

PRELIMINARY AGENDA

1

FLORIDA INLAND NAVIGATION DISTRICT Board of Commissioners Meeting

9:00 a.m., Friday, December 16, 2016

The Shores
2637 South Atlantic Ave.
Daytona Beach Shores (Volusia County), FL 32118-5643

Item 1. **Call to Order.**

Chair Cuozzo will call the meeting to order.

Item 2. **Pledge of Allegiance.**

Treasurer McCabe will lead the Pledge of Allegiance to the United States of America.

Item 3. **Roll Call.**

Secretary Donaldson will call the roll.

Item 4. **Consent Agenda.**

The consent agenda items are presented for approval. Commissioners may remove any items from this agenda that they have questions on or would like the Board to discuss in depth. Any items removed would then be included in the regular agenda in an order assigned by the Chair.

- a) Keep Jacksonville Beautiful, Inc. Waterway Cleanup Program Funding Request, Duval County, FL.
- b) Keep Brevard Beautiful, Inc. Waterway Cleanup Program Funding Request, Brevard County, FL.

(Please see back up pages 6-16)

RECOMMEND: Approval of the Consent Agenda.

Item 5. **Additions or Deletions.**

Any additions or deletions to the meeting agenda will be announced.

RECOMMEND: Approval of a Final Agenda.

Item 6. **Public Comments.**

The public is invited to provide comments on issues that are NOT on today's agenda. All comments regarding a specific agenda item will be considered following Board discussion of that agenda item. *Please note: Individuals who have comments concerning a specific agenda item should fill out a speaker card and communicate with staff prior to that agenda item.*

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Item 7. Board Meeting Minutes.

The minutes of the following meetings are presented for approval.

- November 19, 2016 – Personnel Committee Mtg. (Please see back up pages 17-20)
- November 19, 2016 – Finance & Budget Committee Mtg. (Pls see back up pages 21-25)
- November 19, 2016 – Board Meeting (Please see back up pages 26-53)

RECOMMEND: Approval of the minutes as presented.

Item 8. Staff Report on Volusia County Area Projects.

Staff will present a report on the District's Volusia County area projects. (Please see back up pages 54-81)

Item 9. Comments from the U.S. Army Corps of Engineers.

U.S. Army Corps of Engineers (USACE) Intracoastal Waterway Project Manager, Ms. Shelley Trulock, is scheduled to present an update on projects and activities.

(Please see back up pages 82-89)

Item 10. Presentation – Professional Tallahassee Legislative Services.

The District's Tallahassee legislative coordinator, Mr. Jon Moyle, (Moyle Law Firm, P.A) is scheduled to provide an update on the past year's activities. Mr. Moyle will also provide insight for successful strategies for the forthcoming State Legislative session in fiscal year (FY) 2017.

Mr. Moyle and the Navigation District have enjoyed a mutually beneficial relationship for over 33 years and has successfully represented the Navigation District in Tallahassee since 2008. He has remained accessible and responsible to the District's issues and needs. His current contract with the District has expired and staff is recommending a 2-year agreement with a clause for a mutual 2-year extension should the relationship remain satisfactory to the benefit of both parties.

(Please see back up pages 90-93)

RECOMMEND: Approval of a 2-year contract with Jon Moyle for Tallahassee representation with a possible 2-year extension by mutual consent.

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Item 11. **Presentation and Discussion on the Navigation District Commercial-Industrial Waterway Access Inventory Report.**

Beth Lempke, Planning Solutions Inc. has provided a draft of a report on commercial-industrial waterway access opportunities within the District's 12 member counties. Ms. Lempke is also scheduled to provide the Board with a presentation outlying her company's efforts and the results of the report. This will include suggestions and detail for possible additional information or studies the District or the member counties may desire to pursue regarding commercial-industrial access along the Intracoastal Waterway.

(Please see back up pages 94-135)

RECOMMEND: *(This item is presented for Board review and discussion only.)*

Item 12. **Scope of Services and Fee Proposal for Geotechnical Exploration and Engineering for Dredged Material Management Area M-8, St. Lucie County, FL.**

Taylor Engineering has completed a Request for Qualification (RFQ) to select a geotechnical consultant for work at Dredged Material Management Area (DMMA) M-8. This site is currently undergoing design and permitting in preparation for construction in the subsequent year. This work is required to evaluate the potential influence (if any) of the construction and use of DMMA M-8.

Ellis & Associates (EA) have provided a scope and fee quote to conduct geotechnical evaluations of DMMA M-8. The firm has successfully completed projects for the District in the past, and staff has determined the scope and fee to be reasonable and accurate.

(Please see back up page 136-144)

RECOMMEND: Approval of a proposal and fee quote from Ellis & Associates, Inc. in the amount of \$94,400.00 for geotechnical evaluation of DMMA M-8, St. Lucie County, FL.

Item 13. **Taylor Engineering Hourly Rate Adjustment.**

The District's agreement with Taylor Engineering allows their rates for services to be adjusted annually by mutual agreement. The District Engineer has submitted a request to revise the hourly rates that the firm charges for the various personnel that work on District projects. *(Please note that this is only Taylor Engineering's third rate increase request in the past four years. Taylor Engineering did not request a rate increase in 2013).*

(Please see back up pages 145-149)

RECOMMEND: Approval of the rate adjustment requested by Taylor Engineering for 2017.

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Item 14. Delegation of Authority - Executive Director.

Each year the Board usually reviews the Executive Director's Executive Authority for accuracy and updates as necessary. No significant changes have occurred to this authority since December 13, 2014, when the Board elected to increase the Executive Director's spending authority for administrative purposes from \$3,000.00 to \$5,000.00.

Staff does not have any specific recommendations unless the Board desires to review the spending limits or authority limits for specific items. Any changes to this authorization would need to be adopted by Resolution. A draft Resolution is attached.

(Please see back up pages 150-153)

RECOMMEND: Approval to adopt Resolution 2016-06, revising the District Board's Delegation of Authority to the Executive Director (as necessary).

Item 15. Finance and Budget Committee Report.

The District's Finance and Budget Committee met prior to the Board meeting and will provide their recommendations concerning items on the Committee's agenda.

(Please refer to the Finance and Budget Committee Agenda Package)

RECOMMEND: Approval of the recommendations of the District's Finance and Budget Committee.

Item 16. Washington D.C. Report.

The District's federal governmental relations firm has submitted a status report concerning activity on the District's federal issues.

(Please see back up pages 154)

RECOMMEND: *(This item is presented for Board review and discussion only.)*

Item 17. Additional Staff Comments and Additional Agenda Items.

- a) Update on various District projects.
-

Item 18. Additional Commissioners Comments.

Item 19. Adjournment.

If a person decides to appeal any decision made by the board, agency, or commission with respect to any matter considered at such meeting or hearing, he or she will need a record of the proceedings, and that, for such purpose, he

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or she may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based.

PRELIMINARY CONSENT AGENDA

FLORIDA INLAND NAVIGATION DISTRICT Board of Commissioners Board Meeting

9:00 a.m., Friday, December 16, 2016

**The Shores
2637 South Atlantic Ave.
Daytona Beach Shores, FL 32118-5643**

Item A. Keep Jacksonville Beautiful, Inc. Waterway Cleanup Program Funding Request, Duval County, FL.

Keep Jacksonville Beautiful, Inc. has submitted a funding assistance request for two Waterway Cleanup events occurring on March 25, 2017 and September 16, 2017. The District has funded these successful cleanups in the past. The request is consistent with the District's program rules.

(Please see back up pages C2-C4)

RECOMMEND Approval of Keep Jacksonville Beautiful's request for \$5,000 from the District's Waterway Cleanup Program for the annual Waterway Cleanup, Duval County, FL.

Item B. Keep Brevard Beautiful, Inc. Waterway Cleanup Program Funding Request, Brevard County, FL.

Keep Brevard Beautiful, Inc. has submitted a funding assistance request for the Trash Bash (April 8, 2017), the St. Johns River Cleanup (May 6, 2017) and the annual International Coastal Cleanup (September 16, 2017). The District has funded these successful cleanups in the past. The request is consistent with the District's program rules.

(Please see back up pages C5-C11)

RECOMMEND Approval of Keep Brevard Beautiful's request for \$15,000 from the District's Waterway Cleanup Program for the 3 Waterway Cleanups, Brevard County, FL.



**Keep Jacksonville
Beautiful Commission**

Chris Buckley
Chair

Sheila Cribb
Vice Chair

Members

Brian Burket
Harrison Conyers
Anna Dooley
John Drayton
Larry Figart
Matthew Garman
Kevin Gartland
Hon. Jim Love
Dave McDaniel
Joey McKinnon
Lt. Charice Lee
Hon. Harry Reagan
James Richardson
Melody Shacter
Alicia Smith
Jane Upton
Christi Veleta
Paula Wright

**Executive
Coordinator**
Daniel Durbec

November 25, 2016

Ms. Janet Zimmerman
Florida Inland Navigation District
1314 Marcinski Road
Jupiter, Florida 33477

Dear Ms. Zimmerman:

Keep Jacksonville Beautiful and the City of Jacksonville would like to express their appreciation for allowing KJB to apply for financial assistance for the organized removal of refuse within the District's waterway in Duval County.

For a number of years, the Florida Inland Navigation District has provided funding which makes it possible for the removal of trash and debris from the St. Johns River, Intracoastal Waterway, the Atlantic Ocean and local creeks and streams.

On March 15, 2016, Keep Jacksonville Beautiful coordinated the annual St. Johns River Celebration Cleanup, in which 863 volunteers donated 2,342 hours to remove 23,940 pounds of debris from the St. Johns River, tributaries and other locations.

And on September 17, in conjunction with the International Coastal Cleanup event, 404 volunteers donated 824 hours to remove 6,220 pounds of debris from local waterways. Then on October 1, as part of the annual Right While Festival, 188 volunteers hauled away 4,120 pounds of rubbish. In 2017, we plan to continue with the removal of debris from waterfront parks tributaries, the Intracoastal, the St. John's River and Atlantic Ocean. Attached for your consideration are maps of these locations.

Thanks to F.I.N.D.'s past generosity, Keep Jacksonville Beautiful has been able to purchase needed supplies for its annual cleanups. Attached for your approval is a budget outlining the expenditure of all District funds.

We are grateful for the District's past support and look forward to working together in the future.

Sincerely,

Daniel Durbec

Executive Coordinator



Clean It Up, Green It Up, Keep Jacksonville Beautiful
1321 Eastport Road, Jacksonville, Florida 32218
Telephone: (904) 630-3420 Fax: (904) 630-7206 Web: www.coj.net

An Award Winning Affiliate of Keep America Beautiful

City of Jacksonville & Keep Jacksonville Beautiful
 March 25, 2017 St. Johns River Celebration Cleanup & September 16, 2017 International Coastal
 Cleanup Sites

Beach Boulevard—Oceanfront
 Atlantic Boulevard—Oceanfront
 16th Avenue South—Oceanfront
 Beach Marine Boat Ramp--Riverfront
 Blue Cypress Park—Riverfront
 Burnett Park--Creek front
 Castaway Island Preserve—Intracoastal
 County Boat Dock—Riverfront
 Dames Point Park—Riverfront
 Empire Point—Riverfront
 Exchange Island—Riverfront
 Fishweir Creek--Creek front
 Ft. Caroline National Memorial Park—Riverfront
 Helen Cooper Floyd (Little Jetties)-Riverfront
 Hogan Creek--Creek front
 Hollybrook Park—Creek front
 Intracoastal Waterway Boat Ramp
 Hollybrook Park—Creek front
 Huguenot Memorial Park—Riverside
 Intracoastal Waterway Park—Intracoastal Waterway
 Jimi King Park—River/creek front
 Jetties Pavilion—Riverfront
 Joe Carlucci Boat Ramp—Riverfront
 Kathryn Abbey Park-Oceanfront
 Klutho Park—Tributary/Creek front
 Little Talbot State Park-Riverfront
 Mandarin Park—Riverfront
 Northbank River Walk—Riverfront
 Northshore Park—Riverfront
 Palmetto Leaves Regional Park
 Powers Park—Creek front
 Reddie Point Preserve—Riverfront
 River Oaks Park/Craigs Creek—Creek front
 Riverview Park--Riverfront
 Riverview Park--Riverfront
 Riverview Community Senior Center & Park—Riverfront
 Stockton Park/Creekfront
 Tillie Fowler Regional Park
 Walter Jones Park—Riverfront
 Willowbranch Park—Tributary/Creekfront
 Yacht Basin Park—Creek/Riverfront

Additional sites will be identified and added.

Proposed Budget
St. Johns River Celebration Cleanup, March 25, 2017
International/Florida Coastal Cleanup
September 16, 2017
Expenses

- Supplies:

Bags	(for volunteers)	\$ 3,000
Gloves	(for volunteers)	\$ 1,700
Grabbers	(for volunteers)	\$ 300

Total Estimated Expenses from **\$5,000** **Grant funding**
Grant funds:
 (To satisfy Florida Inland Navigation District Requirements)

- Advertising/Marketing & Educational Awareness
 City of Jacksonville:
 Fliers will be sent via email and event promoted on social media.
 F.I.N.D. will be recognized on City website, in social media, at year-long
 recognition events, on event banners, and in City press releases.
 F.I.N.D. will be recognized in the KJB annual report in 2017.

Est. city cost: Based on SJRC & ICC cleanup numbers

Estimated debris pick up and disposal cost: **\$300** **City of Jax. KJB**

Roll offs will be an in-kind donation.

Supplies purchased with grant funds will be used
 for cleanups throughout the year.

Total, including estimated city cost \$5,300

REC'D

NOV 4 - 2016

Florida Inland
Navigation District

October 26, 2016

Mr. Mark Crosley
Florida Inland Navigation District
1314 Marcinski Rd.
Jupiter, Florida 33477-9427

Dear Mark,

Keep Brevard Beautiful, Inc. is in the preliminary stages of planning our 2017 cleanups. We appreciate all of your financial support in the past. We hope you will support our large community cleanups again next year.

We begin with the Trash Bash on April 8th. Different sites will be targeted on this date. We would like to target more volunteers in the St. Johns River Cleanup. The 2016 event brought out 71 volunteers who collected 3460 pounds of trash at 3 sites.

As an affiliate of Keep America Beautiful, we begin the year with the Great American Cleanup. Trash Bash is an annual opportunity to motivate our community to take action to control litter on the shorelines of the Indian River Lagoon with over 30 check-in sites throughout Brevard County. Next year it will be held on April 8, 2017. Competitions between cities and county commission districts hope to create added enthusiasm. Commemorative t-shirts are worn the day of the event. The 2016 Trash Bash results are: 1,110 volunteers who collected 10.35 tons of trash.

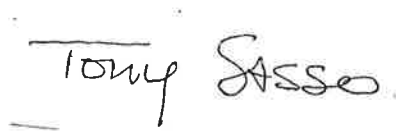
The Coastal Cleanup, which is held on the 3rd Saturday in September, is another traditional large community cleanup event. The Ocean Conservancy asks for a survey of items found. Volunteers are also given commemorative t-shirts for the occasion. The 2016 cleanup brought out 1345 volunteers who collected over 5 tons of trash. The lagoon portion of the cleanup alone saw seven check-in sites having 270 volunteers who collected 2,000 pounds of trash.

Beginning in 1988, FIND has provided waterway cleanup assistance for the Trash Bash. Our volunteer based cleanup effort is a high profile event which serves to motivate community pride while educating the community about the conditions which affect the Indian River Lagoon and St. Johns

River. It is our sincere hope that FIND will continue to support these large community cleanup events on the Indian River Lagoon and the St. Johns River, as we plan to make this year the best yet!

Keep Brevard Beautiful, Inc. is requesting \$15,000.00 for the year 2017 which will include three programs, one cleanup event in the St. Johns River and two in the Indian River Lagoon. If you have any questions regarding this request, please call me. Thank you for your consideration of this request.

Sincerely,

A handwritten signature in black ink that reads "Tony Sasso". The signature is written in a cursive style with a horizontal line above the first name.

Tony Sasso
Executive Director

Keep Brevard Beautiful, Inc.
Florida Inland Navigation District
Coastal Cleanup
September 17 2017

Required Equipment/Material	FIND		In Kind
Office Supplies	200.00		
Advertising	500.00		
T shirts	2600.00		
Grabbers	1000.00		
Gloves	400.00		
Dumpster	300.00		
Donations			500.00
Trash Bags			3,000.00
Incentive items			500.00
Boat			500.00
Water			500.00
Total requested from FIND	5000.00		
Total In-Kind Funds			5,000.00
Total Cleanup Cost	<u>10,000.00</u>		

Keep Brevard Beautiful, Inc.
Florida Inland Navigation District
St. Johns River Cleanup

May 6 2017

Required Equipment/Materials	FIND		In Kind
Office Supplies	400.00		
Advertising	100.00		
Incentive Items	500.00		
Grabbers	3000.00		
Dumpster	300.00		
Gloves	700.00		
Donations			500.00
Boat			2,000.00
Trash Bags			2,000.00
Water			500.00
Total requested from FIND	5000.00		
Total In-Kind Funds			5,000.00
Total Cleanup Cost		<u>10,000.00</u>	

Keep Brevard Beautiful, Inc.
Florida Inland Navigation District
Keep Brevard Beautiful's Trash Bash
April 8 2017

Required Equipment/Material	FIND		In Kind
Office Supplies	50.00		
Advertising	300.00		
T shirts	2500.00		
Grabbers	1000.00		
Gloves	650.00		
Donations			3,000.00
Trash Bags			1,000.00
Incentive items	500.00		
Boat			500.00
Water			500.00
Total requested from FIND	5000.00		
Total In-Kind Funds			5,000.00
Total Cleanup Cost	<u>10,000.00</u>		

Janet Zimmerman

From: Bryan Bobbitt <bryanbobbittkbb@gmail.com>
Sent: Wednesday, November 16, 2016 9:18 AM
To: Janet Zimmerman; Tony Sasso
Subject: KBB Cleanup locations for 2017

Good Morning Janet,

Thanks again for working with KBB this year. The funds we receive from FIND help us accomplish our mission and get the community involved to make a difference. The locations for the three major events are as follows.

Trash Bash:

Spoil Islands in Titusville
 Haulover Canal
 Port Canaveral
 Cheri Down Park
 Lori Wilson Park
 Minuteman Causeway
 1000 Islands
 Kelly Park
 Pelican Beach
 Canova Park
 Melbourne Beach
 Christianson Landing

St. John River Cleanup:

Airboats at Midway
 Tucker Rd
 Melbourne Airboat Club
 Hatbill

Coastal Cleanup:

Spoil Islands in Titusville
 Haulover Canal
 Port Canaveral
 Cheri Down Park
 Lori Wilson Park
 Minuteman Causeway
 1000 Islands
 Kelly Park
 Pelican Beach
 Canova Park
 Melbourne Beach
 Christianson Landing
 Bicentennial Park
 Lee Winner Park
 Barge Canal

There will most likely be more sites added as we get closer to the events but these are the ones we normally target. Please let us know if you have any questions.

--

Thanks,

Bryan Bobbitt
Deputy Director
Keep Brevard Beautiful
bryanbobbittkbb@gmail.com
321-631-0501 Office
321-631-2840 Fax
321-458-4363 Cell

What will be your Legacy?

Tony Sasso- KBB Executive Director

"Release Today To Catch Tomorrow"

**MINUTES OF THE
FLORIDA INLAND NAVIGATION DISTRICT**

Personnel Committee

8:15 a.m., Saturday, November 19, 2016

Hutchinson Island Marriott Beach Resort and Marina

555 N. E. Ocean Boulevard

Stuart, Martin County, Florida 34996-1620

ITEM 1. Call to Order.

Committee Chair Netts called the meeting to order at 8:15 a.m.

ITEM 2. Roll Call.

Assistant Executive Director Janet Zimmerman called the roll and Committee Chair Netts, Treasurer McCabe, Secretary Donaldson, and Commissioner Williams were present. Commissioner Dritenbas was absent. Ms. Zimmerman stated that a quorum was present.

ITEM 3. Additions or Deletions.

Committee Chair Netts asked if there were any additions or deletions to the meeting agenda. Mr. Crosley stated that there were none.

Commissioner Williams made a motion to approve the final agenda as presented. The motion was seconded by Secretary Donaldson. Committee Chair Netts asked for any further discussion. Hearing none, a vote was taken and the motion passed unanimously.

ITEM 4. Public Comments.

Committee Chair Netts asked if there were any public comments on issues that are not on today's agenda. There were none.

ITEM 5. Personnel Salary Adjustments for FY 2016-2017.

Mr. Crosley stated that staff would like to discuss potential salary increases and/or bonuses for FY 2016-2017 for the District staff. He referred to a salary summary showing Cost of Living Adjustment (COLA) and merit increases for 24 Florida counties and municipalities. He asked for discussion.

Committee Chair Netts stated that the COLA averages between 2% to 2.5%. Mr. Crosley stated that inflation has remained low at 2%, but 33% of that is due to the reduction in gasoline prices. The Consumer Price Index (CPI) is predicting that in the near future, gasoline prices will increase and will no longer cover up inflation in other markets. The standard cost of living increase has ranged between 2% to 4%.

Commissioner Williams stated that he does not favor a COLA increase but a lump sum bonus based on performance.

Chair Cuozzo stated that because staff retirement is affected by the last five-years of employment, he does not want to keep staff salaries artificially low.

Secretary Donaldson stated that the District has completed several large projects this past year. The Executive Director's performance is reflected by staff's performance. He does feel that a salary increase for the District staff is justified. He stated that he also knows that there is competition for quality staff and he feels that a 3% to 4% salary increase is warranted.

Secretary Donaldson stated that next year, he would like staff to provide other government salary information as a benchmark to determine staff adjustments.

Treasurer McCabe asked the procedure taken to evaluate staff. Mr. Crosley stated that once the Board provides their recommendations, he then determines staff increases depending on staff performance.

Committee Chair Netts stated that FIND is a small organization and a mediocre employee cannot be hidden. In large corporations, it is easy for a mediocre employee to slide under the radar. FIND has done a remarkably good job with the current staff and this Board needs to recognize that the staff is doing the job that the Board has asked them to do. He is comfortable with an up to 3% salary increase, as determined by the Executive Director.

Treasurer McCabe made a motion to approve a recommendation to the full Board of the personnel salary adjustments, up to 4%, for FY 2016-2017, as determined by the Executive Director. The motion was seconded by Secretary Donaldson. Committee Chair Netts asked for any further discussion. Hearing none, a vote was taken and the motion passed unanimously.

ITEM 6. Executive Director's Performance Review.

Committee Chair Netts stated that for commissioners that have not responded to the Executive Director performance review request, there is a form in the back-up materials that can be completed. He stated that the Executive Director requests that the committee and the Board evaluate his job performance over the last year and he also respectfully requests a performance bonus, if justified.

Chair Cuozzo stated that Mr. Crosley has done an excellent job and has brought fresh ideas to the District.

Committee Chair Netts stated that his review of Mr. Crosley was positive.

Treasurer McCabe stated that the District staff responds to all her requests immediately. She stated that the staff and Mr. Crosley are doing a great job.

Commissioner Blow stated that he is impressed that the Executive Director has been willing to tackle multiple projects and move the District forward.

Commissioner Williams suggested a raise of 4% with a bonus of \$5,000.00 for the Executive Director.

Secretary Donaldson stated that he would recommend a 2% salary adjustment with bonus of 2% or 3% for the Executive Director.

Commissioner Williams made a motion to approve a recommendation to the full Board to provide the Executive Director a salary increase of 2% with a 2% bonus for FY 2016-2017. The motion was seconded by Secretary Donaldson. Committee Chair Netts asked for any further discussion. Hearing none, a vote was taken and the motion passed unanimously.

ITEM 7. Additional Agenda Items or Staff Comments.

Committee Chair Netts asked if there were any additional agenda items or staff comments. There were none.

ITEM 8. Additional Commissioners Comments.

Committee Chair Netts asked if there were any additional Commissioner comments. There were none.

ITEM 9. Adjournment.

Committee Chair Netts stated that hearing no further business the meeting was adjourned at 8:36 a.m.

**MINUTES OF THE
FLORIDA INLAND NAVIGATION DISTRICT**

Finance and Budget Committee Meeting

8:45 a.m., Saturday, November 19, 2016

Hutchinson Island Marriott Beach Resort and Marina

555 N. E. Ocean Boulevard

Stuart, Martin County, Florida 34996-1620

ITEM 1. Call to Order.

Committee Chair McCabe called the meeting to order at 8:36 a.m.

ITEM 2. Roll Call.

Assistance Executive Director Janet Zimmerman called the roll and Committee Chair McCabe, Secretary Donaldson, Commissioner Blow and Commissioner Sansom were present. Ms. Zimmerman stated that a quorum was present.

ITEM 3. Additions or Deletions.

Committee Chair McCabe asked if there were any additions or deletions to the meeting agenda. Mr. Crosley stated that there were no additions or deletions to the agenda.

Mr. Crosley noted that that a current Interest and Term of Funds sheet had been distributed to commissioners and staff.

Commissioner Sansom made a motion to approve the agenda as presented. The motion was seconded by Secretary Donaldson. Committee Chair McCabe asked for any further discussion, hearing none, a vote was taken and the motion passed unanimously.

ITEM 4. Public Comments.

Committee Chair McCabe asked if there were any public comments on issues that are not on today's agenda. There were none.

ITEM 5. Financial Statements for September of 2016.

Mr. Crosley presented the District's financial statements for September of 2016. He noted that September is the end of the District's Fiscal Year.

Mr. Crosley noted that the Fidelity Bank CD that matured in September was transferred into the District's Seacoast Checking account. This funding was partially used to pay end-of-year grant disbursements.

Mr. Crosley stated that \$4.1 million has been disbursed for grants that have been completed and had their close-out paperwork turned by September 1st. Additional funding will be disbursed for grants that have been closed-out and did not turn in their close-out paperwork until September 30th. \$3.9 million has been disbursed to Cashman Dredging for the Broward deepening project. The \$2.5 million deposit to Port Everglades for use of their access and Dredged Material Management Site (DMMA) road will be refunded to the District upon completion of the Broward Deepening project

Mr. Crosley stated that the District's current expenses as of September 30, 2016 are \$30.4 million. That amount is more than usual and will continue to increase. The District has spent \$17.4 million more this Fiscal Year than revenue collected, which was expected and planned, and included the Broward deepening project. The dredging of the Ponce Inlet Intracoastal Waterway project will begin soon and may cost more than \$14 million. He asked for questions.

Commissioner Sansom asked about payments to Cashman Dredging being paid about a month behind. Mr. Crosley stated that the process for payment starts from the time the work is completed, billed and the payment is disbursed to Cashman Dredging. That time line is approximately one-month.

Secretary Donaldson asked about the funds due from other government. Mr. Crosley stated that money is \$2.5 million that is being held by Port Everglades for use of their access road and will be refunded once the project has been completed.

Commissioner Blow made a motion to approve a recommendation to the full Board of the financial statements for September of 2016. The motion was seconded by Secretary Donaldson. Committee Chair McCabe asked for any additional discussion. Hearing none, a vote was taken and the motion passed unanimously.

ITEM 6. September of 2016 Budget Summary and Project Status Expenditure Reports.

Mr. Crosley presented the Budget Summary and Project Status Expenditure Reports for September of 2016.

Mr. Crosley stated the District spent \$40.2 million this year and that reflects the \$6.5 million provided to the U.S. Army Corps of Engineers (USACE) for DMMA O-7.

Mr. Crosley stated that the remaining expenditures are within the District's budget. He asked for questions. There were none.

ITEM 7. FY 2015-2016 Budget Amendment No. 2.

Mr. Crosley presented FY 2015-2016 Budget Amendment No. 2. This is the initial budget amendment to the District's current FY budget and is being made to reflect the actual expenditures by fiscal year in the Waterways Assistance Program (WAP), as well as some other unanticipated distribution of funds such as, additional funding for DMMA O-

7 construction, St. Augustine & Matanzas IWW Maintenance Dredging. To balance the budget, staff transferred \$404,000.00 out of the Land-General account. The final District Budget changes are for line item transfers and do not change the bottom-line.

Commissioner Sansom asked about the DMMA O-7 project cost increase. Mr. Crosley stated that the USACE estimated the project cost and the actual project cost bid came in higher than estimated. The project was re-bid with the road construction removed and there is anticipation that the project will re-bid for less.

Commissioner Sansom asked if the project bids for less than the funding that FIND provided the USACE, will the District received a refund. Ms. Trulock stated that she will hold some funding for project modifications and return any excess funding to the District.

Secretary Donaldson made a motion to approve a recommendation to the full Board of Resolution No. 2016-05 for Budget Amendment No. 2. The motion was seconded by Commissioner Sansom. Committee Chair McCabe asked for any additional discussion. Hearing none, a vote was taken and the motion passed unanimously.

ITEM 8. Review and Update of the District's Cash Management and Investment Policy.

Mr. Crosley stated that the District's Cash Management and Investment Policy was updated in February of 2016, after no changes for over 10 years. Staff has implemented the revised policy and has realized the need for some additional minor revisions.

Mr. Crosley stated that revised policy for Automated Clearing House (ACH), or electronic payments procedures, has been updated. All ACH payments will be reviewed by the Executive Director and two commissioners.

Commissioner Sansom asked if these changes have been reviewed by the District's auditors. Mr. Crosley stated that they have not been reviewed yet, but they will be reviewed by the District's auditors.

Commissioner Sansom made a motion to approve a recommendation to the full Board to adopt Resolution 2016-04, the revised District Cash Management and Investment Policy and Attachments, subject to review by the District auditors. The motion was seconded by Commissioner Blow. Committee Chair McCabe asked for any additional discussion. Hearing none, a vote was taken and the motion passed.

ITEM 9. Delegation of Authority Report.

Mr. Crosley presented the Executive Director's Delegation of Authority Report and stated that eight (8) actions were taken from October 5, 2016 through November 8, 2016. He asked for questions. There were none.

ITEM 10. Additional Agenda Items or Staff Comments.

Committee Chair McCabe asked if there were any additional agenda items or staff comments. There were none.

ITEM 11. Additional Commissioners Comments.

Committee Chair McCabe asked if there were any additional Commissioner comments. There were none.

ITEM 12. Adjournment.

Committee Chair McCabe stated that hearing no further business the meeting was adjourned at 9:00 a.m.

**MINUTES OF THE
FLORIDA INLAND NAVIGATION DISTRICT**

Board of Commissioners Meeting

9:00 a.m., Saturday, November 19, 2016

Hutchinson Island Marriott Beach Resort and Marina

555 N. E. Ocean Boulevard

Stuart, Martin County, Florida 34996-1620

ITEM 1. Call to Order.

Chair Cuozzo called the meeting to order at 9:03 a.m.

ITEM 2. Pledge of Allegiance.

Chair Cuozzo led the Pledge of Allegiance to the Flag of the United States of America.

Chair Cuozzo asked for a moment of silence and prayer for Commissioner Dritenbas who is struggling with illness at this time.

ITEM 3. Roll Call.

Secretary Donaldson called the roll and Chair Cuozzo, Vice-Chair Netts, Treasurer McCabe and Commissioners Blow, Isiminger, Sansom, and Williams were present. Commissioners Chappell, Crowley, Dritenbas and Osteen were absent. Secretary Donaldson stated that a quorum was present.

ITEM 4. Consent Agenda.

Chair Cuozzo asked if there were any comments or questions regarding the Consent Agenda. There were none.

Vice-Chair Netts made a motion to approve the Consent Agenda as amended. The motion was seconded by Commissioner Blow. Chair Cuozzo asked for discussion. Hearing none, a vote was taken and the motion passed unanimously.

ITEM 5. Additions or Deletions.

Chair Cuozzo asked if there were any additions or deletions to the meeting agenda.

