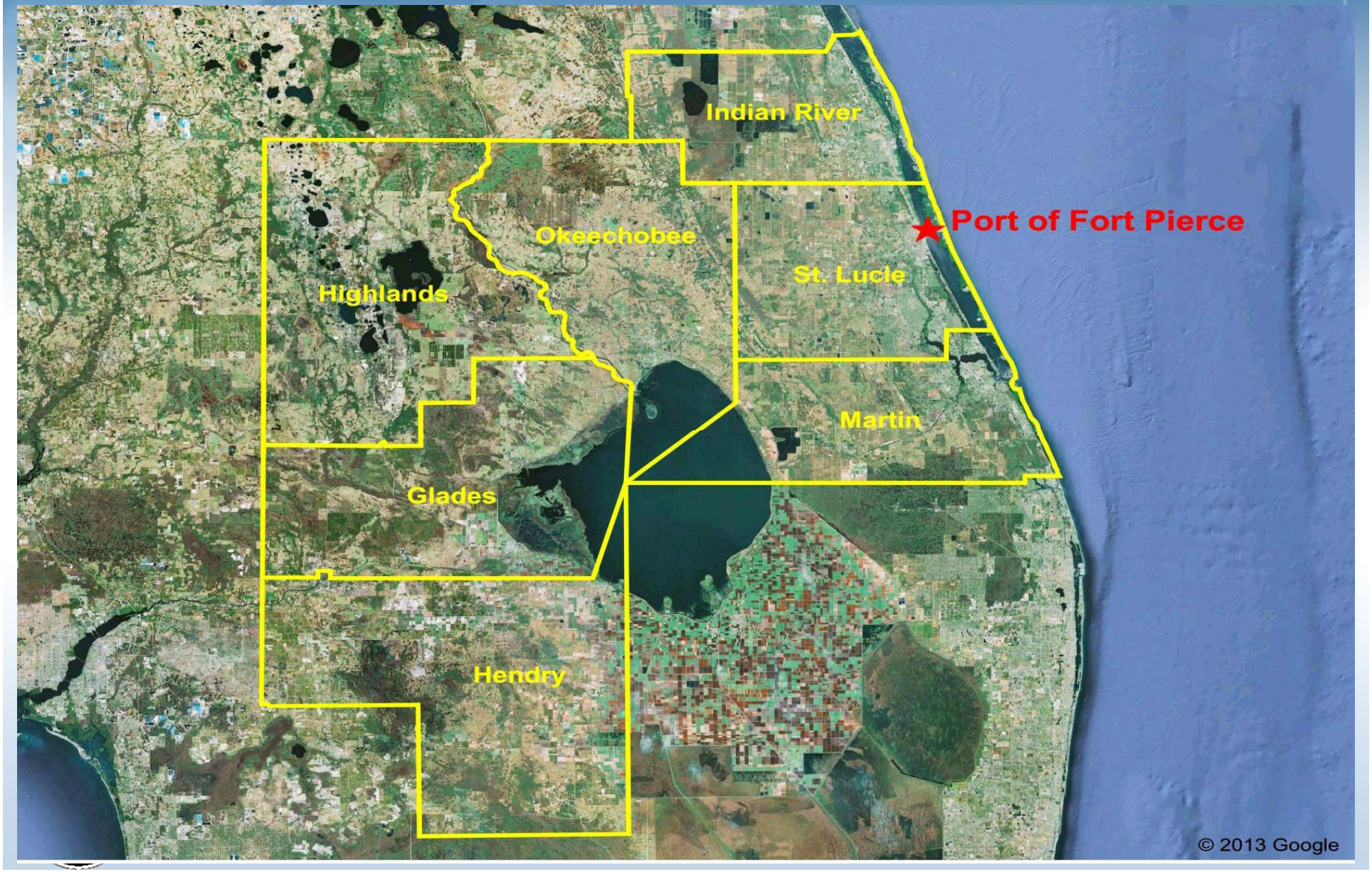
Florida Unemployment Rates by County
(Not Seasonally Adjusted)
October 2013



Economic Generator for Region



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Eligibility Criteria
Florida Statute 311.07

Projects eligible for grant funding:

- Transportation Facilities
- Dredging
- Construction or rehabilitation of wharves, docks, structures, jetties, piers…..
- Vessel tracking systems, cranes
- Acquisition of land for port purpose
- Acquisition, improvement, enlargement or extension of existing port facilities
- Environmental protection projects
- Transportation facilities
- Intermodal projects
- Construction or rehab of port facilities

The 2012 Florida Statutes

Title XXII — PORTS AND HARBORS
Chapter 311 — SEAPORT PROGRAMS AND FACILITIES
View Entire Chapter

311.07 Florida seaport transportation and economic development funding.—

(1) There is created the Florida Seaport Transportation and Economic Development Program

(b) Projects eligible for funding by grants under the program are limited to the following port facilities or port transportation projects:

1. Transportation facilities within the jurisdiction of the port.
2. The dredging or deepening of channels, turning basins, or harbors.
3. The construction or rehabilitation of wharves, docks, structures, jetties, piers, storage facilities, cruise terminals, automated people mover systems, or any facilities necessary or useful in connection with any of the foregoing.
4. The acquisition of vessel tracking systems, container cranes, or other mechanized equipment used in the movement of cargo or passengers in international commerce.
5. The acquisition of land to be used for port purposes.
6. The acquisition, improvement, enlargement, or extension of existing port facilities.
7. Environmental protection projects which are necessary because of requirements imposed by a state agency as a condition of a permit or other form of state approval; which are necessary for environmental mitigation required as a condition of a state, federal, or local environmental permit; which are necessary for the acquisition of spoil disposal sites and improvements to existing and future spoil sites; or which result from the funding of eligible projects listed in this paragraph.
8. Transportation facilities as defined in s. 334.03(30) which are not otherwise part of the Department of Transportation's adopted work program.
9. Intermodal access projects.
10. Construction or rehabilitation of port facilities as defined in s. 315.02, excluding any park or recreational facilities, in ports listed in s. 311.09(1) with operating revenues of $5 million or less, provided that such projects create economic development opportunities, capital improvements, and positive financial returns to such ports.

And……

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Strategic Port Plan Required by Florida Statutes – F.S 311.14

Each Port shall develop a strategic plan with a 10 year horizon"
and must include the following:

✓Economic development component

✓Infrastructure development and improvement component

✓Component that identifies Intermodal transportation facilities

✓Component that identifies physical, environments, and regulatory barriers to achievement

✓Intergovernmental coordination component

The 2012 Florida Statutes

Title XXII — PORTS AND HARBORS
Chapter 311 — SEAPORT PROGRAMS AND FACILITIES
View Entire Chapter

311.14 Seaport planning.–

(1) The Department of Transportation shall develop, in coordination with the ports listed in s. 311.09(1) and other partners, a Statewide Seaport and Waterways System Plan. This plan shall be consistent with the goals of the Florida Transportation Plan developed pursuant to s. 339.155 and shall consider needs identified in individual port master plans and those from the seaport strategic plans required under this section. The plan will identify 5-year, 10-year, and 20-year needs for the seaport system and will include seaport, waterway, road, and rail projects that are needed to ensure the success of the transportation system as a whole in supporting state economic development goals.

(2) Each port shall develop a strategic plan with a 10-year horizon. Each plan must include the following:

(a) An economic development component that identifies targeted business opportunities for increasing business and attracting new business for which a particular facility has a strategic advantage over its competitors, identifies financial resources and other inducements to encourage growth of existing business and acquisition of new business, and provides a projected schedule for attainment of the plan's goals.

(b) An infrastructure development and improvement component that identifies all projected infrastructure improvements within the plan area which require improvement, expansion, or development in order for a port to attain a strategic advantage for competition with national and international competitors

Eligibility Criteria
Florida Statute 311.07

Projects eligible for grant funding:

Seaport master plan or strategic plan development or updates, including the purchase of data to support such plans

The 2012 Florida Statutes

Title XXII — PORTS AND HARBORS
Chapter 311 — SEAPORT PROGRAMS AND FACILITIES
View Entire Chapter

311.07 Florida seaport transportation and economic development funding.—

(1) There is created the Florida Seaport Transportation and Economic Development Program

less, provided that such projects create economic development opportunities, capital improvements, and positive financial returns to such ports.

11. Seaport master plan or strategic plan development or updates, including the purchase of data to support such plans.

(c) To be eligible for consideration by the council pursuant to this section, a project must be consistent with the port comprehensive master plan which is incorporated as part of the approved

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Opportunities and Challenges

- Diverse Economic Opportunities
  - Small niche shipping by specialized operators to expand trade within regional markets (Bahamas and Caribbean)
  - Citrus exports to South Korea
  - Bulk cargoes no longer desired by nearby larger ports
  - Short-sea shipping for transshipped cargoes.
  - Regional distribution, capitalizing on area intermodal transportation network, including FEC rail connection
  - Marine industry facilities, whether mega-yacht marina or boat-repair operations. Mega yachts and cargo can co-exist

- Existing On-Port Rail Corridors
  - Potential for RO/RO
  - Potential for Transfer Facilities

