

# PRELIMINARY AGENDA

## FLORIDA INLAND NAVIGATION DISTRICT Board of Commissioners Meeting

9:00 a.m., Saturday, April 16, 2016

The Hilton Garden Inn  
55 Town Center Boulevard  
City of Palm Coast (Flagler County), FL 32164-2387

### **Item 1.**      **Call to Order.**

Chair Blow will call the meeting to order.

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### **Item 2.**      **Pledge of Allegiance.**

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

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### **Item 3.**      **Roll Call.**

Secretary McCabe will call the roll.

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### **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.

(Please see back up pages following the **COLOR** page)

RECOMMEND:      Approval of the Consent Agenda.

- a) City of Palm Coast Annual Intracoastal Waterway Cleanup Program Funding Request, Flagler County, FL.
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### **Item 5.**      **Additions or Deletions.**

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

RECOMMEND:      Approval of a final agenda.

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### **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.

- March 18, 2016 - Finance & Budget Committee Mtg. (Please see back up pp 6-8)
- March 18, 2016 - Board Meeting (Please see back up pages 9-32)

RECOMMEND:        Approval of the minutes as presented.

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**Item 8.        Staff Report on Flagler County Area Projects.**

Staff will present a report on the District's Flagler County area projects.

(Please see back up pages 33-47)

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**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 48-53)

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**Item 10.       Work Order with the U.S. Army Corps of Engineers for Maintenance Dredging of the Intracoastal Waterway in the Vicinity of St. Augustine Inlet and Matanzas Inlet., St. Johns, County, FL.**

The U.S. Army Corps of Engineers (USACE) has been finalizing the plans and specifications for the maintenance dredging of the Intracoastal Waterway (IWW) in the vicinity of St. Augustine Inlet and Matanzas Inlet. These areas are routinely maintenance dredged at approximately 5 and 3 year intervals, respectively.

Approximately 280,000 cu/yds beach compatible material will be removed from the IWW channel in the vicinity of St. Augustine Inlet and placed on the beaches at Anastasia south of the inlet. Approximately 400,000 cu/yds of beach compatible material will be removed from the IWW channel near Matanzas Inlet and placed on the beach at Summer Haven.

The USACE has federal funding available to share on this project. The remaining project costs will be shared by the District. USACE staff will be available to discuss this item in detail and will present a Work Order for this project at the Board meeting.

*(Back up to be presented at the Board meeting)*

RECOMMEND        Approval of Work Order with the U.S. Army Corps of Engineers for Maintenance Dredging of the IWW in the Vicinity of St. Augustine Inlet and Matanzas Inlet, St. Johns County, FL.

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**Item 11.**      **Status Report on the U.S. Army Corps of Engineers Reauthorization of Regional General Permit (RGP) SAJ-93, and Efforts to Initiate Regional Programmatic Permitting of Intracoastal Waterway (IWW) Maintenance Projects.**

Staff of the USACE are scheduled to provide a status of the Regional General Permit (RGP) for the Intracoastal Waterway as well as initiating a programmatic review of the permitting of Intracoastal Waterway maintenance projects.

Currently, two Navigation District maintenance dredging projects (Nassau Reach 1 and St. Lucie Reach 1) are being delayed pending the issuance of the RGP. The RGP is generally approved for 10 years, and the programmatic permitting review would be a new process for District maintenance navigation projects that could set precedent for years.

(Please see back up pages 54-79)

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

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**Item 12.**      **Pipeline Easement Relocation and Reconstruction, Dredged Material Management Area SJ-14, St. Johns County, FL.**

The PARC Group, owners of land adjacent to Dredged Material Management Area (DMMA) SJ-14, have approached the District to realign the current pipeline easement for this site. This activity will also necessitate reconstruction of portion of the existing pipeline. PARC Group will handle all costs and construction administration for this project. The District will solicit a scope of work and fee quote from Taylor Engineering, reimbursable by the PARC Group, to coordinate this activity.

(Please see back up pages 80-88)

RECOMMEND      Approval of an easement relocation and pipeline reconstruction for DMMA SJ-14, St. Johns County, FL.

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**Item 13.**      **Scope of Professional Engineering Services for Maintenance Dredging of the Intracoastal Waterway in the Vicinity of Jupiter Inlet, Palm Beach County, FL.**

The Intracoastal Waterway (IWW) near the vicinity of the Jupiter Inlet is one of the District's most frequently maintained dredging areas. Approximately every three years this section of the IWW area requires the removal of approximately 100,000+ cu/yds of material. This beach-quality material is placed on the beaches south of the inlet as a beneficial use of dredged material.

The Jupiter Inlet District (JID) maintains the Jupiter Inlet channel and subsequently dredges the inlet sand trap every year. The District plans to partner with the JID to cost-share in their next dredging event, thereby saving mobilization and demobilization costs for each party, and potentially saving on the unit costs per cubic yard by conducting an overall larger project. Note, Taylor Engineering is the engineer of record for both the JID and the District.

*(Continued next page)*

**(Item 13. Cont.)**

(Please see back up pages 89-94)

RECOMMEND: Approval of a scope and cost proposal in the amount of \$33,655.44 from Taylor Engineering for engineering services for the maintenance dredging of the IWW in the vicinity of Jupiter Inlet, Palm Beach County, FL.

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**Item 14. 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.

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**Item 15. 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 95-98)

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

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**Item 16. Additional Staff Comments and Additional Agenda Items.**

a) Election of Officers – The annual election of officers will occur at the Board's May meeting.

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**Item 17. Additional Commissioners Comments.**

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**Item 18. 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 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.*



**MINUTES OF THE  
FLORIDA INLAND NAVIGATION DISTRICT**

**Finance and Budget Committee Meeting**

**8:45 a.m., Friday, March 18, 2016**

**The Casa Marina Hotel**

**691 1<sup>st</sup> Street North**

**Jacksonville Beach, Duval County, Florida 32250-7101**

**ITEM 1.      Call to Order.**

Committee Chair Netts called the meeting to order at 8:45 a.m.

**ITEM 2.      Roll Call.**

Assistant Executive Director Janet Zimmerman called the roll and Committee Chair Netts, Secretary McCabe, and Commissioner Sansom were present. Vice-Chair Cuozzo 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 no additions or deletions to the agenda.

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

**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. Financial Statements for January of 2016.**

Mr. Crosley presented the District's financial statements for January of 2016.

Mr. Crosley stated that the First Atlantic Bank \$3 million CD was renewed at a new interest rate of 0.70%. The \$5 million TD Bank CD was renewed at an interest rate of 0.70%. The estimated annual Effective Yield on the District's investments is 0.55%, which is better than the Benchmark of the State Board of Business Administration's (S.B.A.) Effective Yield of 0.48%. He noted that the interest revenue is covering much of the District's administrative expenses. The District's BB&T checking account has small balance of approximately \$900.00 and will be closed in April of 2016. The Fund Equity account includes \$3.25 million of Reserve Expenditures for the District's Assistance Programs.

Mr. Crosley stated that the District's tax collections are in line and proceeding. He asked for questions. There were none.

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

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

Mr. Crosley presented the Budget Summary and Project Status Expenditure Reports for January of 2016. He asked for questions. There were none.

**ITEM 7. Delegation of Authority Report.**

Mr. Crosley presented the Executive Director's Delegation of Authority Report and stated that twelve (12) actions were taken from February 9, 2016 through March 8, 2016.

Mr. Crosley noted that he approved a scope of work and fee quote in the amount of \$8,996.00 for the entrance re-design at DMMA MSA-641A in Delray Beach.

Commissioner Sansom noted that Brevard County was awarded an additional \$21.5 million from the State Legislature for future muck dredging. He asked staff to check on the county regarding their future muck dredging projects.

**ITEM 8.**      **Additional Agenda Items or Staff Comments.**

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

**ITEM 9.**      **Additional Commissioners Comments.**

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

**ITEM 10.**      **Adjournment.**

Committee Chair Netts stated that hearing no further business the meeting was adjourned at 8:57 a.m.



**MINUTES OF THE  
FLORIDA INLAND NAVIGATION DISTRICT**

**Board of Commissioners Meeting**

**9:00 a.m., Friday, March 18, 2016**

**The Casa Marina Hotel**

**691 1<sup>st</sup> Street North**

**Jacksonville Beach, Duval County, Florida 32250-7101**

**ITEM 1.      Call to Order.**

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

**ITEM 2.      Pledge of Allegiance.**

Commissioner O'Steen led the Pledge of Allegiance to the Flag of the United States of America.

**ITEM 3.      Roll Call.**

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

**ITEM 4.      Consent Agenda.**

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

Treasurer Netts made a motion to approve the Consent Agenda as presented. The motion was seconded by Commissioner Dritenbas. Chair Blow asked for discussion. Hearing none, a vote was taken and the motion passed.

**ITEM 5.      Additions or Deletions.**

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

Mr. Crosley stated that he would like to add to the agenda: Item 14A, Construction Observation Services Rybovich Operations on Peanut Island DMMA: Palm Beach County, Florida; and, Item 19A, Agreement with Duval County Property Appraiser for Exemption Audit Services, Duval County, Florida.

Commissioner Sansom made a motion to approve the final agenda as amended. The motion was seconded by Commissioner O'Steen. Chair Blow asked for discussion. Hearing none, a vote was taken and the motion passed.

**ITEM 6.      Public Comments.**

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

**ITEM 7.      Board Meeting Minutes.**

Chair Blow asked if there were any comments or questions regarding the February 20, 2016 Finance and Budget Committee Minutes and the Board Meeting Minutes. There were none.

Treasurer Netts made a motion to approve the February 20, 2016 Finance and Budget Meeting Minutes, as presented. The motion was seconded by Commissioner Donaldson. Chair Blow asked for discussion. Hearing none, a vote was taken and the motion passed.

**ITEM 8.      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 the Plans and Specifications and

environmental coordination for construction of Dredged Material Management Area (DMMA) O-7 are finalized and awaiting Technical Review, which should be completed by April 15<sup>th</sup>. The project is planned for advertisement on April 25, 2016 and contract award is scheduled for July of 2016.

Ms. Trulock stated that the USACE is moving forward with permitting the IWW Broward Reach I dredging project. The team is working on the permit coordination and documentation for the National Environmental Policy Act (NEPA) with the Florida Department of Environmental Protection (FDEP) for the dredging action and nearshore placement. Given the small quantity of expected dredged material, the most cost-effective way to pursue the dredging would be utilization of a USACE dredge, either the Currituck or Murden. Dredging will take place in February of 2017.

Ms. Trulock 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 are ongoing and will be completed by May of 2016. She stated these projects will be moved up because Work Plan funding cannot be carried forward. She stated that currently, the projects are planned for advertisement in May of 2016, with contract award in July of 2016. A Work Order should be brought to FIND in April of 2016 for a portion of dredging costs.

Ms. Trulock stated that the proposal for a permanent easement for sand placement at Summerhaven has been approved by St. Johns County. Mr. Crosley stated that this creates a permanent easement and material management area for the District and is a positive outcome.

Ms. Trulock stated that the USACE is coordinating the Land Use Agreement with FDEP for placement of material within Anastasia State Park. She stated that it is anticipated that the Land Use Agreement and the FDEP permit modification will be received in plenty of time for a mid-May of 2016 contract advertisement.

Chair Blow asked if the current plan includes running the pipeline down the beach. Ms. Trulock stated that the pipeline will run down the beach towards the northern area of the park which will make the project less expensive, beneficial to the park, and much less intrusive to the public

Ms. Trulock stated that the Plans and Specifications for construction of DMMA O-23 development will kick off on May 16, 2016. NEPA activities were started on November 16, 2015 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 will visit the site in several weeks to determine 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 0-7.

Ms. Trulock stated that she and Martin County staff have met with FDEP in Tallahassee to discuss modification of the existing permit held by the 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. She stated that Mr. Brantley with FDEP thought that this would be a minor permit modification, noting that the USACE has all the necessary geo-technical information.

Commissioner Williams asked about the dredging schedule for the IWW South of Fernandina Beach (Nassau Reach I). Mr. Adams stated that Taylor Engineering has met with the agencies regarding the applications and expects the permit application to be submitted within the next two weeks. If everything goes smoothly, dredging should begin in the Fall of 2016.

**ITEM 9.      Work Order with the U.S. Army Corps of Engineers for Construction of Dredged Material Management Area O-7, Martin County, Florida.**

Mr. Crosley stated that the U.S. Army Corps of Engineers (USACE) has been finalizing the plans and specifications for the construction of Dredged Material Management Area (DMMA) O-7 in Martin County. This site was acquired by the District in October of 2003 through a lengthy eminent domain process. The site is one of the District's primary, long-range DMMA's for the maintenance of the Okeechobee Waterway (OWW).

Ms. Trulock presented Work Order No. 42-2016-01 for Construction of DMMA O-7 to support the future dredging of the OWW from north of the Palm City Bridge to the St. Lucie Lock. The OWW dredging project will occur following construction of DMMA O-7. Project changes include removing some drainage features, swale work and less grubbing than originally planned. Gopher tortoise relocation was added to the project. The total project should take about six months.

Chair Blow asked about the access road. Mr. Crosley stated that that the original plan was to utilize the government easement to build the access road to the site. Staff is determining how high this access road needs to be built-up to make it usable for DMMA construction. Staff has attempted to contact the property owner that owns the road to the north of the site which is currently being used to access the site and to date, the property

owner has not objected to that use. Staff has sent a registered letter to that property owner about using the road for heavy equipment for this project and has not received a response. Staff will continue to contact and then negotiate with that property owner.

Treasurer Netts made a motion to approve the Work Order with the U.S. Army Corps of Engineers for the construction of Dredged Material Management (DMMA) Area O-7, Martin County, Florida. The motion was seconded by Commissioner Dritenbas. Chair Blow asked for discussion. Hearing none, a vote was taken and the motion passed.

**ITEM 10.      Staff Report on Duval County Area Projects.**

Mr. Crosley stated that Phase I of the Dredged Material Management Plan (DMMP) for the Intracoastal Waterway in Duval County was completed in 1986 and Phase II of the DMMP was completed in 1993. Land acquisition was completed in 1995.

Mr. Crosley stated that the 50-year dredging projection for the 21 miles of channel in Duval County is 2.3 million cubic yards and the storage projection is 4.4 million cubic yards. Duval County ranks as the fifth highest dredging projection of the District's 12 counties.

Mr. Crosley stated that six (6) upland Dredged Material Management Areas (DMMA) will manage dredged materials from the waterway. All sites have been purchased, four (4) sites are fully constructed and the rest have had Phase 1 development.

Mr. Crosley stated that in the summer of 2013, approximately 74,000 cubic yards of material was offloaded from DMMA DU-2 for the construction of DMMA NA-1 in Nassau County. He stated that DMMA DU-2 was then utilized for placement of the non-beach quality material that was dredged during the dredging of Nassau Reach 2 by the U.S. Army Corps of Engineers (USACE) in 2013.

Mr. Crosley stated that in 2015, a Florida Department of Transportation (FDOT) sub-contractor removed approximately 300,000 cubic yards of material from DMMA DU-2 for roadway projects, at no cost to the District.

Mr. Crosley stated that following the use of DMMA DU-8 in 2012 by a private contractor for area dredging, the issue of pipeline access was again brought forth by the site's adjacent residents. The District elected to design and construct a permanent underground pipeline sleeve along the site's dedicated pipeline access easement. He stated that the project was well-coordinated with the adjacent property owners and has recently been completed.

Mr. Crosley stated that in September of 2014, the Board approved moving forward with the additional design and permitting necessary to complete the construction of DMMA DU-9. In 2015, the Board approved an "environmental matters" agreement with the previous property owner, and the permitting and engineering of the site is progressing. Site construction is tentatively scheduled for 2017.

Mr. Crosley stated that the USACE completed dredging of Dredging Reach II near Nassau Sound in 2013. He stated that this project was funded by FIND. This reach will likely need to be dredged again in 2017.

Mr. Crosley stated that since 1985 the District has provided \$20.3 million in Waterways Assistance Program funding to 147 projects in the county that have a total constructed value of \$41.8 million. The 13 member Jacksonville Waterways Commission meet to discuss and review local waterway issues. They also determine the assistance projects that the county will submit to FIND for funding.

**ITEM 11. Presentation and Discussion of the Transportation Investment Generating Economic Recovery Program.**

Mr. Crosley stated that the Transportation Investment Generating Economic Recovery (TIGER) is a discretionary grant program that provides a unique opportunity for the Federal Department of Transportation (DOT) to invest in road, rail, transit and port projects that promise to achieve national objectives. Since 2009, Congress has dedicated nearly \$4.6 billion for seven rounds of TIGER to fund projects that have a significant impact on the Nation, a region or a metropolitan area.

Mr. Crosley stated that the railroad bridges located on the St. Lucie River (Okeechobee Waterway) and the Loxahatchee River may be eligible for this funding to improve the navigability of the bridges. At the February Board meeting, staff was requested to research this program, coordinate with the various potential partners, and request All Aboard Florida (AAF) to provide a presentation and additional information at today's Board meeting.

Mr. Crosley introduced Mr. Rusty Roberts, Vice President of Government Affairs with AAF, who will provide additional information about the program.

Mr. Roberts stated that the AAF released the project Environmental Impact Statement (EIS) in the fall of 2015. The EIS identified the Loxahatchee, St. Lucie, and New River Railroad Bridges for improvements. He noted that he has also been having discussions with the Jupiter Inlet District (JID) about improving the Loxahatchee River Railroad Bridge and the TIGER Grant program.

Mr. Roberts stated that the AAF will improve the existing Loxahatchee movable span to accommodate two tracks, replace the mechanical components and lift mechanism, replace the east side existing rail and add a second west side rail. The JID is interested in



raising the clearance of the span to the south of the current channel to allow additional boats to pass under the bridge when closed. This additional work will greatly improve boating navigability and safety. All of the bridge work will cost a total of \$17 million, of which AAF will pay \$12 million and the TIGER grant could provide \$5 million. AAF is looking to JID to take the lead and apply for the TIGER grant for this project. AAF would serve as partner offering matching funding as required. AAF is requesting that FIND become the co-applicant to JID for the TIGER grant application.

Mr. Roberts stated that the AAF will replace the electrical and mechanical system, steel as required, and make significant repairs to the bascule on the St. Lucie River Railroad Bridge. Additional improvements for navigation could be made to this bridge and the project would also qualify for a TIGER grant with a local sponsor such as Martin County and FIND. This project would be more challenging because the horizontal span is narrower than the Loxahatchee Railroad Bridge. It would be best if both bridges could be completed under one project agreement. All TIGER grant funding would go toward boater navigability improvements to these bridges. He requested that FND consider writing a letter supporting these projects. He asked for questions.

Mr. Crosley stated that at the District's February meeting this item was discussed and the discussion included both the Loxahatchee River and the St. Lucie Railroad Bridges. The JID is applying for a TIGER grant for the Loxahatchee River Railroad Bridge only. He noted that the JID may also submit an Assistance Application for this project. The Assistance Application will not include the St. Lucie Railroad Bridge. He noted that currently there is not a cooperative local interest in the St. Lucie River project. AAF is

responsible for repairs to the moving lift span of this bridge, but not modifications to the bridge span for navigation improvements.

Commissioner Dritenbas asked if the Loxahatchee River Railroad Bridge is a movable bridge. Mr. Roberts stated that the JID improvements to the Loxahatchee River Railroad Bridge would be to a fixed span. The project could reduce the underside girders to add boater clearance under the bridge. The JID would like eight-feet of clearance but, realistically the project should get between seven to eight-feet of mean-high-water clearance.

Commissioner Donaldson noted that St. Lucie Railroad Bridge width is very narrow and there is barely enough room for one-boat to pass and certainly not enough room for two-way boater traffic. Mr. Roberts stated that the St Lucie Railroad Bridge span is structurally sound and cannot be changed without rebuilding the bridge. Just to the south of the draw span, there are other spans that could be used by boaters but currently there are cables hanging down preventing this boater access. AAF is contacting the Florida East Coast Railway (FEC) to determine why the cables are hanging for low. Chair Blow stated that occasionally the utility companies lease that right-of-way for their cable installations.

Secretary McCabe asked if other partners have been contacted or are interested in this project. Mr. Roberts stated that the Town of Tequesta has been contacted and their Commissioners have met, discussed and support the project. AAF is talking to the Town of Jupiter and will re-address them after their recent elections.

Mr. Roberts stated that the City of Stuart supports St. Lucie Railroad Bridge improvements, but the Martin County Commission does not. A local Congressman would need the support of the County Commission before he/she could support the project.

Commissioner Donaldson stated there would be local support if there was meaningful and true improvements for the boaters. These improvements would have to be over the EIS requirements.

Mr. Crosley stated that FIND could submit a Resolution supporting this project at the April 16<sup>th</sup> Board Meeting. He noted that the TIGER grant application deadline is April 29<sup>th</sup>. Commissioner Sansom suggested that FIND write a letter supporting the project.

Commissioner Sansom asked what AAF would do to the St. Lucie River Railroad Bridge to improve it for navigation purposes. Mr. Roberts stated that AAF would modify the span just south of the draw span by reducing the underside girders to add boater clearance under the bridge. A fleet mooring could be installed to allow a boat to tie-up while waiting on the train passing. Widening the span would not be part of this project.