Mr. Crosley stated that he would like to delete from the agenda: Item 12, Presentation, Intracoastal Waterway Setback Policy and update Item 13, Scope of Services and Fee Proposal for Engineering Services for Maintenance Dredging of the Intracoastal Waterway in the Vicinity of Jupiter Inlet, Palm Beach County, FL, by changing the total project cost from \$85,000.00 to \$51,500.00. He would like to add to the agenda: Item 19B, Scope of Work, Fee Quote and Agreement for the Relocation of a Permanent Access Road Entrance at Maintenance Spoil Area (MSA) 641A, Palm Beach County, FL.; and, Item 19C, Florida Fish and Wildlife Conservation Commission (FWC) request to designate Spoil Island V-7, Volusia County, FL as a Critical Wildlife Area (CWA).

Treasurer Donaldson stated that he would like to add to the agenda: Item 6A, letter of resignation from Commissioner Dritenbas.

Commissioner Williams stated that he would like to add to the agenda: Item 20A, District Emergency Storm Program.

Treasurer McCabe made a motion to approve the final agenda as amended. The motion was seconded by Commissioner Blow. Chair Cuozzo asked for discussion. Hearing none, a vote was taken and the motion passed unanimously.

ITEM 6. Public Comments.

Chair Cuozzo asked if there were any public comments on issues that are not on today's agenda. There were none.

ITEM 6A. Letter from Commissioner Dritenbas.

Treasurer Donaldson read into the record a letter of resignation from Commissioner Dritenbas. The letter will be attached to the Minutes.

ITEM 7. Board Meeting Minutes.

Chair Cuozzo asked if there were any comments or questions regarding the October 14, 2016 Finance & Budget Committee and Board Meeting Minutes. There were none.

Commissioner Sansom made motion to approve the October 14, 2016 Finance & Budget Committee and Board Meeting Minutes as submitted. The motion was seconded by Commissioner Blow. Chair Cuozzo asked for discussion. Hearing none, a vote was taken and the motion passed unanimously.

ITEM 8. Staff Report on Martin County Area Projects.

Mr. Crosley stated that Phase I of the Dredged Material Management Plan (DMMP) for the 21 miles of the Intracoastal Waterway in Martin County was completed in 1993. He stated that Phase II of the DMMP was also completed in 1993 and all major land acquisition was completed by 2001.

Mr. Crosley stated that the 50-year dredging projection for the IWW is 1.4 million cubic yards and the storage projection is 2.7 million cubic yards. Maintenance Dredging in Reach II in the Crossroads area is 85% of the dredging volume and dredging occurs every three (3) years and was last dredged in the summer of 2013.

Mr. Crosley noted that the District is also the local sponsor for navigation of the 97 miles of the Okeechobee Waterway (OWW) in Martin and Palm Beach Counties. Phase I of the DMMP for the OWW from the Crossroads to the St. Lucie Lock was completed in 1998, and the DMMP from the St. Lucie Lock to the western Martin County line was completed in 2007. Phase II of the DMMP from the Crossroads to the St. Lucie Lock was completed in 2001, and the Phase II Plan from the Lock to the western county line was completed in 2009.

Mr. Crosley stated that the 50-year dredging projection for the OWW is 1.5 million cubic yards and the storage projection is 3 million cubic yards.

Mr. Crosley stated that the acquisition of four Dredged Material Management Areas to serve the section of the OWW from the Crossroads to the St. Lucie Lock was completed in 2006. The acquisition of DMMA LT-4A, which serves the section of the OWW from the St. Lucie Lock to the western Martin County line was completed in 2008. The initial condemnation of a proposed site near OWW Route 2 (DMMA LT-13) has been suspended to evaluate a more cost-effective alternative for the low dredging volumes associated with this section of the waterway.

Mr. Crosley stated that to date, one of the seven upland Dredged Material Management Areas in the county has been fully constructed. Sites MSA 524B and MSA 504 were cleared in 2010. Site DMMA O-7 was undergoing permitting and a final design by Taylor Engineering. Development of the site in 2017 will be undertaken with the assistance of the U. S. Army Corps of Engineers (USACE).

Mr. Crosley noted that the other DMMA sites are in various phases of pre-construction, environmental permitting, engineering, or design.

Mr. Crosley stated that the partial offloading of M-5 by Lucas Marine for the Ft. Pierce Waterfront Protection Project has been completed in 2013. Approximately 110,000 cubic yards of material was offloaded at no expense to the District to assist with the construction of barrier islands offshore of the Fort Pierce Marina. Minimal damage to the existing gabion mats at M-5 occurred during the offloading and was repaired by the contractor. He stated that a full replacement of these mats will be forthcoming in the next few years.

Mr. Crosley stated that dredging a portion of Routes 1 & 2 of the Okeechobee Waterway within the OWW was completed in 2012, removing some small but critical shoals totaling about 6,700 cubic yards of material. Dredging of the Crossroads Area of the IWW and OWW was completed in 2010, again in the summer of 2013, and is scheduled for dredging in 2017. The District is coordinating with the USACE to determine the feasibility of limited Hopper dredging of the area in the near-term. Reach IV of the OWW will be dredged in 2017 following the construction of DMMA O-7. He asked for questions, there were none.

ITEM 9. Comments from the U.S. Army Corps of Engineers.

Ms. Shelley Trulock, the Intracoastal Waterway (IWW) Project Manager with the U.S. Army Corps of Engineers (USACE), stated that \$2.6 million of Work Plan funding will go towards the St. Augustine and Matanzas IWW dredging projects. Development of the Plans and Specifications for the St. Augustine and Matanzas reaches of the IWW have been completed and certified. She stated these projects will be moved up because Work Plan funding cannot be carried forward. The land use agreement for placement of material within Anastasia State Park has been approved by FDEP Parks and the permit modification

has been received. The permanent easements for Summerhaven Beach placement have been approved by St. Johns County.

Ms. Trulock stated that the St. Augustine contract was advertised on July 28, 2016 and awarded to Weeks Marine on September 30, 2016. The Notice to Proceed (NTP) was issued on November 2, 2016. Based on damages incurred in the Vilano/South Ponte Vedra Beach area from Hurricane Matthew, FIND has requested that the Corps investigate the cost of changing the placement area for the St. Augustine reach to the beach north of the Inlet, in lieu of placing material on the State Park south of the Inlet. If FIND agrees to fund the cost change, if any, the IWW FDEP permit will be modified to add a placement area and the county will finalize required easements. Weeks Marine has confirmed that they would not seek monetary compensation for delaying commencement of dredging operations until February 2017, to allow a decision to be made on the shift in placement area and the need to obtain the permit modification and real estate interests. She hopes to bring these changes to the Board in December 2016.

Commissioner Blow referenced monuments R17 to R14 and stated that the residents and the county are working very hard to get homeowners to execute the required temporary construction easements. He stated that he mentioned to residents that the easement form is a USACE form and they cannot make changes to that form.

Ms. Trulock stated that the new breach in the Summerhaven area is located approximately 200 yards north of the placement area, and the exact location where the USACE had envisioned the pipeline to come over to the breach. Taylor Engineering is currently under contract with the county for the Summerhaven River restoration and they

have also been contracted to close the breach. The breach should be closed before commencement of dredging in February 2017.

Mr. Crosley noted that Agenda Item 14 is for an agreement with the St. Augustine Port, Waterway and Beach District (SAPWBP) for material removal at District Site DMMA SJ-1 in St. Johns County. The SAPWBD will remove up to 50,000 cubic yards of material for beach erosion mitigation, and close the Summerhaven Breach at no cost to the District.

Commissioner Blow stated that the county initially planned to take material out of the Summerhaven River basin to place on the beach. Now the county may have to use some of that material to close the breach. The county is in negotiations with the contractor to dredge additional material to close the breach. This option would be more cost effective than offloading District Site DMMA SJ-1. The county may elect to not offload DMMA SJ-1. This is a Change Order with the contractor for \$260,000.00.

Secretary Donaldson stated that FEMA will help with the costs of this project. Commissioner Blow stated that the county has hired a FEMA expert to help with funding reimbursement.

Ms. Trulock stated that the contract for construction of DMMA O-7 was advertised on May 13, 2016, with the contracting tool being small business set aside, least cost technically acceptable. Due to the need to amend the contract a multitude of time to address issues associated with the access road, bids were delayed until October 14, 2016. The source selection team was convened on November 7, 2016 to begin the review process of bids received. Award is currently tracking for November 22, 2016. She will coordinate the pre-construction process with the District staff.

Ms. Trulock stated that the Plans and Specifications for construction of DMMA O-23 will kick off on December 1, 2016. NEPA activities were started and are extensive. There is a federally listed plant, reindeer lichen, which grows in scrub areas and is present on the site. There are about 10 to 20 square feet of the species on the site that will have to be relocated out of the construction area. The USACE team has verified that the land adjacent to this site is compatible as a relocation area for the reindeer lichen. An FDEP exemption will be obtained since this is upland construction. Project design concepts will be the same as DMMA O-7. She anticipates a Work Order being presented to FIND at the June 2017 Board Meeting.

Ms. Trulock stated that there are approximately 10,000 cubic yards of problematic shoaling within the Crossroads reach of the IWW. The plans are to utilize a Corps hopper dredge to remove this small quantity, which she is negotiating with the USACE Wilmington District. FDEP in Tallahassee has permitted the modification of the existing permit held by Martin County to allow for IWW dredged material to be placed into the settling basin within the St. Lucie Inlet. Martin County would then use the material for beach placement south of the inlet. Martin County would be happy if even more material were removed from the area as they need it for additional beach re-nourishment. She expects receipt of the permit modification by mid-December 2016. This project will be funded with Federal funding.

Mr. Crosley stated that because the FIND office has been receiving complaints about critical shoaling in the Crossroads area, which is a -8-foot project that is currently at -6-feet, he would like to get the USACE hopper dredge to take care of this small amount of shoal soon. This would buy approximately one-year in time to obtain the permit for the

widener and complete the entire main dredging project. If the hopper dredge cannot be on site by March of 2017 at the latest, the District is ready to expedite the original project without the widener.

Secretary Donaldson stated that placement of material in the impoundment basin is okay because the impoundment basin is set for the material to be removed by this summer.

Commissioner Sansom asked if silt comes with the Lake Okeechobee releases. Secretary Donaldson stated that the Lake Okeechobee releases do also move material, and that material does contribute to channel shoaling.

Ms. Trulock stated that the USACE is moving forward with permitting the IWW Broward Reach I dredging project. The current path forward is to dredge with a Wilmington District inlet hopper dredge, unless it is determined that the quantity is large enough to justify standard procurement. Discussions with the Hillsboro Inlet Chairman, Mr. Jack Holland, led to the suggestion that the USACE should consider placing the dredged material within the existing Hillsboro Inlet Settling Basin, a permanent sand transfer station. This would alleviate the need to obtain National Environmental Policy Act (NEPA) approval on a new nearshore placement area. The Hillsboro Inlet dredge would then move the material to the beach south of the inlet. In order to do this, the USACE would still need a Florida Department of Environmental Protection (FDEP) permit and possible NEPA coordination, since IWW material has never been placed in this disposal location. The work order will be presented to the FIND Board in February 2017.

Ms. Trulock stated that the Town of Hillsboro Beach has requested that the sand be placed on the beach north of the inlet, and the Town has offered to offload the sand and

truck it to the beach area. She stated that the FDEP permit would have to be modified and she will meet with the Town to discuss this option.

Ms. Trulock stated that the IWW Bakers Haulover continues to be one of the highest frequency dredging needs within the IWW. The current plan is to take advantage of regional sediment management practices and dredge Bakers Haulover as a borrow source for the Miami-Dade County shore protection project. An FDEP permit for either the IWW or the shore protection project must be modified if the area of placement is not specifically what is currently permitted for placement. She has been in discussion with the FDEP for this modification, and FDEP approves of the project modification. Funding for the action would be from FY 2016 carryover funding or FY 2017 Work Plan funding. The USACE survey boat will check the area to determine changes from Hurricane Matthew. She anticipates contract advertisement for the Sunny Isles Beach project in April of 2017.

Ms. Trulock stated that for the next four months, she will be the temporary USACE Regulatory Branch Chief, for the South Branch. She stated that Milan Mora may temporarily work her position.

ITEM 10. Presentation and Update on the Okeechobee Waterway and Crossroads Channel Widener and Realignment Effort.

Chair Cuozzo introduced Dr. Mike Kabiling, with Taylor Engineering, to make a presentation about the Okeechobee Waterway (OWW) channel widener (advanced maintenance basin) in the Crossroads area where the Intracoastal Waterway (IWW), the St. Lucie Inlet, and the Okeechobee Waterway (OWW) converge in Martin County.

Dr. Kabiling stated that this effort also looked at realignment of the existing OWW channel to naturally occurring deeper water. This area is one of the District's most frequently dredged areas. The establishment of the widener will reduce the District's

dredging frequency from its current three (3) year dredging cycle to a five (5) year dredging cycle, allowing for costs savings.

Dr. Kabling stated that the project area extends from the west side of Lake Okeechobee east to Stuart, will be eight-feet deep and includes OWW Cut's 1, 2 and 3. A large portion of dredging includes the St. Lucie River and the North and South Fork areas. Dredged material will be place on DMMA M-5. He discussed several channel re-alignment alternatives. Alternatives CR-1 and CR-2 can provide a deeper navigation channel with almost the same performance and costs. He recommends proceeding with the permitting, engineering and design of either Alternative CR-1 or Alternative CR-2. Future bathymetric surveys should include the OWW Cuts 1W, 2, and 3 to establish shoaling rates at these locations.

Vice-Chair Netts stated that this project would require less frequent dredging but that the cost savings would be in mobilization. Dr. Kabling answered yes and stated that the material would then be moved to the beach on Jupiter Island. Also, moving the channel would help eliminate the material from migrating back into the channel as quickly.

Chair Cuzzo asked about realigning the current channel to meet natural deep water. Dr. Kabling stated that was looked at, and it was determined that it would not reduce dredging frequency. Short-term analysis shows that channel re-alignment to natural deep water would increase dredging.

Commissioner Blow asked if DMMA M-5, has the capacity to handle this dredged material. Dr. Kabling answered yes.

Chair Cuozzo stated that he is disappointed that technically there is not a better solution for this area. He feels that it may not be worth spending the money on design and permitting to re-align this channel.

Vice-Chair Netts stated that the cost savings for alternative 1 is \$830.00 per year and he questioned what this study cost. He also questioned the costs associated with re-aligning the channels, such as real estate right-of-way, markers that will need to be moved and other costs. Mr. Crosley stated that the bottom line is that if the channel is not re-aligned and the only channel markers are moved, the cost is negligible.

Commissioner Sansom stated that what needs to be looked at is the amount of navigation benefit from widening the channel versus re-aligning the channel. The study show the physical impact on FIND activities, not boater benefit from channel widening.

Dr. Taylor stated that the report should include the realized economic benefit from the channel widener project. Dr. Kabling stated that if the channel is widened and re-aligned to naturally deep water, the overall savings per year would be \$30,000.00 to \$40,000.00.

Secretary Donaldson stated that he feels that for this project, the channel wideners are the correct path to take. The county performs inlet surveying every two-years and a wider channel would allow more intensive surveying. This would allow the District to update the computer models with physical changes and fine-tune future management of this area, such as sedimentation rates and sediment movement in the area. The District may be able to manage sediment rates with additional information from management of the OWW, IWW and the inlet.

ITEM 11. Scope of Services and Fee Proposal for Final Design and Bid Administration for Crossroads Maintenance Dredging, Martin County, Florida.

Mr. Crosley stated that the design and permitting of the Okeechobee Waterway (OWW) channel widener has been completed, and the Crossroads area (confluence of the OWW, the Intracoastal Waterway (IWW) and the St. Lucie Inlet) is scheduled to be dredged. Taylor Engineering has submitted a scope and fee quote in the amount of \$39,357.60 to finalize the design of this project, including the dredging of the advance maintenance area (new channel widener) and bid administration assistance.

Mr. Crosley stated that capacity is sufficient for this dredging event to utilize Dredged Material Management Area (DMMA) M-5. The proposal has been reviewed and is consistent with the previous work efforts, and it is necessary to continue this project.

Commissioner Isiminger made a motion approval of a proposal and fee quote from Taylor Engineering in the amount of \$39,357.60 for final design and bid administration services, Crossroads Maintenance Dredging, Martin County, Florida. The motion was seconded by Vice-Chair Netts. Chair Cuzzo asked for discussion. Hearing none, a vote was taken and the motion passed unanimously.

ITEM 12. Presentation – Intracoastal Waterway Setback Policy Update.

Item 12 was deleted from the agenda.

Chair Cuzzo stated that Items 19B and 19C will be discussed at this time.

ITEM 19B. Scope of Work, Fee Quote and Agreement for the Relocation of a Permanent Access Road Entrance at Maintenance Spoil Area (MSA) 641A, Palm Beach County, Florida.

Mr. Crosley stated that the District staff has been negotiating with a contractor to re-locate an ingress/egress access at Maintenance Spoil Area (MSA) 641A in Delray Beach. Negotiations with a previous company failed to produce a viable project and staff

is recommending that the Board approve the scope and fee quote from SLB General Contracting, LLC. Construction is expected to take less than one month and should be complete by January. The final as-built will also be reviewed by the District engineer and all construction will be monitored.

Mr. Crosley stated that a letter will be sent to ZOM, the developer of the site next to MSA 641A, to cancel the District's contract to work with them.

Commissioner Blow asked if the apartments have been built on the site adjacent to MSA 641A. Originally the District's access easement was north of the apartments. Mr. Crosley stated that the apartments have been built and the District has the easement north of the apartments cleared and the pad has been built. The pad needs to be connected to the District's site with a culvert and gate.

Commissioner Blow made a motion to approve a scope of work and fee quote in the amount of \$60,985.00 from SLB General Contracting, LLC. for the relocation and construction of a permanent access entrance at MSA 641A, Palm Beach County, Florida. The motion was seconded by Commissioner Isiminger. Chair Cuzzo asked for discussion. Hearing none, a vote was taken and the motion passed unanimously.

ITEM 19C. Florida Fish and Wildlife Conservation Commission (FWC) request to designate Spoil Island V-7, Volusia County, Florida as a Critical Wildlife Area (CWA).

Ms. Zimmerman stated that in June 2016 the Florida Fish & Wildlife Conservation Commission (FWC) begin identifying Critical Wildlife Areas (CWA) for additional bird protection. Spoil Island V-7 is located near the City of Port Orange, 200 feet south of the Dunlawton Bridge Boat Ramp, adjacent to the Intracoastal Waterway (IWW). V-7 has been identified by FWC as a regionally significant nesting area for brown pelicans. Staff has

been coordinating with FWC on the potential designation of V-7 as a Critical Wildlife Area (CWA), which would allow for the establishment of a “no entry” buffer around the island that would be enforceable by local and state law enforcement. FWC is currently recommending a seasonal closure of January 1 through August 31, with a posted buffer around the island varies between 10-150 feet.

Ms. Zimmerman stated that Spoil Island V-7 is approximately 1.2 acres in size. The southern portion of the island has approximately 0.5 acres of mangrove nesting habitat. A smaller patch of mangrove nesting habitat consisting of 0.1 acres is present on the northern portion of the island. FIND has historically maintained its right to place dredged material on these islands for the maintenance of the Intracoastal Waterway (IWW.)

Ms. Zimmerman stated that staff has concerns regarding a CWA designation that includes: future impacts pertaining to maintenance operations for the IWW; loss or impact to perpetual easement rights; concerns about navigation and boater safety (boat ramp and sign posts); and overlap of the designated buffer with the IWW channel right-of-way.

Ms. Zimmerman referenced an existing Grant of Easement, dated December 28, 1938 for right-of-way purposes, including the perpetual right and easement to enter upon, excavate, cut away and remove any or all listed tracks, including V-7 (Tract 313). At their February 26, 1960 meeting, the FIND Board of Commissioners adopted a resolution approving an effort by the Florida Audubon Society to establish a wildlife sanctuary at V-7 (Tract 313) in Volusia County as part of a pilot project. In the original resolution, FIND maintained the right to place spoil on the island as maintenance of the Intracoastal Waterway may require.

Ms. Zimmerman stated that during discussions with the FWC, an off-comment was that FIND would be allowed to dredge this section of the IWW during the nesting off-season and that comment is concerning.

Ms. Zimmerman stated that on November 16, 2016, the FWC held a meeting to move forward with approval of several CWA's, with V-7 on that list. She wrote a letter explaining the District's concerns regarding V-7. She has not had her concerns fully addressed.

Ms. Zimmerman stated that should the Board desire to proceed with the CWA designation, staff strongly suggest requiring the following conditions for approval: establishment that the CWA cannot place any restrictions on dredging activities of the IWW or adjacent channels; FIND and USACE will retain perpetual easement rights; that the CWA will not impact or restrict Dunlawton boat ramp access, use or maintenance; seasonal closures of the island for the nesting season only occur between April 1 – August 31, during that period no person could access within the buffer area; signage to be placed on existing posts or buoys will be designed and located to maximize boater and navigation safety; the northeast boundary buffer should be buoyed or the sign post should be moved closer to the island for boater safety; and that concurrence for the CWA is obtained from the USACE Navigation and Real Estate sections.

Chair Cuzzo asked if this is a voluntary program. Ms. Zimmerman stated that this is a voluntary program.

Treasurer McCabe stated that she has concerns about this designation. She noted that V-7 is an active bird sanctuary and presently is loaded with pelicans, almost to the point where the odor is problematic. The island is located near the IWW channel. It is also

next to the busiest boat ramp in Port Orange. She stated that she approves of the FWC developing these conservation areas, but she is puzzled by the FWC's selection of this location, (V-7). Two (2) of the FWC's CWA guidelines include proximity to the IWW and proximity to public recreational areas. V-7 is an active bird sanctuary that is located next to the IWW channel and next to a busy public boat ramp.

Treasurer McCabe stated that the CWA establishes a buffer around an identified area. Please be aware that we are not just talking about V-7, the island, it extends and includes the channel right-of-way. That concerns her, how would FIND get around a protected area that includes the channel right-of-way.

Treasurer McCabe referenced the 1960's agreement with the Audubon Society where FIND agreed to V-7 as a sanctuary. Now FIND is being requested to move from the sanctuary to a conservation area (CWA). The establishment of these CWA's are governed by the Florida Administrative Code. If FIND enters an agreement that sets these restrictions by the disestablishment of the conservation zones, the delegation of authority goes to the FWC Executive Director. FIND should check the role of the Administrative Code regulations with regards to the CWA establishment to determine how it relates to FIND and the FWC. Also, FIND should investigate if it has the right to enable a document to protect the right of the easement on V-7. Under the Administrative Code, the code establishes what agreement, restrictions, and modifications can be placed. There is a lot of competing interest in this designation for this very active bird island. She noted that FIND has good intentions, but we better make sure that FIND is authorized to make a recommendation to the CWA agreement.

Commissioner Isiminger stated that because the pelicans seem to be doing just fine with V-7 as it is now and Treasurer McCabe has serious concerns about this designation, he would recommend distributing staff's letter.

Commissioner Sansom made a motion to approve staff's recommendations concerning the establishment of Critical Wildlife Area V-7, Volusia County, Florida. The motion was seconded by Vice-Chair Netts. Chair Cuzzo asked for discussion.

Commissioner Sansom stated that this designation is a very important project to the FWC Executive Director and Chairman. FIND should take some time to review the FWC's request. If limitations are put into the Enabling Document, that becomes part of the agreement and will protect FIND's rights.

Commissioner Blow stated that the pelicans on V-7 are doing very well and he questions if anyone has demonstrated that there is a problem at this site with the way it is now.

Commissioner Blow noted that there is a section of the FWC that is concerned about birds, but there is also a section of the FWC that is concerned about recreational boating and fishing. V-7 is right next to a public boat ramp. Brown pelicans may be a threatened species, but another threatened species in Florida are also public boat ramps.

Vice-Chair Netts suggested that once FIND starts down this road of restrictions, the restrictions will continue to increase. This island is so populated by pelicans, that you could find it with your nose while being blindfolded. If this designation was solving a problem, then yes FIND would support it. But who has identified the problem. Is there any evidence that boaters are harassing the pelicans or that the pelican population has

diminished. He feels that FIND can raise legitimate questions to the FWC and one of them would be “what would be gained by the designation of V-7 as a CWA.”

Treasurer McCabe stated that she does not want to irritate the FWC, but she does not have enough information to make a measured decision today. She does not want to be pushed into something that does not make sense. She does not agree with the inclusion of the Enabling Document into this agreement and would like to look at the position it might put FIND in with the Administrative Code. Under Chapter 120, which is the Administrative Procedure Act, “an agency can only adopt a rule that implements, interprets, or enables them with respect to the powers that they already have.” It would a good idea for Attorney Breton to review this and advise the Board.

Commissioner Blow suggested a follow-up letter be developed by staff and Treasurer McCabe to the FWC identifying FIND’s concerns regarding this CWA designation. Also, request information from the FWC as to why this site was chosen for this designation.

Secretary Donaldson stated that if there is to be a follow-up letter, it should not identify any parameters at this time. The letter should be limited to stating that FIND is concerned about this CWA designation because the list of concerns has not been fully identified at this point.

Treasurer McCabe stated that Secretary Donaldson makes an excellent point. FIND does not want to lose the ability to weigh-in on this issue.

Treasurer McCabe made a substitute motion to approve directing and authorizing the FIND staff to look at the position that the CWA might put FIND in with the

Administrative Code. Also, look at FIND's concerns and engage with the FWC to seek resolution to this issue. The motion was seconded by Commissioner Sansom.

Chair Cuozzo suggested voting on this motion after the public speaker comments.

Mr. John Sprague, for the Marine Industries of South Florida (MIASF), stated that he attended the FWC meeting and there were 37 other speakers that also attended that meeting. He has several concerns regarding the CWA designation of V-7 that include but are not limited to: the ability to continue fishing in the area; use of the island and the boat ramp because the average buffer of a CWA is 300 feet; and interference with FIND's ability to permit, dredge and place material on V-7.

Mr. Sprague stated the MIASF has concerns about current signage of this area. He stated that questions were asked of the FWC about how the public would continue to use this island for picnicking, swimming, fishing, kayaking, etc. He did not receive a comment or response back from the FWC.

Mr. Sprague stated that the MIA has the same concerns that FIND does regarding the CWA designation of V-7 and will support FIND's position.

Chair Cuozzo asked for discussion. Hearing none, a vote was taken and the substitute motion passed. Commissioner Isiminger voted against the motion.

Secretary Donaldson suggested that the District's amendment to the CWA agreement with the FWC should include a clause stating that the FWC and Audubon Society can never file any objections to the District's dredging activities.

ITEM 13. Scope of Services and Fee Proposal for Engineering Services for Maintenance Dredging of the Intracoastal Waterway in the Vicinity of Jupiter Inlet, Palm Beach County, Florida.

Chair Cuozzo stated that at the October 2016 Board meeting, the Navigation District (District) approved an Interlocal Agreement with the Jupiter Inlet District (JID) to share costs associated with maintenance dredging near the Jupiter Inlet.

Mr. Crosley stated that the JID dredges the Jupiter Inlet basin approximately each year. The District maintenance dredges the Intracoastal Waterway (IWW) in this vicinity approximately every three years. The approved agreement affords both agencies costs savings and will allow more material to be placed on the nearby beach.

Mr. Crosley stated that the District's proportional cost-share for this effort is \$51,500.00. This includes construction plans, specifications, inter-agency coordination, bid assistance and construction phase services. Staff has reviewed the submitted information and found it to be consistent and reasonable for this work.

Commissioner Isiminger reference the constructions plans and specifications and asked if the plans are general and reasonable to previous project at this Inlet. Dr. Kabling stated that the Plans and Specifications have been updated, but that the project is overall like previous projects.

Commissioner Blow made a motion to approve the scope and fee quote from Taylor Engineering in the amount of \$51,500.00 for engineering services associated with the maintenance dredging of the Intracoastal Waterway in the vicinity of the Jupiter, Inlet, Palm Beach County, Florida. The motion was seconded by Treasurer McCabe. Chair Cuozzo asked for discussion. Hearing none, a vote was taken and the motion passed unanimously.

ITEM 14. Interlocal Agreement with the St. Augustine Port, Waterway and Beach District for Material Removal at Dredged Material Management Area SJ-1, St. Johns County, Florida.

Mr. Crosley stated that following the recent impacts of Hurricane Matthew, the St. Augustine Port, Waterway and Beach District (SAPWBD) has requested an Interlocal Agreement with the Navigation District to remove material from Dredged Material Management Area (DMMA) SJ-1 near Matanzas Inlet. The SAPWBD has estimated the removal of up to 50,000 cubic yards of suitable material to be utilized for beach erosion mitigation, at no cost to the District. The District has also requested some minor repairs to the site upon project completion.

Commissioner Blow stated that sometimes when other contractors remove material from the District's sites, part of the berm is disturbed. He wanted to note that Taylor Engineering, Inc. is the engineer for both FIND and the St. Augustine Port, Waterway and Beach District.

Vice-Chair Netts made a motion to approve the Interlocal Agreement with the St. Augustine Port, Waterway and Beach District for material removal at DMMA SJ-1, St. Johns County, Florida. The motion was seconded by Treasurer McCabe. Chair Cuozzo asked for discussion. Hearing none, a vote was taken and the motion passed unanimously.

ITEM 15. Review of the Navigation District's Proposed 5-Year Dredging and Dredged Material Management Area (DMMA) Plan.

Mr. Crosley stated that staff has updated the District's five (5) year plan for dredging and DMMA construction. This document is intended to be a "living" planning document that will be utilized to schedule future District projects. As situations change and opportunities are repositioned, the scheduling of these projects may shift significantly. There are always potential projects that come up and are scheduled by opportunity.

Mr. Crosley stated that the District is currently in a maintenance dredging mode. The large project next year will be the offloading of MSA 434 and the dredging of the Ponce Inlet. The District has constructed the primary need DMMA sites and is working towards building the secondary phase of DMMA sites. Generally, two (2) to three (3) sites are constructed yearly. This document assists staff in budgeting for these projects. He asked for questions.

Secretary Donaldson stated that it is great to have a five-year outline. It helps the commissioners and provides backup-up when setting future budgets and millage rates.

Commissioner Sansom stated that Brevard County just approved a ½ cent sales tax for muck dredging. He stated that the county may be interested in partnering with FIND to construct some of the District's sites.

Mr. Crosley stated that he has discussed this opportunity to partner with the county with Virginia Barker and the Brevard County Engineer. The county is also interested in removing the nutrients from the water column. This provides a great opportunity to build the Brevard County sites and include water quality improvements.

Chair Cuozzo asked if Brevard County is addressing the muck source. Commissioner Sansom stated that the county is working to convert residential septic tank use to sewer connections.

Dr. Taylor stated that the disposing of this muck material is concerning. Commissioner Sansom stated that the material would have to be sent to a special site.

IYEM 16. Finance and Budget Committee Report.

Committee Chair McCabe stated that the District's Finance and Budget Committee met before today's Board meeting and the committee reviewed and recommends approval

of the September 2016 financial statements, the delegation of authority and the expenditure and project status report. She asked for questions. There were none.

Treasurer McCabe made a motion to approve the recommendations of the District's Finance and Budget Committee, September 2016 financial statements, the delegation of authority and the expenditure and project status report. The motion was seconded by Commissioner Williams. Chair Cuozzo asked for discussion. Hearing none, a vote was taken and the motion passed unanimously.

Treasurer McCabe made a motion to approve the recommendations of the District's Finance and Budget Committee of FY 2015-2016 Budget Amendment No. 2. The motion was seconded by Commissioner Blow. Chair Cuozzo asked for discussion. Hearing none, a vote was taken and the motion passed unanimously.

Mr. Crosley noted that the District's auditor has reviewed and approved the District's ACH payment policy.

Treasurer McCabe made a motion to approve the recommendations of the District's Finance and Budget Committee, District Cash Management Policy, November 2016. The motion was seconded by Secretary Donaldson. Chair Cuozzo asked for discussion. Hearing none, a vote was taken and the motion passed unanimously.

ITEM 17. Personnel Committee Report.

Committee Chair Netts stated that the District's Personnel Committee met prior to the Board meeting and recommends that the Board authorized the Executive Director to implement up to a 4% salary increase for each employee based on performance.