Opportunities and Challenges

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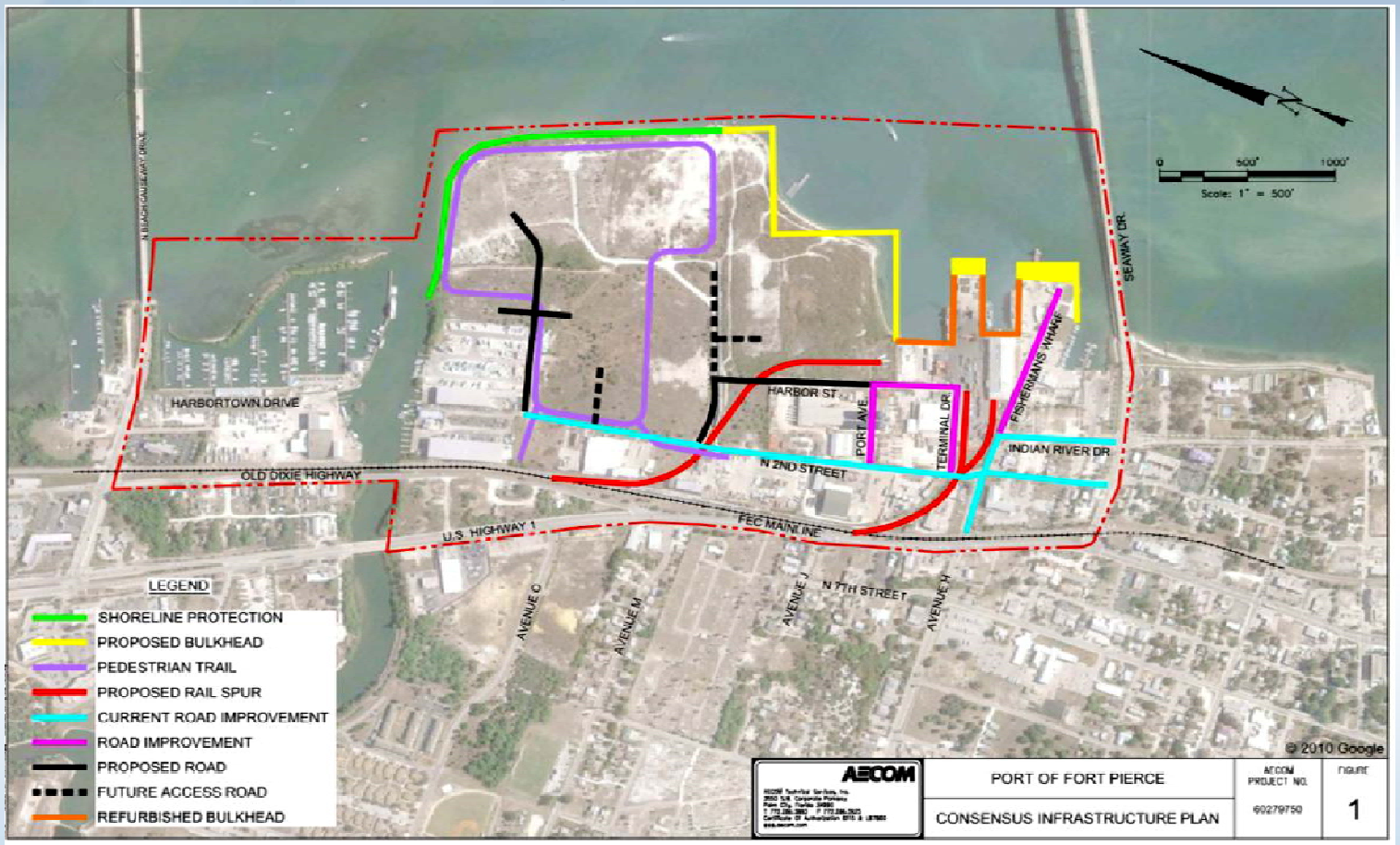
Opportunities and Challenges

Opportunity: Ferry Services

Recommendations and Implementation

Amend the current plan for Design and Construction of Infrastructure Projects



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Recommendations and Implementation

US Maritime Academies

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Massachusetts Maritime Academy

Buzzards Bay, Massachusetts

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London Olympics

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Cleveland College Regatta

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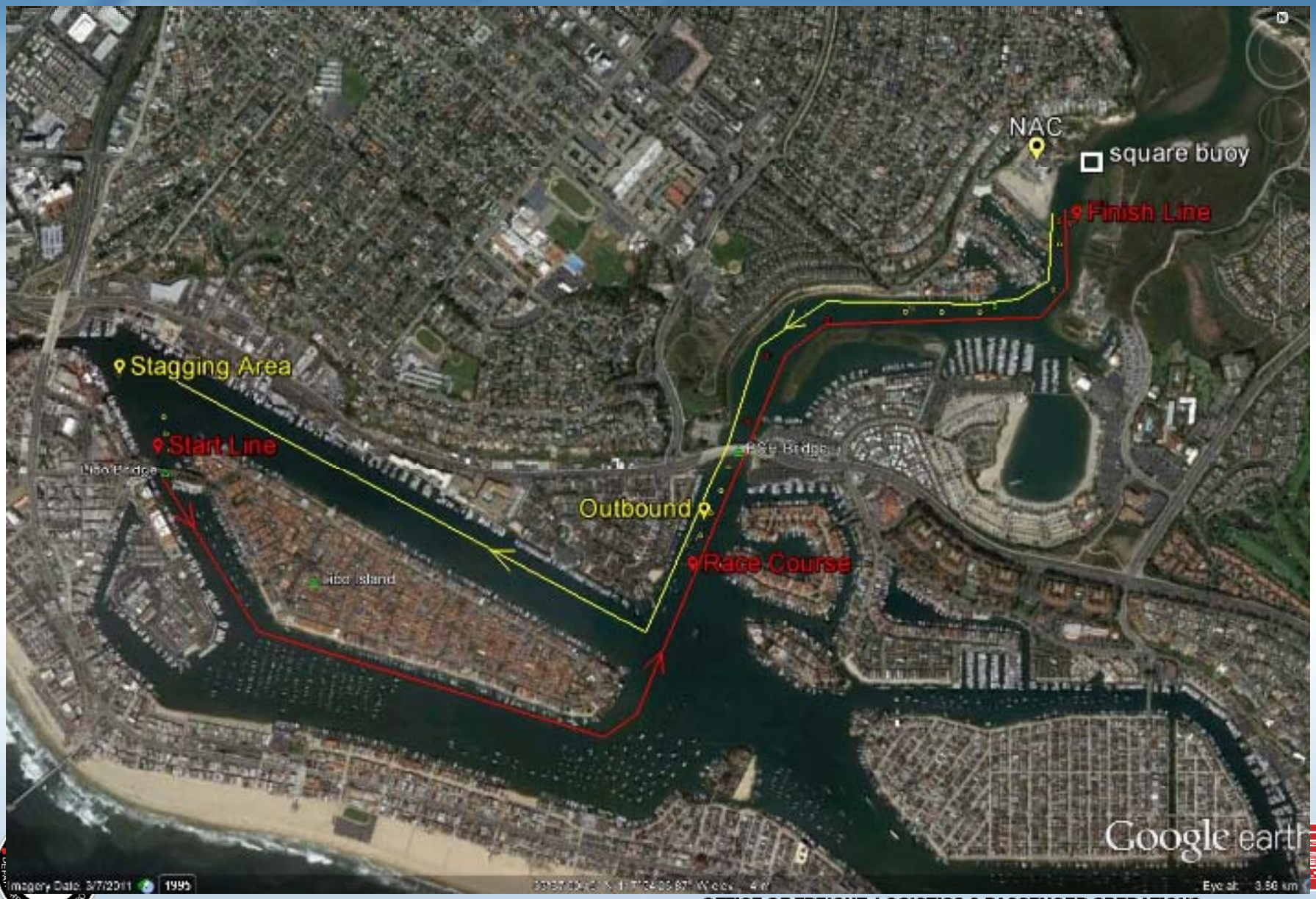
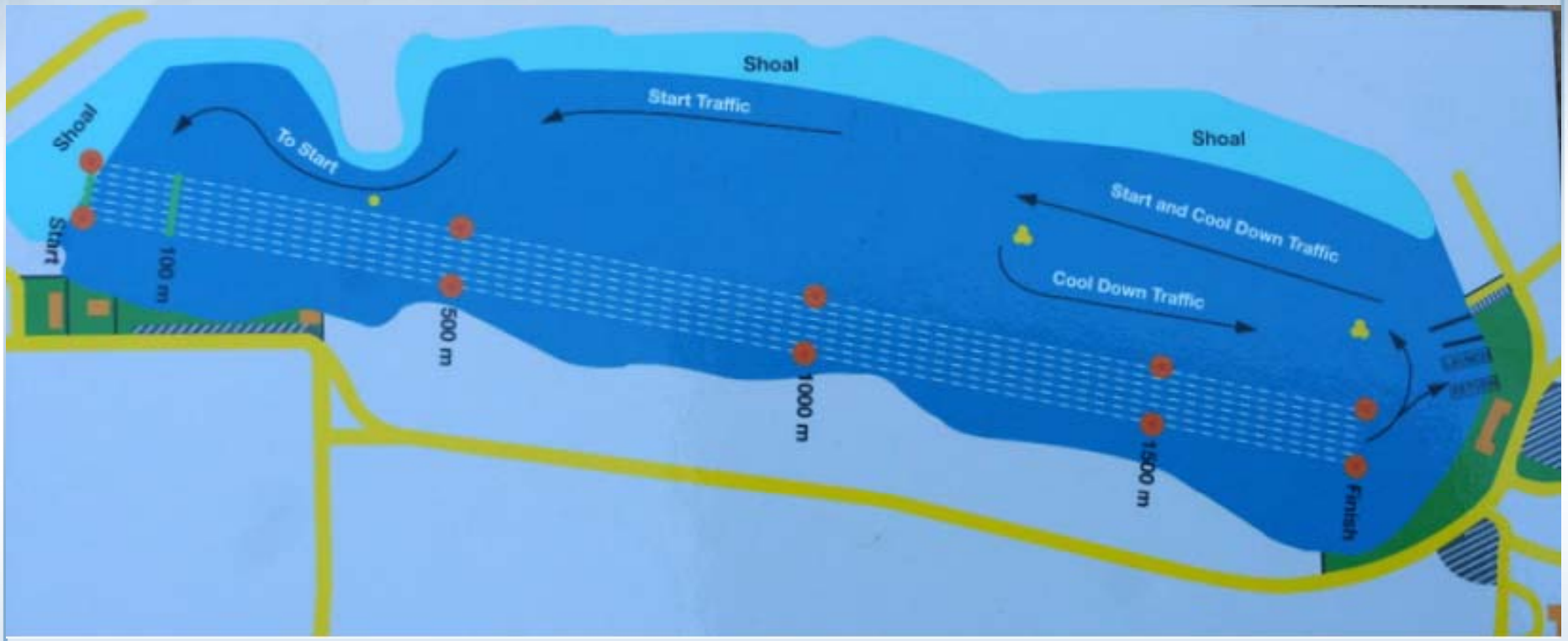
Newport, California Rowing Regatta



Crystal Lake Rowing, Lakewood Ill.