Chair Blow stated that the only bridges that he has seen cameras on the bridge fenders is on railroad bridges. He stated that to expect a barge operator not to touch a bridge fender is asking a lot and to send the operator a bill for touching the fender should be addressed. Bridge fenders can be constructed to allow barges and boats to pass and touch the fender without damaging it. AAF should look into that system.

Chair Blow asked if the District should write a letter supporting the project. Mr. Crosley suggested that the District write a letter of support for the Loxahatchee River Railroad Bridge and focus on the navigation improvements and the JID TIGER Grant application.

Treasurer Netts asked if the District supports this project and the TIGER Grant is not successful, will the District be asked to financially support the project. Mr. Crosley

stated that at this point, the only request has been through the District's Waterways Assistance Program.

Secretary McCabe asked that a letter of support be drafted by staff and brought back to the April meeting for approval.

**ITEM 12.     Presentation and Discussion on Regional Sediment Management by the U.S. Army Corps of Engineers.**

Mr. Crosley stated that typically, dredging projects have been considered and categorized based on their single, primary function, (i.e. a channel dredging project would be considered only as navigation project, etc.). The U.S. Army Corps of Engineers (USACE) has been working on a "systematic approach" to sediment management by examining how projects can "fit" together through such items as scheduling, project modification and combination.

Mr. Crosley stated that a major component of this effort includes the analysis of the "beneficial use" of dredged material, such as an inlet navigation project placing sand on the beach. This approach more accurately captures the overall benefits of the project and can lead to additional cost-share opportunities, as well as provide an effective management tool for the waterway.

Mr. Crosley introduced Ms. Jacqueline Keiser, with the Regional Sediment Management Division of the USACE to discuss this item.

Ms. Keiser stated that Regional Sediment Management (RSM) is a system that manages sediments in a manner that maximizes natural and economic efficiencies to contribute to sustainable water resource projects. It recognizes sediment as a valuable resource and implements strategies across multiple projects to achieve long-term

economic, environmental values and benefits. The idea is that we cannot have a healthy navigation channel without a healthy system surrounding the channel.

Ms. Keiser stated that this management approach has been implemented at the Jacksonville Harbor. The sediment has been used for eco system restoration to beach renourishment. This approach allows more work to be completed with less funding. The Miami-Dade and Broward County beaches are in need of renourishing. Beach renourishment funding could be used for dredging of Baker's Haulover with the material being placed on the beach. Also, the FIND Dredged Material Management Areas (DMMA) could be off-loaded with beach renourishment funding when the material is placed on the beaches.

Ms. Keiser stated that South Florida communities are looking for sources for sediment and the goal is to keep and use as much sediment in the system as possible.

Ms. Keiser stated that this program will benefit FIND by reducing dredging project costs by reducing Dredged Material Management (DMMA) use. Project efficiencies, conservation of scarce resources, cross-project and cross-business line benefits are produced by RSM and are desirable not only within the Navigation Business line, but throughout all aspects of the USACE program. Those benefits are also highly sought after by Congress, OMB and other federal agencies. She stated that beach renourishment has been done for many years, but it never received credit in the Federal Budget. Now the activity has been recognized and will receive funding.

Commissioner Crowley thanked Ms. Keiser for using Baker's Haulover as an example for this project. He said that he would help in any way that he could to move the project forward.

Commissioner Dritenbas asked if this project would also apply to inland beaches such as the Round Island Channel. Ms. Keiser stated that the RSM project applies to all restoration areas.

**ITEM 13.     Fernandina Harbor Channel Re-Alignment, Nassau County, Florida.**

Mr. Crosley stated that the Town of Fernandina Beach is purchasing waterfront property north of the current Fernandina Beach Marina. The Town is interested in utilizing this property to expand the current marina by adding additional dockage. The proposed expansion of the marina at this location could be limited because of the existing Fernandina Harbor project setback.

Mr. Crosley stated that the Fernandina Harbor Federal project is authorized at -28' deep and 300' wide. This supersedes the existing Atlantic Intracoastal Waterway (AIWW) Project, authorized at -12' deep and 125' wide. (Note that the AIWW does not exhibit specific X, Y coordinates in this vicinity, so it has been challenging to establish the exact project location). Since it is unlikely the U.S. Army Corps of Engineers (USACE) would relocate the existing project to accommodate a waterway access project, it appears the expansion of the marina, as proposed in a conceptual plan, would require the deauthorization of the Fernandina Harbor project.

Mr. Crosley introduced Mr. Mark Evans with the USACE to discuss this item.

Mr. Evans stated that the previous permit issued to the City of Fernandina Beach Marina and the channel project associated with it has expired. The work was never implemented pertaining to the channel, which means that the city is in violation of that permit. The AIWW channel is not the only channel in this area, there are two channels; the Fernandina Harbor Channel and the AIWW channel. The Fernandina Harbor Channel

(FHC) is the controlling channel in the area, it is the larger channel and the most important channel in area. There are other stakeholders or businesses to the north of this channel. The FHC has specific X-Y coordinates, is permanent and locked in place and there will be no moving that channel. The IWW channel does not have X-Y coordinates and typically follows deep water along the center line.

Mr. Evans stated that there are four options available to the City of Fernandina Beach: Option A, to proceed with Congressional reauthorization to alter location of the FHC; Option B, Pursue de-authorization for a portion of FHC. This is unlikely because other commercial and national defense interests (stakeholders) would be affected; Option C, The project sponsor, the City of Fernandina, would have to request a permit to dredge and relocate the channel on their own. This would require a Section 408 evaluation review by the USACE for relocation of a federal civil works project and the applicant would be required to fund the extensive evaluation and engineering of the overall impacts of the project. The project would require approval by the USACE Headquarters or Assistance Secretary of the Army (Civil Works); or Option D, inquire with USACE Real Estate about acquiring land in the federal easement to cut back upland of the existing marina.

Mr. Evans noted that the City of Fernandina is in violation of the conditions of the expired permit because they did not move forward with moving the FHC. The second violation is the docking or mooring of vessels on the channel side of the terminal platforms. Those boats are moored in the FHC. This is violation of the FHC permit conditions and the USACE will be moving forward with enforcement action. All vessel docking must be setback at least 84-feet from the Deep Water Channel. The USACE will not contribute any funding towards this channel re-alignment request.

Mr. Crosley asked if there is any mechanism to de-authorize a portion of the FHC. Ms. Trulock stated that a small section of a channel cannot be de-authorized. Mr. Evans stated that this channel will probably never be de-authorized because it runs the entire bay and affects other stakeholders including the Navy.

Chair Blow noted that in 1998-1999 Mr. Roach wrote letters to the USACE stating that the District was not supportive of moving the FHC. He stated that because the AIWW floats around the FHC, the District could write a letter stating that the AIWW Channel lies within the FHC and FIND does not object to actions that the state may take to alleviate the City of Fernandina Beach Harbor problems. He suggested that staff review the correspondence that Mr. Roach wrote in 1999 and write a new letter supporting this project.

Commissioner Williams showed a map of the project area and the problems that currently exist. He stated that the FHC was developed in the early 1840's when Fernandina was the deep draft port in the State of Florida. Sailing ships came into this Port and docked at angled docks. The FHC is where it is today is because in the 1840's, they did not want the sailing ships to stick out into the Federal Channel. The FHC could be moved seventy-feet. The local Fernandina Port Authority, chartered by the State of Florida, supports this project.

Mr. Evans commented that the AIWW channel would not be a project for relocation. The FHC could be considered for relocation and is a long process of engineering and environmental studies and Congressional Authorization. He stated that if an application for a new permit comes in, all previous permit violations will be investigated before the new permit could be issued.



Commissioner Sansom stated that if a Congressman supports the project, there may be an opportunity to obtain Federal Funding for part of this project.

Secretary McCabe made a motion to approve a letter of support for the AIWW re-alignment project. The motion was seconded by Commissioner Sansom. Chair Blow asked for discussion. Hearing none, a vote was taken and the motion passed.

**ITEM 14. Lease Agreement with Rybovich Marina, LLC for the Deposition of Dredge Material into Dredged Material Management Area PB-PI (Peanut Island), Palm Beach County, Florida.**

Mr. Crosley stated that the District successfully completed the deepening of the Intracoastal Waterway (IWW) in the vicinity of Peanut Island. Approximately 100,000 cubic yards of dredged material was placed in Dredged Material Management Area (DMMA) PB-PI (Peanut Island), which is now estimated to be one-third (1/3) full.

Mr. Crosley stated that Rybovich Marina, LLC, located in the vicinity of the deepening project, is requesting to lease DMMA PB-PI for the temporary placement of approximately 100,000 cubic yards of additional material from their dredging project. This material would be removed at the lessee's expense within two-years of deposition. The District attorney and engineers have reviewed the lease agreement and the lessee is providing a bond of not less than \$3 million dollars to ensure the removal of the deposited material.

Commissioner Sansom made a motion to approve the lease agreement with Rybovich Marina for the deposition of dredged material into DMMA PB-PI (Peanut Island), Palm Beach County, Florida. The motion was seconded by Commissioner Donaldson. Chair Blow asked for discussion.

Commissioner Dritenbas asked what would happen if in two-years Rybovich Marina, LLC did not remove the material from DMMA PB-PI (Peanut Island). Attorney Breton stated that the District would cash the Bond and pay to have the material removed from the District's site.

Commissioner Crowley asked if the two-year lease with Rybovich Marina is an exclusive use lease. Mr. Crosley answered no and stated that DMMA PB-PI is a District site and the District can use it at any time. Attorney Breton stated that the lease is exclusive because Rybovich Marina has exclusive use of the property for the term of the lease. Commissioner Sansom suggested changing wording in the lease to make it non-exclusive. Attorney Breton stated that modification of the lease would be simple.

Commissioner Sansom amended the motion to change the lease agreement with Rybovich Marina to a non-exclusive use agreement for the deposition of dredged material into DMMA PB-PI (Peanut Island), Palm Beach County, Florida. The amended motion was seconded by Commissioner Donaldson. Chair Blow asked for discussion. Hearing none, a vote was taken and the motion as amended passed.

**ITEM 14A. Construction Observation Services Rybovich Operations on Peanut Island DMMA; Palm Beach County, Florida.**

Mr. Crosley stated that Rybovich Marina, LLC is pursuing an agreement with the District to utilize Dredged Material Management Area (DMMA) PB-PI (Peanut Island) to dewater dredged material from its Riviera Beach Marina Facility.

Mr. Crosley stated that the dredging portion of this approximately 100,000 cubic yard project is scheduled to commence in late March and end in June. FIND has requested a proposal from Taylor Engineering for limited construction observation of Rybovich's use of the DMMA and associated facilities, staging area and pipeline corridor, necessary for

construction. Rybovich has agreed to reimburse the District for all costs associated with this effort.

Commissioner Sansom made a motion to approve a scope of work and fee quote from Taylor Engineering in the reimbursable amount of \$26,603.20, for construction observation of DMMA PB-PI for the Rybovich Marina dredging project, Palm Beach County, Florida. The motion was seconded by Commissioner Dritenbas. Chair Blow asked for discussion. Hearing none, a vote was taken and the motion passed.

**ITEM 15.     Scope of Work and Fee Quote for Additional Support Services for Document Imaging and Electronic File Conversion.**

Mr. Crosley stated that MCCi has provided a scope and fee quote to address the District's backlog of hard-copy files, over 80+ boxes and 25 files cabinets, and convert this information to the forthcoming electronic filing system (EFS).

Mr. Crosley stated that the District's IT consultant has recently installed the required hardware updates to the District's network and staff has conducted initial meetings with MCCi on the implementation of the EFS. The backlog of files would be addressed following the launch of the EFS system later this month.

Chair Blow asked if the project cost is estimated or fixed. Mr. Crosley stated that the consultant gave a project estimate based on the number of boxes. Chair Blow questioned what would be done with the original files. Mr. Crosley stated that the archived files are kept at Iron Mountain. Once staff is confident that the files were scanned properly the storage requirement will be re-evaluated. Attorney Breton noted that there is a State Records Policy Law that the District must follow.

Treasurer Netts made a motion to approve the scope of work and fee quote in the amount of \$72,500.00 by MCCi for the electronic conversion of existing backlogged files

and data at the District office, Palm Beach County, Florida. The motion was seconded by Secretary McCabe. Chair Blow asked for discussion. Hearing none, a vote was taken and the motion passed.

**ITEM 16. Finance and Budget Committee Report.**

Committee Chair Netts stated that the District's Finance and Budget Committee met before today's Board meeting. He noted that the committee reviewed and recommends approval of the January of 2016 financial information.

Committee Chair Netts made a motion to approve the recommendations of the District's Finance and Budget Committee. The motion was seconded by Commissioner Sansom. Chair Blow asked for discussion. Hearing none, a vote was taken and the motion passed.

**ITEM 17. Tallahassee Report.**

Attorney Jon Moyle sent a report on Florida Legislative activity and bills of interest or with possible impacts to special Districts. A proposal that could prohibit overnight anchoring in some South Florida waterways will go to Governor Rick Scott. The Senate voted 36-2 without debate Monday to approve HB 1051, which would bar overnight anchoring in part of the Middle River in Broward County and Sunset Lake and three parts of Biscayne Bay in Miami- Dade County.

Commissioner Sansom noted that this overnight anchoring bill is temporary and limited until the Florida Fish and Wildlife Conservation Commission (FWC) completes an anchoring pilot study and implements that program.

Commissioner Sansom noted that the anchoring bill and the derelict vessel removal bills were presented to the Legislature. Changes in the derelict vessel bill sought to provide

funding to help remove these vessels from the waterway. FWC has requested \$1.4 million from the Legislature for funding statewide derelict vessel removal.

Commissioner Sansom asked the date of the FWC Derelict Vessel Program meeting. Ms. Zimmerman stated that the meeting will be held on April 4, 2016 from 1:00 p.m. to 5:00 p.m. in Fort Pierce.

Commissioner Sansom stated that the FWC will be making an application to the District's Cooperative Assistance Program (CAP) for derelict vessel removal funding within the District. Mr. Crosley noted that the application has been received.

Mr. Crosley noted that four current FIND Commissioners Crowley, Donaldson, Isiminger and O'Steen have all been confirmed by the full Senate.

**ITEM 18. Washington D.C. Report.**

Mr. Crosley stated that Chair Blow, Commissioners Williams and Crowley joined Ms. Zimmerman and himself in Washington for meetings on March 1 and March 2, 2016.

Mr. Crosley stated that FIND's congressional delegation, House and Senate Energy and Water Appropriations Subcommittee staff, the House Water Resources Subcommittee Staff Director and the Army Corps of Engineers meetings were productive. FIND was able to thank the Army Corps of Engineers (USACE) and Congressional Delegation for obtaining Year (FY) 2016 Work Plan funding in the amount of \$3.3 million for the District's waterways.

Mr. Crosley noted that the Senate may consider the Magnuson Stevens Act. The Water Resources Development Act (WRDA) and the Magnuson bill may be possible vehicles to obtain legislative language to address the District's compensatory mitigation issue.

Mr. Crosley stated that a letter signed by District members and a Congressman from North Carolina has been sent to the House Energy and Water Subcommittee. The District's efforts and work with the Atlantic Intracoastal Waterway Association (AIWA) are beginning to pay off as states work together to better the waterway system.

Commissioner Crowley noted that the District's Washington liaison has made changes to stay on top of the government changes and has very effectively navigated through the system.

Commissioner Williams noted that FIND is very well known and regarded by the delegation.

Mr. Crosley stated that staff distributed appreciation plaques and FIND pins to long-time FIND supporters.

**ITEM 19A. Agreement with Duval County Property Appraiser for Exemption Audit Services, Duval County, Florida.**

Mr. Crosley stated that the Duval County Property Appraiser has requested the concurrence of all taxing authorities to engage the services of a vendor for exemption audit services to discover fraudulent homestead exemptions. Thirty percent (30%) of the fees collected would go to the vendor with the remaining collection divided on a prorated basis among the taxing authorities. All taxing authorities must agree to participate or the program will not be implemented.

Treasurer Netts made a motion to approve the Agreement for Exemption Audit Services with the Duval County Property Appraiser's Office, Duval County, Florida. The motion was seconded by Secretary McCabe. Chair Blow asked for discussion. Hearing none, a vote was taken and the motion passed.

**ITEM 19.     Additional Staff Comments and Additional Agenda Items.**

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

Mr. Crosley stated that the District's Waterway Inspection Tour will begin Tuesday, May 3 in Stuart and travel south to Miami, Florida.

Ms. Zimmerman stated that the Waterways and Cooperative Assistance program application deadline is April 1, 2016. The electronic application copy can be e-mail to her and the hard copy can be mailed. Applicants e-mailing their application must receive a confirmation from her acknowledging receipt of that application. Mr. Crosley noted that April 1<sup>st</sup> is a hard deadline.

**ITEM 20.     Additional Commissioners Comments.**

Chair Blow asked if there were any additional commissioner comments.

Commissioner O'Steen thanked commissioners for holding the meeting in Duval County. He noted that it was nice to meet former Commissioners Bowman and Mesiano.

Commissioner Crowley stated that he has met with Department of State and they are working to fix the lack of maintenance issue with the Miami Circle project.

Chair Blow stated that the Florida Legislature has approved \$2.8 million in funding for the Summerhaven project.

Treasurer Netts asked if commissioners would like bus transportation from the hotel to the Flagler County Community Outreach in April.

Mr. Crosley stated that last evening Mr. Scarborough received the Superior Performance Project award from the USACE.

**ITEM 21.     Adjournment.**

Chair Blow stated that hearing no further business the meeting was adjourned at 11:56 a.m.





## FLAGLER COUNTY PROJECT STATUS UPDATE

APRIL 2016

### **Dredged Material Management Plan.**

Phase I of the Dredged Material Management Plan for the Intracoastal Waterway in Flagler County was completed in 1993. Phase II of the DMMP was completed in 1994 and all major land acquisition was completed in 1996. *(Please see the attached maps).*

The 50-year dredging projection for the 20 miles of channel in Flagler County is 926,905 cy/yds and the storage projection is approximately 1,992,846 cy/yds.

Phase I construction has been completed for all three upland sites in Flagler County, DMMA FL-3, DMMA FL-8 and DMMA FL-12. All the sites have been fenced and the buffer of DMMA FL-12 was landscaped several years ago. Stabilization of the shoreline of DMMA FL-8 has been completed along with the installation of a pedestrian pathway along the shoreline that connects an existing waterfront walkway to the City of Palm Coast's Waterfront Park.

Plans, specifications and permitting for DMMA FL-3 were completed in 2013. Construction of this site was completed in 2015 and the site is ready to receive material from dredging Reach II in 2017.

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### **Waterway Dredging**

Routine maintenance dredging of the Intracoastal Waterway in the vicinity of the Matanzas Inlet and in Cut F-2 was completed in September of 2011. The material was placed on the beach at Summerhaven. Note that this project is scheduled to be constructed and completed again in 2016 by the U.S. Army Corps of Engineers (USACE).

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### **Waterways Economic Study**

The Flagler County Waterways Economic Study was completed in 2002 and updated in 2011. The updated study found that the waterway related businesses in the county employ 1,226 people, with salaries of \$47.8 million and a total economic impact of \$216 million. Property values were determined to be increased by \$163 to \$185 million by the presence of the IWW channel. There are approximately 3,737 registered vessels in the county. *(Please see the attached map).*

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### **Waterways Assistance Program**

Since 1986, the District has provided \$ 2.5 million in Waterways Assistance Program funding to 26 projects in the County having a total constructed value of \$ 5.2 million. The County, the City of Flagler Beach, Marineland and the City of Palm Coast have all participated in the program. *(Please see the attached listing).*

Notable projects funded include: Bings Landing, Moody, Grand Haven South and North Park boat ramps, Marineland Marina and Flagship Harbor Preserve.

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## FLAGLER COUNTY PROJECT STATUS UPDATE

APRIL 2016

### **Cooperative Assistance Program**

The District's Cooperative Assistance Program has provided funding assistance to 23 projects with elements in Flagler County. Notable projects include: Florida Marine Patrol Officer Funding; Manatee Acoustic Warning System; FWC Officer Equipment Funding and, Environmental Education Exhibits at Gamble Rogers State Park. The District's funding assistance for the Flagler County portion of these projects was approximately \$492,100.

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### **Interlocal Agreement Program**

The District's Interlocal Agreement Program (which is a sub-set of the WAP and CAP programs) has provided funding assistance to two projects. The District's funding assistance for the Flagler County portion of these projects was approximately \$25,000.

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### **Public Information Program**

The District currently prints and distributes the following brochures with specific information about Flagler County Waterways, including the Economic Impact of Flagler County Waterways.

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### **Waterway Clean Up Program**

The District has consistently partnered with the City of Palm Coast for many years on waterway cleanup projects in Flagler County, in the amount of \$5,000 per year.