Vice-Chair Netts made a motion to approve the recommendations of the District's Personnel Committee to authorize the Executive Director to implement up to a 4% salary

increase for each employee based on performance. The motion was seconded by Secretary Donaldson. Chair Cuzzo asked for discussion. Hearing none, a vote was taken and the motion passed unanimously.

Committee Chair Netts stated that the District's Personnel Committee met prior to the Board meeting and recommends that the Board authorize 2% salary increase and a 2% one-time bonus for the Executive Director. In future years, the bonus could be made part of the Executive Director's annual salary, not retroactive.

Vice-Chair Netts made a motion to approve the recommendations of the District's Personnel Committee to the Board to authorize a 2% salary increase and a 2% one-time bonus for the Executive Director. In future years, the bonus could be made part of the Executive Director's annual salary, not retroactive. The motion was seconded by Commissioner Williams. Chair Cuzzo asked for discussion. Hearing none, a vote was taken and the motion passed unanimously.

ITEM 18. Washington D.C. Report.

Mr. Crosley stated that Congress remains in recess until November 14th. Prior to adjourning to campaign for the elections, lawmakers approved a ten (10) week Continuing Resolution (CR) to fund the government through December 9th at FY 2016 funding levels.

Mr. Crosley stated that Congresswoman Frankel, Congressman Murphy, Congressman Deutch, Congressman Hastings and Chairman Cuzzo all signed a letter of support to Jo-Ellen Darcy, the Assistant Secretary of the Army for Civil Works requesting 2017 Federal funding to assist FIND.

Mr. Crosley stated that the recent elections changed some of the District's representatives and there will be a new administration. The word is that earmarks may be reinstated this year.

Mr. Crosley stated that the District worked very hard to include "no mitigation for maintenance dredging" language into the WRDA Bill, but were unsuccessful.

Chair Cuozzo stated that Brian Mast is the new Congressman for District 18. He stated that FIND will enjoy meeting him when we go to Washington. He is a very nice person and interesting guy.

Commissioner Blow stated that with the new administration, there may be a chance to fix the seagrass mitigation problem and FIND should not miss that opportunity.

Mr. Crosley stated that the Honolulu District has a mitigation issue with seagrass and they are refusing to mitigate for maintenance dredging projects. The issue is now moving up the Washington chain. He stated that he has talked to the USACE about FIND being an interested party in that issue.

Mr. Crosley stated that the Washington visit may be the first week in March of 2017. The date range is February 27 through March 10, 2017.

ITEM 19. Additional Staff Comments and Additional Agenda Items.

Chair Cuozzo asked if there were any additional staff comments or agenda items.

Ms. Zimmerman stated that the Okeechobee Waterway trip has been re-scheduled for February 1 through February 3, 2017. Day 1 travels from Stuart to Fort Myers and so far, she has 13 people attending and she has four spaces open.

Mr. Crosley noted that the USACE oversees this trip and the Colonel will review the list of attendees.

ITEM 20A. District Emergency Storm Program.

Chair Cuzzo stated that Commissioner Williams would like to discuss modifying the City of Fernandina Beach's current grant.

Mr. Crosley stated that the city can make a supplemental application to change the project.

Commissioner Williams stated that Hurricane Matthew damaged the City of Fernandina Beach Marina. The marina was approved for a FIND grant for dredging and with this hurricane damage, the marina's needs have changed. He questions if the current grant could be changed from dredging to marina repair.

Commissioner Blow stated that the St. Augustine marina was also damaged from the hurricane and the city is applying to FEMA for funding. Commissioner Williams stated that the City of Fernandina Beach is also applying to FEMA for funding.

Vice-Chair Netts made a motion to allow the City of Fernandina Beach to modify their permits and grant application. The motion was seconded Treasurer Donaldson. Chair Cuzzo asked for discussion. Hearing none, a vote was taken and the motion passed unanimously.

Mr. Crosley noted that FIND can also receive an application for emergency funding for hurricane repairs that are not eligible for FEMA funding.

ITEM 20. Additional Commissioners Comments.

Chair Cuzzo asked if there were any additional commissioner comments.

Commissioner Blow noted that last evening's Community Outreach Event was well-attended and very nice.

Commissioner Isiminger stated that he visited Commissioner Dritenbas yesterday and that he is in good spirits and receiving visitors until 5:00 p.m. daily.

Commissioner Sansom stated that the Florida House and Senate will be adopting different rules of operation at the upcoming Legislative Session. The new Speaker will require that every funding request that is not coming from an agency will be required to have a separate piece of Legislation filed supporting the request. He noted that those requests must go through a committee for approval.

ITEM 21. Adjournment.

Chair Cuzzo stated that hearing no further business the meeting was adjourned at 12:12 p.m.



VOLUSIA COUNTY PROJECT STATUS UPDATE

DECEMBER 2016

Dredged Material Management Plan

Phase I of the Dredged Material Management Plan (DMMP) for the Intracoastal Waterway (IWW) in Volusia County was completed in 1993. Phase II of the DMMP was completed in 1994 and all major land acquisition was completed in 1997.

There are six (6) identified Intracoastal Waterway (IWW) dredging reaches with Volusia County supported by seven (7) Dredged Material Management Areas (DMMA's) that have been identified and purchased for waterway maintenance. The 50-year dredging projection is 4.2 million cu/yds. The storage projection is approximately 9 million cu/yds.

Dredged Material Management Area Development:

To date, three of the seven Dredged Material Management Areas (DMMA) in the county, MSA 434/434C, V-26 and V-29, have been fully constructed. In 2006, 780,000 cu/yds of beach quality material was offloaded from MSA 434/434C and placed on the beaches of New Smyrna to repair storm damage impacts. It will be necessary to again offload the island with the next dredging event.

All DMMA's apart from V-6 have been fenced. The future development footprint of DMMA V-22A has been cleared and grubbed. The presence of a bald eagle's nest on DMMA V-21 has precluded any development of that site beyond the security fence. *(Please see the attached maps).*

Waterway Dredging

In fall of 2012, the USACE hopper dredge "Currituck" conducted operations in the IWW in the vicinity of Ponce Inlet for a period of approximately four (4) days in between assignments on the U.S. east coast. Approximately 3,000 cu/yds of material was dredged for the temporary relief of shoaling in this vicinity. A full-scale dredging event was initiated in late summer of 2013 and completed in November 2013. Approximately 245,000 cu/yds of material was removed from Cuts V-22 through V-28 and placed in nearby MSA 434/434C under the District's upland permit exemption. The Navigation District and The U.S. Army Corps of Engineers (USACE) is initiating Plans & Specifications to dredge this area again in 2017. *(Please see attached location & project maps)*

Waterways Economic Study

The Volusia County Waterways Economic Study Update was completed in 2011 and it found that there were approximately 284 waterway-related businesses in the county employing 1,466 people, with salaries of approximately \$53.4 million and an economic output of \$235.4 million. This economic impact generated \$11.2 million in tax revenue. Property values were determined to be increased by \$339 to \$429 million by the presence of the IWW channel. The study reports that these values would decrease by approximately 20% overall if dredging of the waterways ceased. *(Please see the attached map).*



VOLUSIA COUNTY PROJECT STATUS UPDATE

DECEMBER 2016

Waterways Assistance Program

Since 1986, the District has provided \$13.2 million in Waterways Assistance Program funding to 117 projects in the county having a total constructed value of approximately \$50.7 million. The county and nine waterfront municipalities, including: Volusia County; the cities of Daytona Beach, South Daytona Beach, Edgewater, Holly Hill, New Smyrna Beach, Ormond Beach, Oak Hill, Port Orange and the Town of Ponce Inlet; as well and the Ponce De Leon Inlet Authority have participated in the program. *(Please see attached listing and location map.)*

Cooperative Assistance Program

The District's Cooperative Assistance Program has provided funding assistance for the following projects with elements in Volusia County: Florida Clean Marina Program; Florida Clean Vessel Act Program; DeLeon Springs State Park Dock Design; Florida Marine Patrol Officer Funding; and the St. Johns River Boating Safety Search and Rescue Program. The District's funding assistance for the Volusia County portion of these projects was approximately \$465,000.00.

Interlocal Agreement Program

The District's Interlocal Agreement Program has provided funding assistance to 4 projects in Martin County. These include Clean Marina and Clean Vessel Act projects as well as environmental improvements at Peck's Lake Park. The District's funding assistance for these projects was approximately \$175,000 and the projects had a constructed value of \$918,000.

Waterway Clean Up Program

The District has partnered with Volusia County for the past several years to provide funding assistance for the removal of trash and debris from Volusia County's waterways. The District provides up to \$10,000.00 per year for this program.

Small-Scale Derelict Vessel Removal Program

To date, no vessels have been removed in Volusia County through this program.

Small-Scale Spoil Island Enhancement and Restoration Program

The District has assisted Volusia County in the development of a Spoil Island Management Plan.

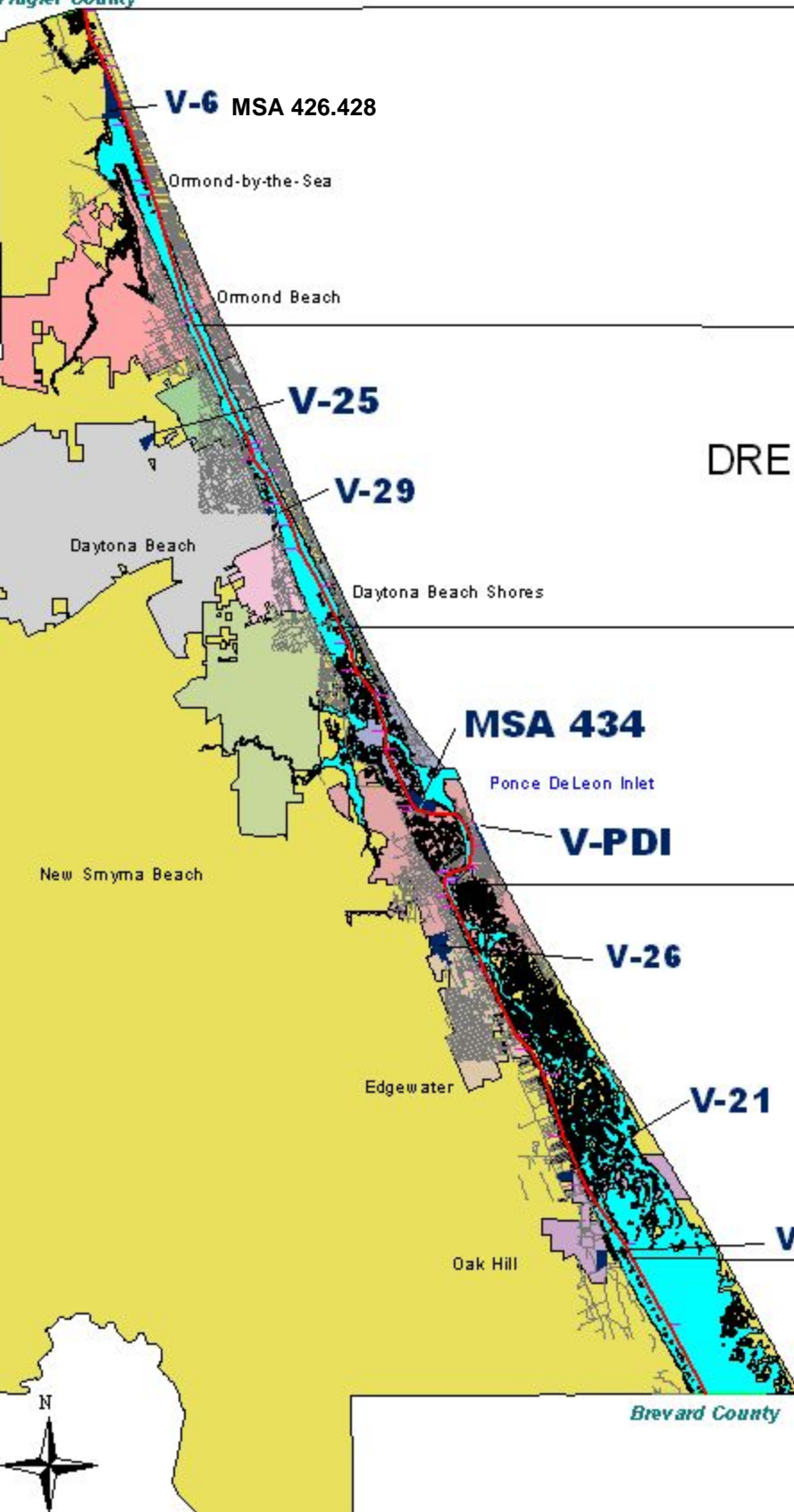
Public Information Program

The District currently prints and distributes brochures with information pertaining to Volusia County Waterways. Additional waterway information and useful links are available on the District's website at <http://www.aicw.org/>.

INTRACOASTAL WATERWAY
DREDGING REACHES AND
DREDGED MATERIAL MANAGEMENT AREAS
IN VOLUSIA COUNTY

56

Flagler County

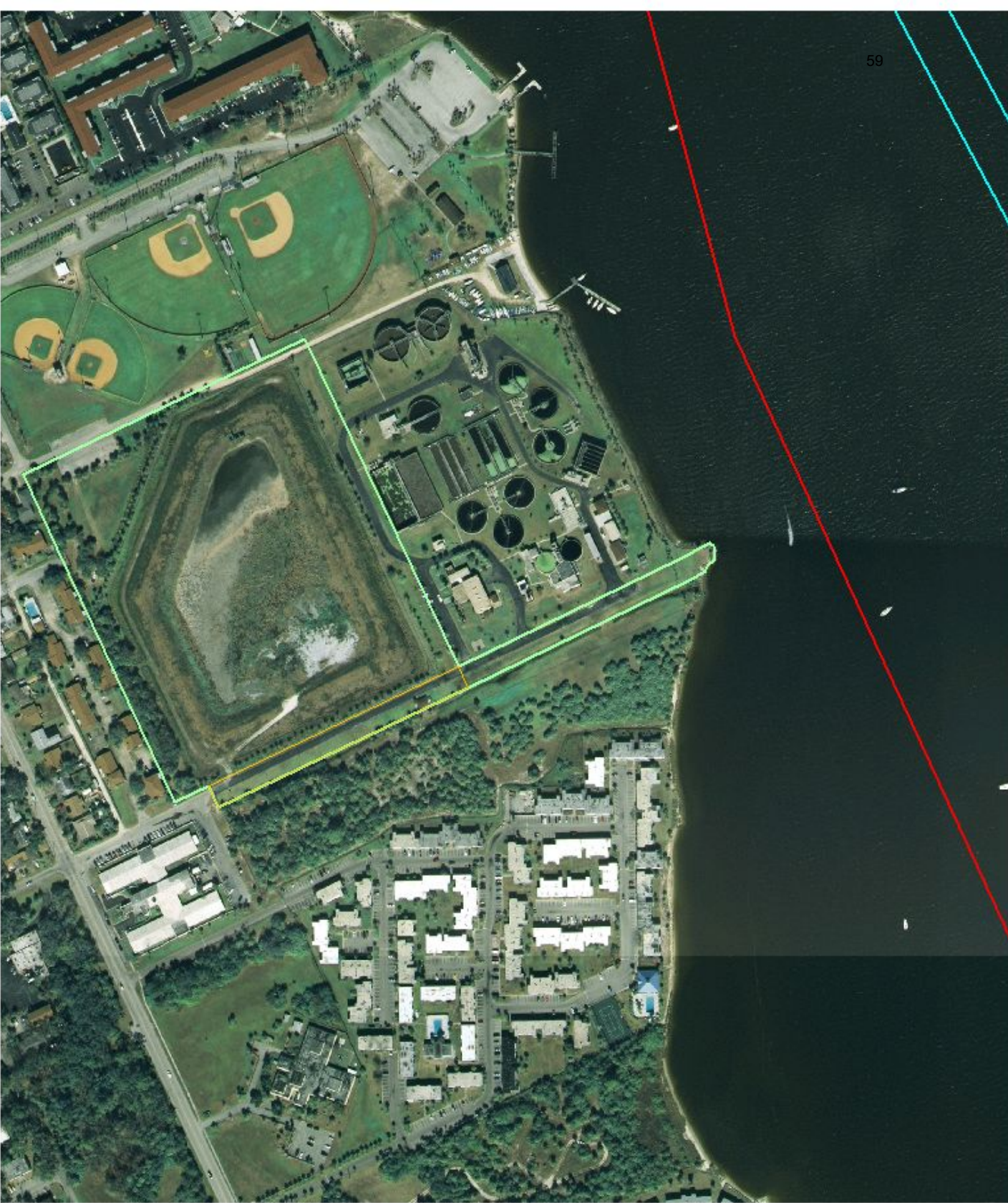




DMMA V-6







-  FIND Easement
-  FIND Owned
-  Channel
-  ROW Right-of-Way

DMMA V-29







MSA V-434 NORTH



MSA V-434 NORTH





-  FIND Easement
-  FIND Owled
-  Channel
-  CW Right-of-Way

MSA 434/434C



2007
Placement
Area

FMF Element
FMF Owned
Channel
KOW Right-of-Way

DMMA V-PDI

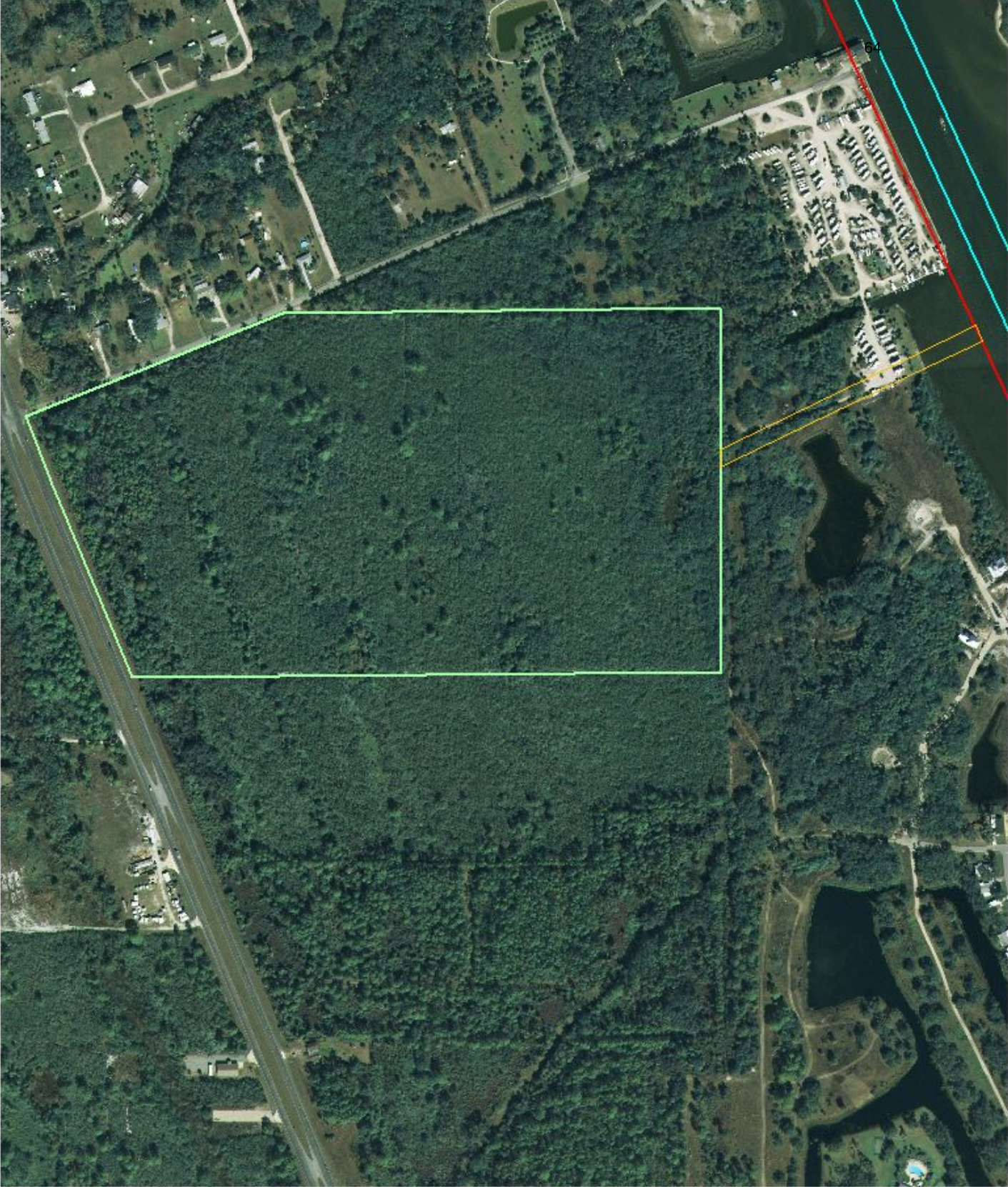








- FIND Easement
- FIND Owned
- Channel
- KW Right-of-Way

DMMA V-26









-  FIND Easement
-  FIND Owned
-  Channel
-  ICW Right-of-Way

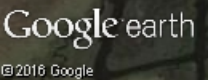
DMMA V-21



-  FIND Easement
-  FIND Owned
-  Channel
-  ICW Right-of-Way

DMMA V-22A







DMMA V-25
West of Jimmy Ann Dr.)

Legend

- Feature 1
- Feature 2
- Feature 3
- Feature 4
- V-25

V-25

Latta Blvd

West Ridgewood R

Cardinal Estates Blvd

Stirling Dr

Tanager Ct

Flicker Way

Fountain Lake Blvd

Nottingham Dr

Jimmy Ann Dr

Heathrow Dr

Piccadilly Dr





V-29







V-26

Legend

Big Cove

Dresser New Smyrna

Cavedo

Pickett Grant New Smyrna

Edson Ridge

Ashtons

Seymour Pickett Grant

Sheppard Sanchez

Sanchez Shepard

Pointer

Highland Ave

Oakridge Ave

Highland Shores

Mission Heights

Parktowne Industrial Center

V-26

Timpan Trail

Village Green Townhouses Condo

Persimmon Place Condo

Edgewater

Induplex Pullman North Condo

McGinnis

Tatum Blvd

Acce Dr

Megan Z Ave

Parktowne Blvd

Base Leg Dr

W Park Ave

Flagler Ave

N Old County Rd

Railroad Ave

Hart Ave

Google earth

© 2016 Google

Hawks



DMMA V-21

Legend

Indian Creek

Lyons

72

V-21

S Ridgewood Ave

1

Google earth

© 2016 Google

N

500 ft



V-22A

Legend



V-22A

Scenic Hwy

Bills Rd

Bills Hill Rd



ECONOMIC BENEFITS OF THE DISTRICT'S WATERWAYS

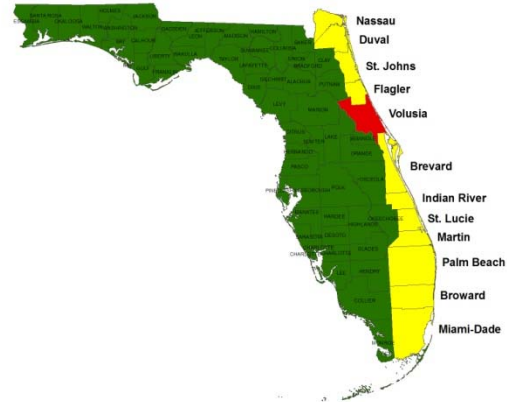


Purpose

To update economic benefits in Volusia County of marine-related activities on the District Waterways, as previously estimated in *An Economic Analysis of the District's Waterways in Volusia County*, February 2003, and to provide the general public and Federal, State, and local officials with a clear understanding of the importance of maintaining the waterways.

Scenarios Evaluated

1. Current Existing Conditions
2. Cessation of Waterways Maintenance
3. Increase in Waterways Maintenance
4. Estimated impact of the 2007-2009 U.S. economic recession



ECONOMIC IMPACTS

Current Existing Impacts

- \$235.4 million in business volume
- \$53.4 million in personal income
- 1,466 jobs
- \$11.2 million in tax revenue

Impacts of Cessation of Waterways Maintenance

- Decrease of \$49.97 million in business volume
- Decrease of \$9.2 million in personal income
- Decrease of 307 jobs
- Decrease of \$2.2 million in tax revenue

Impacts of an Increase in Waterways Maintenance

- Increase of \$7.1 million in business volume
- Increase of \$1.53 million in personal income
- Increase of 55 jobs
- Increase of \$0.3 million in tax revenue

Impact of the 2007-2009 U.S. Economic Recession

- Decrease of \$115.4 million in business volume
- Decrease of \$26.2 million in personal income
- Decrease of 720 jobs
- Decrease of \$5.6 million in tax revenue

Economic Benefits as of April 2011

VOLUSIA COUNTY



ECONOMIC BENEFITS OF THE DISTRICT'S WATERWAYS ⁷⁵

VOLUSIA COUNTY

The Intracoastal Waterway

The Atlantic Intracoastal Waterway (AICW) is a 1,391-mile channel between Trenton, New Jersey, and Miami, Florida. The Waterway along Florida's eastern seaboard is 406 miles long and follows coastal rivers and lagoons past numerous tourism-oriented communities. The channel is authorized to a depth of 12 feet from Nassau County to Fort Pierce, and a 10 foot depth south through Miami-Dade County. Boating activities on the waterways contribute to the existence of numerous marine-related businesses such as marinas and boatyards and have stimulated development of residential properties on the Waterways.

The Navigation District

The Florida Inland Navigation District, created in 1927, is the local sponsor for the AICW in Florida. In cooperation with the Jacksonville District of the U.S. Army Corps of Engineers, the Navigation District is responsible for maintenance of the AICW in Florida. To maintain navigation, the waterways need to be periodically dredged due to shoaling from currents, upland soil erosion, and the movement of offshore sands through the ocean inlets. Maintenance dredging is projected to cost approximately \$12 to \$16 million annually during the next 50 years, of which 50 percent of the costs are expected to be borne by property owners within the Navigation District's jurisdiction.

The Navigation District also partners with other governments to provide waterway access and improvement facilities for our mutual constituents. These projects include public boat ramps, marinas, side channels, parks, fishing piers, boardwalks, navigation aids, derelict vessel removal, shoreline stabilization, and waterway cleanups.

Source of Data Used in This Analysis

The economic benefits of the Waterways were estimated in February 2003 in *An Economic Analysis of the District's Waterways in Volusia County*.

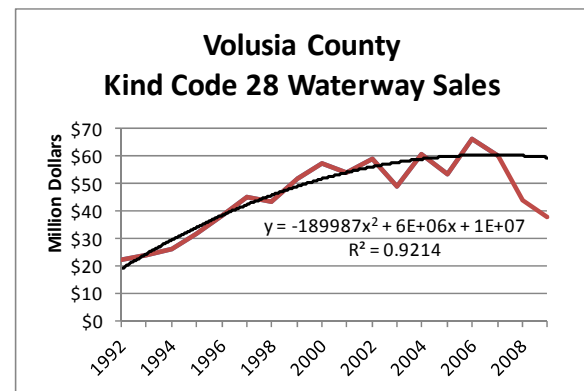
Updating of Previously Estimated Benefits

The benefits presented in this analysis were estimated by updating the direct marine-business

impacts in the original analysis to current values using the change in gross sales reported by boat dealers to the Florida Department of Revenue (FDOR). The updated direct impacts were used in conjunction with an IMPLAN input/output model to estimate total economic benefits.

Estimating the Impact of the Recession

The impact of the recession was estimated by determining the trend in gross sales of boat dealers over the 20-year period prior to the onset of the recession. This trend was used to estimate the theoretical gross sales if sales had continued to increase at the rates previously experienced. The red line in the figure below illustrates reported actual gross sales of boat dealers and the black line illustrates the trend of those sales. From 2007 to 2009 gross boat dealer sales in Volusia County decreased by 37 percent; if the recession had not occurred, it is estimated that gross sales from 2007 to 2009 would have decreased by only six percent.