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Waterways Plan for Martin & St. Lucie Counties

Michelle Miller

Director of Operations

Marine Industries Association of the Treasure Coast

Marine Industries Association of the Treasure Coast, Inc.

Serving, protecting & promoting marine interests since 1974.

Marine Industries Association of the Treasure Coast

Forum on Marine Transportation

December 19, 2013

Who is the MIATC

- Serving, protecting & promoting the marine industry
- Established in 1974
- Part of the MIAF
- Integral to community identity, quality of life, and real estate value throughout the Treasure Coast
- Active in Local, state, federal legislative and policy issues through industry representation

Who Do We Serve

- Recreational Boating
- Commercial fishing and boating
- Freight and cargo
- Commercial/Hospitality/Tourism
- Maritime Education
- Marine Research, Engineering and Ecotourism

Boating Traffic

Recreational boating

- Power and Sail boats
- Personal watercrafts
- Paddle boards and kayaks

Commercial boating

- Commercial Fisherman
- Charter boats
- Eco Tours

Cargo & Freight

Road, Rail, Air traffic

- Shipping freight (all means)
- Employee commuting
- Tourist traffic

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Waterways

Opportunities

- No net loss of "Marine Service Areas"
- Seagrass enhancement through mitigation or other options
- Enhanced marketing for superior marine accommodations
- Marine career education and training

Challenges

- Water Quality
- Development policies unduly restricting marina operation or expansion
- Siting permanent anchorages
- Waterfront taxation policy which unduly burdens those landowners

Challenges for Boaters

- Public access to the water
- Registration fees
- Water Quality
- Navigating the inlets

Boat Builders and Dealers

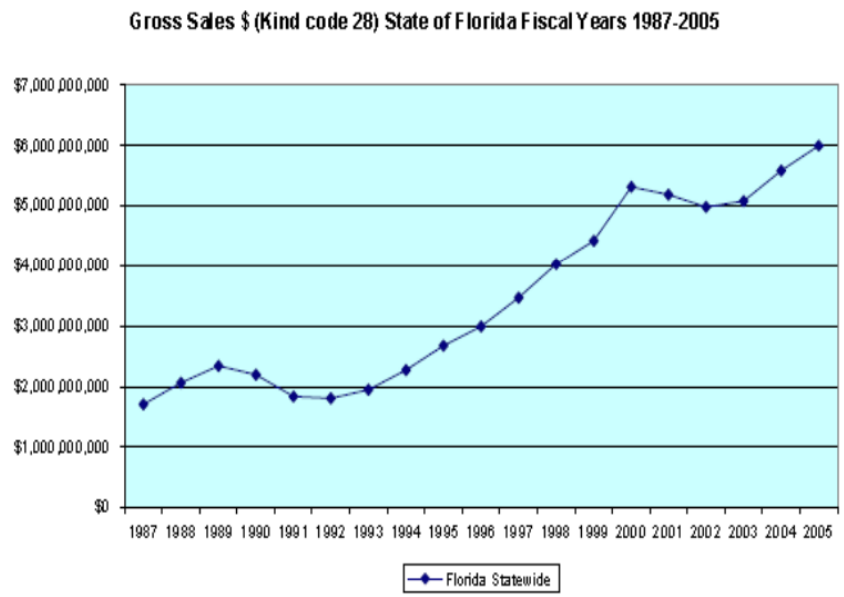
- 27 boat builders
  - 17 Martin County
  - 10 St. Lucie County
- 30 Dealers (560 in the state)
  - 25 Martin County
  - 5 St. Lucie County
- 20 Brokers
  - 15 Martin County
  - 5 St. Lucie County

Marinas

- 23 Marinas
  - 17 Martin County
  - 9 St. Lucie County
- 11 Boat yards
  - 6 Martin County
  - 5 St. Lucie County

Our Economic Impact

- $8.1 Billion direct output
- $18.4 Billion total economic impact
- 220,000 related jobs
- More than Florida's Citrus and Cruise industries combined



Additional Information

- Marine Industries Association of Florida
  www.boatflorida.org
- National Marine Manufacturers Association
  www.nmma.org
- Association of Marina Industries
  www.marinaassociation.org

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Questions

Please contact Michele Miller at:

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772-692-7599 Office

561-758-9130 cell

www.miatc.com

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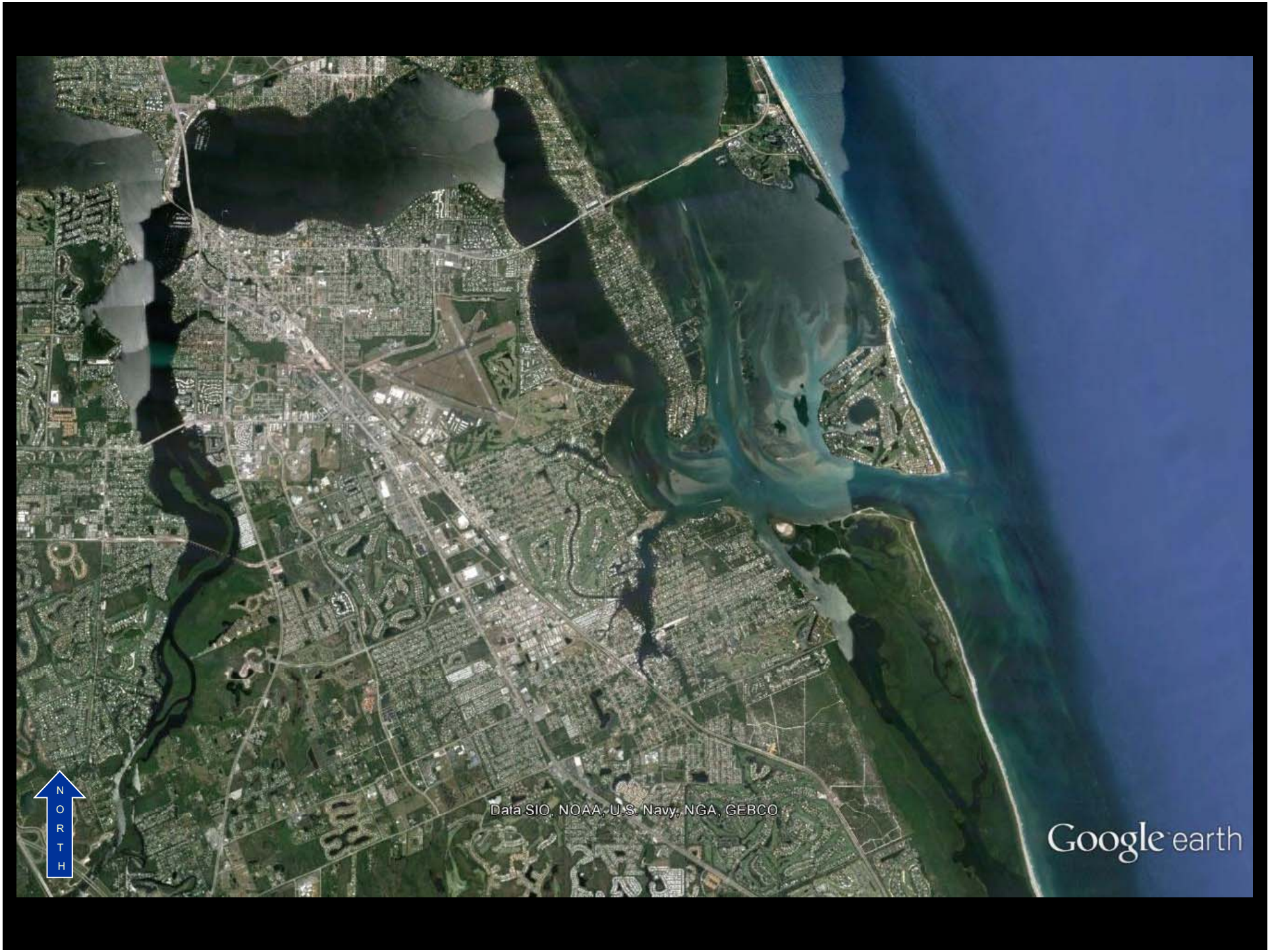
Waterways Plan for Martin & St. Lucie Counties

Don Donaldson, P.E.