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### **Small-Scale Derelict Vessel Removal Program**

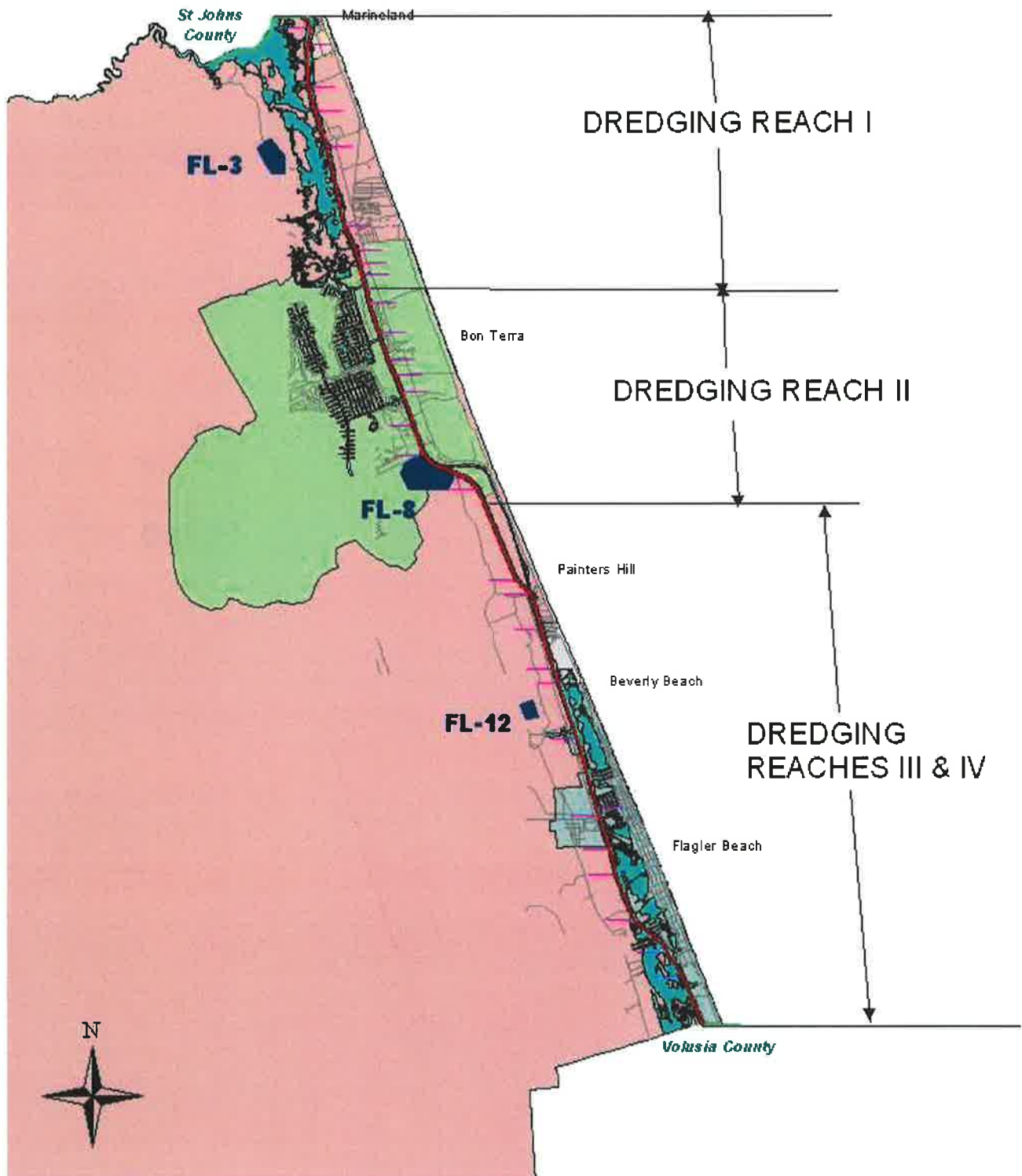
Flagler County has previously participated in the Small-Scale Derelict Vessel Removal Program with \$6,503 contributed in District funding.

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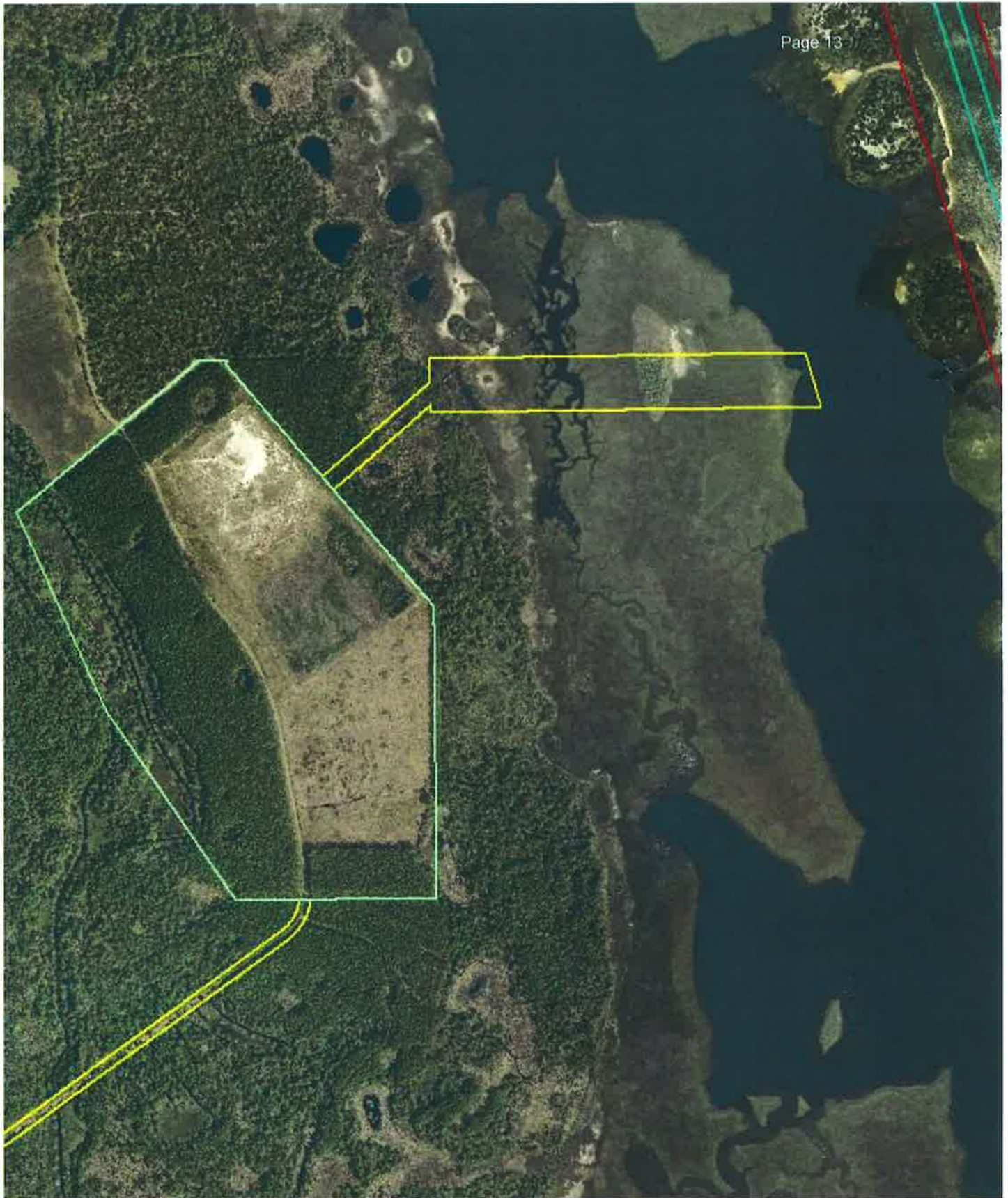
### **Small-Scale Spoil Island Enhancement and Restoration Program**





To date, no spoil island enhancement or restoration projects have been funded in Flagler County.

INTRACOASTAL WATERWAY  
DREDGING REACHED AND  
DREDGED MATERIAL MANAGEMENT AREAS  
IN FLAGLER COUNTY







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

## DREDGED MATERIAL MANAGEMENT AREA FL-3





DMMA FL-12

Legend  
FL-3  
Feature 1















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

## DREDGED MATERIAL MANAGEMENT AREA FL-8











**Legend**  
FL-8  
Feature 1

**DMMA FL-8**

San Gabriel Ln  
Via Roma  
Via Salerno  
N Ocean Shore Blvd  
Island  
Capitol  
N Waterview Dr  
N Village Dr  
N Park Ct  
N Park Ln  
N Village Pkwy  
Mont Park Rd  
Glenview Ct  
Golbert Ln  
Palm Coast Pkwy SE  
Palm Coast Pkwy NE  
Fairways Dr  
Fairways Cir  
Canopy Walk Ln  
Palm Coast Dr  
Palm Coast Ln  
Cerrado Ln  
Carr Ln





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

## DREDGED MATERIAL MANAGEMENT AREA FL-12





**Legend**  
FL-12  
Feature 1



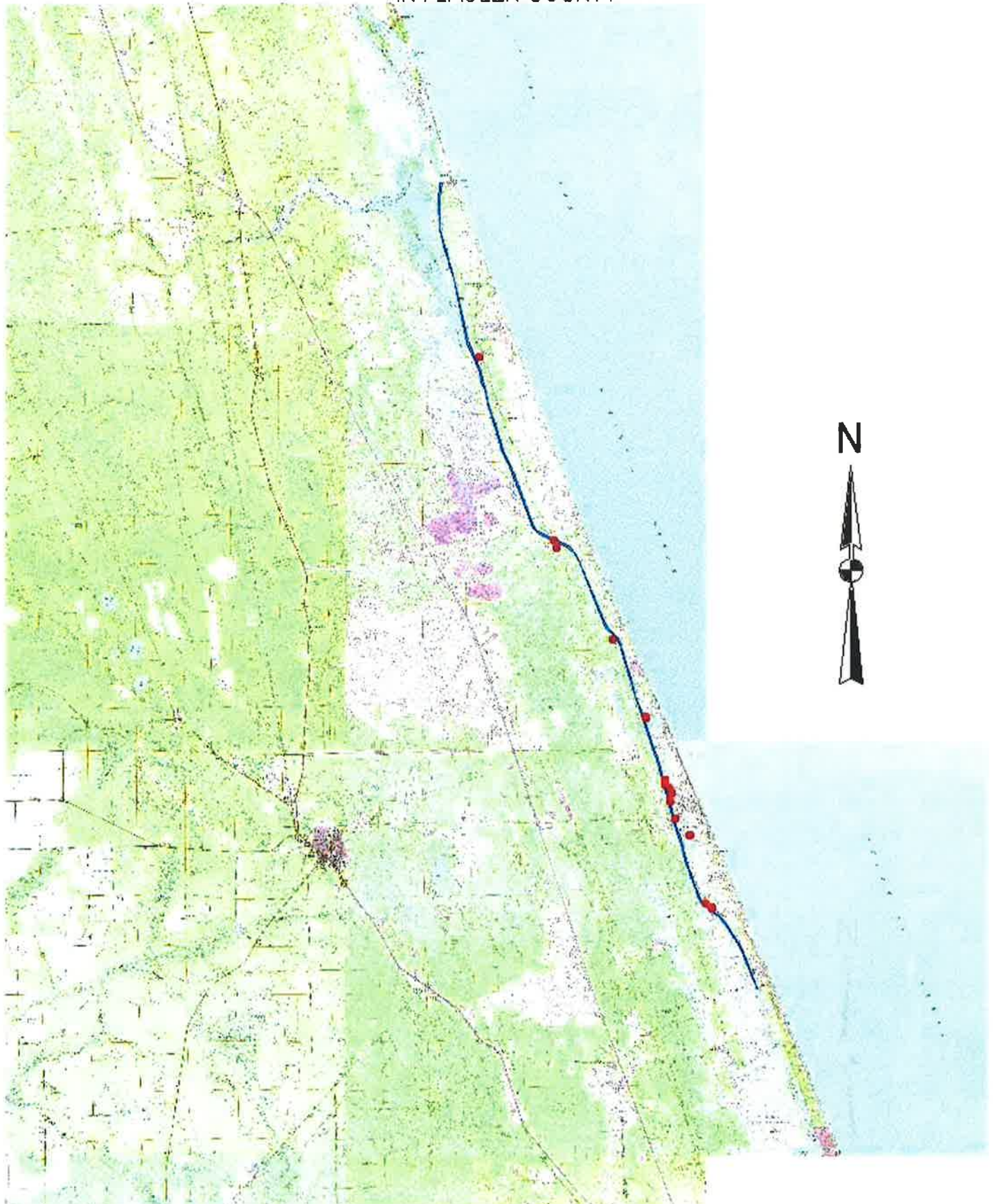
**DMMA FL-12**

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

<b>Project Name</b>	<b>Project Number</b>	<b>Project Sponsor</b>	<b>Grant Amount</b>	<b>Total Cost</b>
Bing's Landing Park Addition Improvements - Phase I	FL-07-13	Flagler County	\$25,000	\$105,000
Bing's Landing Addition County Park	FL-09-15	Flagler County	\$80,310	\$160,620
Bing's Landing Dredging	FL-09-16	Flagler County	\$93,750	\$187,500
Moody Boat Ramp	FL-1	Flagler County	\$40,000	\$80,000
East Bridge Park Dev. (Transferred to Moody Boat Ramp)	FL-88-2	Flagler County	\$38,000	\$160,000
Bings Landing Park Development	FL-90-3	Flagler County	\$66,000	\$132,000
Flagship Harbor Preserve - Phase I	FL-93-4	Flagler County	\$71,996	\$135,479
Flagship Harbor Preserve - Phase II	FL-96-5	Flagler County	\$52,468	\$104,936
Grand Haven South Park - Phase I	FL-98-7	Flagler County	\$72,744	\$235,075
Flagler County Sheriff's Office Marine Unit	FL-99-8	Flagler County	\$55,500	\$74,000
Public Navigation Channel Dredging - Phase I I	FL-FB-00-9	City Of Flagler Beach	\$75,000	\$150,000
Public Navigation Dredging - I I	FL-FB-01-10	City Of Flagler Beach	\$90,000	\$109,500
Smith's Creek Shoreline Stabilization	FL-FB-02-11	City Of Flagler Beach	\$17,200	\$30,000
Public Navigation Channel Dredging - Phase I (Expired)	FL-FB-97-6	City Of Flagler Beach	\$8,910	\$9,900
MarineLand Marina	FL-ML-10-19	Town Of Marineland	\$202,160	\$404,320
MarineLand Marina Phase B construction	FL-ML-14-24	Town Of Marineland	\$175,000	\$975,000
North Park	FL-PC-05-12	City Of Palm Coast	\$130,810	\$261,620
Waterfront Park - Phase I I	FL-PC-08-14	City Of Palm Coast	\$296,750	\$653,500
Long's Landing Estuary - Phase I	FL-PC-09-17	City Of Palm Coast	\$75,000	\$150,000
Long's Landing Estuary - Phase II	FL-PC-13-21	City Of Palm Coast	\$167,843	\$469,400
Long Creek Navigation Enhancements	FL-PC-14-22	City Of Palm Coast	\$10,000	\$20,000
Accessibility Improvements at Bing's Landing	FL-12-13	Flagler County	175,000	64,040
Bing's Landing Restroom & Basin Dock	FL-12-19	Flagler County	231,800	76,900
Eyes On Navigation	FL-12-20	Flagler County	64,420	22,210
FCSO Boating Safety Motor	FL-14-23	Flagler County	30,000	60,000
Boater Improvements at Herschel King Park	FL-15-25	Flagler County	65,436	137,000
Moody Boat Launch and Restroom	FL-15-26	Flagler County	113,187	238,500
			<b>\$2,524,284</b>	<b>\$5,206,500</b>



LOCATION MAP  
WATERWAYS ASSISTANCE PROGRAM PROJECTS  
IN FLAGLER COUNTY





# ECONOMIC BENEFITS OF THE DISTRICT'S WATERWAYS

## FLAGLER 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 Flagler County*.

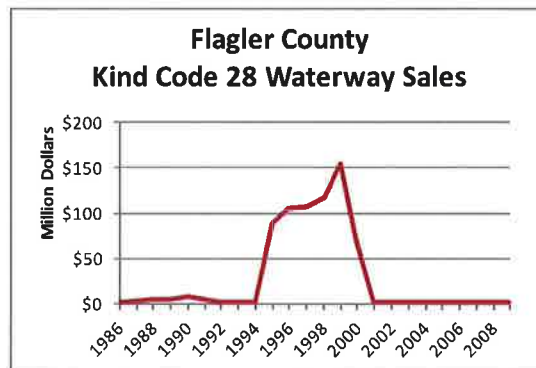
### Updating of Previously Estimated Benefits

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 methodology for estimating the impact of the recession was based on the trend in gross sales of boat dealers established 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. However, anomalies in the FDOR reported gross sales data for Flagler County prevented the development of an estimate of the recession. As illustrate in the graph below, Flagler County FDOR reported gross sales data for boat dealers fluctuated widely from \$0.75 million in 1986 to \$154.4 million in 1999 to \$0.6 million in 2001, with values fluctuating between \$0.6 million to \$1.5 million since 2001. As a result, the impact of the recession on the Flagler County economy could not be estimated.



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

- Current existing conditions: \$4.9 million
- Cessation of maintenance: \$3.9 million
- Increased maintenance: \$4.9 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



# ECONOMIC BENEFITS OF THE DISTRICT'S WATERWAYS



## Purpose

To update economic benefits in Flagler County of marine-related activities on the District Waterways, as previously estimated in *An Economic Analysis of the District's Waterways in Flagler 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



## ECONOMIC IMPACTS

### Current Existing Impacts

- \$215.9 million in business volume
- \$47.8 million in personal income
- 1,226 jobs
- \$6.1 million in tax revenue

### Impacts of Cessation of Waterways Maintenance

- Decrease of \$25.6 million in business volume
- Decrease of \$5.9 million in personal income
- Decrease of 204 jobs
- Decrease of \$1.4 million in tax revenue

### Impacts of an Increase in Waterways Maintenance

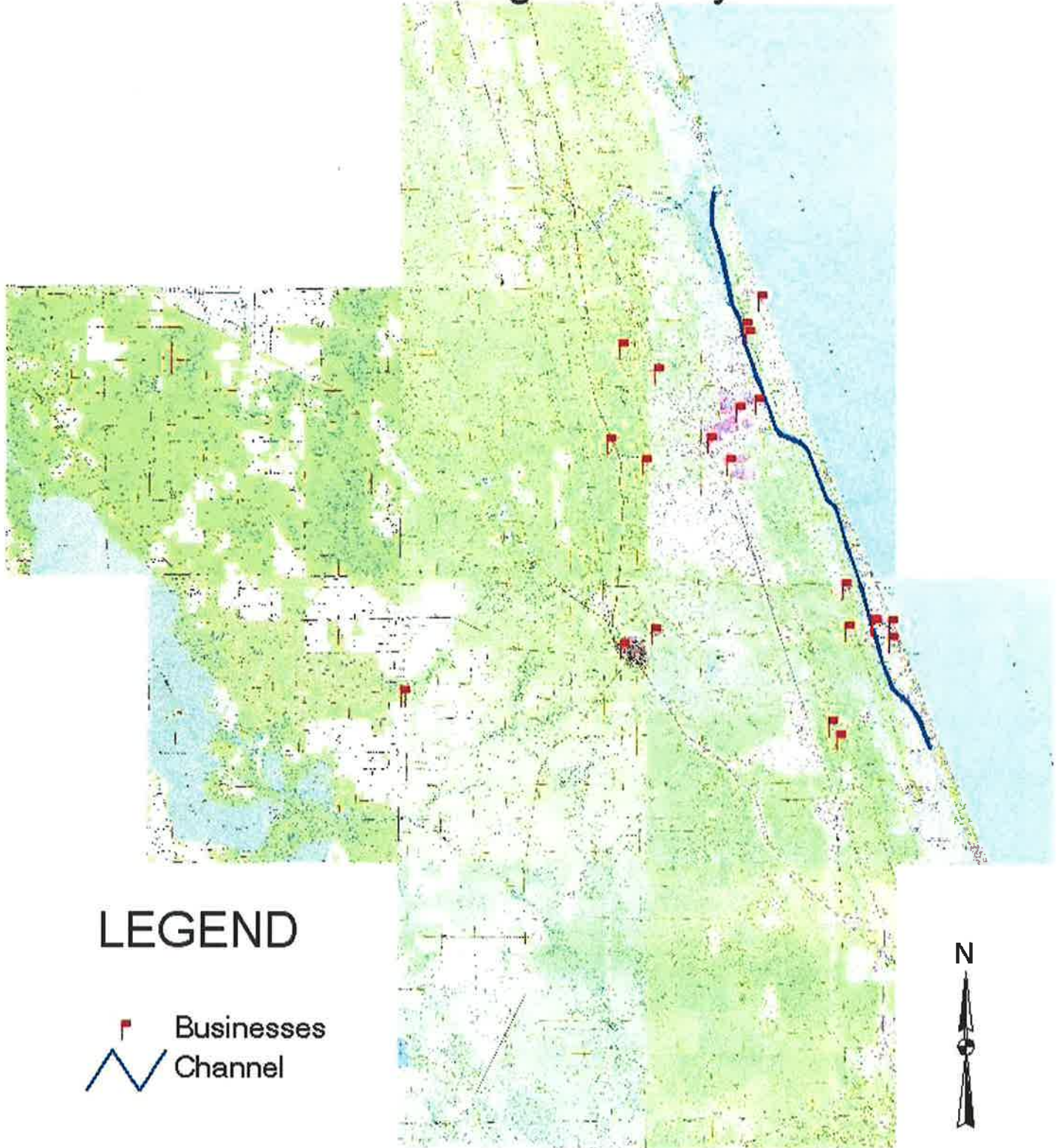
- Increase of \$12.4 million in business volume
- Increase of \$3 million in personal income
- Increase of 122 jobs
- Increase of \$0.8 million in tax revenue

Due to anomalies in Florida Department of Revenue reported gross sales data, the impact of the 2007-2009 U.S. Economic Recession on the Flagler County economy could not be estimated.