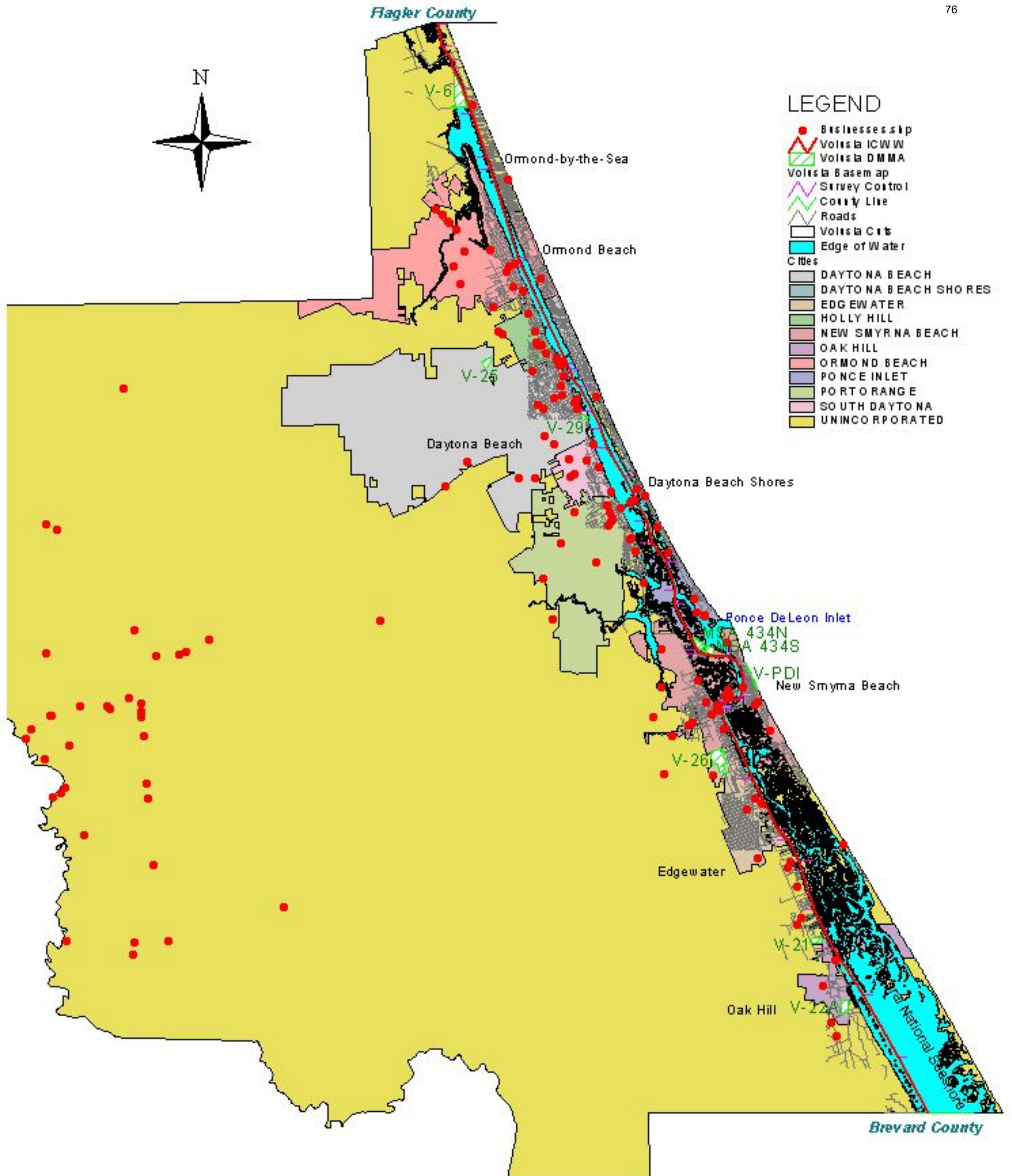


Annual Boater Spending on Gas, Food, and Drinks at Non-Marine-Related Establishments

- Current existing conditions: \$24.6 million
- Cessation of maintenance: \$21.7 million
- Increased maintenance: \$24.6 million
- Assuming no recession: \$37.4 million

Vessel Draft Restrictions Assumed for Each Scenario

- Current existing conditions: 6.5 feet MLW
- Cessation of maintenance: 3 feet MLW
- Increased maintenance: 12 feet MLW
- Assuming no recession: 6.5 feet MLW



Location Map

Waterway Related Businesses in Volusia County

FLORIDA INLAND NAVIGATION DISTRICT - WATERWAYS ASSISTANCE PROGRAM PROJECTS IN VOLUSIA COUNTY 1986-2016

Project Name	Project Number	Project Sponsor	FIND Grant Amount	Total Cost
River Breeze Park	VO-02-55	Volusia County	\$44,000.00	\$88,000.00
South Jetty Ext.- Ponce De Leon Inlet (Project Closed)	VO-03-63	Volusia County Port Authority	\$170,800.00	\$6,500,000.00
Ed Stone Boat Ramp Park Restoration	VO-08-80	Volusia County	\$100,000.00	\$200,000.00
Ed Stone Boat Ramp Park Seawall - Phase I	VO-08-81	Volusia County	\$30,000.00	\$60,000.00
South Jetty Extension At Ponce De Leon Inlet (Expired)	VO-08-82	Volusia County	\$750,000.00	\$7,000,000.00
Ed Stone Boat Ramp Park - Seawall Construction- Ph I I	VO-10-90	Volusia County	\$100,000.00	\$200,000.00
Mariner's Cove Boat Ramp Expansion - Phase I	VO-11-93	Volusia County	\$15,000.00	\$30,000.00
Mariner's Cove Boat Ramp Expansion - Phase I I	VO-12-95	Volusia County	\$40,000.00	\$80,000.00
Highbridge Park Expansion - Phase I	VO-13-99	Volusia County	\$15,000.00	\$30,000.00
Highbridge Park - Phase I I	VO-89-3	Volusia County	\$40,000.00	\$92,050.00
Spruce Creek Preserve	VO-90-7	Volusia County	\$37,500.00	\$75,000.00
Bicentennial Park Pier And Boardwalk	VO-91-10	County of Volusia	\$28,790.00	\$57,581.00
Spruce Creek Preserve - Phase I I I	VO-91-9	County of Volusia	\$37,500.00	\$75,000.00
River Breeze Park - Phase I	VO-93-17	County Of Volusia	\$73,850.00	\$147,700.00
River Breeze Park - Phase I I	VO-94-20	Volusia County	\$300,000.00	\$755,480.00
Lighthouse Boat Ramp Facility	VO-95-22	Ponce De Leon Port Authority	\$100,000.00	\$315,720.00
Volusia Waterway Env. Education - Phase I	VO-96-28	Volusia County	\$87,500.00	\$120,000.00
Waterway Env. Education Center - Phase I I	VO-97-32	County Of Volusia	\$313,461.00	\$368,000.00
Waterways Environmental Education - Phase I I I	VO-98-35	Volusia County	\$363,000.00	\$532,000.00
Volusia Waterways Environmental Education - Phase I V	VO-99-41	Volusia County	\$161,592.00	\$720,000.00
Environmental Learning Center- Manatee Island	VO-DB-00-44	City Of Daytona Beach	\$107,000.00	\$300,000.00
Police Marine Unit	VO-DB-00-45	City Of Daytona Beach	\$58,938.00	\$80,764.00
Seabreeze Bridge/ Ballough Park	VO-DB-00-46	City Of Daytona Beach	\$86,920.00	\$225,000.00
Sickler Drive - Public Waterfront Park	VO-DB-01-50	City Of Daytona Beach	\$95,000.00	\$190,000.00
Halifax Harbor Marina Dredging Project	VO-DB-02-54	City Of Daytona Beach	\$200,000.00	\$400,000.00
Halifax Harbor North Basin Dredge - Ph I I (Withdrawn)	VO-DB-03-56	City Of Daytona Beach	\$150,000.00	\$350,000.00
Halifax Harbor South Basin Dredging	VO-DB-04-64	City Of Daytona Beach	\$200,000.00	\$400,000.00
Sickler Road Shoreline Stabilization	VO-DB-05-69	City Of Daytona Beach	\$69,000.00	\$138,000.00
Halifax Harbor North Basin Dredging - Phase I I	VO-DB-06-73	City Of Daytona Beach	\$200,000.00	\$400,000.00
Halifax Harbor North & South Basin Retention Dredging	VO-DB-08-79	City Of Daytona Beach	\$28,810.00	\$68,750.00
Halifax Harbor In- River Retention Repair	VO-DB-09-83	City Of Daytona Beach	\$263,750.00	\$527,500.00
Halifax Harbor Marina South Entrance Channel Dredging	VO-DB-10-87	City Of Daytona Beach	\$150,000.00	\$300,000.00
Halifax River Trail & Pedestrian Underpass	VO-DB-14-101	City of Daytona Beach	\$52,864.00	\$105,728.00
Root Canal Bridge & Public Boat Ramp - Phase I	VO-DB-14-102	City of Daytona Beach	\$225,000.00	\$450,000.00

FLORIDA INLAND NAVIGATION DISTRICT - WATERWAYS ASSISTANCE PROGRAM PROJECTS IN VOLUSIA COUNTY 1986-2016

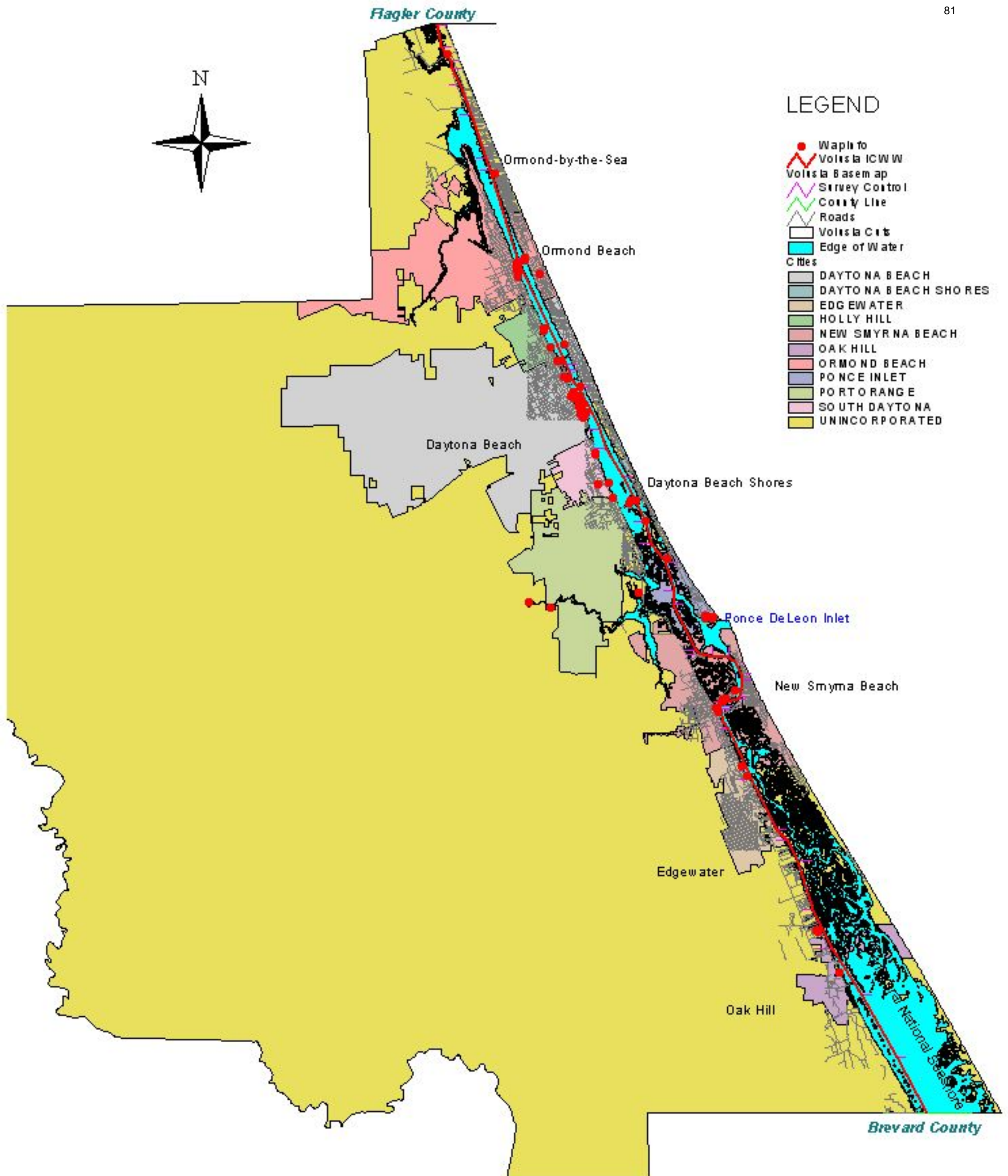
Project Name	Project Number	Project Sponsor	FIND Grant Amount	Total Cost
Bethune Point Park Boat Launch Facility	VO-DB-91-11	City of Daytona Beach	\$75,000.00	\$243,000.00
City Island	VO-DB-93-16	City Of Daytona Beach	\$430,000.00	\$1,500,000.00
Halifax River Dredging, Nav. & Env. Improvements	VO-DB-94-18	City Of Daytona Beach	\$24,080.12	\$80,707.12
Riverfront Park Public Waterfront Boardwalk	VO-DB-95-24	City Of Daytona Beach	\$145,000.00	\$355,648.00
Colin's Park Public Fishing & Viewing Piers	VO-DB-96-30	City Of Daytona Beach	\$87,000.00	\$174,000.00
Riverfront Park Public Waterfront Boardwalk	VO-DB-96-31	City Of Daytona Beach	\$55,000.00	\$411,548.00
Dredging Of Halifax Harbor (Cancelled)	VO-DB-97-34	City Of Daytona Beach	\$180,000.00	\$270,000.00
Manatee Island Environmental Learning Center - Phase I	VO-DB-98-37	City Of Daytona Beach	\$50,000.00	\$81,000.00
Shoreline Stabilization & Boardwalk Repairs	VO-DB-98-38	City Of Daytona Beach	\$50,145.00	\$104,289.00
Halifax Harbor Marina Boat Ramp	VO-DB-99-42	City Of Daytona Beach	\$50,000.00	\$110,000.00
Kennedy Park Pier	VO-EW-03-57	City Of Edgewater	\$60,885.00	\$127,300.00
George Kennedy Park Seawall Restoration - Phase I	VO-EW-14-100	City of Edgewater	\$20,000.00	\$40,000.00
Riverwalk	VO-EW-91-12	City of Edgewater	\$65,000.00	\$214,080.00
Sunrise Park Dredging	VO-HH-05-70	City Of Holly Hill	\$45,000.00	\$90,000.00
Sunrise Park South - Dredging & Boat Ramp Improv.	VO-HH-14-103	City of Holly Hill	\$32,650.00	\$65,300.00
Sunrise Park	VO-HH-2	City of Holly Hill	\$100,000.00	\$430,000.00
Sunrise Park Improvements	VO-HH-90-8	City of Holly Hill	\$40,000.00	\$80,000.00
Ross Point Park - Phase I I I	VO-HH-94-21	City Of Holly Hill	\$47,500.00	\$175,000.00
Ross Point Park Pier Extension (Cancelled)	VO-HH-95-26	City Of Holly Hill	\$75,000.00	\$184,000.00
Marine Discovery Center	VO-NSB-00-47	City Of New Smyrna Beach	\$118,560.00	\$160,000.00
City Marina Reconstruction Project - Phase I	VO-NSB-01-51	City Of New Smyrna Beach	\$65,000.00	\$130,000.00
Riverside Park Shoreline Stabilization	VO-NSB-01-52	City Of New Smyrna Beach	\$62,500.00	\$125,000.00
City Marina Reconstruction Project - Year 1	VO-NSB-03-58	City Of New Smyrna Beach	\$140,000.00	\$1,172,000.00
City Marina Reconstruction Project - Year 2	VO-NSB-04-65	City Of New Smyrna Beach	\$140,000.00	\$1,075,000.00
City Marina Reconstruction	VO-NSB-05-71	City Of New Smyrna Beach	\$140,000.00	\$1,472,767.00
North Causeway Boat Ramps Reconstruction	VO-NSB-07-76	City Of New Smyrna Beach	\$200,000.00	\$400,000.00
Riverside Park Seawall - Phase I	VO-NSB-09-84	City Of New Smyrna Beach	\$85,880.00	\$171,760.00
Canal Calorie Dredging - Phase I	VO-NSB-10-88	City Of New Smyrna Beach	\$15,000.00	\$30,000.00
Riverside Park Bulkhead Repair - Phase I I	VO-NSB-11-91	City Of New Smyrna Beach	\$325,000.00	\$650,000.00
Swoope Public Boat Ramp, Kayak & Parking - Phase I	VO-NSB-11-92	City Of New Smyrna Beach	\$82,800.00	\$165,600.00
Swoope Site Boat Ramp, Parking, Dredge - Phase I I	VO-NSB-12-94	City Of New Smyrna Beach	\$494,000.00	\$988,000.00
North Causeway Boat Launch Facility Improvements	VO-NSB-13-96	City Of New Smyrna Beach	\$407,400.00	\$815,000.00
Swoope Site Boat Ramp Parking & Restroom - Phase I I B	VO-NSB-13-97	City Of New Smyrna Beach	\$171,003.00	\$342,005.00
New Smyrna Waterfront Promenade (Withdrawn)	VO-NSB-14-104	City of New Smyrna Beach	\$60,000.00	\$120,000.00

FLORIDA INLAND NAVIGATION DISTRICT - WATERWAYS ASSISTANCE PROGRAM PROJECTS IN VOLUSIA COUNTY 1986-2016

Project Name	Project Number	Project Sponsor	FIND Grant Amount	Total Cost
Buena Vista Park	VO-NSB-99-40	City Of New Smyrna Beach	\$140,000.00	\$725,000.00
Granada Bridge Pedestrian Underpass	VO-OB-00-48	City Of Ormond Beach	\$73,584.00	\$147,169.00
South Beach Street Riverwalk - Stage I	VO-OB-01-53	City Of Ormond Beach	\$76,917.00	\$153,835.00
Granada Riverfront Park Improvements	VO-OB-89-4	City of Ormond Beach	\$20,000.00	\$230,000.00
Granada Riverfront Park Improvements - Phase I I	VO-OB-90-6	City of Ormond Beach	\$150,000.00	\$300,000.00
Ames Park	VO-OB-92-14	City of Ormond Beach	\$48,000.00	\$91,000.00
Ormond Hotel Riverfront Park - Phase I	VO-OB-94-19	City Of Ormond Beach	\$20,000.00	\$60,000.00
Hotel Ormond Riverfront Park - Phase I I	VO-OB-95-23	City Of Ormond Beach	\$42,000.00	\$84,000.00
Fortunato Park - Phase I I I	VO-OB-96-29	City Of Ormond Beach	\$80,000.00	\$160,000.00
S.R. 40 Halifax River Walkway	VO-OB-97-33	City Of Ormond Beach	\$71,000.00	\$142,000.00
Halifax River Public Outreach Program	VO-OB-98-39	City Of Ormond Beach	\$4,700.00	\$9,400.00
Waterfront Public Fishing & Viewing Pier	VO-OH-03-59	City Of Oak Hill	\$50,000.00	\$100,000.00
Ponce Preserve River Facilities	VO-PI-05-72	Town Of Ponce Inlet	\$150,000.00	\$400,000.00
Ponce Inlet Lighthouse Rehabilitation - Phase I	VO-PI-98-36	Town Of Ponce Inlet	\$29,500.00	\$59,000.00
Ponce Inlet Lighthouse Rehabilitation - Phase I I	VO-PI-99-43	Town Of Ponce Inlet	\$150,000.00	\$563,000.00
South Jetty Ext.- Ponce De Leon Inlet (Project Closed)	VO-PIA-04-68	Volusia County - Ponce Inlet Authority	\$252,945.00	\$6,500,000.00
Gamble Place Launching Facility Design - Phase I	VO-PO-03-60	City Of Port Orange	\$20,000.00	\$40,000.00
Marine Unit	VO-PO-03-61	City Of Port Orange	\$28,000.00	\$56,000.00
Gamble Place Canoe Launch Construction - Phase I I	VO-PO-06-74	City Of Port Orange	\$100,000.00	\$200,000.00
Riverwalk Boardwalk & Park Facilities - (Withdrawn)	VO-PO-06-75	City Of Port Orange	\$140,000.00	\$280,000.00
Causeway Park Boat Ramp Facilities	VO-PO-07-77	City Of Port Orange	\$40,000.00	\$80,000.00
Russell Park Launch Design - Phase I	VO-PO-07-78	City Of Port Orange	\$22,000.00	\$44,000.00
Russell Park Landing Construction - Phase I I	VO-PO-09-85	City Of Port Orange	\$100,000.00	\$200,000.00
Riverwalk Launch & Boardwalk Design - Phase I	VO-PO-13-98	City Of Port Orange	\$40,000.00	\$80,000.00
Riverwalk P2 Launch & Boardwalk North A - Phase II	VO-PO-14-105	City of Port Orange	\$200,000.00	\$400,000.00
Riverwalk P3 Waterfront North B - Phase I	VO-PO-14-106	City of Port Orange	\$100,000.00	\$200,000.00
Port Orange Causeway Park	VO-PO-91-13	City of Port Orange	\$65,000.00	\$194,575.00
Riverfront Park	VO-PO-92-15	City of Port Orange	\$100,000.00	\$200,000.00
Causeway Park Expansion	VO-PO-95-25	City Of Port Orange	\$125,000.00	\$241,316.50
Causeway Park Expansion - Phase I I	VO-PO-96-27	City Of Port Orange	\$50,000.00	\$100,000.00
Riverfront Park Fishing Pier & Boat Ramp Renovations	VO-SD-00-49	City Of South Daytona	\$52,871.00	\$165,048.00
Veterans Memorial Park Channel Access Improvements	VO-SD-03-62	City Of South Daytona	\$13,230.00	\$14,700.00
Reed Canal Outfall Dredging And Spoil Site	VO-SD-04-66	City Of South Daytona	\$25,000.00	\$50,000.00

FLORIDA INLAND NAVIGATION DISTRICT - WATERWAYS ASSISTANCE PROGRAM PROJECTS IN VOLUSIA COUNTY 1986-2016

Project Name	Project Number	Project Sponsor	FIND Grant Amount	Total Cost
Riverfront Veterans Memorial Park Kayak & Canoe Launch	VO-SD-04-67	City Of South Daytona	\$15,000.00	\$30,000.00
Veteran's Memorial Riverfront Park Parking Expansion	VO-SD-09-86	City Of South Daytona	\$42,500.00	\$85,000.00
Riverfront Veteran's Memorial Park- Boat Pier Extension	VO-SD-10-89	City Of South Daytona	\$30,000.00	\$60,000.00
Riverfront Park Expansion	VO-SD-89-5	City of South Daytona	\$150,000.00	\$323,400.00
Highbridge Park - Phase I	VO-TR-1	Ponce DeLeon Port Authority	\$80,000.00	\$160,000.00
Riverwalk Park North B Phase II	VO-PO-15-107	City of Port Orange	\$300,000.00	\$600,000.00
Riverfront Park Esplanade Phase I	VO-DB-15-108	City of Daytona Beach	\$110,000.00	\$220,000.00
Daytona Beach Day Docks Phase I	VO-DB-15-109	City of Daytona Beach	\$134,176.50	\$268,353.00
Riverfront Veterans Memorial Park Kayak Launch	VO-SD-15-110	City of South Daytona	\$35,000.00	\$70,000.00
Shell Harbor Park Phase I	VO-15-111	Volusia County	\$67,500.00	\$135,000.00
Smyrna Dunes Park Fishing Pier	VO-15-112	Volusia County	\$165,000.00	\$415,176.00
Sunrise Park South Ramp and Dredging Ph II	VO-HH-16-113	City of Holly Hill	\$341,110	\$682,220
Kennedy Park Seawall Restoration Phase II	VO-EW-16-113	City of Edgewater	\$150,000	\$300,000
Swoop Boat Ramp Additional Parking Phase I	VO-NSB-16-114	City of New Smyrna Beach	\$60,000	\$120,000
Cassen Park Public Dock Phase I	VO-OB-16-115	City of Ormond Beach	\$53,299	\$142,130
Shell Harbor Park	VO-16-116	Volusia County	\$117,889	\$901,560
TOTALS			\$13,265,900	\$50,718,160



Location Map

Waterway Assistance Program Projects in Volusia County



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IWW STATUS UPDATE
FIND Board of Commissioners Meeting
December 16, 2016



WORK ACTIVITIES IN FY 16:

1. IWW: St. Augustine and Matanzas (St. Johns County)
2. DMMA O-7 (Martin County)
3. DMMA O-23 (Martin County)
4. IWW: Crossroads (Martin County)
5. IWW: Broward Reach 1 (Broward County)
6. IWW: Bakers Haulover (Miami Dade County)



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IWW STATUS UPDATE FIND Board of Commissioners Meeting December 16, 2016



AIWW = Atlantic Intracoastal Waterway Norfolk to St. Johns

IWW = Intracoastal Waterway Jacksonville to Miami (12' and 10' projects)

DMMA = Dredge Material Management Area

1. WORK ACTIVITY: IWW St. Augustine / Matanzas (St. Johns County)

CONTRACT AMOUNT: TBD

DESCRIPTION OF WORK: Completion of plans and specifications and administration of the contract for O&M dredging in the St. Augustine and Matanzas reaches of the IWW located in St. Johns County.

SCHEDULE:

- | | |
|--|---------------|
| • Obtain Survey | 6 Nov 2015A |
| • Initiate P&S | 16 Nov 2015A |
| • Verify NEPA/FDEP permit | 16 Nov 2015A |
| • Complete Draft P&S including reviews | 16 May 2016A |
| • Advertise Contract | 28 July 2016A |
| • Bid Opening | 30 Aug 2016A |
| • Contract Award | 30 Sept 2016A |
| • Notice to Proceed | 2 Nov 2016A |
| • Commencement | February 2017 |

FIND WORK ORDER: P&S were funded 100% with Federal funding in 2016. A work order was presented to and approved by the FIND Board in April 2016 to fund a portion of the dredging contract. Dredging will be paid for with a combination of FIND Contributed Funds and COE federal funding.

NAME OF CONTRACTOR: Contract was awarded to Weeks Marine on 30 Sept 2015 in the amount of \$8,896,500.

STATUS:

St. Augustine: Based on damages incurred in the Vilano Beach area from Hurricane Matthew, FIND has requested that the Corps investigate the cost of changing the placement area for the St. Augustine reach to the beach north of the Inlet in lieu of placing on the State Park south of the Inlet. Initially the Corps reached out to Weeks Marine to inquire if there would be any monetary impact to delaying commencement until the February 2017 timeline, giving FIND adequate time to obtain the appropriate real estate interests as well as the required FDEP permit modification. Weeks Marine confirmed that they would not seek monetary compensation for delaying commencement of dredging operations until February 2017. A Request for Proposal (RFP) is being sent to Weeks which will establish if they would seek additional funding to shift the placement area north...given a further pumping distance, more equipment, risk, etc... Once the proposal is received from Weeks, FIND can determine if they are willing to move forward with



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**IWW STATUS UPDATE
FIND Board of Commissioners Meeting
December 16, 2016**



funding the modification, since St. Johns County has indicated that they have no funding to contribute to the effort.

IWW Matanzas: The new breach in the Summerhaven area is located approximately 200 yards north of the placement area, at the exact location where we had envisioned the pipeline to come over to the beach. Taylor Engineering is currently under contract with the County for the Summerhaven River restoration and they have also been contracted to close the breach. The breach should be closed before commencement of dredging in February 2017. St. Johns County has requested that we shift the placement area a little west and also increase the height to 10'. By doing this, material can be placed where old A1A was severely damaged/washed out. Existing NEPA is sufficient and the Corps is working to verify the FDEP permit as well as what real estate interests would be required.



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**IWW STATUS UPDATE
FIND Board of Commissioners Meeting
December 16, 2016**



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2. WORK ACTIVITY: DMMA O-7 (Martin County)

CONTRACT AMOUNT: TBD

DESCRIPTION OF WORK: Finalization of plans and specifications, environmental coordination, procurement and administration of the construction contract for DMMA O-7.

SCHEDULE O-7:

- Contract Advertisement Initiated: 13 May 2016A
- Bid Opening: 14 Oct 2016A
- Contract Award: 22 Nov 2016A

FIND WORK ORDER: Funding for completion of P&S was funded with 100% Federal funding. Construction of the DMMA will be carried with 100% FIND contributed funding.

NAME OF CONTRACTOR: Construction contract was awarded to Herve Cody out of Robbinsville, NC in the amount of \$4,357,044.

STATUS: Surplus funding in the amount of \$1,042,956 is in the process of being returned to FIND. Coordination is currently underway to establish the pre-construction conference date.



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**IWW STATUS UPDATE
FIND Board of Commissioners Meeting
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3. WORK ACTIVITY: DMMA O-23 (Martin County)

CONTRACT AMOUNT: TBD

DESCRIPTION OF WORK: Development of Plans and Specifications for the construction of DMMA O-23 which is located in Martin County, Florida.

SCHEDULE: (Tentative)

- | | |
|---------------------------------|--------------|
| • Initiate P&S | 1 Dec 2016 |
| • Complete NEPA | 30 May 2017 |
| • Complete P&S with all reviews | 25 July 2017 |
| • Advertise Contract | 1 Aug 2017 |
| • Receive Bids | 1 Sept 2017 |
| • Contract Award: | 1 Oct 2017 |

FIND WORK ORDER: P&S will be funded 100% with Federal funding. Construction of DMMA O-23 will be with FIND Contributed Funds.

NAME OF CONTRACTOR: TBD

STATUS: P&S will kick off once DMMA O-7 is awarded. O-23 will utilize the same weir system as O-7. There is a federally listed plant, reindeer lichen, which grows in scrub areas which is present on the site. Probably 10-20 sf of the species is estimated to be present which will have to be relocated out of the construction area.

Anticipate a work order being presented to the FIND Board in June 2017 for construction funding.



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**IWW STATUS UPDATE
FIND Board of Commissioners Meeting
December 16, 2016**



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4. WORK ACTIVITY: IWW Crossroads (Martin County)

CONTRACT AMOUNT: TBD

DESCRIPTION OF WORK: Staff has identified a small problematic shoal within IWW Crossroads and has asked that the Corps investigate the most efficient way to remove it.

FIND WORK ORDER: Depending on the order of magnitude for dredging, a FIND work order may be required. Amount to be determined.

NAME OF CONTRACTOR: TBD

STATUS: There is approximately 10k cubic yards of material in a problematic shoal within the Crossroads reach of the IWW. The plan is to utilize a Corps dredge to remove this small quantity. An EA and FONSI have been completed that evaluated material being dredged from the IWW and placed within the settling basin at St. Lucie Inlet.

After coordination with FDEP, it was determined that the best path forward is to proceed with a MINOR modification to the existing IWW Crossroads permit instead of modifying Martin County's permit. A modification to FDEP permit No. 0296970-001-JC has been submitted. RAI #1 was received on 29 July 2016 and responded to on 17 August 2016. The application as deemed complete and we anticipate receiving the modification by end of Dec 2016.

February – April 2017 is the block of time that Wilmington District has blocked off for Jacksonville work. Currently, there are no other projects that could share the mobilization cost of the dredge to get it down to Crossroads. It is estimated that it will take 6 days to transit down from Wilmington and 6 days back, for a total of approximately \$260k for mobilization and demobilization. The only way to make this efficient is to dredge more than the 10k cubic yards mentioned above. If we can dredge 30k cubic yards your cost per cubic yard is approximately \$20 per cubic yard. Looking for guidance on how to proceed.



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**IWW STATUS UPDATE
FIND Board of Commissioners Meeting
December 16, 2016**



5. WORK ACTIVITY: IWW Broward Reach 1 (Broward County)

CONTRACT AMOUNT: TBD

DESCRIPTION OF WORK: A hydro survey was performed by Morgan and Ecklund and provided to the Corps on 26 June 2014. There is approximately 50k cy of material located within the federal channel down to 10' and 80k cy down to 10'+2'. Even at 80k cy, given the small quantity, the most cost effective way to pursue the dredging would be utilization of a Corps of Engineers dredge, either the Currituck or Murden, and dispose of in the nearshore.

SCHEDULE Broward Reach 1:

- | | |
|--|----------------|
| • Complete Environmental Assessment (incl. public reviews) | May 2017 |
| • Obtain Water Quality Certification | June 2017 |
| • Obtain updated Survey | July 2017 |
| • Provide Dredge Orders to SAW | Aug 2017 |
| • Dredge | September 2017 |

FIND WORK ORDER: Current path forward is to proceed with dredging with a Wilmington Hopper dredge unless it is determined that the quantity is large enough to justify a standard procurement. Anticipate a work order being presented to the FIND Board in August 2017 for dredging funding.

NAME OF CONTRACTOR: TBD

STATUS: Based on preliminary discussions with the Hillsboro Inlet Chairman, Mr. Jack Holland, it has been suggested that we consider an alternative that requires us dredging material from the IWW and placing in within the existing Hillsboro Inlet Settling Basin. This would alleviate the need to obtain NEPA on a new nearshore placement area. The Hillsboro Inlet dredge would then move the material to the dry beach south of the Inlet. In order to do this, we would need to modify Broward County's permit (JCP 0229394-001-JC) or obtain a new stand-alone permit. NEPA would also need to be addressed since IWW material has never been placed in this disposal location. Staff and the Corps plan to meet with Mr. Holland before the December Board meeting.



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**IWW STATUS UPDATE
FIND Board of Commissioners Meeting
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6. WORK ACTIVITY: IWW Bakers Haulover (Miami Dade County)

CONTRACT AMOUNT: TBD

DESCRIPTION OF WORK: Bakers Haulover continues to be one of the highest frequency dredging needs within the IWW. The current plan is to take advantage of regional sediment management practices and dredge Bakers Haulover as a borrow source for the Miami Dade County shore protection project.

FIND WORK ORDER: N/A

NAME OF CONTRACTOR: TBD

STATUS: The plan is to dredge the Bakers Haulover Reach of the IWW in conjunction with the Miami Dade SPP. Material from the IWW will be placed on the beach in Sunny Isles. This is one of the 2 highest shoaling areas in the IWW and needs dredging asap. Permit modification was received on 28 Sept 2016 which extends the existing permit until 21 Oct 2020; however, another FDEP permit modification will be needed to add Sunny Isles as a placement area for our O&M material. Discussions are underway on the contracting tool since the contract could involve both truck haul of material and pipeline dredging. Anticipate a contract advertisement for Sunny Isles in April/May 2017.

Based on the most recent survey, there does not appear to be enough material to justify proceeding with the IWW as a potential sand source. Further investigations are underway to determine the quantity.

AGREEMENT

This Agreement is made this ____ day of 2016, by and between the Florida Inland Navigation District (FIND) and Jon Moyle, Jr. and the Moyle Law Firm, PA (collectively "Legislative Consultant").

Witnessed, that FIND and Legislative Consultant for the consideration named herein agree as follows:

Legislative Consultant shall undertake the representation of FIND in matters involving the executive and legislative branches of government of the State of Florida during the term of this Agreement, provided, however, that such representation shall be performed only after consultation with and pursuant to directions given by FIND's Executive Director.

Representation of FIND shall consist of, but not be limited to:

- A. In conjunction with the executive director, Legislative Consultant shall develop and implement a comprehensive political and public affairs plan, which may include, without limitation, government relations, community relations efforts and media relations.
- B. Monitoring, tracking and providing political information on all legislative and regulatory activity of interest to FIND. Actively monitor and report on any and all legislation and regulations that may be of interest or concern to FIND and actively engage in lobbying on any legislation that may affect the interests of FIND.
- C. Providing introductions to individuals having an interest in matters affecting FIND and ensuring that FIND is represented in all aspects of the legislative and administrative arena. Assisting FIND in establishing and maintaining good relationships with local municipal officials as appropriate and in conjunction and consultation with the executive director.
- D. Providing political information and insight into how developments in the executive and legislative branches of the state government will impact FIND and advise as to how FIND might best position itself to be effective within the environment, including the Governor's office, the other elected constitutional officers and their staffs, the administrative agencies and the quasi-public agencies.
- E. Answering questions from FIND regarding political developments within the state and meeting with the FIND legislative committee and Board as appropriate and requested by the executive director.