County Engineer

Martin County
Board of County Commissioners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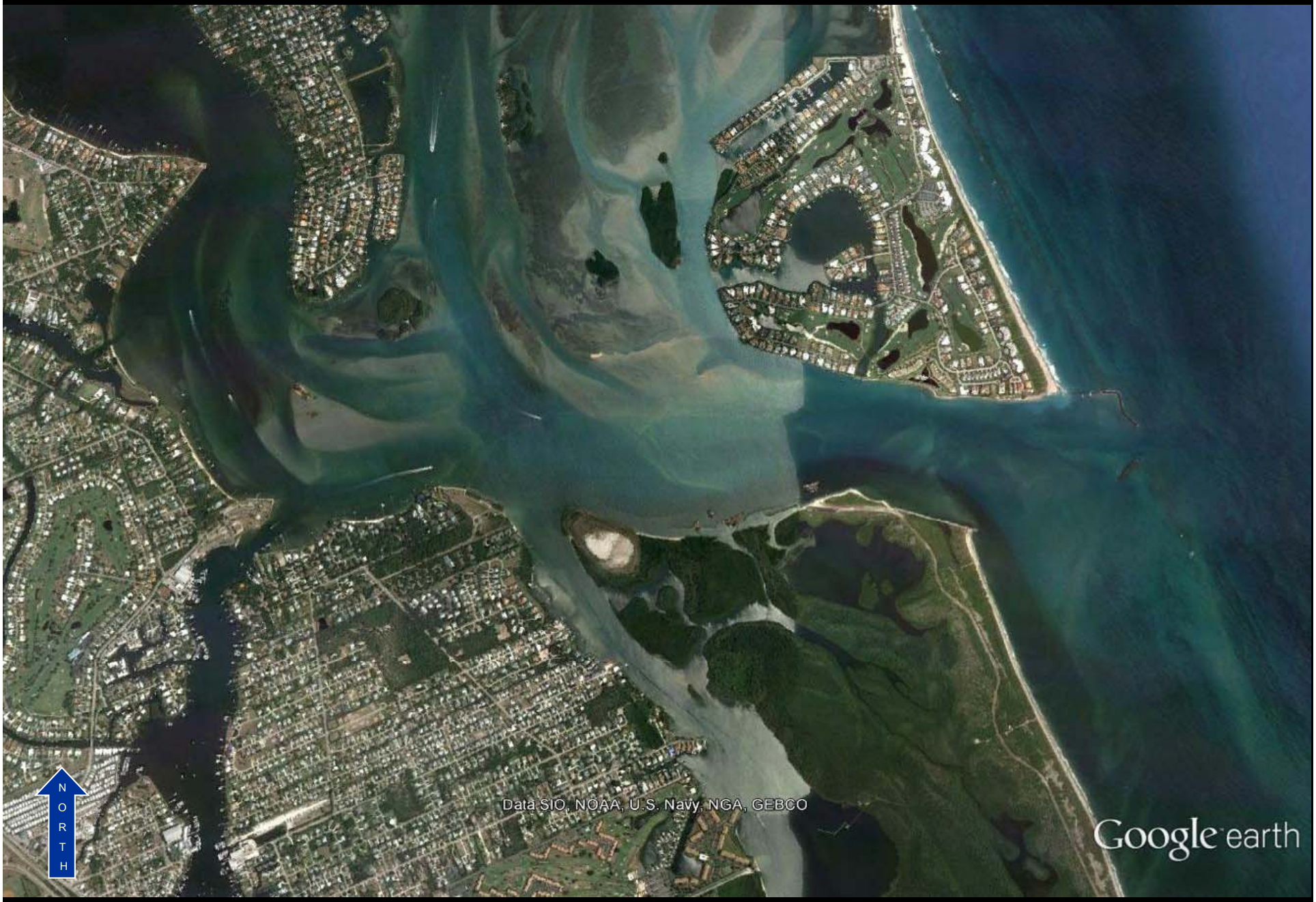
Google earth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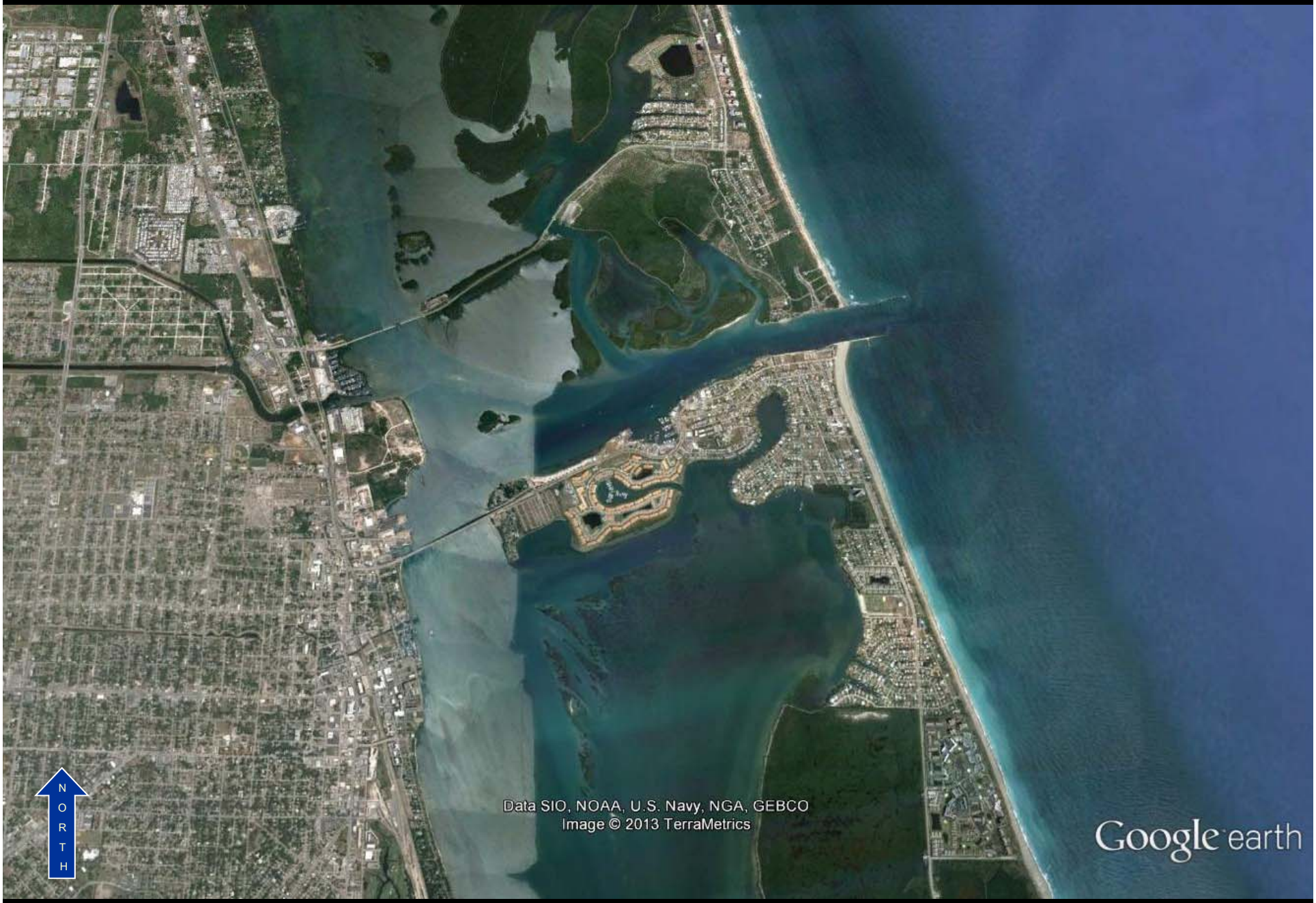
Data SIO, NOAA, U.S. Navy, NGA, GEBCO
Google earth

Waterways Plan for Martin & St. Lucie Counties

Don West, P.E.

County Engineer

St. Lucie County
Board of County Commissioners


NORTH
Data SIO, NOAA, U.S. Navy, NGA, GEBCO
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Google earth

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Google earth

Waterways Plan for Martin & St. Lucie Counties

Michael Williamson

Principal

Cambridge Systematics, Inc.

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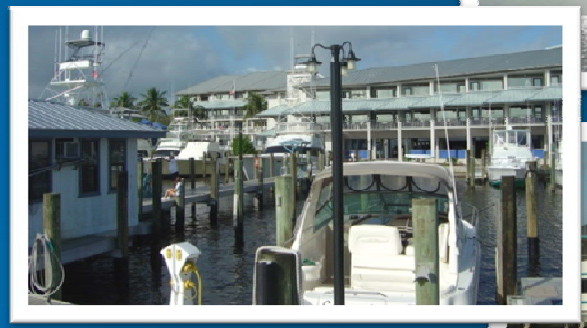
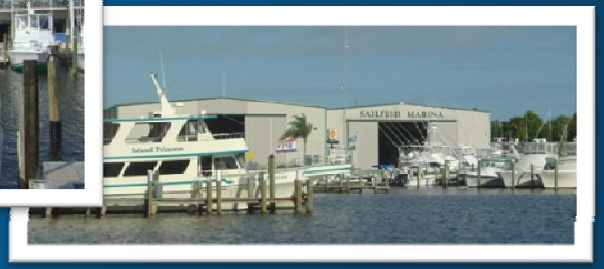
Marine Transportation – General Overview





presented to

Martin MPO
St. Lucie TPO

presented by

Cambridge Systematics, Inc.

Michael Williamson

December 19, 2013

CAMBRIDGE SYSTEMATICS

Transportation leadership you can trust.

General Questions

- What is Our Vision for Our Waterways?
- What Are Our Options?
- How Well Are We Positioned?
- What Are Our Key Decision Factors?

Understanding Our Vision

- What does the community want?
- How can we balance multiple interests?
- How can we preserve what we have today?
- What obstacles do we face?
- Where do we see ourselves going in the future?

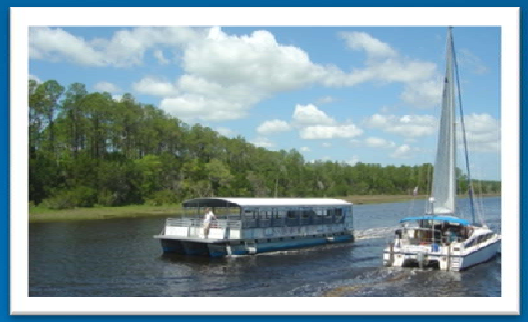
Possible Transportation-Related Options

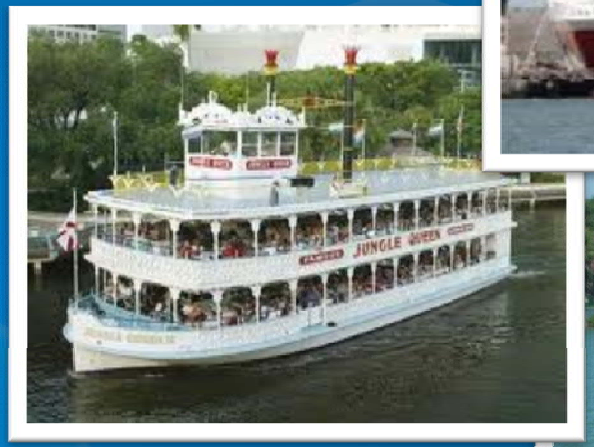
- Local Water Ferries and Taxis
- Interregional/International Ferries
- Cargo Operations
- Recreational/Educational Excursion Operations

Key Factors to Consider

- Community Support
- Business Sector Interest
- Navigational Limitations
- Environmental Impacts
- Marketability of Service
- Landside Development Requirements
- Ability to Balance Joint Uses

Passenger Use Options





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Local Water Ferries and Taxis