Economic Benefits as of April 2011

FLAGLER COUNTY

Location Map  
**Waterway Related Businesses  
in Flagler County**





**US Army Corps  
of Engineers ®**  
Jacksonville District

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

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**WORK ACTIVITIES IN FY 16:**

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





**US Army Corps  
of Engineers®**  
Jacksonville District

**IWW STATUS UPDATE  
FIND Board of Commissioners Meeting  
April 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: DMMA O-7**

**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: 9 May 2016
- Bid Opening: 7 June 2016
- Contract Award: 20 July 2016

**FIND WORK ORDER:** Funding for completion of P&S will be funded with 100% federal funding. A work order for construction funds as presented at the March 2016 FIND Board Meeting and approved by the Board.

**NAME OF CONTRACTOR: TBD**

**STATUS:** P&S for DMMA O-7 are wrapping up. All reviews are anticipated to be complete by 15 April. Advertisement is scheduled for 9 May 2016 and award on 20 July 2016. The contracting tool will likely be a small business set aside with the proposals being evaluated on a least cost technically acceptable. This will require a source selection team to be assembled to evaluate each proposal under this criteria.

Funds will need to be received by the end of April to hold the advertisement date of 9 May 2016.



**US Army Corps  
of Engineers ®**  
Jacksonville District

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



**2. 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) | 27 March 2017 |
| • Obtain Water Quality Certification                      | 14 Nov 2016   |
| • Obtain updated Survey                                   | 1 Dec 2016    |
| • Provide Dredge Orders to SAW                            | 1 Feb 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 January 2017 for dredging funding.

**NAME OF CONTRACTOR: TBD**

**STATUS:** The team is moving forward with the appropriate NEPA documentation as well as obtaining an FDEP permit for the dredging action and placement in the designated nearshore. The team will utilize seagrass mapping that Regulatory has performed to assist in our coordination activities with NMFS. Mapping does not show seagrasses in the channel within this reach nor hard bottoms. There does appear to be sparse seagrass within the anchor zones that we will address. The placement area is the area immediately offshore of the approved Broward Segment 2 shore protection project which means that there is some existing information readily available, such as cultural surveys.



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



**3. WORK ACTIVITY: IWW St. Augustine / Matanzas**

**CONTRACT AMOUNT: TBD**

**DESCRIPTION OF WORK:** Development of Plans and Specifications for St. Augustine and Matanzas reach of the IWW. Plan is to combine these two reaches to save in mobilization cost since both require the same equipment and have the same placement method.

**SCHEDULE: (Tentative)**

- |  |              |
|--|--------------|
| • 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 2016  |
| • Advertise Contract                   | 17 May 2016  |
| • Bid Opening                          | 14 June 2016 |
| • Contract Award:                      | 13 July 2016 |

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

**NAME OF CONTRACTOR: TBD**

**STATUS:** Plans and specifications will be completed in May 2016 including all associated reviews. The Land Use Agreement for placement of material within Anastasia State Park is currently being coordinated with FDEP Parks. The Park has requested that we shift the placement northward toward the Inlet between R128 – R131. Previous placement for IWW material has been between R132-R139, but the Park has requested that we shift the placement northward since it appears the material is staying on the beach longer there. The Land Use Agreement is for placement between R128-R131. This action also required a FDEP minor permit modification. The Corps' team has received a RAI from FDEP and all concerns have been addressed. Anticipate receiving the Land Use Agreement AND FDEP permit modification in plenty of time for a mid May 2016 advertisement. St. Johns County approved permanent easements for Summerhaven beach placement.

A work order for dredging will be presented at the April 2016 FIND Board Meeting. The work order will only be for funding above the \$2.6M received in work plan funding allocated for St. Augustine/Matanzas reaches.



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



**4. 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                  | 16 May 2016   |
| • Complete NEPA                 | 13 Feb 2017   |
| • Complete P&S with all reviews | 25 April 2017 |
| • Advertise Contract            | 1 May 2017    |
| • Contract Award:               | 27 June 2017  |

**FIND WORK ORDER:** P&S will be funded 100% with Federal funding in 2016. Construction of DMMA O-23 will be with FIND Contributed Funds.

**NAME OF CONTRACTOR: TBD**

**STATUS:** NEPA activities for DMMA O-23 kicked off on 16 Nov 2015 and P&S will kick off on 16 May 2016. NEPA will be extensive. A FDEP exemption will be obtained since this is upland construction. Design concepts will be the same as DMMA O-7, with the use of the same weir system. 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. Draft schedule shows advertisement of the construction contract in May 2017.

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



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



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**5. WORK ACTIVITY: IWW Crossroads**

**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. Corps team is currently pulling all required data together to submit to FDEP for the minor permit modification. Modification package was submitted to FDEP end of March 2016.

The Snell will be obtaining cores for Crossroads once work plan money arrives. During the same time cores will be taken in the Sawpit area as well. Both to support ongoing FIND investigations that are being coordinated with Taylor Engineering.



US ARMY CORPS OF ENGINEERS  
REGULATORY INFORMATION PAPER  
FOR  
FLORIDA INLAND NAVIGATION DISTRICT (FIND)  
MAINTENANCE DREDGING OF THE INTRACOASTAL WATERWAY (IWW)

**DESCRIPTION:** The U.S. Army Corps of Engineers Jacksonville District (Corps) is proposing to re-issue Regional General Permit SAJ-93, which authorizes FIND to maintenance dredge the IWW and dispose of dredged material within existing dredged material management areas (DMMAs), self-contained upland sites, or on certain beaches.

**BACKGROUND:** The prior SAJ-93 which was issued on 16 February 2011 and expired on 16 February 2016, had little utility as it required a 100-ft buffer between seagrass beds and dredging and did not allow for any seagrass impacts within the federal channel of the IWW. These terms and conditions were added as a result of consultation with the National Marine Fisheries (NMFS) pursuant to Magnuson-Stevens Fishery Conservation and Management Act on Essential Fish Habitat (EFH) for federally managed species. The Corps prepared a Programmatic Essential Fish Habitat Assessment (PEFHA) to inform re-evaluation of SAJ-93, specifically to address the reasonably foreseeable impacts of maintenance dredging, including seagrass within the design limits of the channel. The PEFHA concluded "no substantial adverse impact" on EFH. The Corps further concluded maintenance dredging of the IWW would have "minimal adverse effects" on EFH as dredging projects are limited in scope and duration and negligible in considering the "small" impact to seagrass within an existing "disturbed" federal channel compared to the extensive seagrass beds outside the channel in natural, undisturbed areas. Additionally, the Corps opines the IWW was authorized, constructed and maintained prior to MSFCMA, the authorized depth, is the baseline condition, and as a matter of principle, compensatory mitigation should not be required for seagrass that colonizes as a result of natural shoaling, storm events, climatic factors, etc. Maintenance dredging restores the baseline condition in the interest of the public and required for public safety.

**ISSUE:** NMFS continues to recommend FIND provide one-time compensatory mitigation for seagrass within the IWW channel impacted via maintenance dredging.

**PATH FORWARD:** The Corps is completing an analysis of monitoring reports and side scan sonar for past and foreseeable impacts to support the conclusion that maintenance dredging of seagrass within the IWW channel would have "minimal adverse effects". Further the Corps believes ample precedent exists to support a position that mitigation for maintenance dredging of an existing federal project is not required. The Corps anticipates sending NMFS a letter stating the consultation requirements under MSFCMA have been fulfilled and a decision on re-evaluation of SAJ-93 will be made upon receipt of Coastal Zone Management (CZM) Consistency from the State. Pursuant to 50 CFR 600.920(j)(2) NMFS may choose to elevate the issue to Corps Headquarters.

**POINT OF CONTACT:** Deputy, Regulatory Division, Tori White, 904-232-1658





#### KEY DATES:

17 Feb 2015 – Rep Frankel hosted meeting with FIND, Corps, and NMFS on EFH and project delays. Corps recommended a programmatic EFH consultation.

9 Mar 2015 - NMFS letter to FIND agreeing to work with Corps on a programmatic EFH consultation.

31 Mar 2015 – Corps circulated Public Notice for re-issuance on SAJ-93 including terms and conditions of the Draft Permit.

24 Apr 2015 – Corps submitted Draft PEFHA to NMFS for review.

15 May 2015 – Corps and NMFS meeting to discuss Draft PEHHA; NMFS agreed to work with Corps on a RGP to cover all of FIND dredging projects in lieu of a “blanket” PEFHA; NMFS requested additional information be included in the Draft PEFHA.

17 Aug 2016 – Corps provided NMFS a Final PEFHA to inform terms and conditions of a revised Draft Permit.

12 May – 16 Sep 2015 – Corps used side scan sonar to map seagrass within and immediately adjacent to the channel to inform conclusions of the PEFHA.

12 Aug 2015 – Biological Evaluation for SAJ-93 sent to U.S. Fish and Wildlife Service (FWS).

17 Sep 2015 – Biological Evaluation for SAJ-93 sent to NMFS Protected Resources Division.

23 Oct 2015 – Corps and NMFS met to discuss SAJ-93; NMFS requested additional information for SAJ-93 and indicated the PEFHA had not been reviewed.

17 Nov 2015 – NMFS informed Corps the PEFHA is not essential to the RGP and requests SAJ-93 be treated as an Individual Permit authorizing only predicted maintenance dredging projects with one-time compensatory mitigation to be provided at Snook Island Natural Area.

20 Nov 2015 – Corps responded to NMFS stating the recommendations were unacceptable and reiterated the PEFHA informs the conclusion mitigation for seagrass in the channel and impacted by maintenance dredging is not necessary. Corps informed NMFS the federal navigation channels were authorized, constructed and maintained prior to MSFCMA, the authorized depth is the baseline condition, and as a matter of principle mitigation should not be required to restore the baseline condition.

29 Jan 2016 – Biological Opinion received from the FWS.

17 Feb 2016 – CZM consistency determination sent to State Clearinghouse.

23 Feb 2016 – Corps and NMFS meeting to discuss status. NMFS has not reviewed the PEFHA and Corps’ conclusions and continues to request one-time mitigation for seagrass in the channel. Corps informed NMFS we would agree to disagree.

#### ANTICIPATED DATES:

11 Mar 2016 – Completion of analysis on past and foreseeable maintenance dredging impacts on seagrass in the IWW channel.

18 Mar 2016 – Corps letter to NMFS advising the consultation requirements pursuant to MSFCMA have been fulfilled and a permit decision will be made.

17 Apr 2016 – Receipt of CZM from the State Clearinghouse.

30 Apr 2016 - Permit decision on SAJ-93 (unless NMFS elevates to Corps Headquarters).



REPLY TO  
ATTENTION OF

**DEPARTMENT OF THE ARMY**  
JACKSONVILLE DISTRICT CORPS OF ENGINEERS  
P. O. BOX 4970  
JACKSONVILLE, FLORIDA 32232-0019

**February 17, 2016**

Regulatory Division  
SAJ-2005-00972 (RGP-TKW)

A Draft of the Regional General Permit SAJ-93 as proposed for re-issuance follows:

**DEPARTMENT OF THE ARMY PERMIT  
REGIONAL GENERAL PERMIT (RGP) SAJ-93**

**FLORIDA INLAND NAVIGATION DISTRICT EAST COAST FLORIDA  
MAINTENANCE DREDGING OF THE ATLANTIC INTRACOASTAL, INTRACOASTAL,  
AND OKEECHOBEE WATERWAYS**

Upon recommendation of the Chief of Engineers pursuant to Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403) and Section 404 of the Clean Water Act (33 U.S.C. 1344), the U.S. Army Corps of Engineers (Corps) is proposing to issue a RGP (SAJ-93) that would provide general authority to the Florida Inland Navigation District (FIND) for activities required for the maintenance dredging of the federal channel located in the Atlantic Intracoastal Waterway (AIWW) the Intracoastal Waterway (IWW), and the Okeechobee Waterway (OWW) along the east coast of Florida. Authorization would be granted provided that the work does not result in more than minimal impact individually and cumulatively on water quality and the environment. RGP SAJ-93 is subject to the following conditions:

**SPECIAL CONDITIONS FOR MAINTENANCE DREDGING:**

1. The work authorized herein is limited to the existing AIWW and the IWW channel along the east coast of Florida from Nassau to Miami-Dade Counties. This area includes the counties of Nassau, Duval, St. Johns, Flagler, Volusia, Brevard, Indian River, St. Lucie, Martin, Palm Beach, Broward, and Miami-Dade. Under this RGP, the areas authorized for dredging are limited to the congressionally approved, federal navigation channel and previously authorized and permitted channel widenings. This channel area is defined as the 125-foot wide, 12-foot deep federal AIWW channel extending from the Georgia/Florida line in Nassau County to the St. Johns River in Jacksonville, the 12-foot deep, 125-foot wide federal IWW channel extending from the St. Johns River in Jacksonville to the Fort Pierce Harbor Project in St. Lucie County, and the 10-foot deep, 125-foot wide federal IWW channel from the Fort Pierce Harbor Project in St. Lucie County to the Miami Harbor in Miami-Dade County. This authorization would also include the dredging of the Okeechobee Waterway including the 8-foot deep, 80-foot wide channel originating at the confluence of the Indian River Lagoon/IWW and the St. Lucie River in Martin County ("Crossroads") to the St. Lucie Lock and Dam/eastern limit of St. Lucie Canal; the 8-foot deep, 100-foot wide channel originating from the St. Lucie Lock and Dam/eastern limit of St. Lucie Canal to the western Palm Beach County line across the middle of Lake Okeechobee (Route 1); and



the 6-foot deep, 80-foot channel originating from the Port Mayaca Lock/western limit of St. Lucie Canal to the western Palm Beach County line along the southern shore of Lake Okeechobee (Route 2/rim canal). Residential canals and/or flood control projects are not included as a part of the IWW.

2. This general permit only authorizes maintenance excavation of the above areas. The dredging/excavation are restricted to the amount necessary to restore the waterway to its congressionally authorized excavated depth allowing for a two-foot over-dredge. No authorization is provided for new channel widenings, new channels or new accesses, or re-aligning existing channels. Dredging activities may include either mechanical or hydraulic methods.
3. This permit does not authorize the removal of channel plugs or the connection of any canal or other waterway to navigable waters of the United States or to any other waters.
4. Prior to the initiation of any construction projects qualifying for SAJ-93 that include beach placement must be authorized by the applicable permit required under Part IV of Chapter 373, F.S., by the Florida Department of Environmental Protection (FDEP) and receive Water Quality Certification (WQC) and applicable Coastal Zone Consistency Concurrence (CZCC) or waiver thereto, as well as any authorizations required for the use of state-owned submerged lands under Chapter 253, F.S., and, as applicable, Chapter 258, F.S.
5. Turbidity control measures will be used to minimize turbidity impacts from dredging to the maximum extent practicable to control water quality and the work must be in accordance with State Water Quality Standards as outlined in Chapter 62.302, Florida Administrative Code. Turbidity control measures may include but are not limited to turbidity control curtains, the exclusive use of suction dredging, and the exclusive use of closed "clam shell" dredging, or any other technique necessary to reduce turbidity to meet State Water Quality Standards. The FDEP may require the applicant to submit a turbidity report within seven (7) days of sample collection, which may be verified by federal, state, or local government inspectors. More frequent report submissions, such as daily, may be requested or required by FDEP. If turbidity generated from the project exceeds acceptable levels, FIND shall immediately notify the Corps, or on the morning of the following workday should the exceedance occur after normal work hours. In addition all dredging or disposal shall cease until corrective measures have been taken and turbidity has returned to acceptable levels.
6. The Permittee will prohibit the contractor from dumping oil, fuel, or hazardous wastes in the work area and will require that the contractor adopt safe and sanitary measures for the disposal of solid wastes in accordance with federal, state, and local requirements. The Permittee shall develop an environmental protection plan to address concerns regarding monitoring of equipment, maintenance and security of fuels, lubricants, and spill prevention.

7. Dredged material shall be deposited in existing Dredged Material Management Areas (DMMAs) or upland areas where the dredged material is self-contained. Decanted return water is allowed and must meet State Water Quality Standards as established by FDEP. The use of an upland disposal area that is not a standard DMMA shall be constructed with consideration of the existing onsite drainage patterns, and the Permittee shall provide verification no onsite or offsite adverse flooding conditions will result from the placement of dredged material. Beneficial reuse of dredged material is allowed through the placement of dredged material on beaches where there is valid authorization and the characteristics of the dredged material are consistent with that of the authorization. Where beach placement is requested, the Permittee shall comply with state standards as approved by FDEP and included as special conditions in the Corps' authorization.

8. Within 60 days of completion of the authorized work, the Permittee shall furnish the Corps an "As built Drawing" of the completed project including a certified/sealed drawing which includes elevations illustrating the total amount of area impacted by the project. The as-built shall include an overlay with previously identified seagrass both in plan-view and cross section. The information shall be submitted to:  
CESAJ-ComplyDocs@usace.army.mil and nmfs.ser.monitoringreportshc@noaa.gov

Hardcopies may be sent to:

Jacksonville District, Regulatory Division  
 Special Projects and Enforcement Branch  
 Post Office Box 4970, Jacksonville, Florida 32232

## **B. SPECIAL CONDITIONS FOR AQUATIC RESOURCES:**

9. This permit authorizes direct impacts to seagrass within the design limits of the federal channel. Seagrass potentially impacted as a result of maintenance dredging of the IWW is based on two sources, the "Corps' 2015 Side-Scan Sonar and Aquatic Resource Mapping of the AIWW, IWW, and OWW" (referred to below as "side-scan sonar data") and the compilation of existing Geographic Information Systems (GIS) data (referred to below as "GIS data").

10. For maintenance dredging of the IWW from Dunlawton Bridge in Volusia County to Miami-Dade County, pre-construction and post-construction seagrass surveys are required, as follows:

a. For projects where the side scan sonar or the GIS data indicate seagrass is present within 100 feet from the design edge of the federal channel and within the scope of the project including anchor drop zones, pipeline corridors, temporary mooring piles, vessel turnaround areas, construction staging areas, anchor zones, and vessel ingress/egress areas.

**b.** The pre-construction survey will clearly identify the limits of all seagrass beds in their entirety and the seagrass polygons will be illustrated on the project construction plans (plan view and cross sections). The size, species identified, estimate of percent coverage, and estimate of percent species abundance shall be provided. The pre-construction survey shall be conducted during the period June 1 through September 30. All surveys within the range of Johnson's Seagrass shall fully adhere to the *Recommendations for Sampling Halophila johnsonii at a Project Site* as provided in Appendix III of the Johnson's Seagrass Recovery Plan available at [http://sero.nmfs.noaa.gov/protected\\_resources/johnsons\\_seagrass/documents/recovery\\_plan.pdf](http://sero.nmfs.noaa.gov/protected_resources/johnsons_seagrass/documents/recovery_plan.pdf).

**c.** The pre-construction survey shall involve a visual inspection of the proposed pipeline route(s), the turbidity mixing zone, the anchor zone adjacent to the dredge areas (100 feet to either side of the design edge of the channel), and all vessel operation areas. The pre-construction survey shall indicate water depths and bottom contours and shall identify and define existing seagrass beds and other aquatic resources within the anchor and pipeline zone on a map at a resolution sufficient to avoid impacts. Patches of Johnson's seagrass within the anchor zone, pipeline routes, and vessel operation areas shall be delineated with GPS and areas of coverage shall be quantified. Anchor drop points and identified pipeline corridor (within 5 meters from the centerline) shall be free of seagrass resources. Coordinates of all dredge anchor drop points shall be recorded using GPS technology, accurate to one (1) meter.

**d.** Where the pre-construction survey shows seagrass within 50 feet of a dredging activity, a post-construction survey will be required. Within 30 days following completion of construction, or after June 1 (whichever is later), a post-construction seagrass survey shall be conducted in the same manner and following the same transect locations and methods that were established during the pre-construction survey. If construction is completed prior to June 1, the post-construction survey shall be completed between June 1 and June 30. Scientific divers shall visit all anchor and pipeline locations that were positioned within the perimeter of a seagrass bed during this survey and will document any alterations to the seagrass, changes in bottom contours, and any changes to the extent of the seagrass (e.g., altered bottom strata including coverage by fill, furrowing from pipelines, or anchoring from dredge equipment/work boats).

**11.** If the pre-construction survey identifies seagrass adjacent to the federal channel or other construction areas, the project may proceed under this permit when the activity includes hydraulic dredging of predominant sandy or coarser sediments (no more than 10% of the material passes a #230 sieve) and seagrass can be avoided and a minimum 25-foot buffer maintained between seagrass and all dredging activities.