- F. Directly lobbying members of the Florida Legislature, the Executive branches of the state including the Governor's Office, relevant public or private sector, administrative agencies and the quasi-public agencies on behalf of FIND when specifically directed to do so by the executive director.
- G. Upon Request of FIND, advising and assisting FIND on various issues at the federal, state and/or local levels of government. Monitor all regulatory activity of relevant state agencies, providing prompt notice to FIND of any activity that may be of interest and concern, and actively engage in lobbying on any regulations, as necessary.
- H. Monitor other relevant activities regarding environmental and business issues as appropriate and as may be requested by the executive director. Actively assist, when requested to do so, in securing any permits or modifications to permits FIND may need for any of its operations in Florida.
- I. Prepare and file all necessary lobbying registrations and reports for FIND.

Legislative Consultant will be paid a monthly retainer of \$2,500 per month by FIND for all services rendered pursuant to this Agreement, and should invoice FIND separately for any registration fees, costs and other related charges as they apply to FIND respectively. Legislative Consultant will also be reimbursed for actual, reasonable and necessary expenses authorized by the executive director. Legislative Consultant shall submit monthly invoices for all services provided pursuant to the terms of the Agreement.

The term of this Agreement shall be for the calendar year 2017-2018 and commence January 1, 2017 and conclude December 31, 2018. The Agreement will automatically extend, subject to an annual appropriation of funding, for another two-year term unless written notice of termination is provided by either party thirty (30) days in event of the conclusion date. The Agreement may, however, be terminated at any time during such term by either party giving thirty (30) days written notice thereof to the other party. FIND acknowledges that certain commitments, if authorized in advance by the executive director, regarding legislative and/or executive agency matters may be made from time to time, by Legislative Consultant on behalf of FIND, and that such commitments may not be abandoned without detriment to FIND and Legislative Consultant. Accordingly, in the event of termination of this Agreement, or the termination or limitation of any services provided pursuant to this Agreement, FIND and Legislative Consultant shall agree upon an appropriate schedule for phasing out of any legislative and/or executive commitments made by Legislative Consultant on behalf of FIND and payment therefore.

It is understood that Legislative Consultant shall not be deemed to be an employee of FIND, but is acting solely as an independent contractor for all purposes and always.

It is also agreed that Legislative Consultant will perform the duties and services expressed herein and that no subcontracting of any of those responsibilities to persons outside the firm will be done without express written authority of FIND.

Legislative Consultant shall not represent any other client in its capacity as Legislative Consultant which Legislative Consultant knows, or should know, might have a conflict of interest with FIND without the express written approval of FIND.

Legislative Consultant shall not discuss matters affecting FIND with any member of the media unless prior consent is granted in writing by FIND's executive director. Legislative Consultant shall not at any time initiate discussions with any media representative regarding matters affecting FIND unless pursuant to written authorization specifically granted by FIND's executive director. Legislative Consultant may respond to inquiries from media representatives but only when such inquiries involve matters on which Legislative Consultant has been previously authorized to speak or testify publicly on behalf of FIND. In any such event, Legislative Consultant shall confine responses to clarification and explanation of positions taken publicly.

Any information or documentation furnished to Legislative Consultant in performance of this Agreement shall remain the property of FIND, shall be used only on behalf of FIND, and shall be returned to FIND upon request. Upon the termination of this Agreement, Legislative Consultant agrees, upon the request of FIND, to return any informational materials or correspondence provided by FIND.

Legislative Consultant shall comply with all federal, state, and municipal laws, regulations and executive orders, including those requiring lobbyist registration, reporting and accounting for all monies spent in connection with lobbying on FIND's behalf. FIND will pay for any appropriate lobbyist registration fees necessary to represent FIND.

Legislative Consultant agrees to consult with the FIND's executive director on all activities and actions relating to the performance of this Agreement, and to keep FIND informed of all significant problems and accomplishments.

This Agreement constitutes the complete understanding between FIND and Legislative Consultant with respect to the subject matter herein as of the date hereof, and shall not be amended nor modified without specific written provision to that effect, signed by all parties.

Except as otherwise specifically provided herein, any notice to be given under the terms of this Agreement by either party to the other shall be in writing and shall be deemed given when sent by certified U.S. mail or a nationally recognized overnight carrier to the address listed below.

APPROVED by the Board this 19th day of November, 2016,

IN WITNESS WHEREOF, the parties hereto have caused the Agreement to be executed by their representatives as of the day, month and year first written above.

LEGISLATIVE CONSULTANT

Signature: _____

Date: _____

Jon C. Moyle, Jr.
Moyle Law Firm, P.A.
The Perkins House
118 N. Gadsden St.
Tallahassee, FL 32301

FLORIDA INLAND NAVIGATION
DISTRICT

Signature: _____

Date: _____

Duly Authorized – Executive Director

Executive Director
Florida Inland Navigation District
1314 Marcinski Road
Jupiter, Florida 33477-9498



Commercial / Industrial Waterway Access Inventory

This report and inventory was prepared by Planning Solutions Corp for the Florida Inland Navigation District (FIND), whose mission is to serve as the local sponsor of the Atlantic Intracoastal Waterway and, secondarily, to provide assistance to other governments to develop waterway access and improvement projects.

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Background / Policy Direction

At the July 2015 Board meeting, the Commission discussed working waterfronts and the acquisition and development of public commercial and industrial waterway access. Concern was expressed among FIND Commissioners that most commercial waterfront access is privately-owned and thus subject to the threat of conversion to other uses that are not water-dependent. A significant amount of funding is provided by FIND to local governments for recreational waterway access projects, but little money is requested for commercial and industrial access.

The District indicated a desire to look at locations along the waterway and identify where commercial or marine contractor access is needed for staging areas and other industrial uses. Local governments along the intracoastal waterway are focused on many things, in addition to the waterway, and may not be fully aware of this need. They may need assistance with identifying potential sites in order to partner with the District to acquire and/or improve these sites.

Additional direction and input was received at the December 11, 2015 Board meeting, as follows:

1. Commissioner Blow (St. Johns County) - Vilano Beach Public Boat Ramp - provide a designated spot for barges adjacent to the site. Sea Diversified, dock builders, etc. He wants Planning Solutions Corp to recommend how the waterway assistance program can provide guidance that the design accommodate a barge. Provide bulkhead and depth enough for a barge.



2. Commissioner Sansom (Brevard County) – South side of SR 528, across Indian River. West side of FDOT ROW. Along FDOT bridge. Deep spot close to bridge bulkhead. Allow barges to lay aside FDOT ROW.



3. Commissioner Netts (Flagler County) – Fully supports additional access in Flagler County. Not just a focus on public lands. Manatee protection zones have increased providing additional impacts to access.

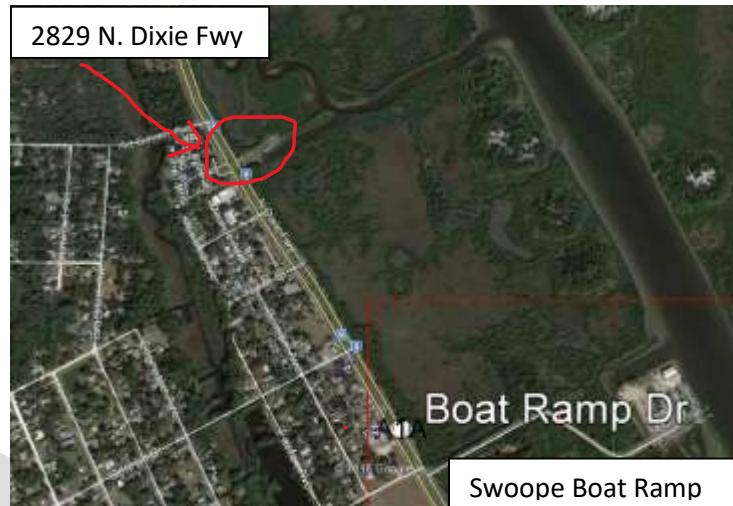


4. Commissioner Blow (St. Johns County) – Excellent idea about using bridges. Not just roads – maritime transportation. FDOT should partner with FIND to provide access.

Other comments were made and input and direction were provided by Commissioners and District Administration throughout the course of the inventory. The District Executive Director provided the following property to be evaluated, based on a specific inquiry:

Evaluate property at 2829 N. Dixie Freeway, New Smyrna Beach, FL 32168 for potential long-term leased commercial/industrial access node.

1. 2.8 acres
2. Boat ramp
3. basic "Camp Style House"
4. bulkhead loading point
5. Ponce Inlet - 11 minutes



Based on a quick review, the site has similar attributes as the nearby Swoope site. It is located on US1, with good landside access, has sufficient space for storage of materials, (but is somewhat long and narrow (300' deep x 100' wide), is isolated from non-compatible uses and has access to the intracoastal waterway and Ponce Inlet. According to the representative, it would need to be dredged. The canal is

approximately 2,120 feet long, before joining the intracoastal waterway. It was undetermined whether the entire length of the canal would need to be dredged. At the narrowest point, close to the boat ramp, the canal is 50' wide.

As stated, it is located in close proximity to the Swoope Boat Ramp, the model for this inventory. There is a domino-effect of development pressures reducing access in the area that this site could help alleviate. The property adjacent to the North Causeway Boat Ramp (2nd busiest in the County) that was used for overflow trailer parking is being developed. This causes a need for additional trailer parking at the Swoope site, which will consequently potentially displace the existing partial use of the site as storage for marine materials. This site warrants further review. Dredging and other needs and costs should be quantified.

Purpose of Inventory

The purpose of the inventory is to provide FIND and local governments with information about: 1). Existing recreational access sites that have the *potential* to be shared-use commercial access sites 2). Bridges that have potential as shared-use sites, and 3). Where the potential exists to provide additional sites. Many recreational boating access sites could serve a dual purpose of providing access for commercial and industrial uses, particularly on the weekdays when recreational use is lower.



Waterway Transportation System



Mobility vs. Access

The waterway is an important transportation mode for moving people and freight. FIND's primary focus is on mobility – dredging the channel, so vessels can move through the intracoastal waterway to their destinations. Access provides the ability to reach destinations, hubs or nodes. Access and mobility (or capacity) are inverse operations in transportation. Additional access results in reduced in capacity, or throughput, because congestion increases with additional access.

Marine Highway M-95

A hierarchy is established in transportation systems where the transportation facility is assigned a class, based on its relative function to provide mobility vs. access. The intracoastal waterway is the highest class of waterway (focus on mobility) – known as an “inland marine highway”. It is known as marine highway M-95 (as a parallel transportation corridor to Interstate I-95). As a parallel facility, it provides the opportunity to satisfy many of the same trips as I-95. Along I-95 there are exits and plazas to provide services and access to destinations for the trips being made. Likewise, services and needs along the waterway must be satisfied. Access for a variety of users is needed, such as:

- Direct Access – recreational & commercial (boat ramps, launch sites, docks, slips, marinas, wharfs, piers)
 - Individual Users, General Public
- Support Service Access - Commercial access to support the boating industry (retail services such as shops and restaurants, boat maintenance services, fuel, etc.)
- Maintenance access to maintain and operate the waterway & build infrastructure
 - Governmental Agencies (FIND, USACE)
 - Marine contractors (private docks, marinas, waterfront residential, etc.)
- Commercial access for governmental operations (reef deployment, emergency operations, infrastructure maintenance – bridges, outfalls, etc.)
- Industrial access (working waterfront uses such as seafood processing)

Waterway – The Choice Mode for Freight

The waterway provides many benefits as the choice mode for moving freight:

- Capacity-extensive cargo capacity-hauling bulk commodities & oversized/overweight items.
 - 1 barge=16 rail cars=70 trucks (dry cargo)
 - 1 barge=46 rail cars=144 trucks (liquid cargo)
- Safety
 - 1 barge fatality=18 rail fatalities=132 truck fatalities
 - 1 barge injury=95 rail injuries=1,609 truck injuries
- Energy Efficiency – fuel requirements to move one ton of cargo
 - Barges: 616 MPG
 - Rail: 478 MPG
 - Truck 150 MPG



The Strategic Intermodal System (SIS) is Florida's high priority network of transportation facilities important to the state's economy and mobility. The Governor and Legislature established the SIS in 2003 to focus the state's limited transportation resources on the facilities most significant for interregional, interstate, and international travel. The SIS is the state's highest priority for transportation capacity investments.

Source: Florida Department of Transportation
Strategic Intermodal System Program,
September 2014



Modal and system connectivity is a new emphasis area of the SIS policy plan. The entire Intracoastal Waterway is identified as a SIS Waterway in the *Strategic Intermodal System (SIS)* for Florida, as indicated below. There are 6 Strategic Intermodal System Seaports along the waterway and 2 emerging SIS Seaports.

The Seaports provide the highest level of access, serving as an intermodal hub, connecting waterway, roadway and railway transportation modes for freight and passenger traffic.



This exhibit depicts the importance of connectivity of the railway, highway and waterway transportation system. The waterway, with its ample capacity, can offer alternatives to the increasingly congested rail and highway networks.

Continued investment in access and connectivity is important to maximize the benefits of the waterway and establish a system with hubs and connectors that serves the needs of the users.



Vessel Draft and Vessel Trips

The intracoastal in Florida is a shallow draft waterway, meaning it is 12' or less and carries only domestic freight. The harbors along the waterway are deep draft waterways, ranging from 15' in the Miami River to 50' in the Miami Harbor.

Location	Authorized Depth at MWL
Fernandina to Ft. Pierce	12'
Ft. Pierce to Miami	10'
Miami to Key West	7'

Vessels	Depth, ft.
Recreational Vessels, Shallow Draft Barges, Tugs, and Seaplanes	6 to 12
Cruise and General Cargo Vessels	28 to 36
General Cargo and Bulk Cargo Vessels	36 to 41
Panamax Bulk and Container	39 to 41
Post-Panamax Bulk and Container	41 to 50

Note: Depths are based on MLW Statistics

% Commercial Vessels by Draft on IWW Sections

IWW Section	0-5 ft.	6-9 ft.	Vessel Draft 10-12 ft.	13-14 ft.	15-17 ft.	Maintained Depth
Fernandina to St. Johns River	24.7%	67.8%	5.6%	1.5%	0.4%	12 ft.
St. Johns River to Miami	26.6%	25.6%	46.2%	1.3%	0.3%	10-12 ft.
Miami to Key West	14.8%	84.9%	0.4%	0.0%	0.0%	7 ft.

Source: Waterborne Commerce Statistics Center

The table above shows the percentage of vessels that fall into different vessel draft categories on the IWW sections, from 0-17 feet, as well as the maintained depth of the sections. The table below shows commercial vessel trips by section of the IWW from 2007 to 2013.

Commercial Vessel Trips on IWW by Section – 2007 to 2013

AIWW Section	2007	2008	2009	2010	2011	2012	2013
Fernandina to St. Johns River	1,070	963	718	838	892	1,216	673
St. Johns River to Miami	1,657	386	475	361	522	210	312
Miami to Key West	535	277	290	217	28	68	284
Totals	3,262	1,626	1,483	1,416	1,442	1,494	1,269

Source: USACE Waterborne Commerce Statistics Center

It is interesting to note that the deepest draft vessels are from the St. Johns River to Miami, but that section has significantly fewer vessel trips than the section to the north of it. The deepest dredged section of the waterway has the highest number of vessel trips. Anomalies in the data are circled. Additional research was not conducted to determine the cause of these large variances.

Methodology

In order to conduct the inventory, the following steps were taken:

1. Literature Review and Research – a literature review was conducted to assist with determining:
 - a. Definition of commercial and industrial waterway access
 - b. Parameters/requirements of potential site
 - c. Amount of access needed
 - d. Demographics and Trends
2. Develop Inventory Database and Mapping Process – identify existing and potential sites
 - a. Existing Boat Ramps
 - b. Existing Bridges
 - c. Adjacent Parcels (shared-use compatibility and acquisition/expansion opportunities)
 - d. FIND Dredged Materials Management Areas (DMMAs)
 - e. Vacant Waterfront Parcels (Government-owned & Industrial-Zoned)



Literature Review

A number of documents were reviewed and relevant information was extracted, including:

1. "Florida Seaport & Waterways System Plans", August 2016
2. "A Modal Comparison of Domestic Freight Transportation Effects on the General Public: 2001-2009", National Waterways Foundation
3. "Marine Industries Association of South Florida Master Plan", January 2001
4. "Marine Industry – South Florida's Money in the Water", South Florida Business Journal, Marine Industries Association of South Florida
5. Tools to Preserve Maine's Waterfront Access, Island Institute, Maine Sea Grant, NOAA
6. "Access to the Waterfront" *Issues and Solutions Across the Nation*, Maine Sea Grant, 2007
7. "Coastal Heritage", On the Waterfront *Can Traditional Industries Survive Explosive Change?* Vol. 28, No. 2, Spring 2014
8. "Florida Boating Access Facilities Inventory and Economic Study, Florida Fish and Wildlife Conservation Commission, 2009
9. A Process for Public Boating Access and Investment Decisions, Fish and Wildlife Research Institute, Florida Fish and Wildlife Conservation Commission
10. Florida Boating Improvement Program, Evaluation Criteria for Boating Access Facilities, Florida Fish and Wildlife Conservation Commission

Definition of Commercial & Industrial Access

One of the first questions to be answered, is what defines commercial and industrial access?

Based on the literature review, it is apparent that terms, definitions and data isn't consistent or fully standardized across the industry. With regard to references to commercial and industrial access, it is often lumped together into a single category. For the purposes of this inventory, industrial and commercial access is defined as public waterfront property that meets, or has the potential to meet, the site requirements identified below.

Parameters / Requirements of Potential Site / Swoope Boat Ramp as "Prototype/Model"

Swoope boat ramp in New Smyrna Beach was identified as an ideal **prototype** for a shared-use site. It is currently owned by the City of New Smyrna Beach





and is a heavily-used recreational boat ramp on the weekends. Volusia County also uses the site for storage of artificial reef materials, heavy equipment, and commercial vessels through an interlocal agreement between the City and the County. It is a five-acre site of an old power substation. Florida Inland Navigation District provided approximately \$750,000 of funding over the last 3 years for the development of the parcel and is currently funding a grant to provide additional trailer parking. The City's intent is to eventually buildout the site with boat trailer parking to maximize boating access. The impact to the commercial/industrial shared use of the site needs to be considered. Additional information on the Swoope Boat Ramp is provided below:

- Compatible surrounding land uses (non-residential)
- Good waterway site access and near inlet
- Good landside site access
 - 2 lane road directly to site with no driveway cuts/vehicular conflicts
 - Direct US 1 Access
- Size of site sufficient for storage of materials / parking for employees / maneuvering of heavy vehicles, etc. (this site is 5 acres) to provide maximum flexibility for use. Simply providing access may be sufficient in some cases, while in other cases having bigger sites may be more beneficial.
- Separate, secure area for materials storage

Amount of Access Needed

There is no clear guideline or “standard” for how much access should be provided or distance required between access points. However, there is demonstrated need for additional access, based on trends, demographics, research and interviews – the results of which are discussed below.

Providing sufficient water depth through dredging *induces* demand for additional access. This is evidenced by the dredge of the Dania Cutoff Canal to 17 feet deep, which was completed in 2013. Boatyard's revenues along the canal have increased 59% since the dredge, and the County has received \$23.4 million in economic benefit. Boatyards there are servicing 54% more vessels than they were before the dredge, and \$6.6 million in labor income has been generated. The majority of the yards are reporting waitlists for service, while none reported waitlists in 2013 or other recent years prior to the dredging.

Based on the demonstrated need and disappearance of land to non-water dependent uses, the goal may be to provide as much access as possible with increases to access year over year, with individual decisions made on a case by case basis, based on economic and other factors.

Another consideration may be to set a standard for access by establishing a baseline (which this inventory will provide) and determine a level of access goal moving forward. Three alternative models for determining desirable amount of access are provided below. Each can be measured against performance.

- Status Quo – “no net loss” of access (which actually means less relative access due to higher demand)
- Demand-Based - increase amount of access based on a relative correlation to vessel registrations or other indicator of growth in the industry
- Opportunistic - increase access based upon property availability



Demographics & Trends

National

Maryland and Delaware - much of the coast is privately owned and they have not increased the amount/availability of public access over time. With increased populations, more people are visiting, adding to the need for even more access.

Of the 5,300 miles of **Maine** coastline only 20 miles comprise sites that support commercial-fishing activities that include marine trades. 66% of the sites are privately owned.

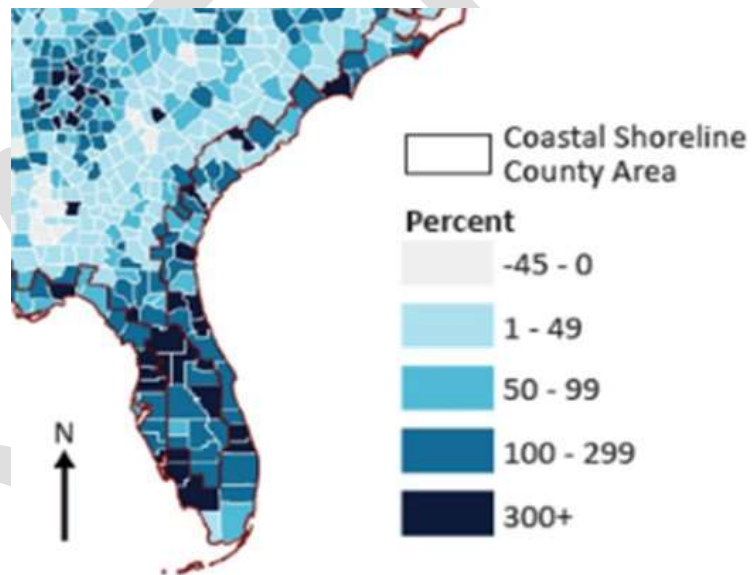
In coastal **Alabama** the issue is the need for affordable housing near the coast, where the jobs are.

153 million people - more than ½ of the United States population - now live in the coastal zone. Those who don't privately own their piece of the coast want access to it. Increasing population is resulting in private residential development of the coast, creating pressure on industrial, commercial and recreational public infrastructure in U.S. coastal communities...in turn, reducing access.

The figure on the right indicates percentage of growth in coastal populations in the United States over the past 40 years.

Florida

The myriad of issues with coastal access around the Country are also experienced in Florida, the State with the fastest coastal population growth in the Country. Coastal shoreline counties, with the exception of 2, along the east coast of Florida sustained growth rates between 100% and 299%, with some growing over 300% from 1970 to 2010.



During this period, **Florida had the fastest coastal population growth in the Country**, at 165% (4% per year average for 40 years). In 2010, Florida's coastal population was nearly 15 million. However, changes affecting our coast, and access to it, is not just more people, but **different demographics** (wealthier and older) and **related development pressure** (private residential and rental construction). In fact, the 2 key drivers of waterfront transformation and resulting changes in public access are:

1. Rising Property Values/Taxes, followed by
2. Construction of Condominiums and Second Homes

These older, wealthier newcomers are not drawn to the coast for traditional reasons of resource-based or industrial employment. The southeast is the top destination for retirees, so it's understandable that these development pressures are particularly evident here. As noted in the





graphic at right, although not along the intracoastal waterway, all of the fastest growing areas in the State are retirement areas.

Florida is the leading state for sales of new powerboats, motors and accessories with \$1.96 billion in 2013, according to the National Marine Manufacturers Association.

In Mayport, developers are buying waterfront to construct condominiums, pushing out wholesale fish houses. Based on the fact that 70% of seafood consumed in the United States is in restaurants and 85% of seafood consumed in the United States is imported, wholesale fish houses may not continue to be viable. This further complicates the issue, as the industry itself changes with traditional waterfront uses in decline.

Boatyards and other working waterfronts across the southeast are being offered millions of dollars by developers – more than the business has been worth for generations -- an amount almost impossible to refuse. Once these marine industrial uses are converted to residential uses, they are not easily converted back, meaning many are lost for good.

A 2008 senate report by the Committee on Environmental Preservation and Conservation found that **roughly half** (1347 leases or 51.01 percent) of all current **Sovereign Submerged Land** leases are issued to **private entities with no public access**.

Larger Vessels - South Florida Mega Yachts

South Florida is home to a large concentration of mega yachts and a variety of facilities to support the industry, all requiring navigable waterfront access. Many of these yachts can reach 300' and draft up to 13'.

The Dania Canal in Broward County is home to a number of yacht repair and maintenance facilities that service this industry. In 2013, FIND completed a project dredging the Canal from 10 to 15 feet. This project was essential for the continued success and growth of the region's mega yacht service industry. Research has shown if the vessels are not able to safely navigate in an area, they will seek maintenance services elsewhere and very seldom return.

The growth of the mega yacht industry in South Florida is pushing yachting demand northward as smaller yachts seek areas that can provide the services they require.

Two challenges face the marine industry:

1. support services and businesses need to grow proportionally with an increase in vessels, and
2. waterfront land needed for at least some of that growth is being committed to other uses.

Technology

- Uber – access for recreational boaters to get to destinations, commercial employees to get to the site/barge, etc. As uber and similar ride-share programs continue to expand and gain popularity, the marine industry may well be impacted. Uber could increase the range of access to landside services. A boating uber could potentially provide effective water-taxi services.
- We are becoming more connected, with mobile phones, wifi and electronic communications for navigation, such as automatic identification systems (AIS) and vessel tracking, which can make us rethink smart waterway infrastructure, autonomous marine vehicles and how it may change site access needs.



Inventory & Mapping Methodology

There are 192 bridges and 285 boat ramps along the Intracoastal Waterway, as shown in the inventory.

Study Area

The study area consists of waterfront parcels along the Intracoastal Waterway and with access to the waterway within the 12-County area.

Existing Boat Ramps & Adjacent Parcels Inventory

Source Data: -Florida Fish and Wildlife Conservation Commission, Boat Ramp Inventory, August 30, 2009
-Florida Department of Transportation, Depth and Channel Data

Areas of Interest			
County	Bridges	Boat Ramps	Total
1 Nassau	3	1	4
2 Duval	23	16	39
3 St. Johns	24	12	36
4 Flagler	5	3	8
5 Volusia	28	35	63
6 Brevard	42	30	72
7 Indian River	8	4	12
8 St. Lucie	10	2	12
9 Martin	14	11	25
10 Palm Beach	16	30	46
11 Broward	7	46	53
12 Miami-Dade	12	95	107
Total	192	285	477

The following process was followed to identify boat ramps in the database:

- Extracted boat ramps from statewide data that are within the Counties in the study area
- Reduced data to boat ramps accessing navigable waters along or with access to the ICW
- Sites within 400' of each identified boat ramp were then identified and determined to be "parcels of interest".

These parcels represent areas where the largest impact related to the commercial or industrial use of the site occur, as well as potential parcels for acquisition or development of an existing recreational site into a shared-use site.

Miles of ICW		
County	Nautical Miles	US Miles
Nassau	13	11
Duval	51	44
St. Johns	38	33
Flagler	16	14
Volusia	43	37
Brevard	86	75
Indian River	20	17
St. Lucie	19	17
Martin	19	17
Palm Beach	41	36
Broward	21	18
Miami-Dade	56	49
Total	423	368

Existing Bridges & Adjacent Parcels Inventory

Source Data: Florida Department of Transportation Bridge Inventory Data. Florida Department of Transportation, Depth and Channel Data

The following process was followed to identify bridges in the database:

- Extracted bridges from statewide data that are within the Counties in the study area
- Reduced data to bridges crossing or adjacent to navigable waters along or with access to the ICW
- Sites within 400' of each identified bridge were then identified and determined to be "parcels of interest".

These parcels represent areas where the largest impact related to the commercial or industrial use of the site occur, as well as potential parcels for acquisition or development of an existing bridge site into a shared-use site. Many bridge abutment lands are not associated with parcels, but rather with FDOT right-of-way. Locations where these circumstances exist is useful to note in seeking partnering opportunities with the FDOT.

Site Density			
County	Sites	Miles of ICW	Sites/Mi
Nassau	4	11	0.36
Duval	39	44	0.89
St. Johns	36	33	1.09
Flagler	8	14	0.57
Volusia	63	37	1.7
Brevard	72	75	0.96
Indian River	12	17	0.71
St. Lucie	12	17	0.71
Martin	25	17	1.47
Palm Beach	46	36	1.28
Broward	53	18	2.94
Miami-Dade	107	49	2.18
Total	477	368	1.30



FIND Dredged Materials Management Areas (DMMAs)

Information was obtained from FIND regarding their DMMA sites to determine access needs and shared-use capability at these locations. The information is provided in the KML files in the database, as available.

Vacant Waterfront Parcels

Vacant parcels were queried in the database to determine the opportunity for potential new access locations. The focus of these sites was on publicly-owned parcels. In addition to publicly-owned parcels, parcels with industrial zoning were queried as the most likely vacant sites to be compatible for future commercial/industrial access.

Mapping

Counties in the study area were divided into a grid. All grid pages that contained an “area of interest” were identified and used to generate a map book. The map book consists of maps for each of the 12 Counties where a boat ramp, bridge or parcel within 400’ of either of those was identified.

Deliverables

In addition to this report, the following deliverables are being provided:

Searchable PDF Lists

1. Searchable PDF Index Map Book: Key Maps
2. Searchable PDF Map Book: Adjacent Parcels – provided digitally (to be posted on FIND website, as desired)
3. Three (3) Searchable PDF Reports:
 - a. Map Page Index – will help identify Map pages relevant to county and municipality.
 - b. Bridges in Inventory – A listing of bridges, including the map page the bridge is presented on, by county, by city.
 - c. Boat Ramps in inventory – A listing of boat ramps, including the map page the bridge is presented on, by county, by city.

KML Files for use with Google Earth

4. Three (3) KML Files for use with Google Earth. The KML Files will have the same attributes present as the Shapefiles. The KML files include all features as sub items and can be easily navigated or actively searched through the “Places” Search bar.
 - a. Map Book Pages
 - b. Areas of Interest – Bridges
 - c. Areas of Interest – Boat Ramps

Shapefiles

5. Shapefiles can be provided upon request

USACE Master Docks Plus Database

Excerpts from the database as provided in the Florida Waterways System Plan is included in the appendix. Maps of each of the Ports and Harbors, Inlets and Passes, and Canals and Rivers along the intracoastal waterway is provided. The focus of this information is on facilities and points of interest around access nodes/hubs (ports and harbors, inlets and passes, canals and rivers). The mapping exercise includes the 632 facilities and navigational points of interest in the USACE Master Docks Plus database.



Conclusions / Findings

There were definite similarities and trends that could be seen across the data sources. The following summarizes these findings.

Demand is Increasing

- Florida had largest **Coastal** population growth in Country – 4% per year for 40 years
- 2010 – Florida Coastal Population – 15,000,000
- 2013 – Florida leading Country in sale of new powerboats
- Vessel Registrations are increasing

Type of Demand is Evolving

- Coastal population is wealthier and older
- Evolution from working waterfront to residential/recreational waterfront
- Creates Greater Demand for Land and pushes Property Values and Taxes Higher
- Traditional Industries Not Viable – 85% of Seafood Consumed in U.S. is imported
- Can't Afford Property Taxes – Property is Worth More for Other Uses
- Need Commercial/Industrial Access to service Recreational Boating Industry
- Opportunity to Rethink Waterways and Waterfront Access
 - Mixed-use, Shared-use, Multi-function
 - Similar to Complete Streets – Complete Waterfronts
 - "Craft" industry – boutique waterfront industrial opportunities

Supply is Decreasing

- Residential Development consuming Land
- 51% of SSL Leases in Private Ownership

Opportunities for Partnership & Funding

- East Coast Greenway, the 3,000-mile multi-use trail from Key West to Maine and the SUNTrail Network (statewide priority trail) parallels much of the Intracoastal Waterway. The SUNTrail has a new, dedicated funding source of \$25,000,000 per year. Florida Inland Navigation District may want to partner with the Department of Environmental Protection and the Florida Department of Transportation to provide waterway access as part of trail projects.
- Coastal Resiliency – use coastal resiliency funding and partnerships for sites that serve dual purposes of providing commercial access while also providing coastal resiliency.