- Florida is home to variety of ferry and taxi services
- Most serve urban areas, connecting points along the Intracoastal, within Harbors, and developed rivers
- Most serve leisure or tourism markets, although a commuter service is under development in Tampa Bay

A Successful Ferry or Taxi Service Is Dependent on Many Variables

- Define a competitive service
- Build regional support
- Identify the right vessel – performance, impact, cost
- Quantify market demand
- Identify and address key connectivity and accessibility issues
- Integrate service into regional transportation system

CAMBRIDGE SYSTEMATICS

Examples of Successful Water Service

Many Success Stories But Specific Conditions Must Exist

- Most profitable services are found where there are captive markets
- Fare-box revenues from passenger only commuter services usually do not cover operating costs – 40% to 60% is typical
- Multiple sailings are essential for commuters
- Most competitive passenger services are those that cut mileage and travel time
- Services tend to operate a mix of vessels operating 15 to 35 knots – faster boats can attract more riders at significant cost
- Strong landside connections are critical
- Management of community and environmental impacts is critical

CAMBRIDGE SYSTEMATICS

Successful Waterborne Services Exist Today

Florida is Home to Many Successful Water Services

PALM BEACH WATER TAXI

Shuttle Transfer Service

Palm Beach WATER TAXI

- Water Taxi Home
- Sightseeing Tours
- **Shuttle Service**
- Private Charters
- Where We Are

CALL: (561) 683-TAXI (8294) for reservations today! or Have Questions?

e-mail

The Palm Beach Water Taxi is your connection to the BEST Destinations, Events & Attractions in Palm Beach County. Forget about traffic and parking hassles as our Captains do the steering on the beautiful Intracoastal Waterway. No matter your destination, a Palm Beach Water Taxi cruise is a wonderful beginning and/or end to your outing. The BEST way to Travel in Palm Beach County!

Take the Palm Beach Water Taxi to Cruise to:

Dining

Many of Palm Beach County's Best restaurants and bars can be reached by water. Menus and ambiance range from casual Caribbean to fine dining at its best. (Click Here for a List of our favorites)

Shopping

Fabulous shopping destinations are just minutes away from a number of Water Taxi stops. Visit the Clematis Street District or the new CityPlace in Downtown West Palm Beach; Palm Beach Gardens Mall or Oakbrook Square in Palm Beach Gardens; or the famous Worth Avenue and the Royal Poinciana Plaza in Palm Beach.

Some of the Regularly Scheduled Water Taxi Shuttle Service

"Peanut Island Shuttle"

(Picnic, swim, camp, snorkel or just come along for the ride to this tropical island accessible only by boat, click here for more Peanut Island info)

DAILY, from Sailfish Marina

Price: Just $7 per person round-trip!

Daily: at 10am, 12noon, 2pm and 4pm (return times back from Peanut Island are at 11:20am, 1:20pm, 3:20pm and 5:20pm)

Fri.-Sun: every hour on the hour 10am-5pm (return times back from Peanut Island are every hour on the half hour 10:30am-5:30pm)

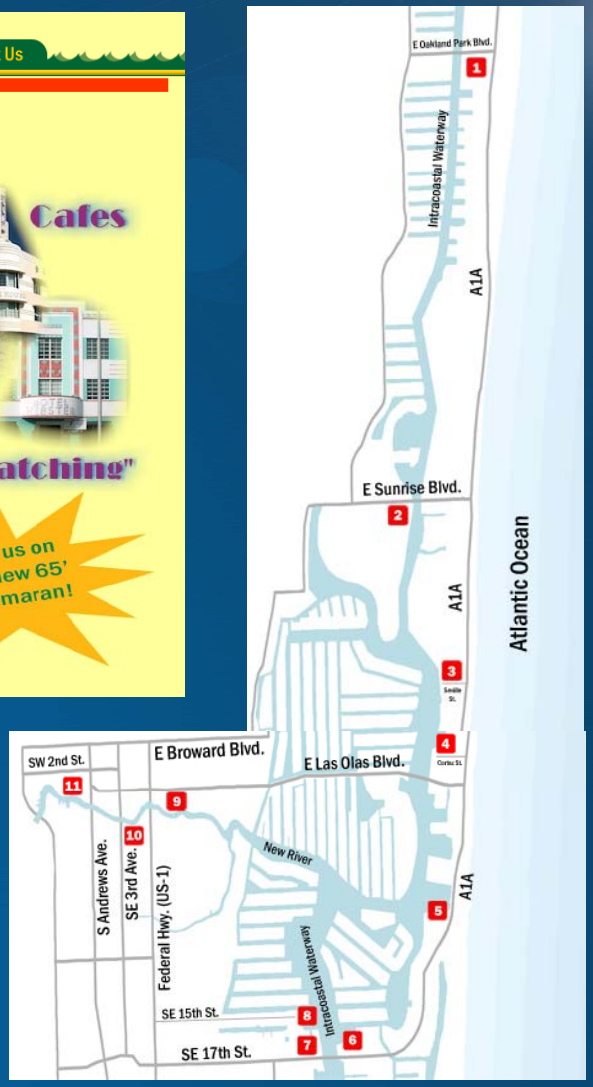
No On-site parking allowed for Peanut Island Transfers.

http://watertaxi.homestead.com/ShuttleService.html

CAMBRIDGE SYSTEMATICS

Successful Waterborne Services Exist Today

Florida is Home to Many Successful Water Services

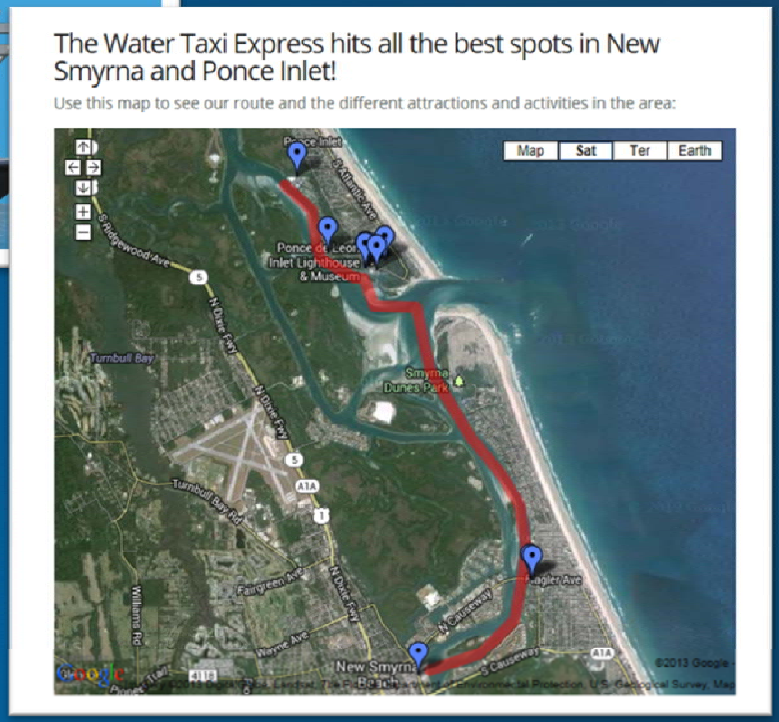


http://www.watertaxi.com/watertaxi/fort-lauderdale/

CAMBRIDGE SYSTEMATICS

Successful Waterborne Services Exist Today

Florida is Home to Many Successful Water Services



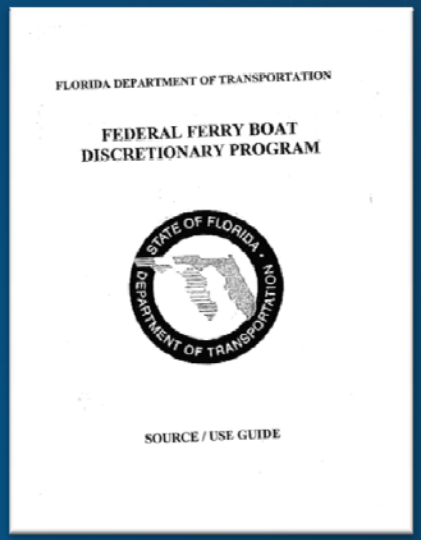
http://watertaxiexpress.com/

CAMBRIDGE SYSTEMATICS

Example of Water Ferry Feasibility Study

Hillsborough Water Ferry Feasibility Study

- Phase 1 evaluated possible service options through the Tampa Bay region
- Phase 2 focused on a commuter service between Gibsonton & MacDill AFB Service
  - » Explore use of FHWA funding
  - » Conduct outreach to key regional stakeholders
  - » Refine site analysis and service parameters
  - » Refine and validate initial ridership estimates
  - » Develop recommendations for next steps