**12.** If the pre-construction survey identifies seagrass within 25 feet of proposed dredging activities (e.g., design limits of federal channel/area to be dredged, pipeline areas, anchor drop zones, etc.) or within 100 feet of the design limits of the federal channel/area to be dredged and the activity includes mechanical dredging and/or

removal of fine sediments (material passing a #230 sieve) the Corps will coordinate with National Marine Fisheries Service (NMFS) Habitat Conservation Division (HCD) for a 10-day review period prior to verification under this permit.

**13.** Work vessels crossing seagrass beds shall have a minimum of eighteen inches of water below the hull.

**14.** Direct impacts to seagrass located outside of the design limits of the federal channel are not authorized by this permit. FIND shall not anchor, place pipeline, or stage equipment in a manner that will cause any damage to seagrass. Unauthorized impacts to seagrass shall require remediation and may be subject to further compensatory mitigation requirements. Divers shall visit all anchor locations that were positioned within the perimeter of a seagrass bed within 14 days following completion of construction of each maintenance dredging event to investigate potential damage to seagrass.

**15.** Impacts to wetlands and natural hardbottom (including corals and worm rock) and wetlands are not authorized by this permit. This permit recognizes that the construction of the IWW in certain areas resulted in 1-foot to 3-foot relief ledges that provide habitat for a variety of fish and other marine organisms including sessile invertebrates such as corals and sponges. Although dredging would not directly impact these ledges, dredging to the design width of the channel in these locations would be in close proximity. The Permittee shall not anchor, place pipeline, or stage equipment in a manner that will cause any damage to hardbottom or wetlands. Anchoring, placing pipeline, or staging equipment shall avoid these sensitive areas. If the Corps' side scan sonar identifies the presence of hardbottom, a detailed benthic resource survey will be required (date of survey, species type, coverage, quantity, resource characteristics, etc.). If high-functioning benthic groups are present, such as stony corals, and the resources are candidates for relocation, the Permittee may avoid impacts by implementing an approved relocation plan prior to construction. All relocation plans shall be coordinated and approved by the Corps and NMFS Habitat Conservation Division as well as NMFS Protected Resources Division (PRD) if the corals proposed for relocation are federally listed species prior to verification under this permit. If impacts to wetland resources cannot be avoided such as due to pipeline placement, the Permittee may develop a compensatory mitigation plan to be coordinated and approved by both the Corps and NMFS HCD prior to verification this permit.

**16.** Anchor or pipeline damage to seagrass, hardbottom, or wetlands shall be reported to the Corps within 48 hours of discovery of impact. If the post-construction survey or project monitoring reveals that unintentional impacts to seagrass, hardbottom, or wetlands have occurred as a result of project-related activities (e.g., anchoring impacts, pipeline impacts, sedimentation and/or burial impacts, side slope sloughing, propeller wash, etc.), the Permittee shall coordinate with the Corps to quantify the impact, assess the ecological functional losses, and provide an in-kind compensatory mitigation plan within 30 days of discovery of impact to the Corps for review, coordination with NMFS, and approval.

## C. SPECIAL CONDITIONS FOR THREATENED AND ENDANGERED SPECIES:

### 17. Manatee Conditions:

a. The Permittee shall comply with the "Standard Manatee Conditions for In-Water Work - 2011" available at [http://www.saj.usace.army.mil/Portals/44/docs/regulatory/sourcebook/endangered\\_species/Manatee/2011\\_StandardConditionsForIn-waterWork.pdf](http://www.saj.usace.army.mil/Portals/44/docs/regulatory/sourcebook/endangered_species/Manatee/2011_StandardConditionsForIn-waterWork.pdf).

b. The Permittee shall comply with all additional dredging protocols described on maps contained within the "Corps of Engineers, Jacksonville District, and the State of Florida Effect Determination Key for the Manatee in Florida" dated 2013 (Manatee Key 2013) when the proposed project is located closer than 500-feet (within, adjacent to, or within 500-feet) from an Important Manatee Area (IMA). For any proposed projects located closer than 500-feet to a Warm Water Aggregation Area (WWAA) on the Manatee Key maps available at [http://www.saj.usace.army.mil/Portals/44/docs/regulatory/sourcebook/endangered\\_species/Manatee/County\\_Maps\\_2013.pdf](http://www.saj.usace.army.mil/Portals/44/docs/regulatory/sourcebook/endangered_species/Manatee/County_Maps_2013.pdf). The Permittee shall comply with the restricted dredging protocols required for projects located within WWAAs. Additionally, if a proposed project is within 500-feet of an IMA or WWAA and FIND is unable to implement the specified dredging protocols, the Corps will coordinate with FWC. Upon completion of coordination, the Corps may elect to verify the project under this permit with the inclusion of any additional applicable special conditions. The Manatee Key 2013, or any future revised keys, is available at: <http://www.saj.usace.army.mil/Missions/Regulatory/SourceBook.aspx>. *Note: The manatee key may be subject to revision at any time. It is our intention that the most recent version of this technical tool will be utilized during the verification of any dredging activity under this permit.*

c. The use of a clamshell dredge will be prohibited at night year round during clamshell dredging operations. A dedicated observer shall monitor for the presence of manatees. The dedicated observer shall have experience in manatee observation and be equipped with polarized sunglasses to aid in observing. The dredge operator shall gravity-release the clamshell bucket only at the water surface, and only after confirmation that there are no manatees within the safety distance identified in the standard construction conditions. Only hydraulic dredging activities are permitted to take place 24 hours a day, 365 days a year.

d. Barges shall install mooring bumpers that provide a minimum 4-foot standoff distance under maximum compression between other moored barges and large vessels, when in the vicinity of inlets, river mouths, and large estuaries where manatees are known to congregate.

e. Pipelines shall be positioned such that they do not restrict manatee movement to the maximum extent possible. Plastic pipelines shall be weighted or floated. Pipelines transporting dredged material within the vicinity of inlets, river mouths, and large

estuaries where manatees are known to congregate shall be weighted or secured to the bottom substrate as necessary to prevent movement of the pipeline and to prevent manatee entrapment or crushing.

f. In the event that such pipeline positioning has the potential to impact seagrass or nearshore hardbottom, the pipeline may be elevated or secured to the bottom substrate to minimize impacts.

#### **18. Sea Turtle and Smalltooth Sawfish Conditions:**

a. The Permittee shall comply with National Marine Fisheries Service's "Sea Turtle and Smalltooth Sawfish Construction Conditions" dated March 23, 2006 and available at [http://www.saj.usace.army.mil/Portals/44/docs/regulatory/sourcebook/endangered\\_species/sea\\_turtles/inwaterWorkSeaTurtle032306.pdf](http://www.saj.usace.army.mil/Portals/44/docs/regulatory/sourcebook/endangered_species/sea_turtles/inwaterWorkSeaTurtle032306.pdf).

b. Sand placement projects in Brevard, Indian River, St. Lucie, Martin, Palm Beach, and Broward counties shall be started after October 31 and be completed before May 1. During the May 1 through October 31 period, no construction equipment or pipes may be placed and/or stored on the beach.

**19. Biological Opinion:** This permit does not authorize the Permittee to take an endangered species, in particular sea turtles, shortnose sturgeon, piping plovers, southeastern beach mice, Anastasia Island beach mice, or Johnson's seagrass. In order to legally take a listed species, the Permittee must have separate authorization under the Endangered Species Act (ESA) (e.g., an ESA Section 10 permit, or a Biological Opinion (BO) under ESA Section 7, with "incidental take" provisions with which you must comply). The following BOs provide incidental take provisions for the above federally listed species: 1) *NMFS Regional Biological Opinion on Hopper Dredging Along the South Atlantic Coast (SARBO)* dated October 29, 1997, including all addendums; 2) *NMFS Maintenance Dredging of the Ports and Intracoastal Waterway within the Range of Johnson's Seagrass Regional Biological Opinion* dated June 4, 2001; 3) *U.S. Fish and Wildlife Service (FWS) Statewide Programmatic Biological Opinion for the U.S. Army Corps of Engineers Civil Works and Regulatory sand placement activities* updated March 13, 2015; 4) *FWS Programmatic Piping Plover Biological Opinion (P<sup>3</sup>BO) for the effects of U.S. Army Corps of Engineers planning and regulatory shore protection activities* dated May 22, 2013; and 5) *FWS BO for Regional General Permit SAJ-93* dated January 29, 2016. The aforementioned referenced BOs contains mandatory terms and conditions to implement the reasonable and prudent measures that are associated with "incidental take" that is also specified in the BO. Authorization under this permit is conditional upon compliance with all of the mandatory terms and conditions associated with incidental take of the referenced BOs, which terms and conditions are incorporated by reference in this permit. Failure to comply with the terms and conditions associated with incidental take of the BOs, where a take of the listed species occurs, would constitute an unauthorized take, and it would also constitute noncompliance with this permit. The FWS or NMFS is the appropriate

authority to determine compliance with the terms and conditions of its BO, and with the ESA.

**20.** This permit acknowledges the federal channel is excluded from Johnson's seagrass designated critical habitat; however, in the event that dredging related activities such as pipeline placement are proposed within Johnson's seagrass designated critical habitat, consultation with the NMFS PRD may be required. Upon completion of consultation, the Corps may elect to verify the project under this permit with the inclusion of any additional applicable special conditions.

**21.** Where beach placement is proposed the Permittee may be required to submit to the Corps for review plans and specifications for beach placement and a monitoring plan for sand compaction, scarp formation and leveling, lighting, beach profile surveys, sea turtle surveys and shorebird surveys. The beach profile template for the sand placement projects shall be designed to mimic the native beach berm elevation and beach slopes landward and seaward of the equilibrated berm crest. Prior to verification of a project with beach placement under this permit, the Corps will provide FWS with the pre-construction notification including any required information listed above for a 30-day period of review.

**22.** Any take of or sighting of an injured or incapacitated federally listed species shall be reported immediately to the Corps.

#### **D. SPECIAL CONDITIONS FOR HISTORIC PROPERTIES:**

**23.** If, during the initial ground disturbing activities and construction work, there are archaeological/cultural materials unearthed (which shall include, but not be limited to: pottery, modified shell, flora, fauna, human remains, ceramics, stone tools or metal implements, dugout canoes or any other physical remains that could be associated with Native American cultures or early colonial or American settlement), the Permittee shall immediately stop all work in the vicinity and notify the Compliance and Review staff of the State Historic Preservation Office (850-245-6333) and the Corps (904-232-1658) to assess the significance of the discovery and devise appropriate actions, including salvage operations. Based, on the circumstances of the discovery, equity to all parties, and considerations of the public interest, the Corps may modify, suspend or revoke the permit in accordance with 33 CFR Part 325.7.

**24.** In the unlikely event that human remains are identified, they will be treated in accordance with Section 872.05, Florida Statutes; all work in the vicinity shall immediately cease and the local law authority, the State Archaeologist (850-245-6444) and the Corps (904-232-1658) shall immediately be notified. Such activity shall not resume unless specifically authorized by the State Archaeologist and the Corps.

## **E. ADDITIONAL SPECIAL CONDITIONS:**

**25.** No work shall be performed until the Permittee submits satisfactory plans for the proposed activity and receives written verification from the District Engineer that the proposed project is in accordance with the general and specific conditions of this permit. The pre-construction notification shall include the proposed date of construction, the total quantity and type of material to be dredged, type of dredged equipment, anticipated duration of dredging, the location and areal extent of the cut or shoals to be dredged, the designated disposal sites including miles of shoreline for beach placement, and any required surveys, as appropriate, for the areas to be dredged and the disposal site.

**26.** The Permittee shall provide an annual report to the Corps in March of each year including a list of all verifications under this permit, total quantity of material dredged, GIS coverage of all cuts/shoals dredged, construction schedule and results of all required mitigation and monitoring including pre and post seagrass surveys with supporting GIS data, miles of shoreline where dredged material was placed on the beach.

**27.** This RGP will not obviate the necessity to obtain any other Federal, State, or local permits, which may be required.

**28.** The District Engineer reserves the right to require that any request for authorization under this general permit be evaluated as an Individual Permit or Letter of Permission.

**29.** This RGP shall be valid for a period of 5 years from the above date of issuance unless suspended or revoked by issuance of a public notice by the District Engineer. If SAJ-93 expires or is revoked prior to completion of the authorized work, authorization of activities that have commenced or are under contract (including if plans and specifications have commenced for contract) reliance on SAJ-93 will remain in effect provided the activity is completed within 12 months of the date SAJ-93 expired or was revoked.

**30.** The permittee shall perform all work in accordance with the general conditions for permits. The general conditions attached hereto are made a part of this permit.

**31. Assurance of Navigation:** The Permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structures or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the Permittee will be required, upon due notice from the U.S. Army Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.





REPLY TO  
ATTENTION OF

DEPARTMENT OF THE ARMY  
JACKSONVILLE DISTRICT CORPS OF ENGINEERS  
PO BOX 4970  
JACKSONVILLE, FLORIDA 32232-8176

**March 18, 2016**

Regulatory Division  
SAJ-2005-00972 (RGP-TKW)

Ms. Virginia M. Fay  
Assistant Regional Administrator  
Southeast Regional Office, Habitat Conservation  
NOAA, National Marine Fisheries Service  
263 13th Avenue South  
St. Petersburg, FL 33701

Dear Ms. Fay:

We have received your preliminary Essential Fish Habitat (EFH) Conservation Recommendations provided by letter dated May 5, 2015, responding to our request for consultation on re-evaluation of Regional General Permit SAJ-93 (RGP SAJ-93) which authorizes the Florida Inland Navigation District (FIND) to maintenance dredge the inland federal navigation channel and to dispose of dredged material within existing dredged material management areas (DMMAs), self-contained upland sites, or on certain beaches which currently receive dredged material. SAJ-93 includes the following inland federal navigation channels located within the counties of Nassau, Duval, St. Johns, Flagler, Volusia, Brevard, Indian River, St. Lucie, Martin, Palm Beach, Broward, and Miami-Dade and within FIND's area of responsibility:

- Atlantic Intracoastal Waterway (AIWW) from the Florida State line south to the St. Johns River,
- Intracoastal Waterway (IWW) on the east coast of Florida, from the St. Johns River south to Miami,
- Okeechobee Waterway (OWW), from its intersection with the IWW to the western Palm Beach County line in Lake Okeechobee.

The Corps has reviewed and considered the concerns and recommendations presented by the National Marine Fisheries Service (NMFS) in its letter, and has prepared the responses below, as required under the Magnuson-Stevens Fisheries Conservation and Management Act (MSA; 50 CFR § 600.920(k)). Additionally, we are enclosing the latest version of RGP SAJ-93 when includes some of your suggested edits received on November 17, 2015, as well an updated spreadsheet of the past and reasonably foreseeable dredging projects, and two survey reports located subsequent to our preparation of the DVDs of supporting documents and reports previously provided to your office. The aforementioned inland federal navigation channels are referred to in this letter collectively as "IWW".

-2-

1. *When impacts to previously mitigation seagrass would occur, the RGP SAJ-93 require FIND to provide the NMFS with information precisely defining dredge location, projected volumes, and construction schedule and documenting the seagrass mitigation has met performance standards established by the Jacksonville District.*
2. *RGP SAJ-93 require FIND to conduct pre-dredging and post-dredging surveys with a buffer distance of no less than 10 feet from dredging locations to allow verification that no direct impacts to seagrass are occurring from the dredging.*

To date, neither FIND nor the Corps has provided compensatory mitigation for seagrass within the IWW impacted by a maintenance dredging project. In order to reestablish and maintain the full function of the congressionally authorized federal navigation projects, the Corps and FIND must conduct maintenance dredging. Construction of the original Federally-authorized projects occurred prior to the enactment of the MSA and National Environmental Policy Act, whereby the environmental impacts associated with the authorized construction and maintenance were "grandfathered in," precluding the requirement to mitigate for past environmental damages, i.e., establishes a baseline.

The federally maintained channels are to be regarded as transportation infrastructure, much like highways or airfields. Regular maintenance dredging is required to maintain the function of channels, when newly returned to their intended design state, i.e., returned to whatever habitat value is present as result of their original authorized construction (baseline condition). Where seagrass opportunistically colonizes the channel between maintenance dredging events, any increase in habitat value is considered temporary and will be lost during the next dredging cycle necessary to maintain authorized project depths. Maintenance dredging restores the authorized depth in the interest of the public and required for public safety and as a matter of principle, compensatory mitigation should not be required for seagrass that colonizes as a result of natural shoaling, storm events, climatic factors, etc. The authorized depth of the IWW should be recognized as the "baseline condition" as it is an existing federal navigation channel authorized by Congress for public interest prior to MSA. In fact it is recognized in this context by NMFS in the Federal Register / Vol. 65, No. 66 / Wednesday, April 5, 2000 / Rules and Regulations 65 FR 17786 "*Designated Critical Habitat: Critical Habitat for Johnson's Seagrass*, excludes the IWW channel from critical habitat designation since the "maintenance activities are ongoing and associated with a disturbed area".

Ample precedent exists to support a position that mitigation for maintenance dredging of an existing federal project is not required. Examples include:

-3-

- Port Everglades Expansion. 2015 (ROD 2016). No mitigation for in-channel habitat. Corps/NMFS did not even initiate consultation on in-channel resources.
- Palm Beach Harbor Operation and Maintenance (O&M), Florida. 2015. No mitigation for in-channel habitat. Corps/NMFS did not even initiate consultation on in-channel resources.
- Port of Miami, Florida. Expanded 2014-2015. No mitigation for in-channel habitat. Mitigation for habitat in the expanded footprint.
- Indian River Intracoastal Waterway O&M, Florida 2014. No mitigation for in-channel habitat. Corps/NMFS did not even initiate consultation on in-channel resources.
- Jupiter Atlantic Intracoastal Waterway O&M. 2007. No mitigation for *Halophila* seagrass in the channel.
- Key West O&M, Florida 2007. No mitigation for in-channel habitat.
- Port Everglades O&M, Florida 2004 (FONSI 2005). No mitigation for in-channel habitat, seagrass or hardbottom/coral resources immediately adjacent to the entrance channel. Dredging has occurred twice (2005 and 2012-2013) since FONSI completed.
- San Juan Harbor, Puerto Rico. Expanded 2001. No mitigation for in-channel habitat. Seagrass (*Halophila*) mitigation for habitat in the expanded footprint.

The Corps is committed to evidence-based decision-making and as such provided NMFS a Draft Programmatic Essential Fish Habitat Assessment (PEFHA) on April 27, 2015, to engage with NMFS on a programmatic consultation under MSA for maintenance dredging of the IWW and to inform re-evaluation of RGP SAJ-93. Following a meeting with NMFS on May 16, 2015, substantial changes were made to the PEFHA and to the terms and conditions of RGP SAJ-93, at the request of NMFS. A Final PEFHA and revised Draft RGP SAJ-93 were provided to NMFS on August 17, 2015, including a spreadsheet of all reasonably foreseeable dredging projects with dredge location, projected volume, and construction schedule (by year). The PEFHA concluded "no substantial adverse impact" on EFH. On August 19, 2015, the Corps further concluded maintenance dredging of the IWW would have "minimal adverse effects" on EFH as dredging projects are limited in scope and duration and negligible in considering the "small" impact to seagrass within an existing "disturbed" federal channel compared to the extensive seagrass beds outside the channel in natural, undisturbed areas.

-4-

To the extent required by the relevant regulations, best available data was incorporated into the PEFHA. The Corps relied on three types of seagrass sources to inform conclusions regarding the extent of seagrass within the IWW: the Florida Fish and Wildlife Research Institute's (FWRI) GIS data, diver surveys, and side scan sonar. The FWRI data set which is comprised of primarily aerial sources was used to provide a large geographic extent to compare the extent of seagrass adjacent to the federal channel. This dataset represents a snapshot in time although the Indian River Lagoon dataset shows trends over multiple years of surveys. As this data set is largely aerial, it was assumed it might under-represent seagrass within the channel (compared to diver surveys) because of the deeper water and less density of seagrass within the channel but it covers the entire channel length, so is good for providing context of the total seagrass. Diver surveys are highest resolution but are limited to the location of dredging and impose delay to do the pre survey work for an event. The side scan sonar offers an in-between source as it provides better resolution than aerial interpretation with the tradeoff of less detail than diver survey but much greater geographic extent. Another benefit of the side scan sonar is the data was collected during the seagrass growing season over the same year period. To determine the confidence of the side scan sonar as a reliable survey method for predicting seagrass within the geographic and comprehensive scale of the IWW, the Corps' Engineering Research Design Center is analyzing the data and constructing a confusion matrix. The confusion matrix will identify false positives, false negatives, and accurate results in order to predict the confidence level of the side scan sonar based on ground truthing, underwater video, and diver surveys. It should be noted that ground truthing that took place in Broward and Miami-Dade Counties in July and August 2015, with a member of your staff, was not conducted randomly but rather intentionally focused on areas where the side scan sonar seagrass polylines did not align with the FWRI GIS and/or diver seagrass survey results. Subsequent to the side scan sonar, we also collected underwater video in October 2015, across certain transects of the IWW in Volusia and St. Lucie Counties to verify side scan polylines. The confusion matrix will be shared with NMFS upon its completion.