Barriers to Access

This inventory should help eliminate these barriers by providing information and the ability to be proactive.

- Intergovernmental Coordination of Multi-Jurisdictional Needs
 - Potential sites in one jurisdiction (i.e., City) and need in another jurisdiction (i.e., Co.)
 - Mission of agency that owns sites (FDOT bridges vs. FIND waterway access)
- Lack of consistent data / definitions / metrics across agencies and the industry
- No standard or guideline for acceptable amount of access
- Regulations - Restrict Accessibility of the Waterway



Call to Action

- If vessels cannot safely navigate, they seek access elsewhere and seldom return
- Once property changes from industrial to residential, it seldom reverts back
- Once property changes from public to private, it seldom reverts back

Recommendations and Next Steps

The database and mapping contains a lot of valuable data that can be easily queried and analyzed.

Additional Analysis

- Review and Distribute Information – provide input regarding future direction
- Review the County-level maps with each County and its municipalities (and marine contractors) to identify target sites for acquisition and/or development/expansion. Conduct site visits and vessel counts, as needed.
- Establish access hierarchy

Policy-Related

FIND should establish a goal for commercial/industrial access and then set policies to assist with achieving that goal. The following are some examples of policies or guidelines that may assist with obtaining additional access.

- Continue to fund and encourage the implementation of maritime management plans. Provide more guidance to local governments regarding encouraging an assessment of commercial/industrial access. Identify potential areas for future access in plan. Require annual reporting on plan implementation for 3 years after completion of plan.
- *Policy* - Consider amending the grant evaluation criteria to increase points for multi-purpose sites – where recreational sites are also providing commercial/industrial access.
- *Policy/Communication* - Ask local governments to provide a report when they submit a grant request stating if they have sold any public waterfront access in the previous year and what mechanisms were taken to attempt to provide some remaining public access on the site, or otherwise mitigate for the loss of access.
- Consider adding a deed-restriction or other requirement for grant projects that require public access be provided for a specified amount of time (i.e., 20 years, perpetuity, etc.). This is not uncommon with grant programs and would help address the issue of access being developed.

Education

Encourage local governments to adopt working waterfront and commercial waterway access policies, such as requiring public access as part of waterway development plans. (Examples include Maine's Toolkit, Rhode Island's Urban Coastal Greenway and Boston's 44-mile {and growing} public Harbor Walk).

Share dredging plans with local governments so they can proactively evaluate and prepare for planned / newly dredged areas and the impacts of additional *induced* demand to determine increased need for access and facilities after dredging.

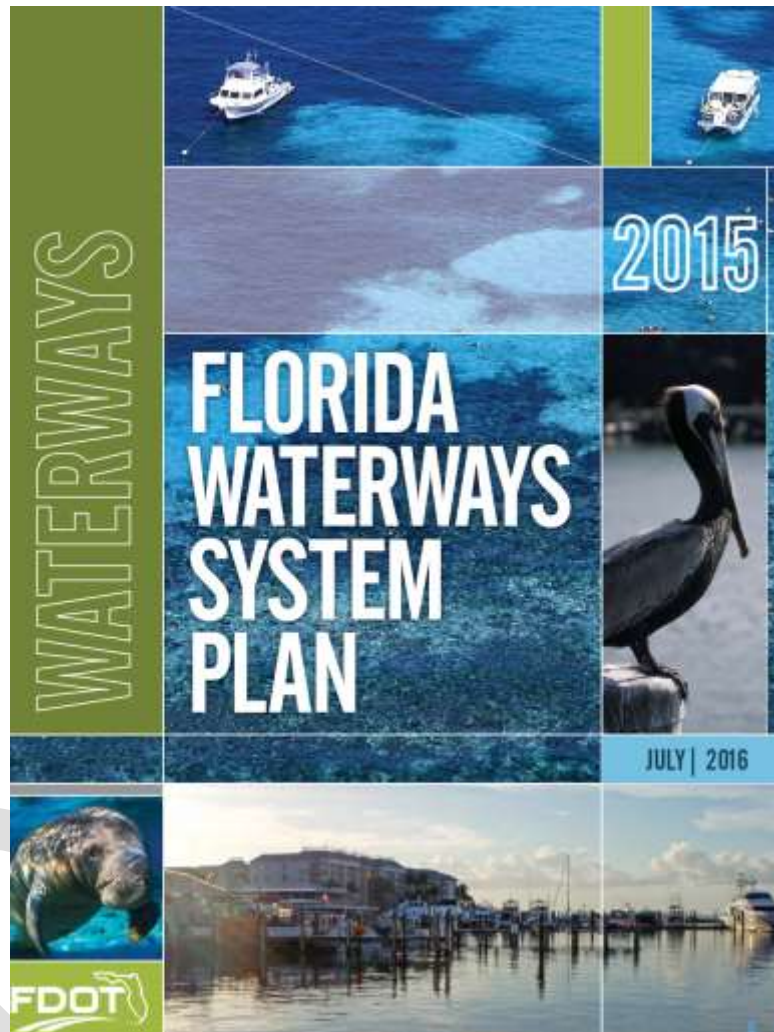
Partnering

Work with partner agencies to provide shared access. (e.g., Florida Department of Transportation – bridges, East Coast Greenway, FDOT, FDEP - trails).



Appendix A

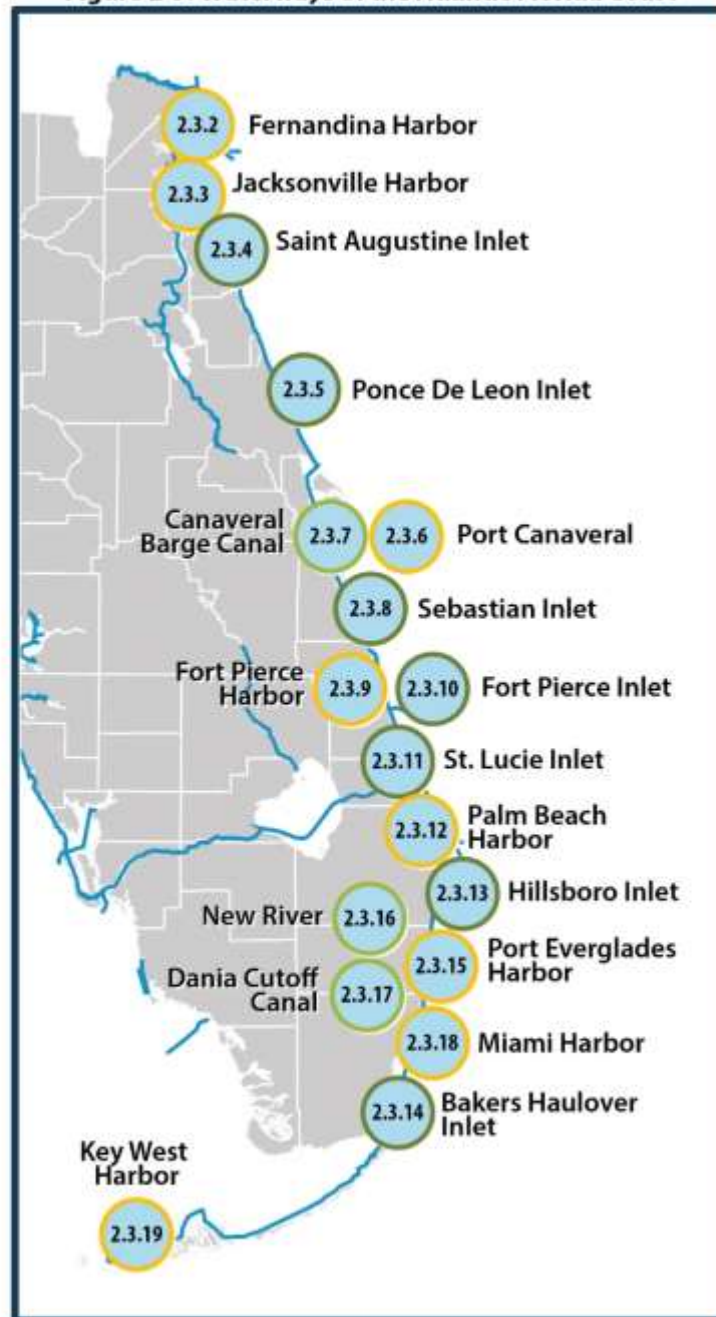
Excerpts from Florida Waterways System Plan





The waterways of the Atlantic Florida Coast can be seen on Figure 2-5. Each circle on the map is explained in more detail in subsequent pages. In some cases, notable facilities in each area are identified, including government facilities, ports, and navigational points of interest.

Figure 2-5: Waterways of the Atlantic Florida Coast



Legend:

- Ports and Harbors
- Inlets and Passes
- Canals and Rivers
- Waterways



2.3.2 FERNANDINA HARBOR

Fernandina Harbor is a natural deep draft harbor in Nassau County. The harbor is home to the Port of Fernandina. It is accessed via the entrance to the St. Marys River connecting to the AIWW. Its channel is 2 miles long and its authorized depth is 40 feet. In 2013, it reported 299,000 tons of cargo, and the top commodities were primary manufacturing goods (paper, iron and steel), mainly for foreign export.

2.3.2



Legend:

- Intracoastal Waterways
- Canals and Rivers
- ++++ Regional Railroads

Ports	Port of Fernandina
Industrial/Commercial	Rayonier Cellulose Plant, Rock-Tenn Plant, Kinder Morgan Nassau Terminals, Fernandina Harbor Marina
Seafood	Atlantic Seafood, Cook and Cook Seafood
Navigational Points of Interest	St. Marys Entrance Channel, Amelia and St. Marys River Junction, Lanceford Creek and Amelia River Junction



2.3.3 JACKSONVILLE HARBOR

Jacksonville Harbor is a natural deep draft harbor located in the heart of Duval County. It is home to Jaxport, which has 4 public seaport terminals and 20 privately-owned terminals, and is accessed from the Atlantic Ocean via the entrance to the St. Johns River. Its channel is 32 miles long and has an authorized depth of 42 feet. In 2013, 16,473,000 tons of cargo were reported as traversing the channel, and the top commodities were petroleum, limestone, and paper.

2.3.3



Legend:

- Ports and Harbors
- Intracoastal Waterways
- Canals and Rivers
- Inlets and Passes
- +—+—+— Regional Railroads

Government	U.S. Naval Station Mayport, USMC Support Facility Blount Island, USCG Sector Jacksonville, St. Johns River Ferry
Ports	Jaxport (Blount Island, Dames Point, Talleyrand, and Jaxport Cruise Terminals)
Industrial/Commercial	Morningstar Marina, BAE Systems, JEA Power Plant, Buckeye Fuel Terminal, BP Fuel Terminal, U.S. Gypsum, Colonial Oil Terminal, Keystone Bulk Terminal, TransMontaigne Fuel Terminal, River City Marina, Jacksonville Water Taxi, North Florida Shipyards, Victory Casino Cruises
Seafood	Safe Harbor Seafood, Singleton's Seafood
Navigational Points of Interest	St. Johns River Channel Entrance, Mile Point, St. Johns River and Blount Island Channel Junction, Dames Point Bridge, Mathews Bridge, Hart Bridge, John T. Alsop Bridge, Acosta Bridge, Fuller Warren Bridge



2.3.4 ST. AUGUSTINE INLET

The St. Augustine Inlet was originally a natural inlet that was relocated to its current location in 1940. The inlet is located in St. Johns County and connects the Tolomata and Matanzas Rivers and the AIWW to the Atlantic Ocean. The inlet is the entrance channel to the historic St. Augustine Port Waterway and Beach District, which was created in 1930 to fulfill the requirements of a the USACE for a local sponsor for inlet dredge projects. It is 4 miles long and has an authorized depth of 16 feet.

2.3.4



Legend:

- Intracoastal Waterways
- Inlets and Passes
- +—+—+— Regional Railroads

2.3.5 PONCE DE LEON INLET

The Ponce de Leon Inlet is located in Volusia County and connects the Indian River and the AIWW to the Atlantic Ocean. The pass is 4 miles long and has an authorized depth of 15 feet. The inlet is used primarily for recreational purposes, such as boating and fishing.

2.3.5



Legend:

- Intracoastal Waterways
- Inlets and Passes
- +—+—+— Regional Railroads



2.3.6 CANAVERAL HARBOR

Canaveral Harbor is a man-made harbor located mid-way between Jacksonville and Miami on the Atlantic Coast. This harbor is home to Port Canaveral and is accessed via the Canaveral Harbor Channel. Its channel is 2 miles long and has an authorized depth of 44 feet. The harbor was initially created to provide a turning basin in the Banana River. The harbor contains the largest navigation lock in Florida, built to secure safe passage of vessels to the Canaveral Barge Canal (detailed on the next page). In 2013, the harbor reported 3,337,000 tons of cargo, and the top commodities were foreign petroleum imports.

2.3.6



Legend:

- Ports and Harbors
- Canals and Rivers

Government	U.S. Navy Turning Basin, USCG Marine Safety Detachment and Station Port Canaveral
Ports	Port Canaveral
Industrial/Commercial	Disney Cruises, Norwegian Cruises, Carnival Cruises, Royal Caribbean Cruises, Ocean Club Marina, Port Canaveral Yacht Club, Cape Marina, Victory Casino Cruises
Seafood	Wild Ocean Market, Seafood Atlantic, Cape Canaveral Shrimp Co, Puck O'Neal Seafood Wharf
Navigational Points of Interest	Canaveral Lock, West Turning Basin, Middle Turning Basin, East Turning Basin, Canaveral Barge Canal, West Access Channel, Inner and Middle Reach Channels



2.3.7 CANAVERAL BARGE CANAL

The Canaveral Barge Canal is a man-made canal that connects the Indian River and the Banana River to the Atlantic Ocean. The canal also connects Canaveral Harbor with the AIWW. The canal has a lock managed by the USACE. It is used mostly for recreational purposes, however, barges use the canal to move fuel north to the Reliant and FPL power plants in Titusville from fuel tank farms at Port Canaveral. Port Canaveral is also investigating the possibility of using the canal to ship containers on barges to rail access in the community of Mims, in northern Brevard County. The canal is 8 miles long and has an authorized depth of 12 feet.



2.3.7

Legend:

- Ports and Harbors
- Intracoastal Waterways
- Canals and Rivers
- + + + Regional Railroads

2.3.8 SEBASTIAN INLET

The Sebastian Inlet is located in southern Brevard County and connects the Indian River Lagoon and the AIWW to the Atlantic Ocean. It is 2 miles long and 8 feet deep. This inlet is known for its surfing and fishing activities.



2.3.8

Legend:

- Intracoastal Waterways
- Inlets and Passes
- + + + Regional Railroads



2.3.9 FORT PIERCE HARBOR

Fort Pierce Harbor is a man-made harbor, accessed via the Fort Pierce Inlet through the Indian River Lagoon. The harbor is located in St. Lucie County and houses the Port of Fort Pierce. Its channel is 1 mile long and has an authorized depth of 30 feet. In 2013, 6,000 tons of cargo were reported for this harbor, and the top commodities were sand, gravel, and other non-metal materials.

2.3.9



Legend:

- Ports and Harbors
- Intracoastal Waterways
- Inlets and Passes
- +—+— Regional Railroads

Government	USCG Station Fort Pierce, Fort Pierce City Marina
Ports	Port of Fort Pierce
Industrial/Commercial	Fort Pierce Inlet Marina, Pelican Yacht Club, Harbortown Marina, River Marina
Seafood	Inlet Fisheries, Day Boat Seafood
Navigational Points of Interest	Fort Pierce Inlet Inner and Entrance Range, AIWW Junction



2.3.10 FORT PIERCE INLET

The Fort Pierce Inlet is a man-made inlet located in St. Lucie County. The inlet connects the Indian River Lagoon and the AIWW to the Atlantic Ocean. It also provides access to the Fort Pierce Harbor. It is 3 miles long and has an authorized depth of 30 feet.



2.3.10

Legend:

- Ports and Harbors
- Intracoastal Waterways
- Inlets and Passes
- +—+— Regional Railroads

2.3.11 ST. LUCIE INLET

The St. Lucie Inlet is located in St. Lucie County and connects the Okeechobee Waterway and the AIWW to the Atlantic Ocean. This inlet is one of six that is linked to the Indian River Lagoon. The inlet is used for navigation, commercial, and recreational uses but also is essential for promoting estuarine health. The inlet is the core of the estuarine system that joins the Indian River Lagoon, the St. Lucie River, and the Hobe Sounds Narrow. It is 11 miles long and has an authorized depth of 6 feet.



2.3.11

Legend:

- Intracoastal Waterways
- Inlets and Passes
- Rivers and Canals
- +—+— Regional Railroads



2.3.12 PALM BEACH HARBOR

Palm Beach Harbor is a deep draft harbor located in Palm Beach County. The harbor is located 80 miles north of Miami and 135 miles south of Port Canaveral, and is accessed via the Lake Worth Inlet. The Port of Palm Beach is located within the harbor. Its channel is 7 miles long and has an authorized depth of 33 feet. In 2013, 2,130,000 tons of cargo were reported moving over these waters, and the top commodities were food and farm products, with approximately half as foreign exports.

2.3.12



Legend:

- Ports and Harbors
- Intracoastal Waterways
- Inlets and Passes
- +++ Regional Railroads

Government	USCG Station Lake Worth Inlet, Peanut Island Park
Ports	Port of Palm Beach
Industrial/Commercial	Peanut Island Water Taxi, Cracker Boy Boat Works, Riviera Beach Marina, Majestic Princess Cruises, Lockheed Martin, Cannonsport Marina, Sailfish Marina Resort, Sailfish Club of Florida
Navigational Points of Interest	Lake Worth Inlet, Entrance Channel, Inner Channel, Turning Basin, AIWW Junction

2.3.13 HILLSBORO INLET

The Hillsboro Inlet is a naturally opened channel located in Pompano Beach in Broward County. This channel connects the AIWW to the Atlantic Ocean. It is 1 mile long and has an authorized depth of 13 feet.



Legend:

- Intracoastal Waterway
- Inlets and Passes

2.3.14 BAKERS HAULOVER INLET

The Bakers Haulover Inlet is a man-made channel located in Miami-Dade County. It connects Biscayne Bay and the AIWW with the Atlantic Ocean. The inlet is used for recreational activities, primarily boating and sailing. The inlet is 1 mile long and has an authorized depth of 8 to 11 feet.



Legend:

- Intracoastal Waterways
- Inlets and Passes



2.3.15 PORT EVERGLADES HARBOR

Port Everglades Harbor is a man-made deep draft harbor located between Fort Lauderdale and Hollywood in Broward County, and is home to Port Everglades. It is accessed via the Port Everglades Inlet. The harbor has 3 miles of channel and has an authorized depth of 48 feet. In 2013, 21,703,000 tons of cargo were reported moving through the harbor, and the top commodities were domestic petroleum and petroleum products.

2.3.15



Legend:

- Ports and Harbors
- Intracoastal Waterways
- Inlets and Passes
- ++ Regional Railroads

Government/Institutional	USCG Station Fort Lauderdale, Nova Southeastern University Oceanographic Center
Ports	Port Everglades
Industrial/Commercial	Sails Marina, Pier 66 Marina, Hilton Fort Lauderdale Marina
Navigational Points of Interest	17 th St Causeway Drawbridge, Dania Cut-off Canal and AIWW Junction, Turning Basin, Entrance Channel



2.3.16 NEW RIVER

The New River is part of a system of canals in Fort Lauderdale located in Broward County. Fort Lauderdale is a major yachting center where mega-yachts and other pleasure craft use the New River. It is six miles long and has an authorized depth of eight feet. The recorded tonnage for this canal is included as part of the tonnage reported for Port Everglades Harbor.

2.3.16



Legend:

- | | | | |
|-------|------------------------|-------|--------------------|
| | Ports and Harbors | | Canals and Rivers |
| | Intracoastal Waterways | ++ | Regional Railroads |
| | Inlets and Passes | | |

2.3.17 DANIA CUT-OFF CANAL

The Dania Cut-Off Canal is located in Broward County, intersecting the South Fork of the New River. It connects Port Everglades to the AIWW. The Dania Cut-Off Canal is a working waterfront home to many marine companies, marinas, and small boat terminals. This canal is 3 miles long and was recently dredged in 2014 by FIND and USACE to 15 feet in depth. The recorded tonnage for this canal is included as part of the tonnage reported for Port Everglades Harbor.

2.3.17



Legend:

- | | | | |
|-------|------------------------|-------|--------------------|
| | Ports and Harbors | | Canals and Rivers |
| | Intracoastal Waterways | ++ | Regional Railroads |
| | Inlets and Passes | | |



2.3.18 MIAMI HARBOR

Miami Harbor is a deep draft harbor on the east coast of Florida in the heart of the City of Miami. It is accessed via the Miami Harbor Inlet (also known as Government Cut) and is home to PortMiami. The harbor has 13 miles of channel and, after completing a major deepening project in 2015 to a new depth of 50 feet, it became the deepest port on the Atlantic coast south of Norfolk, Virginia. In 2013, the USACE reported 7,125,000 tons of cargo moving through these waters, and the top commodities for foreign trade both inbound and outbound were manufacturing equipment, machinery, and products.

2.3.18



Legend:

- Ports and Harbors
- Canals and Rivers
- Intracoastal Waterways
- Regional Railroads
- Inlets and Passes

Government	USCG Sector Miami, USCG Station Miami Beach, Miamarina
Ports	PortMiami
Industrial/Commercial	Fisher Island Ferry, Yacht Club at Portofino, Miami Beach Marina, Sunset Harbour Yacht Club, Sea Isle Marina, Miami Aqua Tours
Navigational Points of Interest	Main Ship Channel, Fisherman's Channel, Government Cut, Bar Cut, Outer Bar Cut, Miami River Entrance, Intracoastal Waterway, Port Blvd Bridge, MacArthur Causeway, Venetian Causeway



2.6 MIAMI RIVER

The Miami River is a naturally formed river that has been manually deepened and widened for navigation and future commercial prospects. The river extends from the Miami International Airport to Biscayne Bay. The Miami River has 32 private terminals and is separated into 3 distinct zones: the Upper River, the Middle River, and the Lower River. The Upper River is typically known for its industrial business centers, primarily marine and shipping. Many of the shipping terminals are located here. The Middle River is known for its huge residential district, parks, and historic neighborhoods. The Lower River is where downtown Miami is located. The river is 5.5 miles long and has an authorized depth of 15 feet. In 2013, it carried 369,000 tons of cargo and the top commodities were foreign outbound manufacturing equipment, machinery, and products.



Legend:

- Ports and Harbors
- Intracoastal Waterways
- Canals and Rivers
- + + + + Regional Railroad

Government	Miami-Dade County Public Works Wharf, U.S. Customs Service Miami Wharf
Industrial/Commercial	5 th St Marina, Norseman Shipbuilding Corp, Anchor Marine, Merrill Stevens Yachts, Hurricane Cove Marina, Port of Miami River Terminal, Federal Metals, Miami Shipping Terminal, Antillean MaRine Shipping Corporation, Bimini Shipping, Laser Intl Freight, Miami Iron and Metal, Betty K Agencies
Seafood	Garcia's Fish Market, Casablanca Fish Market, Miami River Lobster and Stone Crab
Navigational Points of Interest	IWW and Miami Harbor Junction, SFWMD S-26 Pump Station, N.W. 27 th Ave. Drawbridge, N.W. 22 nd Ave. Drawbridge, N.W. 17 th Ave. Drawbridge, Dolphin Expy Bridge, N.W. 12 th Ave. Drawbridge, N. State Road 7 Drawbridge, W. Flagler St. Drawbridge, S.W. 1 st St. Drawbridge, I-95 Bridge, S.W. 2 nd Ave. Bridge, MDT Metrorail Bridge, S. Miami Ave. Drawbridge, Miami Metromover Bridge, Brickell Ave Drawbridge



Appendix B

Excerpts from Marine Industries Association of South Florida Master Plan

DRAFT



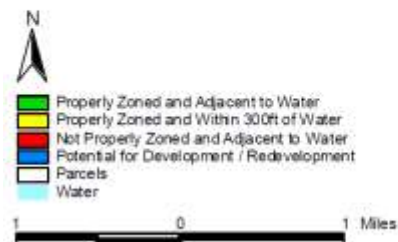
Figure 8. Sites Potentially Suitable for the Development of Marine Facilities in Northern Fort Lauderdale

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

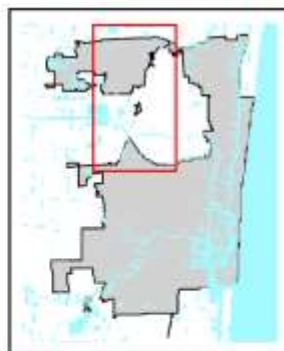
Yellow - Undeveloped sites that are located near to water and that are properly zoned. These represent new sites for expansion as facilities that do not require a waterfront location (e.g. boat storage). Little or no regulatory changes would be required.

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

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



Urban Harbors Institute - September 2011



Fort Lauderdale

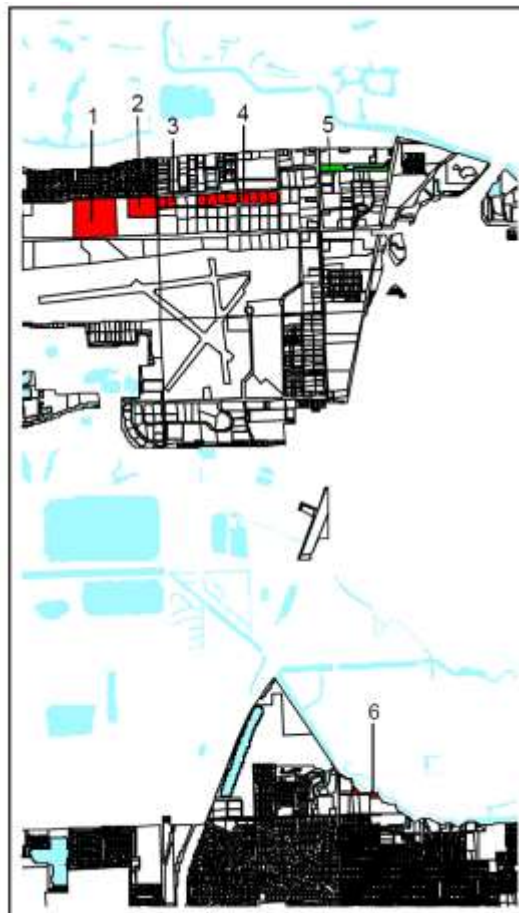



Table 2 Fort Lauderdale Selected Parcel Data

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

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

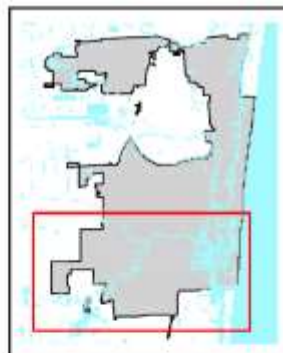


Figure 9. Sites Potentially Suitable for the Development of Marine Facilities in Southern Fort Lauderdale

- Green - Properly Zoned and Adjacent to Water
- Yellow - Properly Zoned and Within 300ft of Water
- Red - Not Properly Zoned and Adjacent to Water
- Blue - Potential for Development / Redevelopment
- White - Parcels
- Cyan - Water

1 0 1 Miles

Urban Harbors Institute - September 2001



Fort Lauderdale

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

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

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

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

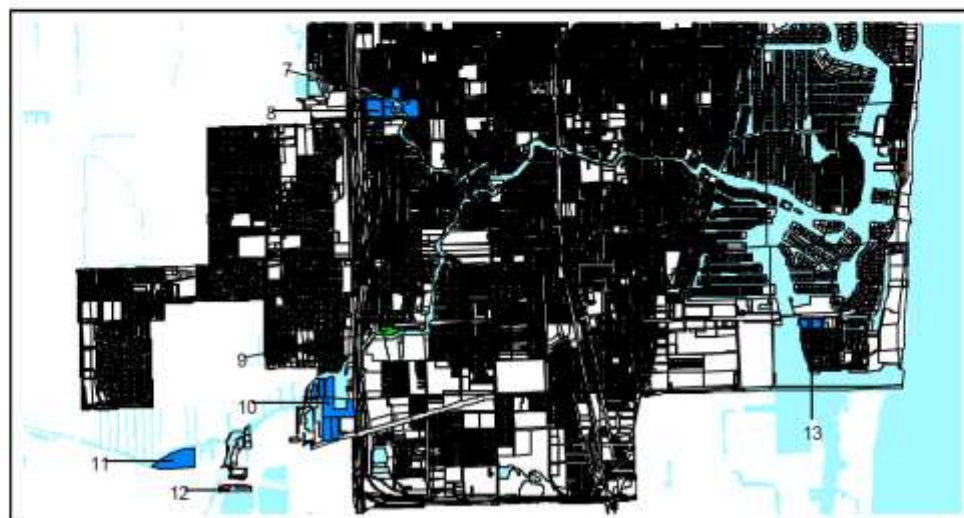



TABLE 3 Dania Beach and Hollywood/Port Everglades Selected Parcel Data

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

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

PORT EVERGLADES/HOLLYWOOD

18	27.00		Port Authority property <i>Woodland. W of parcel is woodland. Huge area to E of parcel is undeveloped but may not be Dania</i>			Excellent site for mega yacht service and repair facility
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KEY:
Property Zoned and Adjacent to Water
Property Zoned and Within 300ft of Water
Not Properly Zoned and Adjacent to Water

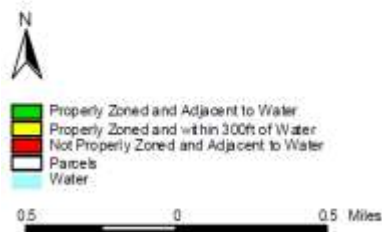


Figure 10. Sites Potentially Suitable for the Development of Marine Facilities in Dania Beach.

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

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

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



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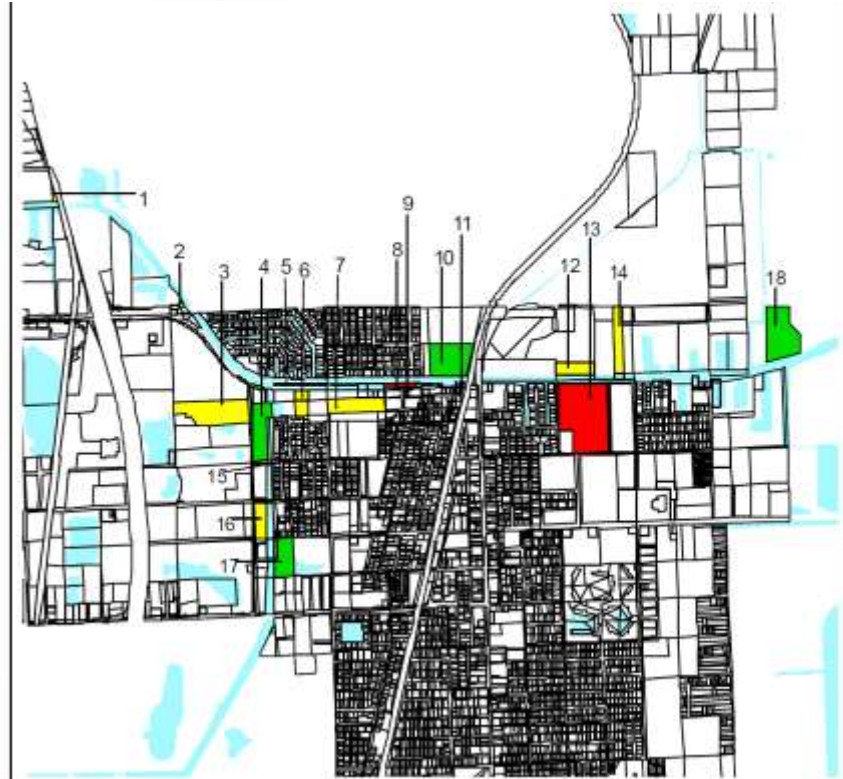


Figure 11. Sites Potentially Suitable for the Development of Marine Facilities in Pompano Beach.