FLORIDA DEPARTMENT OF TRANSPORTATION

FEDERAL FERRY BOAT
DISCRETIONARY PROGRAM

STATE OF FLORIDA · DEPARTMENT OF TRANSPORTATION

SOURCE / USE GUIDE

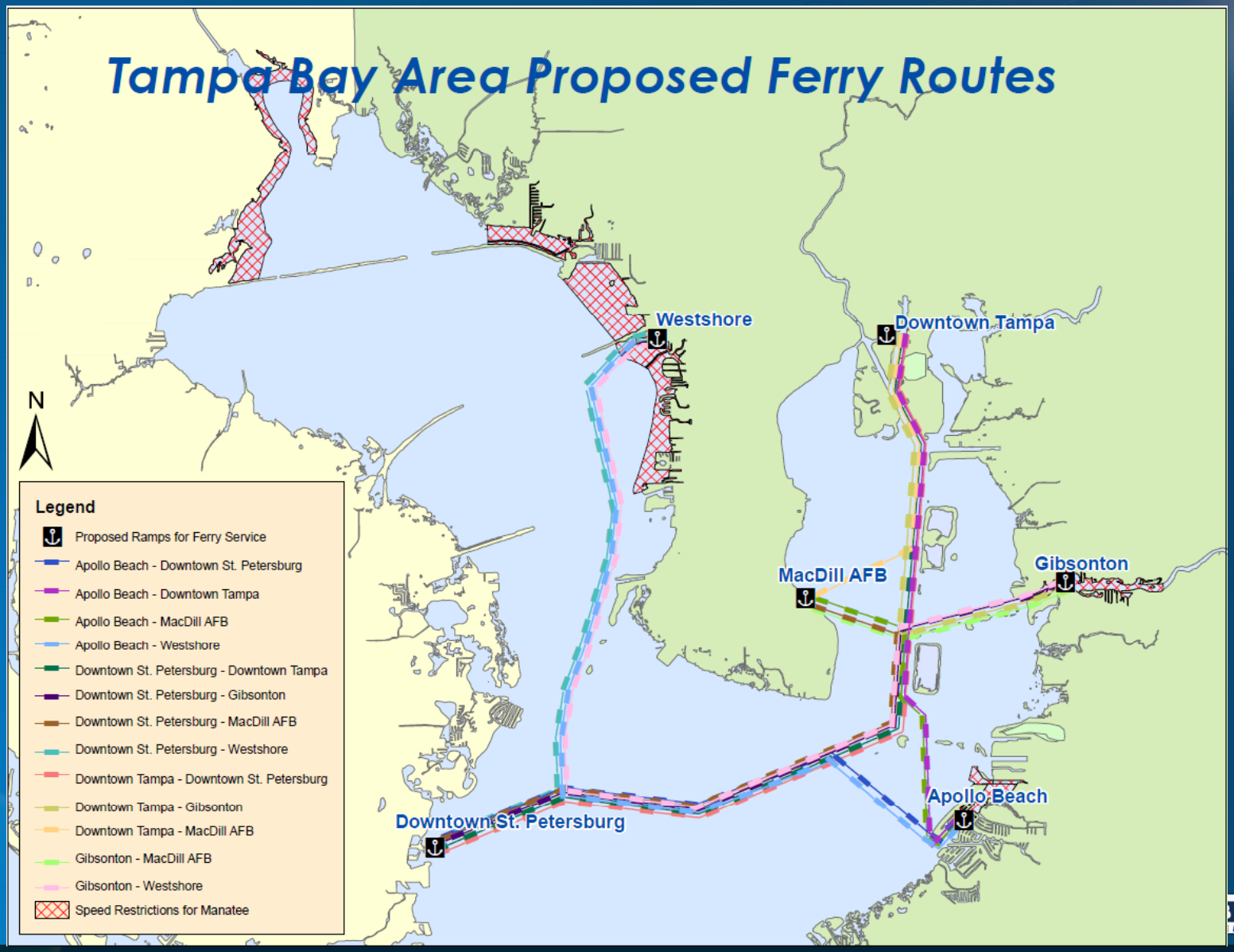
CAMBRIDGE SYSTEMATICS

Key Considerations for Service Included…

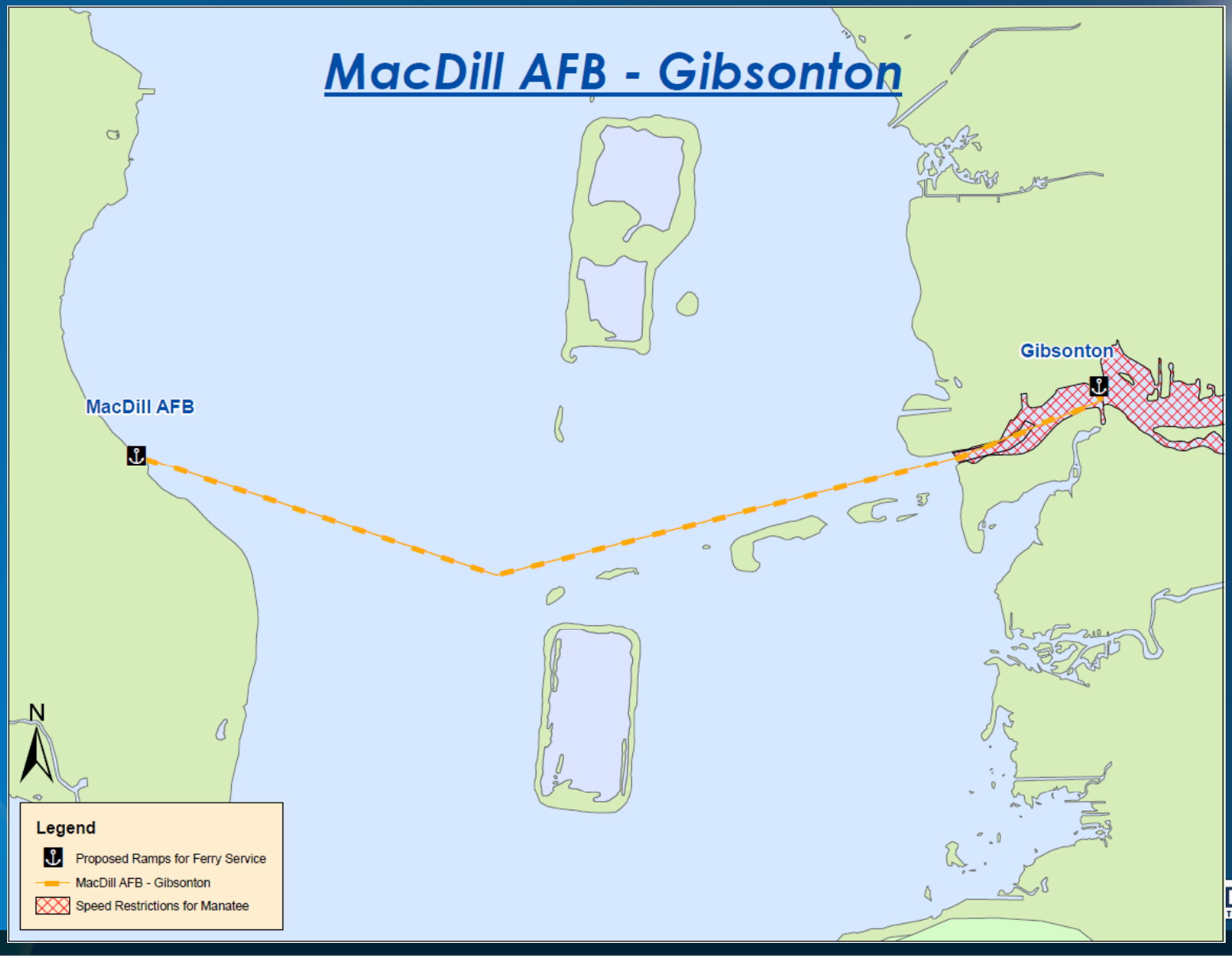
- Water depth & vessel type
- Waterway restrictions & environmental regulations
- Existence of dock/infrastructure
- Landside acreage
- Parking capacity
- Existing land use/zoning
- Security and amenities
- Transit connectivity

CAMBRIDGE SYSTEMATICS

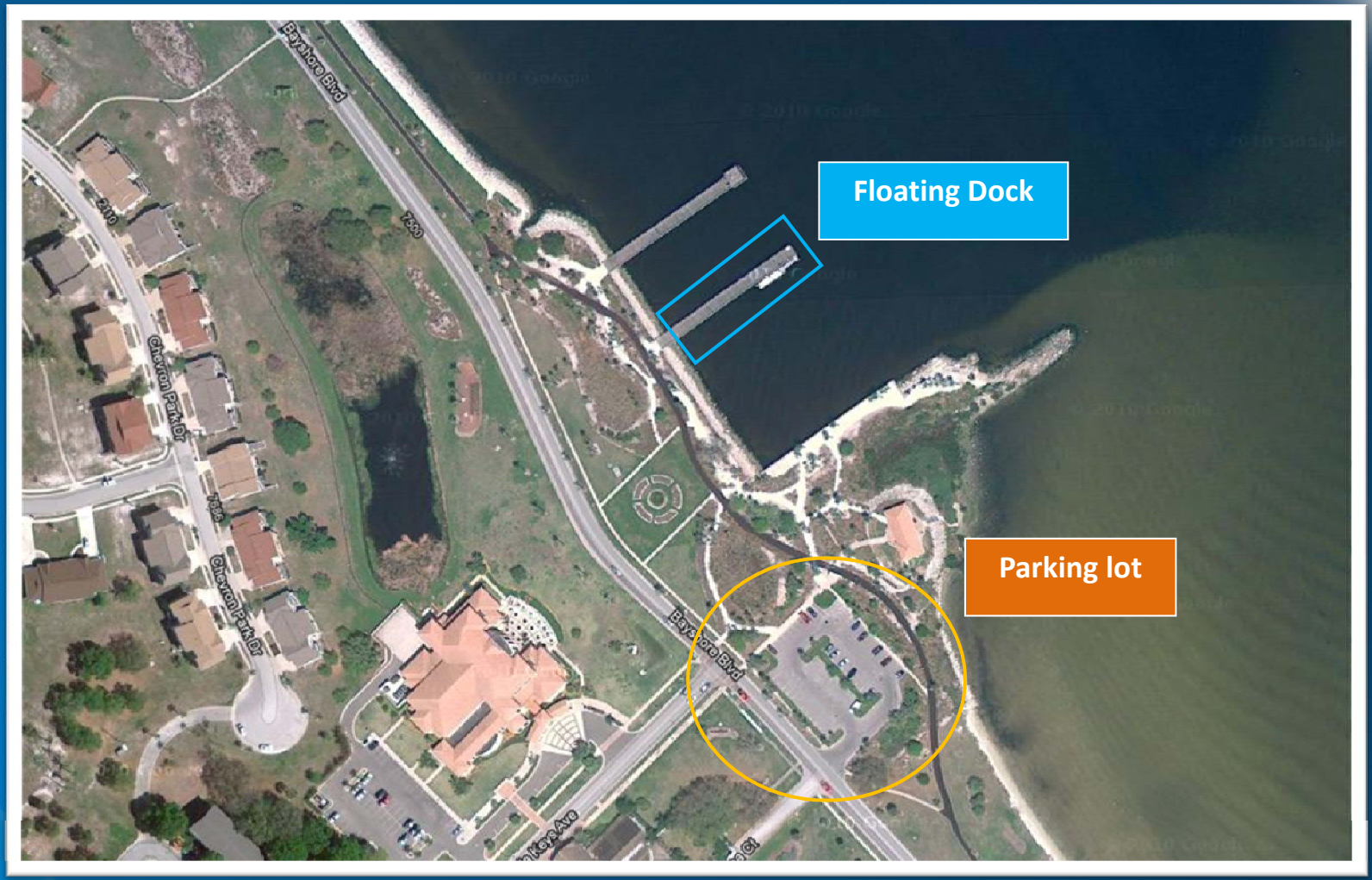
Original Routes Evaluated



Route Selected for Further Analysis



MacDill AFB – Station Location



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MacDill AFB – Existing Dock Infrastructure