Within the range of seagrass, from Ponce de Leon Inlet south (Volusia Cut V-22) through its terminus in Biscayne Bay (Miami-Dade Cut DA-22) there is approximately 250 miles of IWW federal channel encompassing an area of approximately 4,088 acres, including wideners. The area of the federal channel does not represent a substantial contribution to seagrass habitat considering the expansive natural water bodies including the Mosquito Lagoon, Banana River, Indian River Lagoon, Lake Worth Lagoon, and Biscayne Bay. Based on the FWRI GIS data layer, seagrass encompasses approximately 1,027,363 acres with minimal seagrass within the actual design limits of the federal channel, i.e., approximately 29 acres as identified by the FWRI GIS data and approximately 20 acres as identified by the side scan sonar; this represents 0.0029 percent or 0.0019 percent, respectively, of the total amount of

-5-

seagrass. It should be noted the side scan acreage figure includes 0.57 acre north of State Road 838 in Broward County which ground truthing in July 2015, identified as a "false positive" as no seagrass was present in the federal channel.

During telephone conversations on October 23, 2015, and February 23, 2016, NMFS requested the Corps provide specific information on the acreage of seagrass impacted within the IWW as a result of past maintenance dredging and the projected loss as a result of future projects. This information is included on the enclosed spreadsheet. Pre-dredging surveys of projects within the range of seagrass show seagrass predominantly in the channel only in the vicinity of coastal inlets where high shoaling facilitates seagrass growth. The spreadsheet identifies "losses" of seagrass from the channel by comparing pre and post-dredge surveys but also identifies "gains" of seagrass as a result of colonization within the channel between dredge events. It should be noted that even though we recognize the authorized channel depth as the baseline condition, and therefore could surmise that any seagrass in the channel is a "gain" following the original construction, the spreadsheet only identifies a "gain" following a maintenance dredge event. Pre and post-dredging surveys from 1999 through 2014 show "gains" of 12.78 acres and "losses" of 9.05 acres of seagrass with no "net loss". This is due to the ability of seagrass to recolonize after dredging events. For example, pre-dredging surveys for Baker's Haulover between 2006 and 2010 surveys show a net increase of 7.8 acres of seagrass within the channel. Using the pre 2010 (7.85 acres) survey and the post 2010 (2.90 acres) survey, there was a loss in the federal channel of 4.95 acres of seagrass for the 2010 dredging event. When comparing the post 2010 survey (2.90 acres) and post 2013 survey (7.05 acres), however, there is a gain of 4.05 acres which was dredged during the 2014 event.

Similar results are apparent at Jupiter. A comparison of pre and post-dredging surveys for the 2008, 2011, and 2013 dredging events show a gain and subsequent loss of 0.10 acre, 0.67 acre, and 0.703 acre of seagrass, respectively, within the channel demonstrating seagrass recolonizes after dredging (or colonizes on new shoals) with no net loss. No other IWW maintenance dredging projects have resulted in the removal of seagrass within the IWW channel. Additionally, seagrass was not observed in the IWW channel in Cut P-50 near South Lake Worth Inlet in 2002, 2007, 2008, or 2012 surveys. Following the dredging event in 2012, however, the post 2013 survey showed a gain of 0.125 acre of seagrass in the channel.

The *South Lake Worth Inlet Cumulative Report of Seagrass Monitoring Conducted During 2001, 2002, 2003, and 2004* showed no long-term adverse effects of maintenance dredging on seagrass and as discussed in the PEFHA, further corroborates that seagrass coverage on an annual basis is highly variable and dependent on many factors including water quality, water clarity, weather, varying survey conditions, etc. Natural coastal processes contributes to shifting shoals and varying locations, density, and distribution of seagrass. Not surprisingly, the *South Lake*

-6-

*Worth Inlet Submerged Aquatic Vegetation Status Report* prepared in 2012, showed loss of any seagrass as a result of maintenance dredging is short-term as seagrass quickly recolonizes following dredging and more importantly, the longer-term threat to seagrass is a result of shifting sands and deposition on the flood shoal from natural coastal processes. Both of these reports are enclosed.

The projects previously identified for 2015 are anticipated to result in loss of 6.03 acres of seagrass in the IWW. Approximately 5.3 acres of seagrass was observed in Cuts P-35 to P-36 near Lake Worth Inlet during the 2011 pre-dredging survey, however, compensatory mitigation has been provided at Snook Island Natural Areas as this removal is associated with channel widening and deepening. Dredging has been completed and a post-dredging survey will be performed with any re-colonization of seagrass noted as a "gain". The St. Lucie maintenance dredging and Broward deepening projects which were originally anticipated to commence in 2015 will remove 0.97 acre and 0.03 acre of seagrass, respectively based on pre surveys provided with the permit application. Broward deepening is scheduled to commence in May 2016, and St. Lucie in summer 2016. Underwater video collected across IWW transects in St. Lucie in October 2015 indicates seagrass may not be as extensive as it was during the 2014 pre-dredging survey. This is not surprising as this area is highly dynamic due to tidal currents and the proximate flood shoal. Additionally, although out-of-kind for seagrass, FIND did complete compensatory mitigation for impacts to EFH associated with the Broward deepening project. Following completion of both of these projects seagrass that recolonizes will be designated as a "gain". No other foreseeable dredging projects through 2020 are anticipated to impact seagrass in the federal channel. The minimal amount of seagrass present within the design width of the authorized federal navigation channel which is essentially the area of direct impact from maintenance dredging when compared to the extensive seagrass beds present within the adjacent natural water bodies and the ability of seagrass to recolonize after dredging events supports our conclusion that maintenance dredging of the IWW including any seagrass within the channel has "minimal adverse effect" on EFH for federally managed species. Based on our data, this minimal effect is short term with no net loss of seagrass.

RGP SAJ-93 requires FIND provide the Corps an annual report of all projects verified including total quantity of material dredged, dredge location, construction schedule, and results of any required mitigation and monitoring including miles of shoreline where dredged material was placed on the beach. See special condition number 26.

3. *RGP SAJ-93 require a buffer of no less than 100 feet between dredging and seagrass habitats.*

The prior RGP SAJ-93 required a minimum buffer of 100 feet between dredging and seagrass habitat. Although seagrass is generally absent from the federal navigation channel, it is present in close proximity to the channel including some side slopes.

-7-

Meeting this minimum buffer requirement proved difficult resulting in little utility of the RGP with only six verifications over the five-year period. Three of those projects required a modified dredge footprint in order to meet the 100-foot minimum buffer. As the Corps' oldest and primary mission is safe navigation, modifying a dredge footprint to leave a shoal in the federal channel and not dredging the entire width of a navigation channel is an unsafe practice. For safety reasons and to ensure the IWW is unobstructed for commercial and recreation vessel traffic, the Corps and FIND prefer dredging be performed for the entire width of the channel from design edge to design edge including channel wideners. With a well maintained navigation channel, vessels are more likely to stay within the deeper channel limits and outside of the shallows where seagrass is more prevalent, thereby protecting seagrass resources.

Since avoiding seagrass within the design limits of the federal channel is unwise, the revised draft RGP-93 circulated by public notice on March 31, 2015, proposed a reduction in buffer from 100 feet to 25 feet which would fall within the side slopes of the federal channel where sloughing and sedimentation are most likely to occur. Following discussions with NMFS on May 16, 2015, further refinement of the special conditions was made to address turbidity concerns where dredge material has a higher fine content and to address a buffer of less than 25 feet for projects with minimal risk of turbidity such as near the coastal inlets where sand is hydraulically dredged. Pre and post-dredging surveys show seagrass within these areas quickly recolonizes following the dredging event; and loss of seagrass documented in post-dredging surveys has not always been attributed to the dredging project. Where minimum buffers as established in RGP SAJ-93 cannot be met, a 10-day coordination with NMFS will be required prior to verification of a project under the RGP. See special condition numbers 11 and 12.

Despite all measures that can and will be taken to reduce impacts, any dredging activity will always generate a certain irreducible amount of turbidity and sedimentation. It is the Corps and FIND's experienced view that impacts to the marine environment from the necessary dredging are best minimized by maximizing use of hydraulic dredges and limiting the duration of the dredging activity, and therefore the duration of the turbidity and other effects in a given area. FIND will employ all best management practices available to minimize impacts. See special condition number 5.

*4. RGP SAJ-93 include a special condition requiring compensatory mitigation in the case that indirect impacts are documented through comparison of post-dredging surveys and pre-dredging surveys.*

RGP SAJ-93 does not authorize direct impacts to seagrass outside the federal navigation channel. The Corps and FIND have been successful in utilizing pre-construction surveys to avoid seagrass impacts associated with pipelines, booster pumps, anchors, etc. Compensatory mitigation will be required for any of the following



-8-

activities that result in adverse impacts to seagrass outside the federal channel: unauthorized dredging beyond prescribed project limits, scouring of adjacent resources as a result of dredging/prop dredging/vessel damage, inadvertent barge disposal on seagrass or other aquatic resources, pipeline failures, dredged material containment failures, and anchoring or pipeline placement outside the channel. See special condition numbers 14 and 16.

5. RGP SAJ-93 stipulate the methods, reporting requirements, and time of year for seagrass surveys. The language included in special condition 10 of the existing RGP is sufficient.

This language has been added to RGP SAJ-93. See special condition numbers 10.a and 10.b.

6. RGP SAJ-93 require FIND to annually provide a list of all dredging actions performed under the RGP. The NMFS requests the list include a map of station numbers defining actual areas where dredging occurred and a summary of seagrass surveys conducted. NMFS requests the surveys be send to [nmfs.ser.monitoringreportshe@noaa.gov](mailto:nmfs.ser.monitoringreportshe@noaa.gov).

This language has been added to RGP SAJ-93. See special condition number 26.

Based on the findings of the Final PEFHA including the two DVDs of supporting documents, the terms and conditions of the revised RGP SAJ-93, and the information contained in this letter, the Corps is satisfied that the consultation procedures outlined in 50 CFR Section 600.920 of the regulation to implement the EFH provisions of the Magnuson-Stevens Act have been met and intends to issue permit number SAJ-2005-00972 for re-authorization of RGP SAJ-93 on or about 10 days after the date of this letter. If you have any questions, please contact Tori White at 904-232-1658 or by email at [tori.white@usace.army.mil](mailto:tori.white@usace.army.mil).

Sincerely,



for Donald W. Kinard  
Chief, Regulatory Division

Enclosures:

RGP SAJ-93 revised March 2016

FIND Dredging History and Projections Spreadsheet revised March 2016

-9-

*South Lake Worth Inlet Cumulative Report of Seagrass Monitoring Conducted During 2001, 2002, 2003, and 2004* prepared by and for Palm Beach County Environmental Resources Management

*South Lake Worth Inlet Submerged Aquatic Vegetation Status Report* prepared by Applied Technology and Management for Palm Beach County Environmental Resource Management in January 2012

Copies Furnished (electronically):

NMFS, Mr. Pace Wilber, [pace.wilber@noaa.gov](mailto:pace.wilber@noaa.gov)

NMFS, Ms. Jocelyn Karazsia, [jocelyn.karazsia@noaa.gov](mailto:jocelyn.karazsia@noaa.gov).

YEAR	REACH	CUTS	FROM CUT/STATION	TO CUT/STATION	LOCATION	YARDAGE (CY)	DMMA	ENTITY	FILE NUMBER	EFH CONSULT	SOURCE	FREQUENCY (YEARS)	Seagrass amount notes	Gain (regrow)	Loss
<b>DREDGING HISTORY (1999 - 2014)</b>															
1999	SJ-V	SJ-59 - SJ-61	Cut SJ59/STA 20+00	Cut SJ61/STA 30+00	Matanzas	1,040,000	Bch	USACE			Outside range of seagrass	3			
2000	N-II	N-21 - N-27-C	Cut 21/5+00 Cut 23/23+00	Cut 22/9+00 Cut 27/23+00	Sawpit	180,000 26,000	Bch DU-2	USACE		22-Jun-96	Outside range of seagrass	5			
2001	BV-I	BV-1 - BV-9	Cut BV-1/STA 0+00	Cut BV-9/STA 43+00	Brevard, Haulover Canal	1,000,000	BV-2C	USACE			SIRWMD - IRL		No seagrass in channel.		
2001	P-IV	P-50	CUT P-50/STA 15+00	CUT P-50/STA 30+00	Palm Beach			FIND/PBC	SAJ- 2000- 02301	23-Mar-01	Post 2002 survey		No seagrass in channel per EA/SOF or cumulative seagrass report (2001-2004) although 0.09 acre within sand trap directly affected by dredging (sand trap designed to preclude burying of grass by shoaling).		
2003	M-II	M-5 and OWW Cut-1	Cut M-4/STA 22+00 OWW Cut 1/STA 0+00	Cut M-6/STA 6+00 OWW Cut 1/STA 14+00	Crossroads	55,700	Bch	USACE	SAJ- 1996- 02289	18-Feb-03	2002 Pre Survey	3	Based on 2002 pre survey no seagrass in the channel. Two patches of seagrasses are located within 50 feet of the channel.		
2003	P-I	P-1 - P-4			Jupiter	100,000	Bch	USACE				3	No survey found; likely no survey required.		
2003	SJ-V; F- I	SJ-2 - SJ-5; F-2			Matanzas	286,500	Bch	USACE			Outside range of seagrass	3			
2005	V-V	V-36 - V-40	Cut V-36/STA 17+00 Cut V-37/STA 16+00 Cut V-38/STA 38+00 Cut V-38/STA 55+00 Cut V-38/STA 74+00 Cut V-38/STA 80+00 Cut V-38/STA 21+00 Cut DU-8/STA 12+97.18	Cut V-37/STA 4+00 Cut V-38/STA 25+00 Cut V-38/STA 43+00 Cut V-38/STA 60+00 Cut V-40/STA 31+87.9 Cut V-40/STA 84+46.7 Cut DU-8/STA 2+00 Cut DU-9/STA 4+00	Volusia S New Smyrna	300,000	Bch	USACE			SIRWMD - IRL	5	No seagrass in channel.		
2005	SJ-I/II	SJ-5 - SJ-9, DU- 7 - DU-9			Palm Valley S	1,200,000	SJ-14	USACE		4-Aug-04	Outside range of seagrass	10			
2005	SJ-III	SJ-29A			St Augustine Inlet Intersection	124,900	Bch	USACE			Outside range of seagrass	5			
2005	M-II	M-5 and OWW Cut-1			Crossroads	35,300	M-5	USACE				3	No survey required.		
2005	DA-II	DA-9			Bakers Haulover	45,100	Bch	USACE		4-Aug-97	Feb 2006 Pre- Survey	4	No seagrass in channel.		
2006	N-II	Cut 11 - 27-A	Cut 11/STA 0+00 Cut 12/STA 22+00 Cut 19/STA 27+00 Cut 23/STA 27+00 Cut 27/STA 5+00 Cut 27/STA 61+00 Cut 27A/STA 8+00	Cut 12/STA 7+00 Cut 19/STA 2+00 Cut 22/STA 7+00 Cut 26A/STA 2+00 Cut 27/STA 14+00 Cut 27/STA 67+00 Cut 27A/STA 20+00	Sawpit	297,000 147,000	Bch DU-2	USACE			Outside range of seagrass	5			

YEAR	REACH	CUTS	FROM CUT/STATION	TO CUT/STATION	LOCATION	YARDAGE (CY)	DMMA	ENTITY	FILE NUMBER	EFH CONSULT	SOURCE	FREQUENCY (YEARS)	Seagrass amount notes	Gain (regrow)	Loss
2007	SJ-V	SJ-59 – SJ-61 P-1 – P-3	Cut SJ-59/STA 20+00	Cut SJ-61/STA 13+00	Matanzas	183,000	Bch	USACE			Outside range of seagrass	3			
			Cut P-1/STA 65+00	Cut P-1/STA 78+00											
			Cut P-3/STA 3+00	Cut P-3/STA 11+5192											
2008	P-I	P-4	Cut P-4/STA 0+00	Cut P-4/STA 7+00	Jupiter	138,000	Bch	USACE		9-Nov-07	2007 & 2008 Pre Surveys	3	Loss is the reduction of 0.10 acre in the channel noted in the 2008 post survey. This are is also a gain as it shows in 2007 pre survey but did not exist in the 2006 pre survey.	0.10	0.10
2008	P-IV	P-50	CUT P-50/STA 15+00	CUT P-50/STA 30+00	Palm Beach	39,000	MSA 617C /Bch (Ocean Ridge)	FIND	SAJ- 2000- 02301	23-Mar-01	2007 & 2008 Surveys		2007pre and 20087 post surveys show no seagrass in channel. Dredge of inlet sandtrap adjusted to avoid seagrass. Overlay with post 2003 shows some spatial growth.		
2010	SJ-I	SJ-2 – SJ-5	Cut SJ-2/STA 23+00	STA SJ-5/STA 80+00	Palm Valley N	258,000	DU-9	USACE		4-Aug-04	Outside range of seagrass				
			Cut M-4/STA 22+00	Cut M-5/STA 3+00											
			Cut M-5/STA 17+00	Cut M-5/STA 35+00											
2010	M-II	M-4-M-5 and OWW Cut-1	Cut M-5/STA 45+00	Cut M-5/STA 61+73.96	Crossroads	51,900	M-5	USACE				3	No survey required.		
			OWW Cut-1/STA 2+50	OWW Cut 1/ STA 11+00											
			CUT P-2/STA 17+50	CUT P-2/STA 26+12.63											
2010	P-I	P-3	CUT P-3 STA 0+00	Cut P-3/STA 11+5192	Jupiter	66,000	Bch	FIND	SAJ- 2008- 00533	3-Mar-08	2011 survey	3	2011 post survey states no loss of seagrass within the dredge footprint although seagrass coverage within the survey area decreased by 0.67-acre due to other factors.		
			Cut P-4/STA 0+00	CUT P-4/STA 17+00											

YEAR	REACH	CUTS	FROM CUT/STATION	TO CUT/STATION	LOCATION	YARDAGE (CY)	DMMA	ENTITY	FILE NUMBER	EFH CONSULT	SOURCE	FREQUENCY (YEARS)	Seagrass amount notes	Gain (regrow)	Loss
2010	DA-II	DA-9	Cut DA-9/STA 23+00	Cut DA-9/STA 55+00	Bakers Haulover	38,000	Bch	USACE			FWRI & Construction drawing G-102	4	Gain is the growth of 7.8 acres of seagrass in the channel between the 2006 pre survey (0 acres) and the 2010 pre survey (7.8 acres). Loss is 4.95 acres identified in the 2010 post survey by comparing 2010 pre survey (7.8 acres) and 2010 post survey (2.90 acres).	7.8	4.9
2010	P-III	P-37 P-38	Cut P-37/STA 53+00 Cut P-38/STA 15+00	Cut P-37/STA 68+00 Cut P-38/STA 66+75	Palm Beach	12,750	MSA 617C	FIND	SAJ-2009-04126	18-Feb-10	Pre Report dated Oct 1 2012 (Survey performed Aug 30 & Sep 12, 2012).		No seagrass in channel.	-	-
2011	SJ-V/F-I	SJ-59-SJ-61, F-2	Cut SJ-60/STA 4+00 Cut F-2/STA 5+50	Cut SJ-61/STA 13+00 Cut F-2/STA 33+00	Matanzas	272,915	Bch	USACE		14-Jan-10	Outside range of seagrass	3			
2012	SJ-III	SJ-28-SJ-30			St Augustine Inlet Intersection	122,645	Bch	USACE		10-May-10	Outside range of seagrass	5			
2013	N-II	24, 25, 26, 26A, 27, SB, AMA-B,	Cut SJ-20/5+00 Cut F-2/5+50	Cut SJ-61/13+00 Cut F-2/33+00	Sawpit	519,556 13,000	Bch DU-2	USACE			Outside range of seagrass	5			
2013	M-II	M-4 - M-6, OWW Cut 1	CUT M-4/STA 21+64 OWW-1/STA 0+00	CUT M-6/STA 4+31 OWW-1/STA 13+82	Crossroads	42,000	M-5	FIND	SAJ-2009-	12-Sep-11	2013 Pre Survey	3	No seagrass in channel.	-	-
2013	V-IV	V-22 - V-28	CUT V-22/STA 64+00	CUT V-28/STA 19+17.6	Volusia/Ponce	258,000	MSA 434	FIND	SAJ-2012-02660	RGP-93	SJRWMD- IRL	4	No seagrass in channel.	-	-
2013	P-IV	P-50	CUT P-50/12+00	CUT P-50/32+00	Palm Beach/Ocean Ridge	30,000	MSA 617C & Bch (Ocean Ridge)	FIND	SAJ-2000-02301	28-Aug-12	Post report dated Apr 24, 2015 (Post surveys Feb 9-10, 2015). This report included the pre 2013 edge of seagrass.		No seagrass in channel based on 2013 pre- seagrass edge but there was some regrowth 0.125 acres in 2015 post survey (estimated by digitizing).	0.125	-
2013	P-III	P-37 P-38	CUT P-37/STA 54+50 CUT P-38/STA 26+25	CUT P-37/STA 66+75 CUT P-38/STA 31+02.04	Palm Beach Palm Beach	17,000	MSA 617C	FIND	SAJ-2009-	RGP-93	2012 Pre Survey		No seagrass in channel.	-	-
2013	P-III	P-31	CUT P-31/STA 8+00	CUT P-31/STA 14+00	Palm Beach	5,000	MSA 617C	FIND	SAJ-2012-02469	RGP-93	2011 Pre Survey; RGP verified with modification of dredge footprint to meet 100' buffer		No seagrass in channel.	-	-