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



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Table 4 Pompano Beach Selected Parcel Data

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

KEY:

Property Zoned and Within 300ft of Water





COMMERCIAL / INDUSTRIAL WATERWAY ACCESS INVENTORY

12/01/2016



PlanningSolutionsCorp.com





Presentation to FIND Board of Commissioners

12/16/2016



PlanningSolutionsCorp.com

Purpose of Inventory

- Most commercial waterfront access is privately-owned / subject to conversion to non water-dependent uses.
- Significant amount of funding to local governments for recreational waterway access projects, but little money is requested for commercial and industrial access.
- Identify locations where commercial or marine contractor access is needed for staging areas and other industrial uses.



Method

- Focus on Existing Facilities
 - Identify Boat Ramps
 - Determine Parameters
 - Swoope as Model
- Add Bridges
- Add FIND Sites
- Add Vacant Governmental
- Add Vacant Industrial



Swoope Site Boat Ramp



Parameters

- Compatible surrounding land uses (non-residential)
- Waterway Site Access – sufficient depth
- Location - Near Inlet
- Landside Site Access
 - 2 lane road directly to site
 - Direct US 1 Access
- Size of Site – sufficient for
 - storage of materials
 - parking for employees
 - maneuvering of heavy vehicles, etc.
 - site is 5 acres
 - Larger Site provides additional flexibility re: use



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Data Constraints

- Reliable depths not available
- Inconsistencies in terminology
- Poor Metadata
- Ease of Use of End Product
 - Low-tech
 - Data-driven
 - Human Intelligence



Planning
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Corp

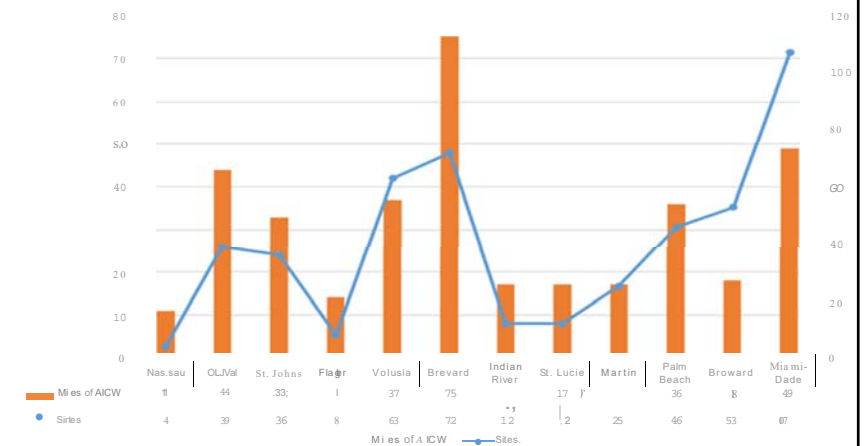
Access by County

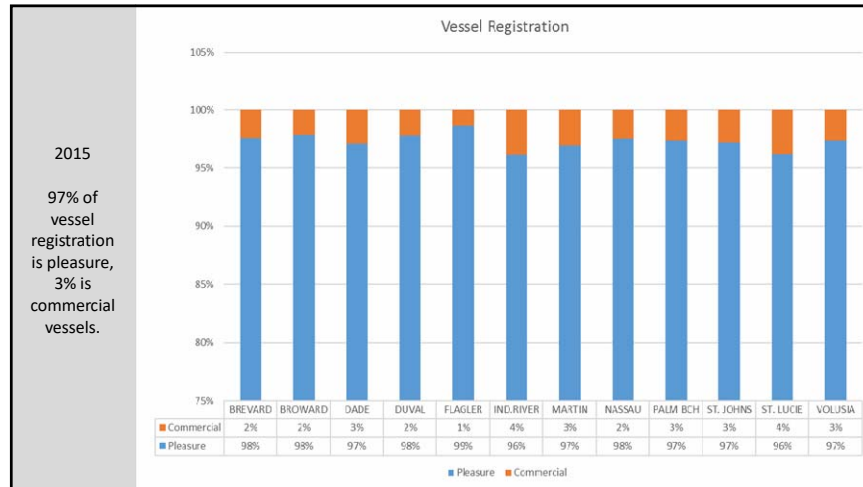
- 192 Bridges
- 285 Boat Ramps

Areas of Interest

	County	Bridges	Boat Ramps	Total
1	Nassau	3	1	4
2	Duval	23	16	39
3	St. Johns	24	12	36
4	Flagler	3	3	8
5	Volusia	28	35	63
6	Brevard	42	30	72
7	Indian River	8	4	12
8	St. Lucie	10	2	12
9	Martin	14	11	25
10	Palm Beach	16	30	46
11	Broward	7	46	53
12	Miami-Dade	12	95	107
	Total	192	285	477

Areas of Interest V. AICW Miles





Vilano Beach Boat Ramp

Google Earth



Searchable PDF



SR 528 Bridge

Google Earth



- Google Earth
- Commissioner Sansom
- Deep area alongside bridge for barges
- Shared-use site potential
- In Contact with FDOT

Amount of Access Needed

No Clear Guideline



Intracoastal Waterway

- As much Access as Possible
- Baseline / no net loss (which actually means less relative access due to higher demand)
- Demand-Based - increase access based on a relative correlation to vessel registrations or other indicator of growth in the industry
- Opportunistic - increase access based upon property availability

Trends – Demand Increasing



Intracoastal Waterway

Demand is Increasing

- 1970-2010 - Florida had largest **Coastal** population growth in the Country – 4% per year
- 2010 – Florida Coastal Population – 15,000,000
- 2013 – Florida leads Country in new powerboats
- Vessel Registrations are increasing

Trends – Type of Demand Evolving



Intracoastal Waterway

- Coastal population is wealthier and older
- Working waterfront to residential/recreational waterfront
- Increases Demand for Land – Higher Property Values & Taxes
- Traditional Industries Not Viable
 - 85% of Seafood Consumed in U.S. is imported
 - Can't Afford Property Taxes – Worth More as Other Uses
- Need Commercial Access to service Recreational Boating
- Opportunity to Rethink Waterways and Waterfront Access
 - Mixed-use, Shared-use, Multi-function
 - Similar to Complete Streets – Complete Waterfronts
 - "Craft" industry – boutique waterfront industrial opportunities

Recommendations / Next Steps



Intracoastal Waterway

Additional Analysis

- Review and Distribute Information – Correct Errors
- Provide input regarding future direction (level of access)
- Establish access hierarchy?
- Review the County-level data to identify target sites for acquisition and/or development/expansion
- Gather site-specific information, as needed: site visits and vessel counts, water depths, improvement needs, costs
- On-going, continuous need – coordination and site-specific evaluations

Recommendations / Next Steps



Intracoastal Waterway

Potential Policies to Encourage Access

- Continue to fund maritime management plans. Require annual reporting on plan implementation for 3 years.
- Consider amending the grant evaluation criteria to increase points for multi-purpose sites – where recreational sites are also providing commercial/industrial access.
- Request a statement from local governments confirming if they have sold any public waterfront access in the previous year and what mechanisms were taken to attempt to retain public access on the site, or mitigate for loss of access.
- Consider adding a deed-restriction for grant projects that require public access be provided for a specified amount of time (i.e., 20 years, perpetuity, etc.)

Recommendations / Next Steps



Intracoastal Waterway

Education

- Encourage local governments to adopt working waterfront and commercial waterway access policies, such as requiring public access as part of waterway development plans. (Examples include Maine's Toolkit, Rhode Island's Urban Coastal Greenway and Boston's 44-mile {and growing} public Harbor Walk).
- Share dredging plans with local governments so they can proactively evaluate and prepare for planned / newly dredged areas and the induced demand to determine increased need for access and facilities after dredging.

Recommendations / Next Steps



Intracoastal Waterway

Partnering

- Work with partner agencies to provide shared access
 - Florida Department of Transportation – bridges
 - East Coast Greenway, FDOT, FDEP - trails



December 5, 2016

Mark Crosley, Executive Director
Florida Inland Navigation District
1314 Marcinski Road
Jupiter, FL 33477

RE: Proposal for Geotechnical Exploration and Engineering Services
Dredged Material Management Area M-8
St. Lucie County, FL

Dear Mr. Crosley:

On August 24, 2016, the Florida Inland Navigation District (FIND) approved Work Order Number 16-10 for Professional Engineering Design and Permitting Services for Dredged Material Management Area (DMMA) M-8 in St. Lucie County, FL. The Work Order contained the assumption that FIND would contract directly with a geotechnical engineering firm for the necessary geotechnical explorations and that Taylor Engineering (Taylor) would only be required to coordinate geotechnical scopes of work, oversee field work, and review geotechnical deliverables.

At FIND's request, in October 2016, Taylor issued a Request for Qualifications (RFQ) for Geotechnical Services for the site. RFQs were received and evaluated in November 2016. As a result of the evaluation, Ellis and Associates, Inc. (E&A) was selected to provide necessary geotechnical services. On November 30, 2016, based on the scope of work provided by Taylor, E&A submitted a Proposal for Geotechnical Exploration and Engineering Services (**Attachment 1**). Taylor has reviewed this proposal and finds the scope and cost to be acceptable.

We recommend approval of E&A's proposed scope of work for a not-to-exceed fee of \$94,400. Please contact me with any questions.

Sincerely,

Jerry Scarborough, P.E.
Senior Advisor, Waterfront Engineering
Attachments (1)



November 30, 2016

Mr. Jonathan Armbruster, P.E.
Taylor Engineering, Inc.
10151 Deerwood Park Boulevard
Building 300, Ste 300
Jacksonville, Florida 32256

Subject: Proposal for Geotechnical Exploration and Engineering Services
Dredged Material Management Area M-8
St. Lucie County, Florida
E&A Proposal No. 11917

Dear Mr. Armbruster:

Ellis & Associates, Inc. is pleased to present this proposal to provide the geotechnical exploration and engineering services for the subject project.

COMPANY EXPERIENCE

E&A is a respected industry leader that has provided dependable, quality services throughout Florida and Southeast Georgia for more than 40 years. E&A provides specialty engineering services including geotechnical engineering, construction materials testing and hazardous waste and groundwater environmental consulting. Our projects include buildings, stadiums, highways, airports, seaports, schools, industrial and commercial facilities and other landmarks all across throughout Northeast Florida and Southeast Georgia. Our staff of geotechnical, environmental and materials engineers are highly qualified to provide these specialty engineering consulting services. Our client list is also quite varied and includes private industry, state and municipal government agencies.

We take pride in our testing laboratory and lab personnel which are routinely inspected and certified by the FDOT, Cement Concrete Reference Laboratory (CCRL), and AASHTO Materials Reference Laboratory (AMRL). We are also U.S. Army Corps of Engineers validated. At E&A, we have made significant investment in our staff and facilities to assure that we provide quality engineering consulting and testing services to all of our clients.

PROJECT INFORMATION

Based on a Request for Proposal (RFP) dated November 23, 2016 and prepared by you, we understand that geotechnical engineering services are requested to support engineering design and permitting of the Florida Inland Navigation District's (FIND's) Dredged Material Management Area (DMMA) M-8 in St. Lucie County, Florida.

DMMA M-8, is an approximately 20.3-acre undeveloped parcel with herbaceous/forested upland in St. Lucie County, Florida for development as a permanent DMMA to serve adjacent segments of the Intracoastal Waterway (ICWW). The site lies approximately 3.5 miles east of Port St. Lucie, 120 feet west of the Indian River and is bounded on the west by the Florida East Coast Railroad and on the east by

South Indian River Drive. We were provided reports and design documents for the DMMA design and permitting including DMMA M-8 Management Plan (Attachment B), DMMA M-8 Engineering Narrative (Attachment C), and Recent site photos (Attachment D), which were used along with the RFP to develop the scope contained in this proposal.

PROPOSED GEOTECHNICAL EXPLORATION

The objective of the geotechnical exploration is to provide site and subsurface information to evaluate the subsurface conditions at the site for the proposed construction. The following field services are proposed:

Location	Number of Borings/Tests	Depth of Borings/Tests Below Ground Surface, feet
Containment Dike	10 SPT*	100
	2 DMT**	50
	8 Field Permeability	Varies
Containment Area	7 SPT*	15
Indian River Drive Utility (Pipeline) Crossing Areas (east and west of roadway for open trench/HDD/or jack and bore installation)	4 SPT*	40
Weirs	1 SPT*	90

*Standard Penetration Test

**Flat Dilatometer Test (DMT)

We will attempt to locate existing underground utilities at the site using the One-Call system. However, private utilities not registered with this system, such as irrigation systems, will need to be located by the Owner. We will locate the borings using our hand-held Global Positioning System (GPS) receivers. All borings and tests locations will be staked, numbered, and flagged in the field. We will provide Taylor Engineering with the actual GPS coordinates of each test location. A digital point file containing the horizontal coordinates of each boring location will be provided to Taylor Engineering.

LABORATORY ANALYSIS

Laboratory classification and index property tests, including natural moisture contents, percent fines contents, full sieve analyses, Atterberg Limits, and percent organics contents, will be performed as necessary on selected soil samples obtained from the exploration. Grain-size distribution from sieve analyses will be presented both graphically and by summary statistics.

One dimensional consolidation testing and tri-axial shear strength testing (UU, CU, and CD) will be performed on relatively undisturbed Shelby Tube samples, as required. We have budgeted for two CD tests, two UU tests, and two CU tests (three points per test). Three Limerock Bearing Ratio (LBR) tests, five moisture/density relationship of soils (modified Proctor tests), five in-situ soil unit weight tests, and five laboratory hydraulic conductivity test will be performed on bulk samples obtained from the containment area above the anticipated excavation depth. All soil samples will be classified in accordance with the Unified Soil Classification System (USCS). Laboratory testing will be performed in accordance with ASTM and Florida Methods (FM, e.g. LBR tests).

ENGINEERING ANALYSES, RECOMMENDATIONS, AND DESIGN

A geotechnical engineer, licensed in the State of Florida, will direct the geotechnical exploration and provide an engineering evaluation of the site and subsurface conditions with respect to the planned construction and imposed loading conditions. The results of the exploration and engineering evaluation will then be documented in a report containing the following:

1. A brief discussion of our understanding of the planned construction and imposed loading conditions.
2. A presentation of the field and laboratory test procedures used and the data obtained.
3. A presentation of the existing on-site conditions, such as topography, surface vegetation, etc. as they relate to the planned construction.
4. A presentation of the encountered subsurface conditions, including subsurface profiles and measured groundwater levels, estimated seasonal high groundwater levels, and estimated geotechnical engineering properties (as necessary). Soil strata suitable and likely unsuitable for dike construction borrow material within the dike footprint will be provided.
5. A geotechnical engineering evaluation of the site and subsurface conditions with respect to the planned construction including a settlement evaluation of the proposed dike (magnitude and time rate of settlement). Recommend methods to decrease the consolidation period and methods to monitor consolidation settlement will be provided, if needed.
6. Recommended shear strength, unit weight, and hydraulic conductivity parameters for dike stability and seepage analyses. Based on the soil properties identified in these tests, we understand that Taylor Engineering will complete the necessary seepage and slope stability analysis for the dike embankments.
7. Specific recommendations for construction if dike settlement or differential settlement is deemed excessive.
8. Recommendations for dewatering, mixing, or compaction of excavated material for placement and construction of the dike.
9. General recommendations for earthwork and weir foundation construction methods.
10. Recommended foundation type to support weir (shallow or deep foundations). An allowable bearing capacity and anticipated settlement will be provided if shallow foundations are feasible. For deep foundation, soil properties for analysis of the deep pile foundations will be provided. We understand that Taylor Engineering will complete the weir foundation design.
11. General recommendations for utility (pipeline) crossings beneath Indian River Drive (e.g. open trench, horizontal directional drill, jack and bore).
12. General recommendations for protecting the shoreline and slope along Indian River Drive during and after installation of the inflow and outflow utility crossings.
13. Provide general recommendations for earthwork and pile construction methods.

Six hard copies and one digital copy of the geotechnical report signed and sealed by a licensed Florida Professional Engineer will be provided. Our proposed scope will be performed in substantial conformance with the RFP document provide to us, dated November 23, 2016.

COMPENSATION FOR SERVICES

Based on the scope of the geotechnical exploration, laboratory testing, and engineering services outlined above, we propose to complete our services for a not-to-exceed fee of **\$94,400**. Our work will be performed in accordance with our Terms and Conditions, a copy of which is attached and made part of this proposal.

SCHEDULING AND AUTHORIZATION

We can initiate our geotechnical exploration within one week after receiving notice to proceed. A returned copy of the attached authorization sheet, dated and signed by a responsible signatory, will formally authorize the proposed geotechnical exploration. Preliminary verbal results and recommendations can be provided within one week after completion of the field drilling portion of the project. The written report containing final recommendations will be submitted within two weeks after completion of all field and laboratory testing.

CLOSURE

We appreciate this opportunity to provide this proposal to perform the geotechnical exploration for this project. If you have any questions concerning this proposal, or if we can serve you in any other way, please contact me.

Respectfully submitted,

ELLIS & ASSOCIATES, INC.



David W. Spangler, P.E.
Geotechnical Department Manager

cc: Mr. Bill Aley, P.G. – Taylor Engineering

Authorization for Geotechnical Exploration and Engineering Services
Dredged Material Management Area M-8
St. Lucie County, Florida
E&A Proposal No. 11917

Signature of Authorized Representative: _____

Name (Printed): _____

Title: _____

Company: _____

Date Authorized: _____

Billing and Invoicing Information (if different from addressee)

Company Name: _____

Company Address: _____

Attn. (Contact's Name): _____ Email: _____

Phone No.: _____ Fax No.: _____

FEDERAL TAX ID NO. _____

Send Additional Reports To:

Company Name: _____

Company Address: _____

Attn. (Contact's Name): _____ Email: _____

Phone No.: _____ Fax No.: _____

Copies to Others (Include names and physical or e-mail addresses below):

For new clients that have not established a credit history with us, E&A may require a completed Credit Application and may require a retainer be paid prior to beginning our work.



Terms and Conditions of Service

The professional services ("Services") to be provided by Ellis & Associates, Inc. (a wholly owned subsidiary of Engineering Consulting Services, Ltd.) ("E&A") pursuant to the Proposal shall be provided in accordance with these Terms and Conditions of Service ("Terms"), including any addenda as may be incorporated or referenced in writing and shall form the Agreement between E&A and CLIENT.

1.0 INDEPENDENT CONSULTANT STATUS - E&A shall serve as an independent professional consultant to CLIENT for Services on the Project and shall have control over, and responsibility for, the means and methods for providing the Services identified in the Proposal, including the retention of Subcontractors and Subconsultants.

2.0 SCOPE OF SERVICES - It is understood that the fees, reimbursable expenses and time schedule defined in the Proposal are based on information provided by CLIENT and/or CLIENT'S agents, contractors and consultants ("Contractors"). CLIENT acknowledges that if this information is not current, is incomplete or inaccurate, if conditions are discovered that could not be reasonably foreseen, or if CLIENT orders additional services, the scope of services will change, even while the Services are in progress.

3.0 STANDARD OF CARE

3.1 In fulfilling its obligations and responsibilities enumerated in the Proposal, E&A shall be expected to comply with and its performance evaluated in light of the standard of care expected of professionals in the industry performing similar services on projects of like size and complexity at that time in the region (the "Standard of Care"). Nothing contained in the Proposal, the agreed-upon scope of Services, these Terms or any E&A report, opinion, plan or other document prepared by E&A shall constitute a warranty or guarantee of any nature whatsoever.

3.2 CLIENT understands and agrees that E&A will rely on the facts learned from data gathered during performance of Services as well as those facts provided by the CLIENT and/or CLIENT'S contractors and consultants. CLIENT acknowledges that such data collection is limited to specific areas that are sampled, bored, tested, observed and/or evaluated. Consequently, CLIENT waives any and all claims based upon erroneous facts provided by the CLIENT, facts subsequently learned or regarding conditions in areas not specifically sampled, bored, tested, observed or evaluated by E&A.

3.3 If a situation arises that causes E&A to believe compliance with CLIENT'S directives would be contrary to sound engineering practices, would violate applicable laws, regulations or codes, or will expose E&A to legal claims or charges, E&A shall so advise CLIENT. If E&A's professional judgment is rejected, E&A shall have the right to terminate its Services in accordance with the provisions of Section 25.0, below.

3.4 If CLIENT decides to disregard E&A's recommendations with respect to complying with applicable laws or regulations, E&A shall determine if applicable law requires E&A to notify the appropriate public officials. CLIENT agrees that such determinations are E&A's sole right to make.

4.0 CLIENT DISCLOSURES

4.1 Where the Services requires E&A to penetrate a surface, CLIENT shall furnish and/or shall direct CLIENT'S or CLIENT'S Contractors to furnish E&A information identifying the type and location of utility lines and other man-made objects known, suspected, or assumed to be located beneath or behind the Site's surface. E&A shall be entitled to rely on such information for completeness and accuracy without further investigation, analysis, or evaluation.

4.2 "Hazardous Materials" shall include but not be limited to any substance that poses or may pose a present or potential hazard to human health or the environment whether contained in a product, material, by-product, waste, or sample, and whether it exists in a solid, liquid, semi-solid or gaseous form. CLIENT shall notify E&A of any known, assumed, or suspected regulated, contaminated, or other similar Hazardous Materials that may exist at the Site prior to E&A mobilizing to the Site.

4.3 If any Hazardous Materials are discovered, or are reasonably suspected by E&A after its Services begin, E&A shall be entitled to amend the scope of Services and adjust its fees or fee schedule to reflect any additional work or personal protective equipment and/or safety precautions required by the existence of such Hazardous Materials.

5.0 INFORMATION PROVIDED BY OTHERS - CLIENT waives, releases and discharges E&A from and against any claim for damage, injury or loss allegedly arising out of or in connection with errors, omissions, or inaccuracies in documents and other information in any form provided to E&A by CLIENT or CLIENT'S Contractors, including such information that becomes incorporated into E&A documents.

6.0 CONCEALED RISKS - CLIENT acknowledges that special risks are inherent in sampling, testing and/or evaluating concealed conditions that are hidden from view and/or neither readily apparent nor easily accessible, e.g., subsurface conditions, conditions behind a wall, beneath a floor, or above a ceiling. Such circumstances require that certain assumptions be made regarding existing conditions, which may not be verifiable without expending additional sums of money or destroying otherwise adequate or serviceable portions of a building or component thereof. Accordingly, E&A shall not be responsible for the verification of such conditions unless verification can be made by simple visual observation. CLIENT agrees to bear any and all costs, losses, damages and expenses (including, but not limited to, the cost of E&A's additional services) in any way arising from or in connection with the existence or discovery of such concealed or unknown conditions.

7.0 RIGHT OF ENTRY/DAMAGE RESULTING FROM SERVICES

7.1 CLIENT warrants that it possesses the authority to grant E&A right of entry to the site for the performance of Services. CLIENT hereby grants E&A and its agents, subcontractors and/or subconsultants ("Subconsultants"), the right to enter from time to time onto the property in order for E&A to perform its Services. CLIENT

agrees to indemnify and hold E&A and its Subconsultants harmless from any claims arising from allegations that E&A trespassed or lacked authority to access the Site.

7.2 CLIENT warrants that it possesses all necessary permits, licenses and/or utility clearances for the Services to be provided by E&A except where E&A's Proposal explicitly states that E&A will obtain such permits, licenses, and/or utility clearances.

7.3 E&A will take reasonable precautions to limit damage to the Site and its improvements during the performance of its Services. CLIENT understands that the use of exploration, boring, sampling, or testing equipment may cause damage to the Site. The correction and restoration of such common damage is CLIENT'S responsibility unless specifically included in E&A's Proposal.

7.4 CLIENT agrees that it will not bring any claims for liability or for injury or loss against E&A arising from (i) procedures associated with the exploration, sampling or testing activities at the Site, (ii) discovery of Hazardous Materials or suspected Hazardous Materials, or (iii) E&A's findings, conclusions, opinions, recommendations, plans, and/or specifications related to discovery of contamination.

8.0 UNDERGROUND UTILITIES

8.1 E&A shall exercise the Standard of Care in evaluating client-furnished information as well as information readily and customarily available from public utility locating services (the "Underground Utility Information") in its effort to identify underground utilities. The extent of such evaluations shall be at E&A's sole discretion.

8.2 CLIENT recognizes that the Underground Utility Information provided to or obtained by E&A may contain errors or be incomplete. CLIENT understands that E&A may be unable to identify the locations of all subsurface utility lines and man-made features.

8.3 CLIENT waives, releases, and discharges E&A from and against any claim for damage, injury or loss allegedly arising from or related to subterranean structures (pipes, tanks, cables, or other utilities, etc.) which are not called to E&A's attention in writing by CLIENT, not correctly shown on the Underground Utility Information and/or not properly marked or located by the utility owners, governmental or quasi-governmental locators, or private utility locating services as a result of E&A's or E&A's Subconsultant's request for utility marking services made in accordance with local industry standards.

9.0 SAMPLES

9.1 Soil, rock, water, building materials and/or other samples and sampling by-products obtained from the Site are and remain the property of CLIENT. Unless other arrangements are requested by CLIENT and mutually agreed upon by E&A in writing, E&A will retain samples not consumed in laboratory testing for up to sixty (60) calendar days after the first issuance of any document containing data obtained from such samples. Samples consumed by laboratory testing procedures will not be stored.

9.2 Unless CLIENT directs otherwise, and excluding those issues covered in Section 10.0, CLIENT authorizes E&A to dispose of CLIENT'S non-hazardous samples and sampling or testing by-products in accordance with applicable laws and regulations.

10.0 ENVIRONMENTAL RISKS

10.1 When Hazardous Materials are known, assumed, suspected to exist, or discovered at the Site, E&A will endeavor to protect its employees and address public health, safety, and environmental issues in accordance with the Standard of Care. CLIENT agrees to compensate E&A for such efforts.

10.2 When Hazardous Materials are known, assumed, or suspected to exist, or discovered at the Site, E&A and/or E&A's subcontractors will exercise the Standard of Care in containerizing and labeling such Hazardous Materials in accordance with applicable laws and regulations, and will leave the containers on Site. CLIENT is responsible for the retrieval, removal, transport and disposal of such contaminated samples, and sampling process byproducts in accordance with applicable law and regulation.

10.3 Unless explicitly stated in the Scope of Services, E&A will neither subcontract for nor arrange for the transport, disposal, or treatment of Hazardous Materials. At CLIENT'S written request, E&A may assist CLIENT in identifying appropriate alternatives for transport, off-site treatment, storage, or disposal of such substances, but CLIENT shall be solely responsible for the final selection of methods and firms to provide such services. CLIENT shall sign all manifests for the disposal of substances affected by contaminants and shall otherwise exercise prudence in arranging for lawful disposal.

10.4 In those instances where E&A is expressly retained by CLIENT to assist CLIENT in the disposal of Hazardous Materials, samples, or wastes as part of the Proposal, E&A shall do so only as CLIENT'S agent (notwithstanding any other provision of this Agreement to the contrary). E&A will not assume the role of, nor be considered a generator, storer, transporter, or disposer of Hazardous Materials.

10.5 Subsurface sampling may result in unavoidable cross-contamination of certain subsurface areas, as when a probe or excavation/boring device moves through a contaminated zone and links it to an aquifer, underground stream, pervious soil stratum, or other hydrous body not previously contaminated, or connects an uncontaminated zone with a contaminated zone. Because sampling is an essential element of the Services indicated herein, CLIENT agrees this risk cannot be eliminated. Provided such services were performed in accordance with the Standard of Care, CLIENT waives, releases and discharges E&A from and against any claim for damage, injury, or loss allegedly arising from or related to such cross-contamination.

10.6 CLIENT understands that a Phase I Environmental Site Assessment (ESA) is conducted solely to permit E&A to render a professional opinion about the likelihood of the site having a Recognized Environmental Condition on, in, beneath, or near

the Site at the time the Services are conducted. No matter how thorough a Phase I ESA study may be, findings derived from its conduct are highly limited and E&A cannot know or state for an absolute fact that the Site is unaffected or adversely affected by one or more Recognized Environmental Conditions. CLIENT represents and warrants that it understands the limitations associated with Phase I ESAs.

11.0 OWNERSHIP OF DOCUMENTS

- 11.1 E&A shall be deemed the author and owner (or licensee) of all documents, technical reports, letters, photos, boring logs, field data, field notes, laboratory test data, calculations, designs, plans, specifications, reports, or similar documents and estimates of any kind furnished by it [the "Documents of Service"] and shall retain all common law, statutory and other reserved rights, including copyrights. CLIENT shall have a limited, non-exclusive license to use copies of the Documents of Service provided to it in connection with its Project for which the Documents of Service are provided until the completion of the Project.
- 11.2 E&A's Services are performed and Documents of Service are provided for the CLIENT'S sole use. CLIENT understands and agrees that any use of the Documents of Service by anyone other than the CLIENT and its Contractors is not permitted. CLIENT further agrees to indemnify and hold E&A harmless for any errors, omissions or damage resulting from its contractors' use of E&A's Documents of Service.
- 11.3 Without E&A's prior written consent, CLIENT agrees to not use E&A's Documents of Service for the Project if the Project is subsequently modified in scope, structure or purpose. Any reuse without E&A's written consent shall be at CLIENT'S sole risk and without liability to E&A or its Subconsultants. CLIENT agrees to indemnify and hold E&A harmless for any errors, omissions or Damage resulting from its use of E&A's Documents of Service after any modification in scope, structure or purpose.
- 11.4 CLIENT agrees to not make any modification to the Documents of Service without the prior written authorization of E&A. To the fullest extent permitted by law, CLIENT agrees to indemnify, defend, and hold E&A harmless from any damage, loss, claim, liability or cost (including reasonable attorneys' fees and defense costs) arising out of or in connection with any unauthorized modification of the Documents of Service by CLIENT or any person or entity that acquires or obtains the Documents of Service from or through CLIENT. CLIENT represents and warrants that the Documents of Service shall be used only as submitted by E&A.

12.0 SAFETY

- 12.1 Unless expressly agreed to in writing in its Proposal, CLIENT agrees that E&A shall have no responsibility whatsoever for any aspect of site safety other than for its own employees. Nothing herein shall be construed to relieve CLIENT and/or its Contractors from their responsibility for site safety. CLIENT also represents and warrants that the General Contractor is solely responsible for Project site safety and that E&A personnel may rely on the safety measures provided by the General Contractor.
- 12.2 In the event E&A assumes in writing limited responsibility for specified safety issues, the acceptance of such responsibilities does not and shall not be deemed an acceptance of responsibility for any other non-specified safety issues, including, but not limited to those relating to excavating, fall protection, shoring, drilling, backfilling, blasting, or other construction activities.

13.0 CONSTRUCTION TESTING AND REMEDIATION SERVICES

- 13.1 CLIENT understands that construction testing and observation services are provided in an effort to reduce, but cannot eliminate, the risk of problems arising during or after construction or remediation. CLIENT agrees that the provision of such Services does not create a warranty or guarantee of any type.
- 13.2 Monitoring and/or testing services provided by E&A shall not in any way relieve the CLIENT'S contractor(s) from their responsibilities and obligations for the quality or completeness of construction as well as their obligation to comply with applicable laws, codes, and regulations.
- 13.3 E&A has no responsibility whatsoever for the means, methods, techniques, sequencing or procedures of construction selected, for safety precautions and programs incidental to work or services provided by any contractor or other consultant. E&A does not and shall not have or accept authority to supervise, direct, control, or stop the work of any of CLIENT'S Contractors or any of their subcontractors.
- 13.4 E&A strongly recommends that CLIENT retain E&A to provide construction monitoring and testing services on a full time basis to lower the risk of defective or incomplete work being installed by CLIENT'S Contractors. If CLIENT elects to retain E&A on a part-time or on-call basis for any aspect of construction monitoring and/or testing, CLIENT accepts the risk that a lower level of construction quality may occur and that defective or incomplete work may result and not be detected by E&A's part time monitoring and testing in exchange for CLIENT'S receipt of an immediate cost savings. Unless the CLIENT can show that E&A's errors or omissions are contained in E&A's reports, CLIENT waives, releases and discharges E&A from and against any other claims for errors, omissions, damages, injuries, or loss alleged to arise from defective or incomplete work that was monitored or tested by E&A on a part-time or on-call basis. Except as set forth in the preceding sentence, CLIENT agrees to indemnify and hold E&A harmless from all Damages, costs, and attorneys' fees, for any claims alleging errors, omissions, damage, injury or loss allegedly resulting from work that was monitored or tested by E&A on a part-time or on-call basis.