CAMBRIDGE SYSTEMATICS

MacDill AFB – Proximity to Work Centers

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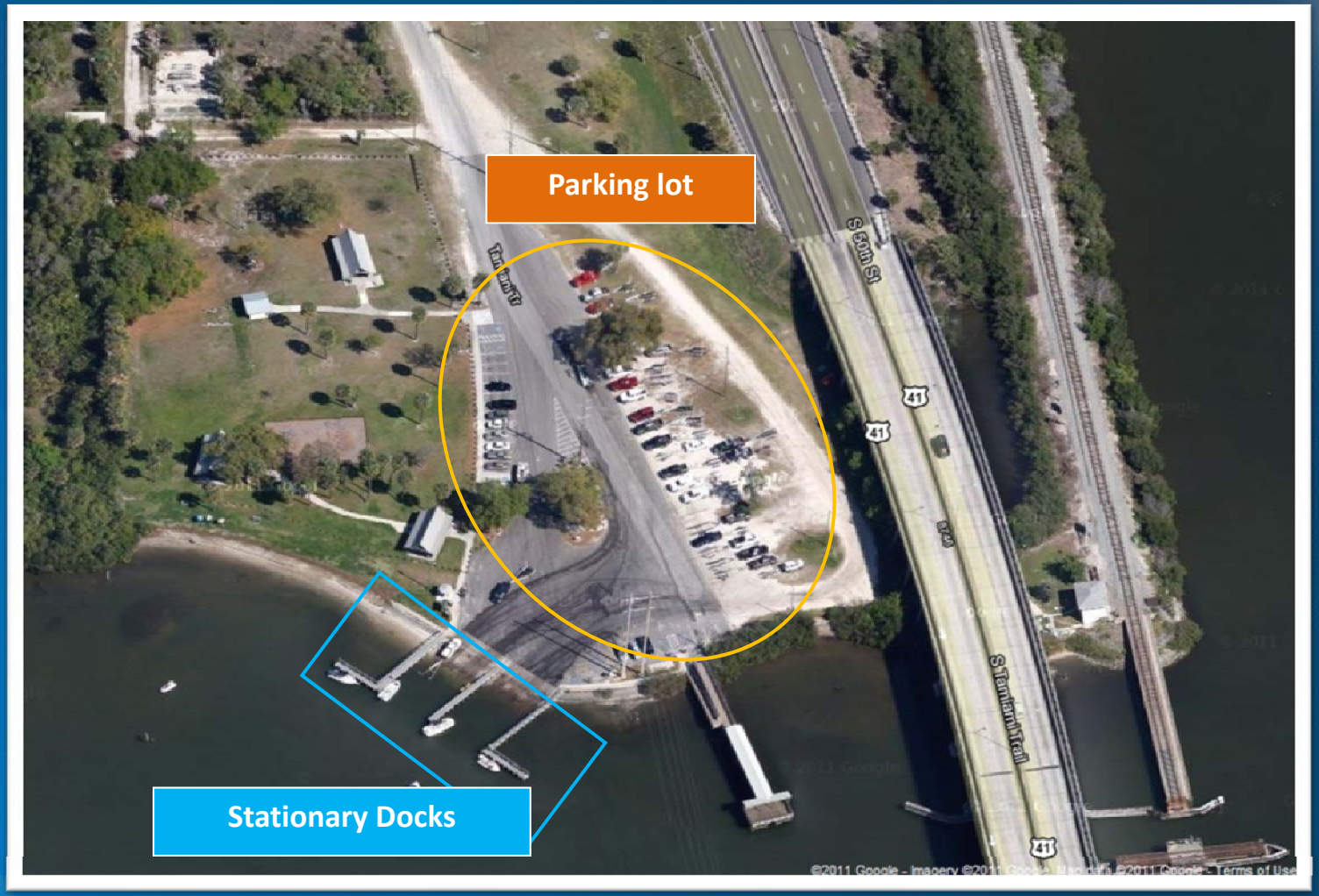
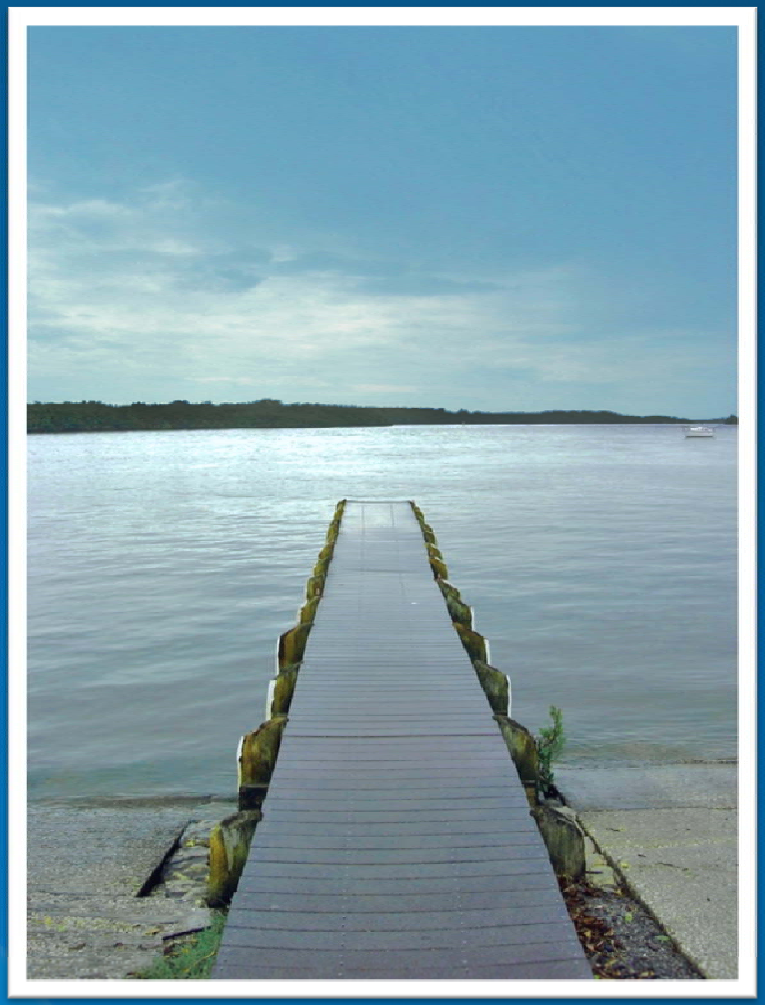
Gibsonton – Station Location



CAMBRIDGE SYSTEMATICS

Gibsonton – Existing Dock Infrastructure



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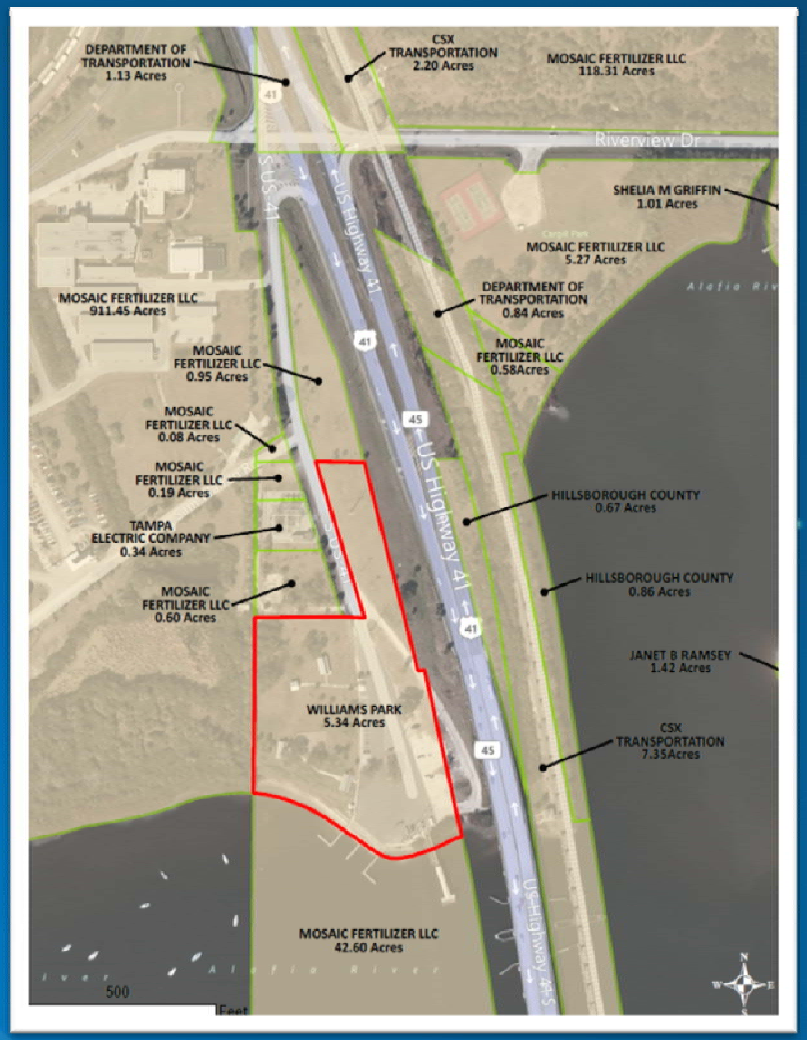
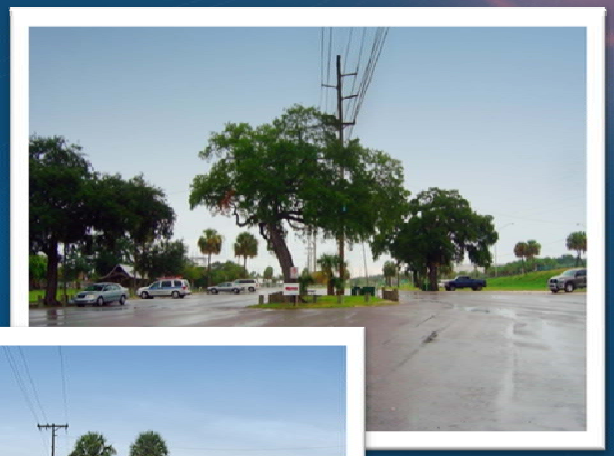
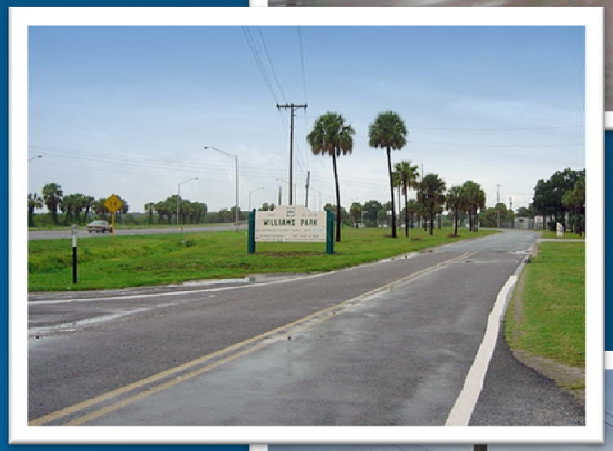
Gibsonton – Station Access via Williams Park