# FIND Dredging History and Projections

update version March 18, 2016

YEAR	REACH	CUTS	FROM CUT/STATION	TO CUT/STATION	LOCATION	YARDAGE (CY)	DMMA	ENTITY	FILE NUMBE R	EFH CONSULT	SOURCE	FREQUENCY (YEARS)	Seagrass amount notes	Gain (regrow)	Loss
2013	Route 1 & 2	R1-1, R1-2, R2-1, R2-2, R2-3	R1-1/STA 0+00 R2-1/STA 0+00	R1-2/STA 42+00 R2-3/STA 33+02.96	Martin	6,700	Temp. DMMA	FIND	SAJ- 2011-	RGP-93	Outside the range of				
2013	SL-1	SL-3	CUT SL-3N/STA 7+00	CUT SL-3N/STA 10+00	St. Lucie	2,500	City of Ft. Pierce Marina	FIND	SAJ- 2013- 00633	RGP-93	2011 Pre Survey		No seagrass in channel.	-	-
2014	P-1	P-1	Cut P-1/STA 11+50	Cut P-1/STA 30+00	Jupiter	86,000	Bch	USACE			2013 Pre Survey	3	Loss is 0.703 acre in the channel in Cut P-1 North. This acreage is also a gain as it was not present in the 2007 pre survey and colonized between 2007 and 2013.	0.703	0.703
			Cut P-1/STA 66+00	Cut P-1/STA 81+20.77											
			Cut P-2/STA 23+00	Cut P-4/STA 11+00											
2014	MD-II	DA-9	Cut DA-9/STA 23+36	Cut DA-9/STA 56+26	Bakers Haulover	50,000	Bch	USACE			Pre report dated Jan 13, 2014 (Surveys Aug 13 - Sep 6, 2013). Post report dated Jul 22, 2014 (Surveys Apr 16-23, 2014)	4	Gain is the pre-2013 seagrass extent (shown on the post- report for the 2014 dredge event) that falls within the channel, presuming no seagrass in the channel after the 2010 dredging event. Loss is based on presumption no seagrass in the channel after the 2014 dredging event. Reports from Miami- Dade indicates this occurred.	4.05	4.05
													Subtotal 1999 - 2014	12.78	9.05
DREDGING PROJECTION (2015 - 2020)															
2015	IR-I	IR-1-IR-6	CUT IR-1/STA 0+00	CUT IR-2/STA 130+00	Indian River Rch 1	300,000	IR-2	USACE		3-Jul-14	SURWMD IRL & 2014 Pre Survey	10	No seagrass in channel.	-	
			CUT IR-3/STA 7+00	CUT IR-3/STA 40+00											
			CUT IR-4/STA 5+00	CUT IR-4/STA 18+00											
			CUT IR-5/STA 0+00	CUT IR-5/STA 5+00											
			CUT IR-5/STA 9+00	CUT IR-5/STA 26+00											
			CUT IR-5/STA 31+00	CUT IR-5/STA 35+49.73											
2015	SL-I	SL-2 - SL-3N, SL3S	CUT IR-6/STA 0+00	CUT IR-6/STA 14+40	St Lucie Rch I Ft Pierce	70,000	SL-2	FIND	SAJ- 2014- 03657		2014 Pre Survey. Project not yet dredged		0.97ac of seagrass observed in Cut 5.	No prior data to compare.	0.97
			CUT SL-2/STA 11+00	CUT SL-2/STA 16+00											
			CUT SL-2/STA 25+00	CUT SL-2/STA 53+00											
			CUT SL-3N/STA 8+50	CUT SL-3N/STA 12+00											
			CUT SL-3S/STA 2+50	CUT SL-3S/STA 4+50											

# FIND Dredging History and Projections

update version March 18, 2016

YEAR	REACH	CUTS	FROM CUT/STATION	TO CUT/STATION	LOCATION	YARDAGE (CY)	DMMA	ENTITY	FILE NUMBER	EFH CONSULT	SOURCE	FREQUENCY (YEARS)	Seagrass amount notes	Gain (regrow)	Loss
		SL-5	CUT SL-5/STA 7+00	CUT SL-5/STA 74+00							so impact by				
2015	P-III	PB-35 – PB-36	CUT PB-35/STA 0+00	CUT PB-36/STA 9+00	Palm Beach Deepening	95,000	Peanut Island	FIND	SAJ-2012-01719	20-Aug-14	2011 Pre Survey. Project just completed so do not yet have post report to show actual dredge template therefore impact may be less.		Based on shapefile for 2011 Pre survey, approximately 5.3 acres in channel. FWRI (Palm Beach benthic 2007 report) and 2015 side scan show no seagrass. Side scan high resolution indicates sand has moved into area. palm beach deeping pre2011 report.	Prior data is aerial (vs. diver) survey.	5.3
2015	BW-III	BW-36 – WB-49	CUT BW-36/STA 0+00	CUT BW-49/STA 26+50	Broward Deepening	250,000	Port Everglades	FIND	SAJ-2009-03523	12-Apr-10	Pre Report dated Oct 10, 2014 (Surveys Jul 21 & Aug 6, 2014)		.03 acre of seagrass in channel widener.	No prior data to compare	0.03
Subtotal 2015															
2016	BW-III	BW-1-BW-21			Broward Rch I, North County	80,000	Nearshore	USACE			2015 Side Scan Sonar & FWRI		No seagrass within the channel (confirmed by groundtruthing).		
2016	M-II	M-4 – M-6, OWW Cut 1			Crossroads	50,000	M-5	FIND			Ref historic, 2015 side scan sonar, & FWRI	3	No seagrass within the channel.		
2016	N-II	N-34 – N-27			Nassau Rch I, North County	190,000	NA-1	FIND			Outside range of seagrass				
2016	SJ-V	SJ-59-SJ-61, F-2			Matanzas	250,000	Bch	USACE			Outside range of seagrass	3			
2017	O-III/IV				OWW Rch III & IV, Palm City	80,000	O-7	FIND/USACE			Outside range of seagrass				
2017	SJ-III	SJ-28-SJ-30			St Augustine Inlet Intersection	50,000	Bch	USACE			Outside range of seagrass	5			
2017	V-IV	V-22 – V-40			Volusia/Ponce & MSA Offload	500,000	Bch	FIND			2015 side scan sonar & SJRWMD - IRL	4	No seagrass in the channel.		
2017	P-I	P-1-P-3			Jupiter	75,000	Bch	USACE			Ref historic	3	Historic shows both no seagrass in channel (2002, 2010) and seagrass "gain" in channel (2008, 2014).		



# FIND Dredging History and Projections

update version March 18, 2016

YEAR	REACH	CUTS	FROM CUT/STATION	TO CUT/STATION	LOCATION	YARDAGE (CY)	DMMA	ENTITY	FILE NUMBER	EFH CONSULT	SOURCE	FREQUENCY (YEARS)	Seagrass amount notes	Gain (regrow)	Loss
2018	P-III/V	P-31-P-50			Palm Beach/Ocean Ridge	50,000	MSA 617C & Bch	FIND			Ref historic	5	Anticipated no seagrass in channel.	*	*
2018	SL-II	SL-6-M-1			St Lucie Rch II, South of Ft. Pierce	200,000	M-8	USACE/FIND			SJRWMD - IRL & 2015 side scan sonar		Side Scan 0.001712 acre (72sqft) in channel.	*	0.00
2018	F-I	F-2-F-11			Flagler Rch I, South of Marineland	300,000	FL-3	USACE/FIND			Outside range of seagrass				
2018	BV-III	BV-1, BV-3, BV-6 - BV-9 BV-2, BV-4, BV-5			Brevard, Haulover Canal	500,000	BV-2C	USACE/FIND			SJRWMD - IRL & 2015 side scan	10	No seagrass in the channel.		
2019	N-II	SI-21-SI-27C			Sawpit	500,000	Bch & DU-2	USACE			Outside range of seagrass	5			
2019	DA-II	DA-9			Bakers Haulover	45,000	Bch	USACE			Ref historic	4	Presume no net loss. No seagrass in channel (2005), or net gain (2010) or no net loss because seagrass grew from prior dredge event (2014).		
2019	SI-V	SI-59-SI-61, F-2			Matanzas	250,000	Bch	USACE			Outside range of seagrass	3			
2019	M-II	M-4 - M-6, OWW Cut 1			Crossroads w/Add, ICWW N&S	75,000	M-5	FIND			Ref historic, FWRI, & 2015 side scan sonar	3	No seagrass in the channel.		
2020	V-IV				Volusia/Ponce	250,000	MSA 434	FIND			SJRWMD - IRL & 2015 side scan sonar	4	No seagrass in the channel.		
2020	P-I	P-1-P-3 P-4			Jupiter	75,000	Bch	USACE			Ref historic	3	Historic shows either no seagrass (2002, 2010) or loss	*	*
2020	BV-II	BV-7-BV-15			Brevard Rch II Mims	300,000	BV-4B	USACE/FIND			SJRWMD - IRL & 2015 side scan sonar		No seagrass in channel.		
													Subtotal 2016 - 2020	0.00	0.00
													Total 1999 - 2020	12.78	15.35

## Mark Crosley

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**From:** Bradley Weeber <WeeberB@etminc.com>  
**Sent:** Saturday, April 02, 2016 9:31 AM  
**To:** Mark Crosley; 'jscarborough@taylorengineering.com';  
'hverkerk@taylorengineering.com'; 'jarmbruster@taylorengineering.com';  
'jadams@taylorengineering.com'; michael O'Steen (michael@parcgroup.net)  
**Subject:** Marsh Harbor South: FIND easement relocation  
**Attachments:** FIND Easement Release.pdf; FIND Easement.pdf; FIND relocation.pdf; Marsh Harbor Wetland Impact Map.pdf

Mark,

Attached please find:

1. FIND easement release area legal
2. FIND easement replacement area legal
3. FIND relocation exhibit
4. Marsh Harbor Wetland Impact Map
  - a. Impact #2 taken for residential road and FIND easement relocation
  - b. Impacts #19-26 taken for haul road so that haul road could be located completely off of existing FIND pipe

As we discussed the other day, ETM understands that there is a constant flow in the existing pipe and that this flow will need to be maintained during the construction process. Additionally, John has provided the original specifications for the FIND pipe. We will review and incorporate into the plan.

Thank you again for your time the other day. Let me know if there is anything else you need from me.

**Bradley Weeber, P.E., LEED AP BD+C**

**Shareholder**



Direct: 904-265-3192  
Main: 904-642-8990  
Fax: 904-646-9485  
Email: WeeberB@etminc.com

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14775 Old Saint Augustine Road, Jacksonville, Florida, 32258

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March 31, 2016  
Marsh Harbor  
Page 1 of 2

Work Order No. 16-071.00  
File No. 123M-29.00B

### F.I.N.D. Easement Release

A portion of Section 55 of the Pedro Miranda Grant, Township 4 South, Range 29 East, St. Johns County, Florida, being more particularly described as follows:

For a Point of Reference, commence at the Southwesterly corner of Marsh Harbor at Palm Valley Unit Two, as recorded in Map Book 56, pages 57 through 61 of the Public Records of said county; thence North  $75^{\circ}40'38''$  East, along the Southerly line of said Marsh Harbor at Palm Valley Unit Two, 1023.55 feet to a point lying on the Westerly line of the Intracoastal Waterway, as recorded in Map Book 4, pages 68 through 78 of said Public Records; thence South  $25^{\circ}11'43''$  East, departing said Southerly line and along said Westerly line, 790.15 feet to the Northeasterly corner of that certain Perpetual Pipeline Easement as described and recorded in Official Records Book 3254, page 878 of said Public Records; thence Southwesterly, along the Northerly line of said Perpetual Pipeline Easement, the following 4 courses: Course 1, thence South  $63^{\circ}35'55''$  West, departing said Westerly line, 297.75 feet to the point of curvature of a concave Southeasterly having a radius of 50.00 feet; Course 2, thence Southwesterly along the arc of said curve, through a central angle of  $62^{\circ}49'53''$ , an arc length of 54.83 feet to a point of reverse curvature, said arc being subtended by a chord bearing and distance of South  $32^{\circ}10'58''$  West, 52.12 feet; Course 3, thence Southwesterly, along the arc of a curve concave Northwesterly having a radius of 100.00 feet, through a central angle of  $57^{\circ}56'09''$ , an arc length of 101.12 feet to the point of tangency of said curve, said arc being subtended by a chord bearing and distance of South  $29^{\circ}44'06''$  West, 96.86 feet; Course 4, thence South  $58^{\circ}42'11''$  West, 127.75 feet to the Point of Beginning.

From said Point of Beginning, thence South  $31^{\circ}17'49''$  East, departing said Northerly line, 60.00 feet to a point lying on the Southerly line of said Perpetual Pipeline Easement, said point being a point on a curve concave Southeasterly having a radius of 335.00 feet; thence Southwesterly, along said Southerly line and along the arc of said curve, through a central angle of  $26^{\circ}36'45''$ , an arc length of 155.60 feet to the Southwesterly corner of said Perpetual Pipeline Easement, said corner lying on the Southerly line of that certain Perpetual Pipeline Easement as described and recorded in Official Records Book 1097, page 1093 of said Public Records, said arc being subtended by a chord bearing and distance of South  $45^{\circ}23'48''$  West, 154.20 feet; thence South  $57^{\circ}02'35''$  West, along said Southerly line of Official Records Book 1097, page 1093, a distance of 165.07 feet to the point of curvature of a curve concave Northerly having a radius of 408.59 feet; thence Westerly, continuing along said Southerly line and along the arc of said curve, through a central angle of  $31^{\circ}33'58''$ , an arc length of 225.11 feet to a point on said curve, said arc being subtended by a chord bearing and distance of South  $72^{\circ}49'34''$  West, 222.27 feet;

March 31, 2016  
Marsh Harbor  
Page 2 of 2

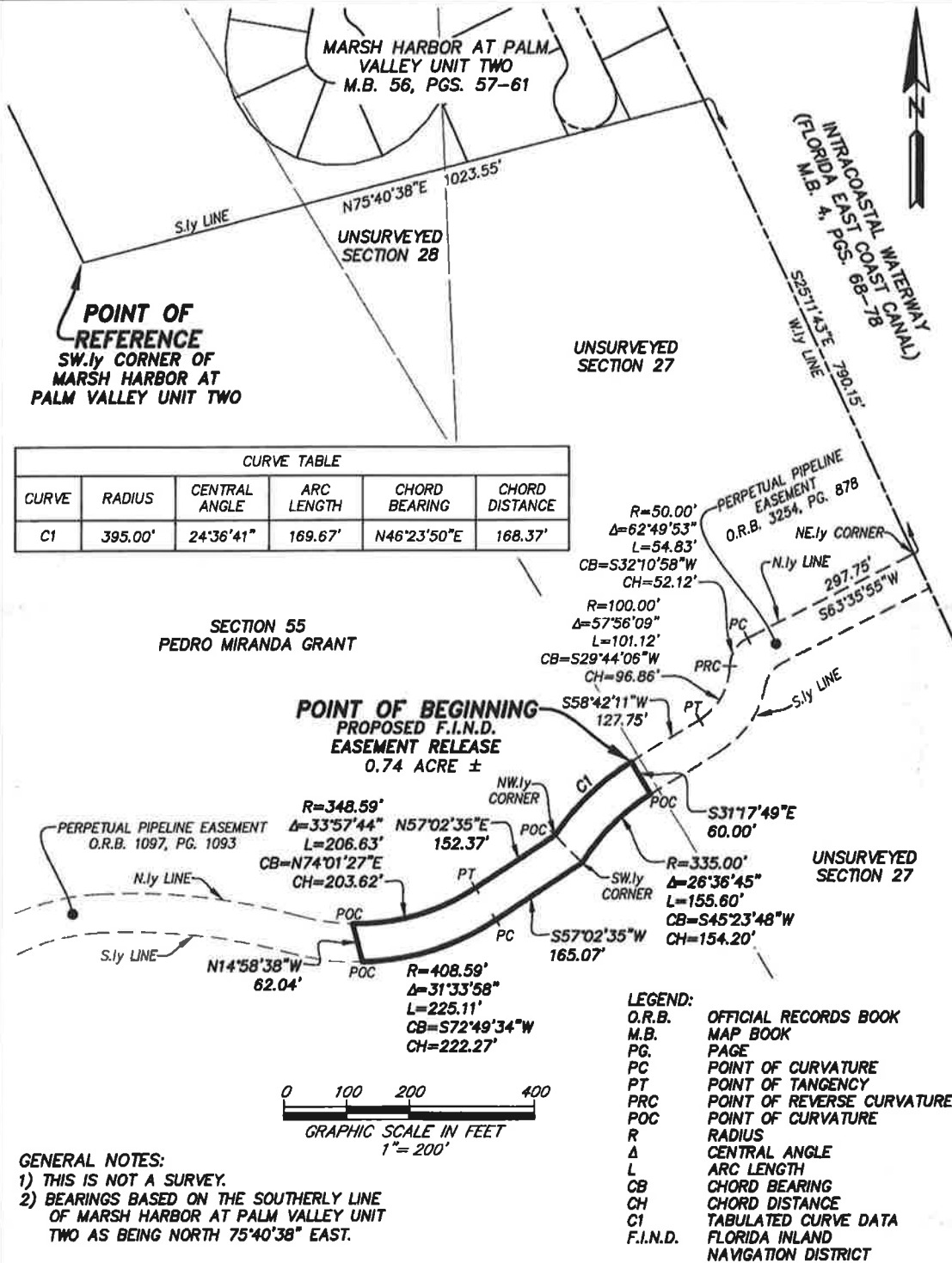
Work Order No. 16-071.00  
File No. 123M-29.00B

**F.I.N.D. Easement Release (continued)**

thence North 14°58'38" West, 62.04 feet to a point lying on the Northerly line of said Official Records Book 1097, page 1093, said point being a point on a curve concave Northerly having a radius of 348.59 feet; thence Easterly, along said Northerly line and along the arc of said curve, through a central angle of 33°57'44", an arc length of 206.63 feet to the point of tangency of said curve, said arc being subtended by a chord bearing and distance of North 74°01'27" East, 203.62 feet; thence North 57°02'35" East, along said Northerly line, 152.37 feet to a point on a curve concave Southeasterly having a radius of 395.00 feet, said point being the Northwesterly corner of said Perpetual Pipeline Easement as described and recorded in Official Records Book 3254, page 878; thence Northeasterly, along the Northerly line of said Perpetual Pipeline Easement and along the arc of said curve, through a central angle of 24°36'41", an arc length of 169.67 feet to the Point of Beginning, said arc being subtended by a chord bearing and distance of North 46°23'50" East, 168.37 feet.

Containing 0.74 acre, more or less.

**SKETCH TO ACCOMPANY DESCRIPTION OF  
A PORTION OF SECTION 55, OF THE PEDRO MIRANDA GRANT,  
TOWNSHIP 4 SOUTH, RANGE 29 EAST, ST. JOHNS COUNTY, FLORIDA,  
BEING MORE PARTICULARLY DESCRIBED IN SEPARATE ATTACHMENT.**



**ROBERT M. ANGAS ASSOCIATES, INC.**  
SURVEYORS • PLANNERS • CIVIL ENGINEERS

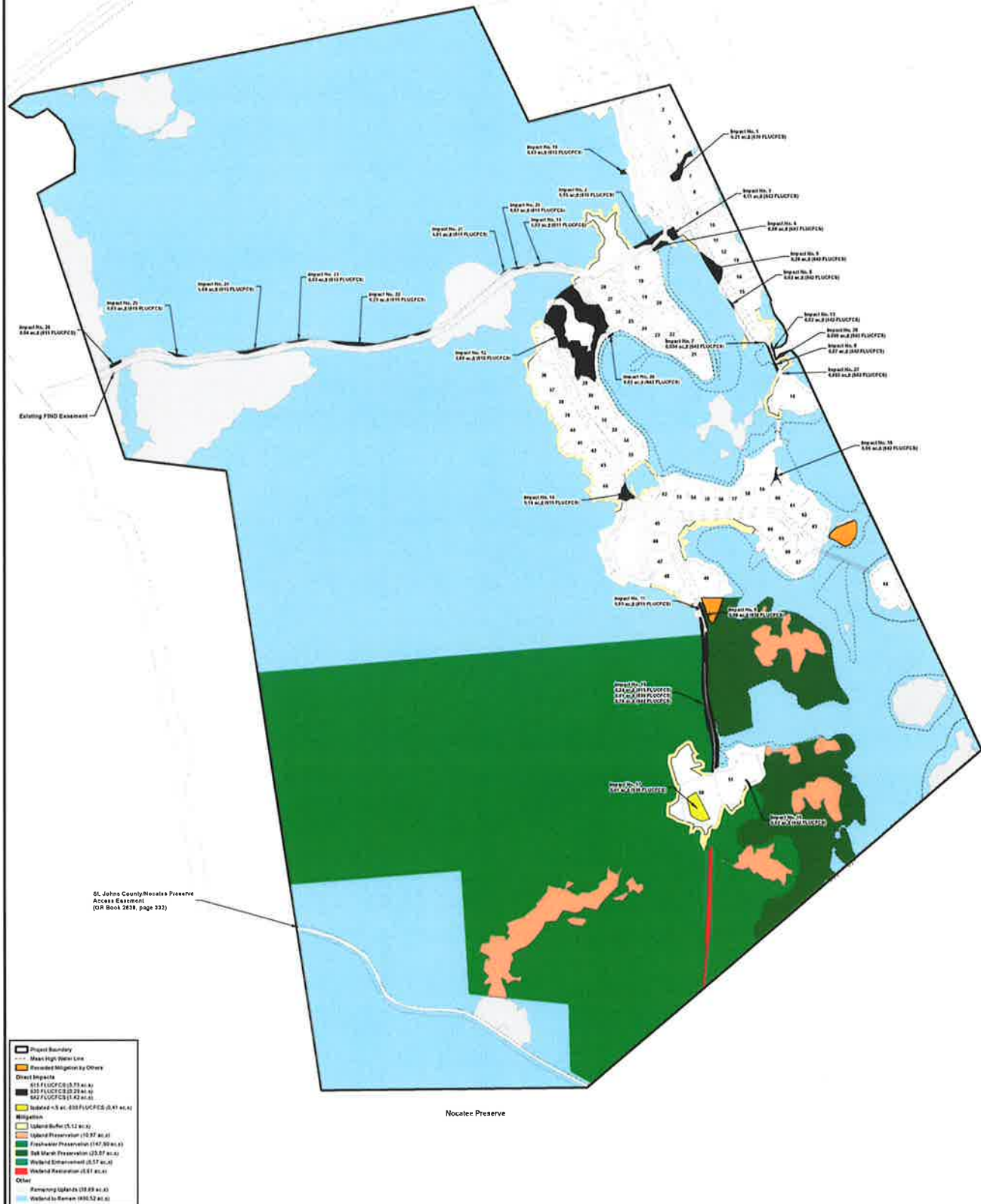
14775 Old St. Augustine Road, Jacksonville, FL 32258  
Tel: (904) 642-8550 Fax: (904) 642-4165  
Certificate of Authorization No.: LB 3624

NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.