14.0 CERTIFICATIONS - CLIENT may request, or governing jurisdictions may require, E&A to provide a "certification" regarding the Services provided by E&A. Any "certification" required of E&A by the CLIENT or jurisdiction(s) having authority over some or all aspects of the Project shall consist of E&A's inferences and professional opinions based on the limited sampling, observations, tests, and/or analyses performed by E&A at discrete locations and times. Such "certifications" shall constitute E&A's professional opinion of a condition's existence, but E&A does not guarantee that such condition exists, nor does it relieve other parties of the responsibilities or obligations such parties have with respect to the possible existence of such a condition. CLIENT agrees it cannot make the resolution of any dispute with E&A or payment of any amount due to E&A contingent upon E&A signing any such "certification."

15.0 BILLINGS AND PAYMENTS

- 15.1 Billings will be based on the unit rates, plus travel costs, and other reimbursable expenses as stated in the professional fees section of the Proposal. Any estimate of professional fees stated shall not be considered as a not-to-exceed or lump sum amount unless otherwise explicitly stated. CLIENT understands and agrees that even if E&A agrees to a lump sum or not-to-exceed amount, that amount shall be limited to number of hours, visits, trips, tests, borings, or samples stated in the Proposal.
- 15.2 CLIENT agrees that all professional fees and other unit rates may be adjusted annually to account for inflation based on the most recent 12-month average of the Consumer Price Index (CPI-U) for all items as established by www.bls.gov when the CPI-U exceeds an annual rate of 2.0%.
- 15.3 Should E&A identify a Changed Condition(s), E&A shall notify the CLIENT of the Changed Condition(s). E&A and CLIENT shall promptly and in good faith negotiate an amendment to the scope of Services, professional fees, and time schedule.
- 15.4 CLIENT recognizes that time is of the essence with respect to payment of E&A's invoices, and that timely payment is a material consideration for this Agreement. All payment shall be in U.S. funds drawn upon U.S. banks and in accordance with the rates and charges set forth in the professional Fees. Invoices are due and payable upon receipt.
- 15.5 If CLIENT disputes all or part of an invoice, CLIENT shall provide E&A with written notice stating in detail the facts of the dispute within fifteen (15) calendar days of the invoice date. CLIENT agrees to pay the undisputed amount of such invoice promptly.
- 15.6 E&A reserves the right to charge CLIENT an additional charge of one-and-one-half (1.5) percent (or the maximum percentage allowed by Law, whichever is lower) of the invoiced amount per month for any payment received by E&A more than thirty (30) calendar days from the date of the invoice, excepting any portion of the invoiced amount in dispute. All payments will be applied to accrued interest first and then to the unpaid principal amount. Payment of invoices shall not be subject to unilateral discounting or set-offs by CLIENT.
- 15.7 CLIENT agrees that its obligation to pay for the Services is not contingent upon CLIENT'S ability to obtain financing, zoning, approval of governmental or regulatory agencies, permits, final adjudication of a lawsuit, CLIENT'S successful completion of the Project, settlement of a real estate transaction, receipt of payment from CLIENT's client, or any other event unrelated to E&A provision of Services. Retainage shall not be withheld from any payment, nor shall any deduction be made from any invoice on account of penalty, liquidated damages, or other sums incurred by CLIENT. It is agreed that all costs and legal fees including actual attorney's fees, and expenses incurred by E&A in obtaining payment under this Agreement, in perfecting or obtaining a lien, recovery under a bond, collecting any delinquent amounts due, or executing judgments, shall be reimbursed by CLIENT.
- 15.8 Unless CLIENT has provided notice to E&A in accordance with Section 16.0 of these Terms, payment of any invoice by the CLIENT shall mean that the CLIENT is satisfied with E&A's Services and is not aware of any defects in those Services.
- 16.0 DEFECTS IN SERVICE**
- 16.1 CLIENT and CLIENT'S Contractors shall promptly inform E&A during active work on any project of any actual or suspected defects in the Services so to permit E&A to take such prompt, effective remedial measures that in E&A's opinion will reduce or eliminate the consequences of any such defective Services. The correction of defects attributable to E&A's failure to perform in accordance with the Standard of Care shall be provided at no cost to CLIENT. However, E&A shall not be responsible for the correction of any deficiency attributable to client-furnished information, the errors, omissions, defective materials, or improper installation of materials by CLIENT's personnel, consultants or contractors, or work not observed by E&A. CLIENT shall compensate E&A for the costs of correcting such defects.
- 16.2 Modifications to reports, documents and plans required as a result of jurisdictional reviews or CLIENT requests shall not be considered to be defects. CLIENT shall compensate E&A for the provision of such Services.

17.0 INSURANCE - E&A represents that it and its subcontractors and subconsultants maintain workers compensation insurance, and that E&A is covered by general liability, automobile and professional liability insurance policies in coverage amounts it deems reasonable and adequate. E&A shall furnish certificates of insurance upon request. The CLIENT is responsible for requesting specific inclusions or limits of coverage that are not present in E&A insurance package. The cost of such inclusions or coverage increases, if available, will be at the expense of the CLIENT.

18.0 LIMITATION OF LIABILITY

- 18.1 CLIENT AGREES TO ALLOCATE CERTAIN RISKS ASSOCIATED WITH THE PROJECT BY LIMITING E&A'S TOTAL LIABILITY TO CLIENT ARISING FROM E&A'S PROFESSIONAL LIABILITY, I.E. PROFESSIONAL ACTS, ERRORS, OR OMISSIONS AND FOR ANY AND ALL CAUSES INCLUDING NEGLIGENCE, STRICT LIABILITY, BREACH OF CONTRACT, OR BREACH OF WARRANTY, INJURIES, DAMAGES, CLAIMS, LOSSES, EXPENSES, OR CLAIM EXPENSES (INCLUDING REASONABLE ATTORNEY'S FEES) RELATING TO PROFESSIONAL SERVICES PROVIDED UNDER THIS AGREEMENT TO THE FULLEST EXTENT PERMITTED BY LAW. THE ALLOCATION IS AS FOLLOWS.
- 18.1.1 If the proposed fees are \$10,000 or less, E&A's total aggregate liability to CLIENT shall not exceed \$20,000, or the total fee received for the services rendered, whichever is greater.
- 18.1.2 If the proposed fees are in excess of \$10,000, E&A's total aggregate liability to CLIENT shall not exceed \$50,000, or the total fee for the services rendered, whichever is greater.
- 18.2 CLIENT agrees that E&A shall not be responsible for any injury, loss or damage of any nature, including bodily injury and property damage, arising directly or indirectly, in whole or in part, from acts or omissions by the CLIENT, its employees, agents, staff, consultants, contractors, or subcontractors to the extent such injury, damage, or loss is caused by acts or omissions of CLIENT, its employees, agents, staff, consultants, contractors, subcontractors or person/entities for whom CLIENT is legally liable.

18.3 CLIENT agrees that E&A's liability for all non-professional liability arising out of this Agreement or the services provided as a result of the Proposal be limited to \$500,000.

19.0 INDEMNIFICATION

19.1 Subject to Section 18.0, E&A agrees to hold harmless and indemnify CLIENT from and against damages arising from E&A's negligent performance of its Services, but only to the extent that such damages are found to be caused by E&A's negligent acts, errors or omissions, (specifically excluding any damages caused by any third party or by the CLIENT.)

19.2 To the fullest extent permitted by law, CLIENT agrees to indemnify, and hold E&A harmless from and against any and all liability, claims, damages, demands, fines, penalties, costs and expenditures (including reasonable attorneys' fees and costs of litigation defense and/or settlement) ("Damages") caused in whole or in part by the acts, errors, or omissions of the CLIENT or CLIENT's employees, agents, staff, contractors, subcontractors, consultants, and clients, provided such Damages are attributable to: (a) the bodily injury, personal injury, sickness, disease and/or death of any person; (b) the injury to or loss of value to tangible personal property; or (c) a breach of these Terms. The foregoing indemnification shall not apply to the extent such Damage is found to be caused by the sole negligence, errors, omissions or willful misconduct of E&A.

19.3 It is specifically understood and agreed that in no case shall E&A be required to pay an amount of Damages disproportional to E&A's culpability. IF CLIENT IS A HOMEOWNER, HOMEOWNERS' ASSOCIATION, CONDOMINIUM OWNER, CONDOMINIUM OWNER'S ASSOCIATION, OR SIMILAR RESIDENTIAL OWNER, E&A RECOMMENDS THAT CLIENT RETAIN LEGAL COUNSEL BEFORE ENTERING INTO THIS AGREEMENT TO EXPLAIN CLIENT'S RIGHTS AND OBLIGATIONS HEREUNDER, AND THE LIMITATIONS, AND RESTRICTIONS IMPOSED BY THIS AGREEMENT. CLIENT AGREES THAT FAILURE OF CLIENT TO RETAIN SUCH COUNSEL SHALL BE A KNOWING WAIVER OF LEGAL COUNSEL AND SHALL NOT BE ALLOWED ON GROUNDS OF AVOIDING ANY PROVISION OF THIS AGREEMENT.

19.4 IF CLIENT IS A RESIDENTIAL BUILDER OR RESIDENTIAL DEVELOPER, CLIENT SHALL INDEMNIFY AND HOLD HARMLESS E&A AGAINST ANY AND ALL CLAIMS OR DEMANDS DUE TO INJURY OR LOSS INITIATED BY ONE OR MORE HOMEOWNERS, UNIT-OWNERS, OR THEIR HOMEOWNER'S ASSOCIATION, COOPERATIVE BOARD, OR SIMILAR GOVERNING ENTITY AGAINST CLIENT WHICH RESULTS IN E&A BEING BROUGHT INTO THE DISPUTE.

19.5 IN NO EVENT SHALL THE DUTY TO INDEMNIFY AND HOLD ANOTHER PARTY HARMLESS UNDER THIS SECTION 19.0 INCLUDE THE DUTY TO DEFEND.

20.0 CONSEQUENTIAL DAMAGES

20.1 CLIENT shall not be liable to E&A and E&A shall not be liable to CLIENT for any consequential damages incurred by either due to the fault of the other or their employees, consultants, agents, contractors or subcontractors, regardless of the nature of the fault or whether such liability arises in breach of contract or warranty, tort, statute, or any other cause of action. Consequential damages include, but are not limited to, loss of use and loss of profit.

20.2 E&A shall not be liable to CLIENT, or any entity engaged directly or indirectly by CLIENT, for any liquidated damages due to any fault, or failure to act, in part or in total by E&A, its employees, agents, or subcontractors.

21.0 SOURCES OF RECOVERY

21.1 All claims for damages related to the Services provided under this Agreement shall be made Ellis & Associates, Inc. and no other person or entity. CLIENT agrees that it shall not name any affiliated entity including parent, peer, or subsidiary entity in any lawsuit brought under this Agreement.

21.2 In the event of any dispute or claim between CLIENT and E&A arising out of in connection with the Project and/or the Services, CLIENT and E&A agree that they will look solely to each other for the satisfaction of any such dispute or claim. Moreover, notwithstanding anything to the contrary contained in any other provision herein, CLIENT and E&A's agree that their respective shareholders, principals, partners, members, agents, directors, officers, employees, and/or owners shall have no liability whatsoever arising out of or in connection with the Project and/or Services provided hereunder. In the event CLIENT brings a claim against an affiliated entity, parent entity, subsidiary entity, or individual officer, director or employee in contravention of this Section 21, CLIENT agrees to hold E&A harmless from and against all damages, costs, awards, or fees (including attorneys' fees) attributable to such act.

21.3 For projects located in Florida, the parties agree that Pursuant to Fla. Stat. Sections 558.002 and 558.0035, CLIENT agrees that an individual employee or agent of E&A may not be held individually liable for negligence for acts or omissions arising out of the Services.

22.0 **THIRD PARTY CLAIMS EXCLUSION** - CLIENT and E&A agree that the Services are performed solely for the benefit of the CLIENT and are not intended by either CLIENT or E&A to benefit any other person or entity. To the extent that any other person or entity is benefited by the Services, such benefit is purely incidental and such other person or entity shall not be deemed a third party beneficiary to the Agreement. No third-party shall have the right to rely on E&A's opinions rendered in connection with E&A's Services without written consent from both CLIENT and E&A, which shall include, at a minimum, the third-party's agreement to be bound to the same Terms and Conditions contained herein and third-party's agreement that E&A's Scope of Services performed is adequate.

23.0 DISPUTE RESOLUTION

23.1 In the event any claims, disputes, and other matters in question arising out of or relating to these Terms or breach thereof (collectively referred to as "Disputes"), the parties shall promptly attempt to resolve all such Disputes through executive negotiation between senior representatives of both parties familiar with the Project.

The parties shall arrange a mutually convenient time for the senior representative of each party to meet. Such meeting shall occur within fifteen calendar (15) days of either party's written request for executive negotiation or as otherwise mutually agreed. Should this meeting fail to result in a mutually agreeable plan for resolution of the Dispute, CLIENT and E&A agree that either party may bring litigation.

23.2 CLIENT shall make no claim (whether directly or in the form of a third-party claim) against E&A unless CLIENT shall have first provided E&A with a written certification executed by an independent engineer licensed in the jurisdiction in which the Project is located, reasonably specifying each and every act or omission which the certifier contends constitutes a violation of the Standard of Care. Such certificate shall be a precondition to the institution of any judicial proceeding and shall be provided to E&A thirty (30) days prior to the institution of such judicial proceedings.

23.3 Litigation shall be instituted in a court of competent jurisdiction in the county or district in which E&A's office contracting with the CLIENT is located. The parties agree that the law applicable to these Terms and the Services provided pursuant to the Proposal shall be the laws of the Commonwealth of Virginia, but excluding its choice of law rules. Unless otherwise mutually agreed to in writing by both parties, CLIENT waives the right to remove any litigation action to any other jurisdiction. Both parties agree to waive any demand for a trial by jury.

24.0 CURING A BREACH

24.1 A party that believes the other has materially breached these Terms shall issue a written cure notice identifying its alleged grounds for termination. Both parties shall promptly and in good faith attempt to identify a cure for the alleged breach or present facts showing the absence of such breach. If a cure can be agreed to or the matter otherwise resolved within thirty (30) calendar days from the date of the termination notice, the parties shall commit their understandings to writing and termination shall not occur.

24.2 Either party may waive any right provided by these Terms in curing an actual or alleged breach; however, such waiver shall not affect future application of such provision or any other provision.

25.0 TERMINATION

25.1 CLIENT or E&A may terminate this Agreement for breach, non-payment, or a failure to cooperate. In the event of termination, the effecting party shall so notify the other party in writing and termination shall become effective fourteen (14) calendar days after receipt of the termination notice.

25.2 Irrespective of which party shall effect termination, or the cause therefore, E&A shall promptly render to CLIENT a final invoice and CLIENT shall immediately compensate E&A for Services rendered and costs incurred including those Services associated with termination itself, including without limitation, demobilizing, modifying schedules, and reassigning personnel.

26.0 **TIME BAR TO LEGAL ACTION** - Unless prohibited by law, and notwithstanding any Statute that may provide additional protection, CLIENT and E&A agree that a lawsuit by either party alleging a breach of this Agreement, violation of the Standard of Care, non-payment of invoices, or arising out of the Services provided hereunder, must be initiated in a court of competent jurisdiction no more than two (2) years from the time the party knew, or should have known, of the facts and conditions giving rise to its claim, and shall under no circumstances shall such lawsuit be initiated more than three (3) years from the date of substantial completion of E&A's Services.

27.0 **ASSIGNMENT** - CLIENT and E&A respectively bind themselves, their successors, assigns, heirs, and legal representatives to the other party and the successors, assigns, heirs and legal representatives of such other party with respect to all covenants of these Terms. Neither CLIENT nor E&A shall assign these Terms, any rights thereunder, or any cause of action arising therefrom, in whole or in part, without the written consent of the other. Any purported assignment or transfer, except as permitted above, shall be deemed null, void and invalid, the purported assignee shall acquire no rights as a result of the purported assignment or transfer and the non-assigning party shall not recognize any such purported assignment or transfer.

28.0 **SEVERABILITY** - Any provision of these Terms later held to violate any law, statute, or regulation, shall be deemed void, and all remaining provisions shall continue in full force and effect. CLIENT and E&A shall endeavor to quickly replace a voided provision with a valid substitute that expresses the intent of the issues covered by the original provision.

29.0 **SURVIVAL** - All obligations arising prior to the termination of the agreement represented by these Terms and all provisions allocating responsibility or liability between the CLIENT and E&A shall survive the substantial completion of Services and the termination of the Agreement.

30.0 TITLES: ENTIRE AGREEMENT

30.1 The titles used herein are for general reference only and are not part of the Terms.

30.2 These Terms together with the Proposal, including all exhibits, appendices, and other documents appended to it, constitute the entire agreement between CLIENT and E&A ("Agreement"). CLIENT acknowledges that all prior understandings and negotiations are superseded by this Agreement.

30.3 CLIENT and E&A agree that subsequent modifications to the Agreement shall not be binding unless made in writing and signed by authorized representatives of both parties.

30.4 All preprinted terms and conditions on CLIENT'S purchase order, Work Authorization, or other service acknowledgement forms, are inapplicable and superseded by these Terms and Conditions of Service.

30.5 CLIENT's execution of a Work Authorization, the submission of a start work authorization (oral or written) or issuance of a purchase order constitutes CLIENT's acceptance of this Proposal and these Terms and their agreement to be fully bound to them. If CLIENT fails to provide E&A with a signed copy of these Terms or the attached Work Authorization, CLIENT agrees that by authorizing and accepting the services of E&A, it will be fully bound by these Terms as if they had been signed by CLIENT.



November 28, 2016

Mr. Mark Crosley
Executive Director
Florida Inland Navigation District
1314 Marcinski Road
Jupiter, FL 33477

Re: Annual Adjustment of Billing Rates

Dear Mr. Crosley:

Please find attached our proposed schedule of billing rates effective January 1, 2017 through December 31, 2017 (Attachment 1). Attachment 1 includes our currently effective rates for comparison and notes the percentage change with the proposed rate for each staff category. Variations in the percentage increase by labor category result from changes in staffing, such as new hires and promotions. As noted in Attachment 1, the average percentage increase in rates for 2016 is 2.6% for all staff and 3.9% for professional and technical staff.

We have added a third level to the GIS labor categories we proposed last year. We are expanding our GIS capabilities and anticipate the FIND will use this area of expertise significantly in the future. The two levels we previously proposed no longer fit with our current staffing. The wide range of experience among our GIS professionals, and their corresponding salaries, create a wide gap in billing rates among staff. Therefore, we submit that adding the third level will benefit the FIND by charging a significantly lower rate for the Staff GIS Analyst, an average rate for the new Project GIS Specialist category, and a higher rate the Senior GIS Specialist for QA/QC and highly-technical issues.

So that you can fairly evaluate our rates, we also include supporting documentation comparing our fully-burdened rates in Attachment 1 with industry averages (Attachments 2 and 3). Attachment 2 provides a comparison of the direct salaries included in our proposed rates with the Florida Department of Transportation's (FDOT) average negotiated rates for the period May 4, 2016 through November 3, 2016 and with the *Zweig Group 2016 Salary Survey of Northeast & South Atlantic Engineering Firms*. As noted in Attachment 2, our average proposed direct rates are 0.2% lower than the average FDOT rates and only 0.8% higher than Zweig Group rates. Considering that both sources base their information on 2015 and 2016 salaries, we feel that our direct rates for 2017 are fair and reasonable.

Furthermore, Attachment 3 provides average overhead rates, as audited by the FDOT from 2013 to 2015, which is the most recently published data. The average FDOT home office overhead rate is 169.21%. For comparison purposes, our proposed overhead rate is 168% of direct labor, which is reflected in the burdened rates included in Attachment 1. Therefore, we feel that our overhead rate is also fair and reasonable.

Mark Crosley
November 28, 2016
Page 2 of 2

Finally, our fully-burdened rates in Attachment 1 include our standard 12% profit. This is the standard profit we charge our clients and the profit on labor the FIND has granted us in the past. As previously authorized by the FIND, we include a 10% fee on subcontractor and other direct costs.

Thank you for your consideration of this request. Please let me know if I can answer any questions.

Sincerely,

A handwritten signature in dark ink, appearing to read "R. Bruce Taylor". The signature is fluid and cursive, with the first name "R." and last name "Taylor" clearly distinguishable.

R. Bruce Taylor, Ph.D., P.E.
CEO/Chairman of the Board

Attachments

RBT/lar

ATTACHMENT 1

TAYLOR ENGINEERING, INC.
PROPOSED HOURLY RATES FOR
FLORIDA INLAND NAVIGATION DISTRICT

Effective Date: 1/1/2017
 Expiration Date: 12/31/2017
 Fee on Subconsultants & ODC's: 10%

Labor Category	Current Burdened Hourly Rate	Proposed Burdened Hourly Rate	% Change
R. Bruce Taylor, Ph.D.	\$ 310.00	\$ 310.00	0.0%
President	240.00	240.00	0.0%
Vice President/Principal	187.00	196.00	4.8%
Senior Advisor	188.00	193.00	2.7%
Director/Project Manager	166.00	173.00	4.2%
Senior Professional*	148.00	152.00	2.7%
Project Professional*	109.00	112.00	2.8%
Staff Professional*	86.00	94.00	9.3%
Technical Editor	102.00	104.00	2.0%
Senior CAD Designer*	113.00	119.00	5.3%
Staff CAD Designer*	83.00	83.00	0.0%
Senior GIS Specialist	115.00	158.00	37.4%
Project GIS Specialist	n/a	100.00	n/a
Staff GIS Analyst	85.00	60.00	-29.4%
Administrative/Intern	52.00	54.00	3.8%
 Average Billing Rate — All Staff	 148.67	 152.50	 2.6%
 Average Billing Rate — Professional & Technical Staff	 107.80	 112.00	 3.9%

*Included in calculation of *Average Billing Rate — Professional & Technical Staff*

ATTACHMENT 2

Taylor Engineering, Inc.
Comparison of Proposed Rates to FDOT Average Negotiated Rates
and Zweig Group Average Salaries

Labor Category	Direct Rate Proposed	Equivalent FDOT Job Classification	FDOT Average Rate	Equivalent Zweig-White Classification	Zweig Group Average Rate
R. Bruce Taylor, Ph.D.	103.33	No comparison		No comparison	
President	80.00	Chief Engineer	73.81	President	87.41
Vice President/Principal	65.33	Principal Engineer	68.95	Vice President	62.93
Senior Advisor	64.33	Senior Engineer Principal Engineer	59.74 68.95	Principal Civil Engineer	65.34
Director/Project Manager	57.67	Project Manager	62.45	Department Manager, Civil	61.03
Senior Professional	50.67	Project Manager Senior Engineer	62.45 59.74	Project Manager, Civil	50.61
Project Professional	37.33	Project Engineer Engineer	44.08 36.66	Project Civil Engineer	38.67
Staff Professional	31.33	Engineering Intern	29.26	Entry-level Civil Engineer	26.60
Technical Editor	34.67	No comparison		No comparison	
Senior CAD Designer	39.67	Senior Designer	39.71	Senior Civil Eng. Tech.	33.08
Staff CAD Designer	27.67	Designer CADD/Computer Tech	30.68 27.35	Entry-level Civil Eng. Tech. Mid-Level Civil Eng. Tech.	24.77 26.31
Senior GIS Specialist	52.67	GIS Specialist (75th Percentile)	34.45	GIS Department Manager GIS Principal	43.43 56.91
Project GIS Specialist	33.33	GIS Specialist (Mean)	30.17	GIS Project Manager GIS Project Professional	37.42 31.49
Staff GIS Analyst	20.00	GIS Specialist (25th Percentile)	24.29	Entry-level GIS Professional	19.79
Administrative	18.00	Secretary/Clerical	21.34	Administrative Assistant	17.92
Average Rate ¹	44.46	Average Rate ¹	44.56	Average Rate ¹	44.12

¹ Average Rate excludes categories that have no comparison to FDOT and Zweig-White job classifications.

Attachment 3

Current Averages for Audited Overhead, Expense and Facilities Capital Cost of Money (FCCM) Rates

Updated: January 11, 2016

<u>RATE</u>	<u># OBS.</u>	<u>HIGH</u>	<u>LOW</u>	<u>MEAN</u>
Home Office Overhead	1045	241.15%	112.40%	169.21%
Field Office Overhead	496	175.76%	84.28%	123.69%
Home Office Expense	945	36.14%	0.610%	9.80%
Field Office Expense	442	33.65%	1.10%	13.19%
FCCM	943	1.392%	0.035%	0.347%

The averages were calculated using three years worth of audit data, after eliminating the highest and lowest 5%. Self-certified rates, interim rates, and rates determined from job cost accounting system reviews were also eliminated from the calculations, since they are unaudited rates.

The average overhead, expense, and FCCM rates are to be used for comparatively assessing consultant cost control efforts, in accordance with Section 5.0, Negotiation of Operating Margin.

The averages will be used as caps on maximum awarded overhead (indirect costs) rates for firms who submit unaudited rates, including interim reimbursement rates, self-certified reimbursement rates, and job cost accounting system review reimbursement rates for use on professional services contracts.

RESOLUTION NO. 2016-06

A RESOLUTION OF THE BOARD OF COMMISSIONERS OF FLORIDA INLAND NAVIGATION DISTRICT, DELEGATING CERTAIN AUTHORITIES TO THE EXECUTIVE DIRECTOR (OR, IN HIS/HER ABSENCE, THE ASSISTANT EXECUTIVE DIRECTOR)

WHEREAS, the Board of Commissioners of the Florida Inland Navigation District (the “Board”) is the administrative and policy making body of the Florida Inland Navigation District (the “District”) pursuant to s.374.983 and 374.984, F.S.; and

WHEREAS, the Board has determined that the delegation of certain routine administrative functions to the District’s Executive Director will facilitate more effective and efficient administrative operations.

NOW, THEREFORE, be it resolved by the Board of Commissioners of the Florida Inland Navigation District:

Section 1. The Board hereby delegates certain routine administrative functions to the District’s Executive Director as described in the attached revised Exhibit "A" (the “Delegation”).

Section 2. The Executive Director will report to the Board monthly on the Delegations that he/she approves.

Section 3. In the event that the Executive Director is on vacation or is otherwise absent from the office for a period of three (3) or more consecutive business days, the administrative functions described in the attached Exhibit "A" are delegated by the Board to the Assistant Executive Director until the earlier of: the return of the Executive Director or the Board taking further action.

Section 4. This Delegation will be reviewed annually by the Board in conjunction with the development and approval of the annual District budget.

Section 5. This Resolution shall become effective upon adoption.

Upon motion by Commissioner _____ and seconded by Commissioner _____, the Board approved the Resolution as follows:

[This space intentionally left blank]

Lynn Williams	_____
Michael O'Steen	_____
J. Carl Blow	_____
Jon Netts	_____
Susanne McCabe	_____
Jerry H. Sansom	_____
Paul U. Dritenbas	_____
Don Donaldson	_____
Donald Cuzzo	_____
Charles C. Isiminger	_____
Tyler Chappell	_____
Spencer T. Crowley III	_____

The Chair thereupon declared the resolution duly passed and adopted this 16th day of December, 2016.

**FLORIDA INLAND NAVIGATION
DISTRICT**

By: _____
Don Cuzzo, Chair

APPROVED AS TO FORM AND
LEGAL SUFFICIENCY

By: _____
Peter L. Breton, Esq.
General Counsel

EXHIBIT "A"

**FLORIDA INLAND NAVIGATION DISTRICT
BOARD OF COMMISSIONERS DELEGATIONS OF AUTHORITY**

TO THE EXECUTIVE DIRECTOR

Agreements:

Execute Agreements for projects approved by the Board, such as but not limited to the following:

- 1) Assistance Program Agreements.
- 2) Assistance Program Agreement Modifications.
- 3) Construction, Engineering, or Environmental Services Agreements.

Leases:

Execute lease agreements on District properties for the following uses:

- 1) Storage of equipment or construction material/supplies.
- 2) Placing 1,000 cubic yards or less of dredged material on the site in accordance with the District's standard use agreement.
- 3) Removing 20,000 cubic yards or less of dredged material from a site for public purposes.
- 4) Leases approved by the Board or the Land Acquisition and Management Committee.
- 5) Leases with minor non-substantive amendments that have been reviewed and approved by the District's general counsel and which have been previously approved by the Board or the Land Acquisition and Management Committee.

Financial Issues:

- 1) Approve expenditures of \$5,000.00 or less for administration purposes.
- 2) Approve expenditures of \$10,000.00 or less for land acquisition and management and dredging related services.
- 3) Execute financial reports to the State that have been approved by the Board or that provide financial information from a Board-approved financial audit.
- 4) Execute resolutions for the purchase of certificates of deposit with State approved and qualified banks and institutions.
- 5) Authorize the designation of fund balance categories for the financial statements.

Bids:

- 1) Reject bids for projects where there was only one bidder and/or the bid(s) was twenty-five (25) percent or more above the construction estimate.
- 2) Award bids of \$10,000.00 or less.

Permit Issues

- 1) Sign permit applications for Board-approved construction projects on District properties.
- 2) Issue Letters of No Objection to permitting agencies when neighboring projects affect District properties.

Travel

- 1) Authorize travel and make decisions about the most economical method of travel in accordance with s.112.061, F.S. for staff and commissioners.

Other

Execute the following:

- 1) Emergency contracts of \$20,000.00 or less
- 2) Contracts of all types meeting the above referenced dollar thresholds.
- 3) Equipment leases.
- 4) Approve contract change orders totaling up to ten (10) percent of the initially executed contract value with the concurrence of the Chair.
- 5) Approve change orders exceeding ten (10) percent of the initially executed contract value but not more than twenty (20) percent of the initially executed contract value if there is a finding by the Engineer, the District's Executive Director and the District's Chair that a delay in approving the change order will result in significant negative financial, environmental, or health safety and welfare impacts that could be avoided by a prompt approval.
- 6) Execute a termination of employment and general release agreement in accordance with Florida Statutes § 215.425(4)(b) with the concurrence of the Chair and the General Counsel.

ALCALDE & FAY
GOVERNMENT & PUBLIC AFFAIRS CONSULTANTS

December 2, 2016

MEMORANDUM

TO: Mark Crosley, Executive Director
Janet Zimmerman, Assistant Executive Director

FROM: Jim Davenport

SUBJECT: Federal Legislative Report

FY 2017 FUNDING FOR THE INTRACOASTAL WATERWAY

Following last month's elections, Republican Leadership announced they would be seeking a continuing resolution (CR) through next year that would effectively lock-in current spending levels after the current CR expires on December 9, 2016. The decision to advance a CR came after discussions between senior House Republicans and the Trump transition team, as the President-elect's team reportedly wanted to give incoming President Trump an opportunity to fully weigh in on spending decisions.

House Appropriations Committee Chairman Harold Rogers, (R-KY) said the text of the CR would be released in the coming days with an expected vote on the House floor sometime next week. What is unknown however is how long the CR will run into the New Year. Republicans in both chambers said this week that a new stopgap spending bill will almost certainly stretch into April and possibly longer due to the Senate's jam-packed 2017 schedule that will include confirmations of President-elect Donald Trump's Cabinet. Republican leaders warned that the delay also could mean yet another continuing resolution would have to be passed that would extend through the end of the fiscal year in September.

As a result of the CR, the Corps FY 2017 Work Plan will likely be delayed until spring, but we will continue working with your congressional delegation and the Corps to obtain FY 2017 funding for the IWW.

We will continue to keep you apprised of our efforts.