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Waterway Restrictions

East Tampa Bay Boating Regulatory Zones

NOTE: Not all of the boating regulatory zones are shown on the map below. Please look out for posted signs and follow instructions. When in doubt, slow down.

Legend (for all maps)

No Entry

1 All Year 2 November 15 to March 31

Idle Speed

3 All Year 4 November 15 to March 31

Slow Speed

5 All Year 6 November 15 to March 31

Other Posted Zone

7 All Year

Combustion Engine Exclusion

9 All Year

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Interregional and International Service Options

- Regional Coastal Service
- Gambling Operation
- High Speed Service

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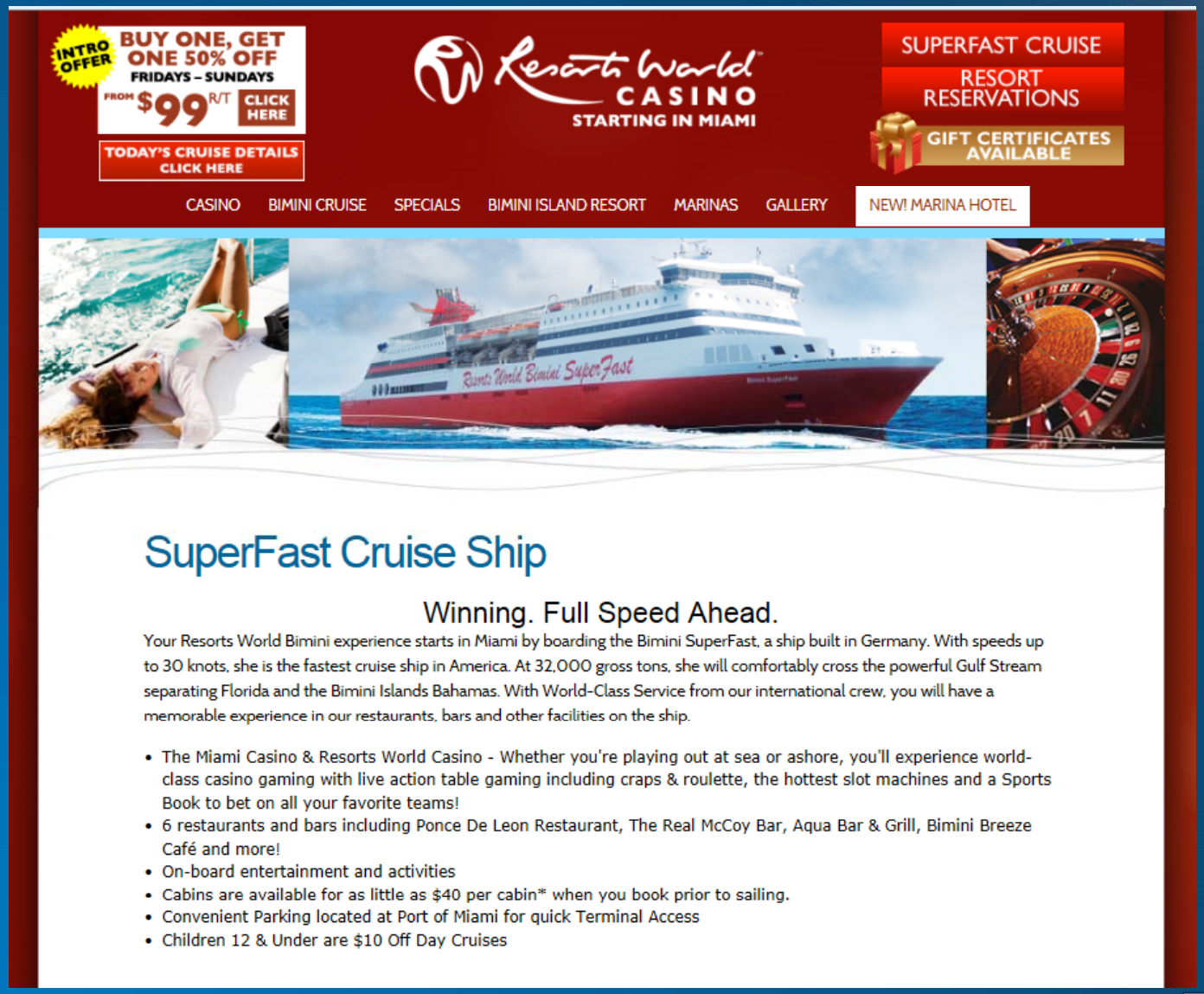
Successful Waterborne Services Exist Today

High Speed Service from Miami to Bimini



http://www.rwbimini.com/superfast-cruise-ship

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Successful Waterborne Services Exist Today

High Speed Service from Ft. Myers to Key West

TAKE A TRIP TO

KEY WEST

This site is a Best On Key West inc. property and is an authorized ticket vendor for the Key West Express

The Key West Express

Key West Express is known for its speed and comfort in transporting guests to Key West in style. The Key West Express vessel is a brand new 170-ft. catamaran with all aluminum construction, turbo diesel engines with jet propulsion, large flat-screen TVs with satellite television, and state-of-the-art electronics and navigation equipment. The Key West Express is a non-stop trip from Ft. Myers to Key West and back at a special low, introductory rate.

Aboard the Key West Express, enjoy tasty treats, beer and wine, and mixed drinks on the ship's galley and bar.The knowledgeable and friendly crew can help guests navigate their way through the ship and answer any questions guests may have. Key West Express is the best way to make it to Key West quickly and aboard an amazing ship that guests are sure to enjoy and remember for years to come!

Book Your Tickets Now

Important Please Note: Please contact our offices for the most up to date departure schedule.

Select Travel Destination

Ft. Myers To Key West

http://ferryservicestokeywest.com/

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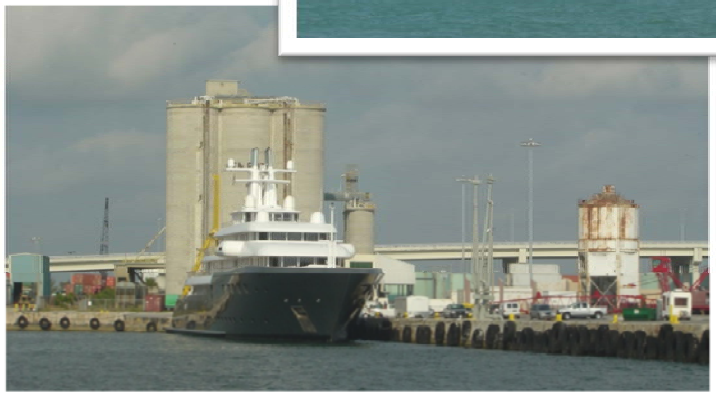
Industrial Use Options



Marine-Based Industrial Use Options

- Mega yacht facilities
- Ship yard/marina services
- Ship building
- Marine related events
- Cargo operations

http://www.americancustomyachts.com/

Stuart Boat Show 2014

The 40th Annual Stuart Boat Show, with over $100 million in products on display, will feature more than 500 boats of all shapes and sizes both in-water and on land. Accompanying this vast array of boats will be engines, electronics and every conceivable accessory from major marine manufacturers worldwide. Admission is only $10.00 with kids under 10 free.

Website

Times

Friday, January 10, 2014
10am-6pm
Saturday, January 11, 2014
10am-6pmÃ
Sunday, January 12 2014
10am-6pm

http://www.floridabywater.com/event/event/22-stuart-boat-show

Port of Fort Pierce

Examples of Cargo Operations

- Port Everglades
- Port of Palm Beach
- Port of Panama City
- Port of Penscola

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Port Everglades

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Port of Palm Beach

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Port of Panama City

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Port of Pensacola

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Recreational Use Options

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Educational Use Options

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In Summary…

- We have many options for effective use of our waterways
- We must:
  - » Define our vision
  - » Build regional consensus
  - » Identify our priorities
  - » Define our markets
  - » Develop our Plan

QUESTIONS?

Waterways Plan for Martin & St. Lucie Counties

Panel Discussion

Questions & Discussion

Waterways Plan for Martin & St. Lucie Counties

Next Forum:

A Forum on Land Use & Upland Transportation

Wednesday, January 8, 2014 (2-5 PM)
Historic City Hall
(Downtown Fort Pierce)

Waterways Plan for Martin & St. Lucie Counties

Happy Holidays!