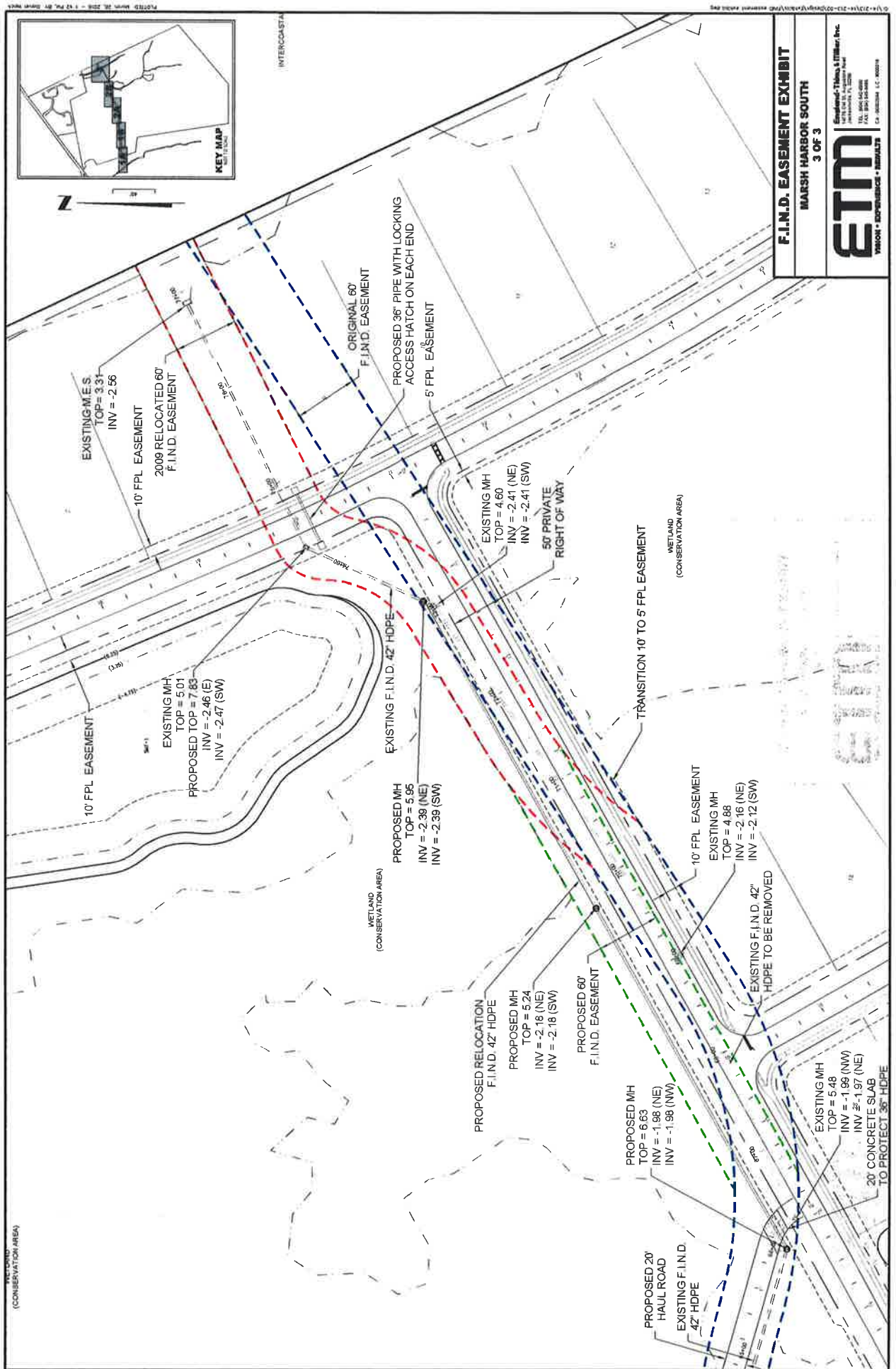
SCALE: 1"=200'

DATE: MARCH 31, 2016

ANDREW O. KNUPEL  
PROFESSIONAL SURVEYOR AND MAPPER  
STATE OF FLORIDA LS No. 6511







**F.I.N.D. EASEMENT EXHIBIT**  
**MARSH HARBOR SOUTH**  
**3 OF 3**



Engineered: Thomas & Thomas, Inc.  
10000 N. 15th Ave., Suite 100  
Tampa, FL 33613  
TEL: 813.444.4444  
FAX: 813.444.4444  
CA: 00000000

PLOTTED: MARSH HARBOR SOUTH - 11.12.2018 - 11.12.2018 BY: JAMES W. WILSON





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14775 Old St. Augustine Road • Jacksonville, Florida 32258

March 31, 2016  
Marsh Harbor

Work Order No. 16-071.00  
File No. 123M-29.00A

### F.I.N.D. Easement

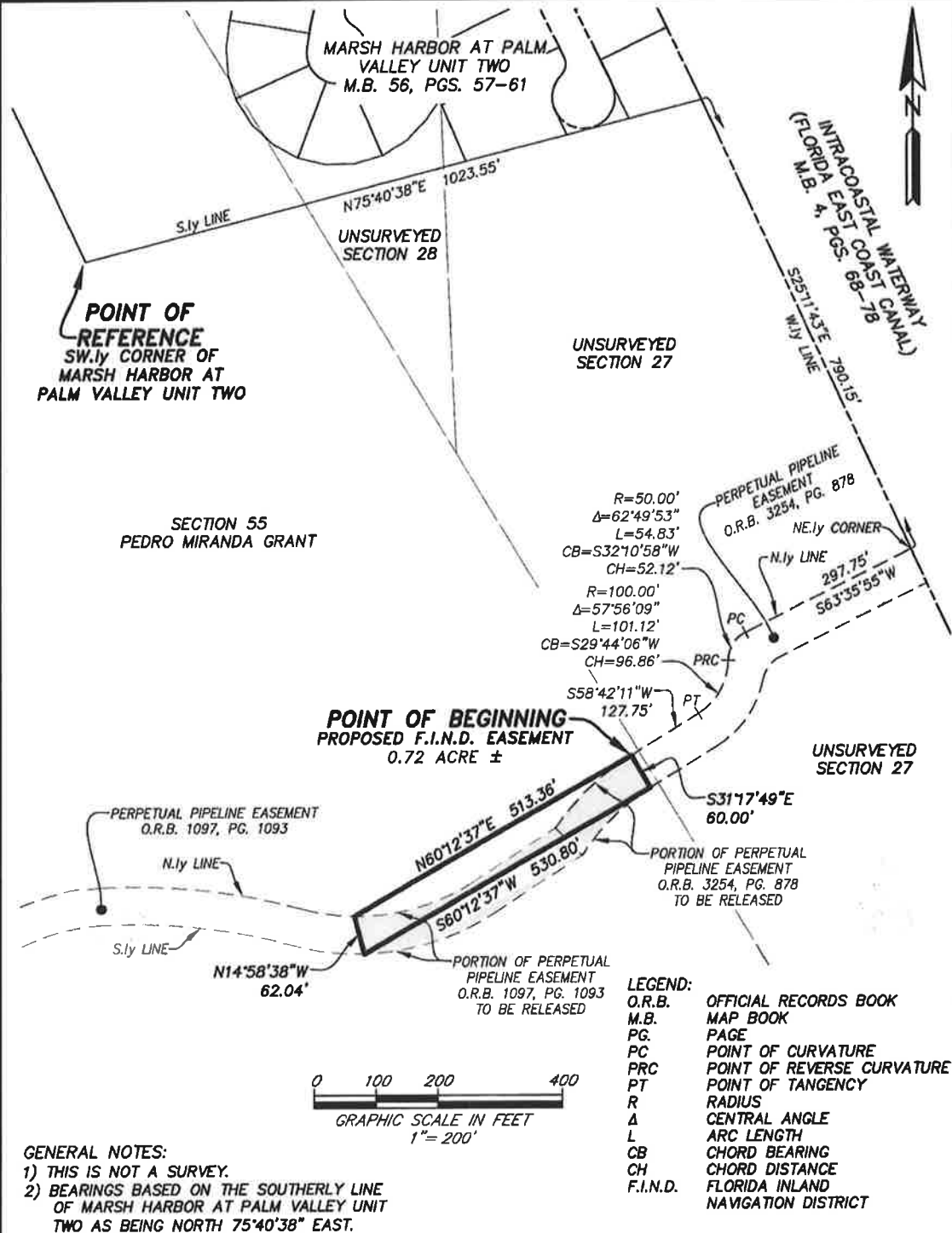
A portion of Section 55 of the Pedro Miranda Grant, Township 4 South, Range 29 East, St. Johns County, Florida, being more particularly described as follows:

For a Point of Reference, commence at the Southwesterly corner of Marsh Harbor at Palm Valley Unit Two, as recorded in Map Book 56, pages 57 through 61 of the Public Records of said county; thence North  $75^{\circ}40'38''$  East, along the Southerly line of said Marsh Harbor at Palm Valley Unit Two, 1023.55 feet to a point lying on the Westerly line of the Intracoastal Waterway, as recorded in Map Book 4, pages 68 through 78 of said Public Records; thence South  $25^{\circ}11'43''$  East, departing said Southerly line and along said Westerly line, 790.15 feet to the Northeasterly corner of that certain Perpetual Pipeline Easement as described and recorded in Official Records Book 3254, page 878 of said Public Records; thence Southwesterly, along the Northerly line of said Perpetual Pipeline Easement, the following 4 courses: Course 1, thence South  $63^{\circ}35'55''$  West, departing said Westerly line, 297.75 feet to the point of curvature of a concave Southeasterly having a radius of 50.00 feet; Course 2, thence Southwesterly along the arc of said curve, through a central angle of  $62^{\circ}49'53''$ , an arc length of 54.83 feet to a point of reverse curvature, said arc being subtended by a chord bearing and distance of South  $32^{\circ}10'58''$  West, 52.12 feet; Course 3, thence Southwesterly, along the arc of a curve concave Northwesterly having a radius of 100.00 feet, through a central angle of  $57^{\circ}56'09''$ , an arc length of 101.12 feet to the point of tangency of said curve, said arc being subtended by a chord bearing and distance of South  $29^{\circ}44'06''$  West, 96.86 feet; Course 4, thence South  $58^{\circ}42'11''$  West, 127.75 feet to the Point of Beginning.

From said Point of Beginning, thence South  $31^{\circ}17'49''$  East, departing said Northerly line, 60.00 feet; thence South  $60^{\circ}12'37''$  West, 530.80 feet to a point lying on the Southerly line of that certain Perpetual Pipeline Easement as described and recorded in Official Records Book 1097, page 1093 of said Public Records; thence North  $14^{\circ}58'38''$  West, 62.04 feet to a point lying on the Northerly line of said Official Records Book 1097, page 1093; thence North  $60^{\circ}12'37''$  East, 513.36 feet to the Point of Beginning.

Containing 0.72 acre, more or less.

**SKETCH TO ACCOMPANY DESCRIPTION OF  
A PORTION OF SECTION 55, OF THE PEDRO MIRANDA GRANT,  
TOWNSHIP 4 SOUTH, RANGE 29 EAST, ST. JOHNS COUNTY, FLORIDA,  
BEING MORE PARTICULARLY DESCRIBED IN SEPARATE ATTACHMENT.**



**ROBERT M. ANGAS ASSOCIATES, INC.**  
SURVEYORS • PLANNERS • CIVIL ENGINEERS

14775 Old St. Augustine Road, Jacksonville, FL. 32258  
Tel: (904) 642-8550 Fax: (904) 642-4165  
Certificate of Authorization No.: LB 3624





NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED  
SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.

SCALE: 1"=200'

DATE: MARCH 31, 2016

ANDREW O. KNUPPEL  
PROFESSIONAL SURVEYOR AND MAPPER  
STATE OF FLORIDA LS No. 6511



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

Dredged Material Management Area  
SJ-14





April 1, 2016

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

Re: Scope of Professional Engineering Services  
Jupiter ICWW Maintenance Dredging and Beach Fill Placement Project  
Palm Beach County, Florida

Mr. Crosley:

Taylor Engineering is pleased to submit the attached scope of services (Attachment A) and cost proposal (Attachment B) for the above-referenced project. Based on recent discussions with the FIND, we understand that the proposed dredging project would maintain the Intracoastal Waterway (ICWW) in the vicinity of Jupiter Inlet between the CR 707 and the U. S. Highway 1 bridges (including portions of cuts P-1, P-2, P-3, and P-4) and deposit dredged material on the Atlantic Ocean shoreline between Florida Department of Environmental Protection (FDEP) reference monuments R-13 and R-19 (Attachment C). We understand the FIND and the Jupiter Inlet District (JID) will execute an interlocal agreement for a JID contractor to perform this work in conjunction with the sand trap dredging project (expected to begin in January 2017).

As detailed in the enclosed documents, our proposed services include coordination of field investigations (bathymetric and natural resources survey) and permitting services (verification of authorization under Department of the Army Permit SAJ-93) for the ICWW project. We understand that the FIND will directly contract with a professional survey consultant and an environmental consultant to complete an updated bathymetric survey and a pre-design submerged aquatic natural resources survey.

We propose to perform these services for a cost-plus not to exceed cost of \$33,655.44. Please contact me with any questions.

Sincerely,

John F. Adams, P.E.  
Senior Advisor, Waterfront Engineering

Attachments (3)

**SCOPE OF PROFESSIONAL ENGINEERING SERVICES****FLORIDA INLAND NAVIGATION DISTRICT  
JUPITER ICWW MAINTENANCE DREDGING AND BEACH FILL PLACEMENT PROJECT  
PALM BEACH COUNTY, FLORIDA****INTRODUCTION**

This scope of professional engineering services describes Taylor Engineering's effort to support a proposed project to maintain the Intracoastal Waterway (ICWW) in the vicinity of Jupiter Inlet between the CR 707 and the U. S. Highway 1 bridges (including portions of cuts P-1, P-2, P-3, and P-4) and deposit dredged material on the Atlantic Ocean shoreline between Florida Department of Environmental Protection (FDEP) reference monuments R-13 and R-19. In accordance with current FDEP and previous U. S. Army Corps of Engineers (USACE) permits, this project would excavate the channel to a maximum depth (design plus advance maintenance and overdepth) between -12 and -16 ft mean lower low water (MLLW). We understand that the Jupiter Inlet District's (JID) dredging contractor will perform this work in conjunction with the upcoming sand trap dredging project (expected to begin approximately January 2017).

The Florida Inland Navigation District (FIND) requested Taylor Engineering's assistance with field investigations (bathymetric and natural resources surveys) and permitting of this effort. Taylor Engineering has developed this scope of services based on the following assumptions:

- The FIND and JID will develop an interlocal agreement such that FIND will reimburse the JID for all dredging contract work and associated construction administration fees related to the ICWW. The FIND will negotiate directly with JID regarding the contract fee.
- Department of the Army Regional General Permit SAJ-93, once reissued, will authorize the ICWW maintenance portion of the project, including beach placement of dredged material.
- The USACE will reissue SAJ-93 by May 2016.
- Dredged material will meet state beach placement requirements.
- The FIND will contract a design-level bathymetric survey and a pre-construction seagrass survey, in coordination with Taylor Engineering.
- Taylor Engineering will not develop plans and specifications for the beach placement area.
- The beach placement template in JID's contract has enough capacity to hold all the material dredged from the ICWW in addition to all the material dredged from the sand trap.
- The beach placement template in JID's permits will be the same as that in FIND's permits.

This scope of work does not include development of final construction drawings or specifications for the dredging project. We plan to prepare final engineering documents for the project in conjunction with the Jupiter Inlet sand trap dredging project. We will conduct this work under a future authorization from JID in accordance with the interlocal agreement that FIND will develop with JID.

Should any of these assumptions prove incorrect, Taylor Engineering will work with FIND to develop a scope of services and costs for any additional effort.

**TASK 1 FIELD INVESTIGATION****Task 1.1 Bathymetric Survey Coordination**

Under contract to FIND, a licensed professional surveyor will perform a design-level bathymetric survey of the ICWW maintenance dredging project area. This survey will provide the basis for creation of

**ATTACHMENT A**  
**P2016-059**

construction drawings and a dredging template for the ICWW portion of the project. Taylor Engineering will coordinate with FIND and its survey contractor to develop the bathymetric survey scope, define deliverable requirements, and provide review of all survey products.

**Task 1.2 Natural Resources Survey Coordination**

In accordance with FDEP and USACE permit conditions, an environmental consultant, under contract to FIND, will perform a pre-design submerged aquatic natural resources survey of the ICWW project area. The submerged natural resources survey will cover the entire dredging area, anchor areas, turbidity mixing zones, and pipeline route. Taylor Engineering has included time in this task to assist in development of the survey scope, define deliverable requirements, review the pre-design seagrass survey and coordinate with the environmental consultant.

**TASK 2 PERMITTING**

FDEP Permit No. 0262913-001-JC, effective through January 6, 2018, authorizes the ICWW maintenance dredging. Department of the Army Regional General Permit SAJ-93 authorized FIND maintenance dredging of the ICWW through February 2016. The USACE is scheduled to re-issue SAJ-93 by May 2016. Accordingly, we have included time and budget for verifying that the ICWW dredging meets SAJ-93 requirements.

**Task 2.1 Verify Department of the Army SAJ-93 Authorization**

Taylor Engineering will prepare and submit to the USACE Jacksonville District a request for verification of the maintenance dredging authorization under SAJ-93. The verification request will include a description of the waterway's design, construction, and maintenance history; drawings showing the maintenance dredging locations, templates, beach placement area; and description of the dredging and material handling methods. Prior to development of the permit documents, Taylor Engineering will coordinate and attend a pre-application meeting with the USACE to discuss the upcoming verification request and obtain feedback from USACE.

**Task 2.2 Respond to Request for Additional Information (RAI)**

After initial review of the verification request, the USACE will likely respond with one or more RAIs. An RAI typically comprises a series of questions that require additional clarification or other information regarding the proposed work. We have budgeted up to 30 senior professional personnel hours to respond to up to two requests for additional information from the USACE. Should the RAI responses require more than this budgeted labor, we will evaluate the response requirements and submit to the FIND a scope of work and cost proposal for the additional effort.

**ANTICIPATED SCHEDULE**

Taylor Engineering will begin work on this project immediately on receipt of FIND's work order authorizing our services. We will complete tasks in general accordance with the timeline illustrated below.

<b>TASK</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sept</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>
<b>1.1 Bathymetric Survey</b>									
<b>1.2 Natural Resources Survey</b>									
<b>2.1 SAJ-93 Verification</b>									
<b>2.2 RAI Response</b>									



## ATTACHMENT B

**TAYLOR ENGINEERING, INC.**  
**COST SUMMARY BY TASK**  
**P2016-059: FIND JID ICWW**

**TASK 1: Field Investigation**

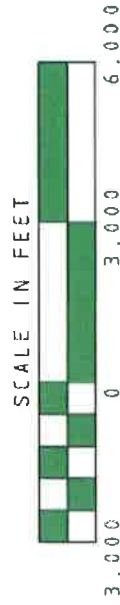
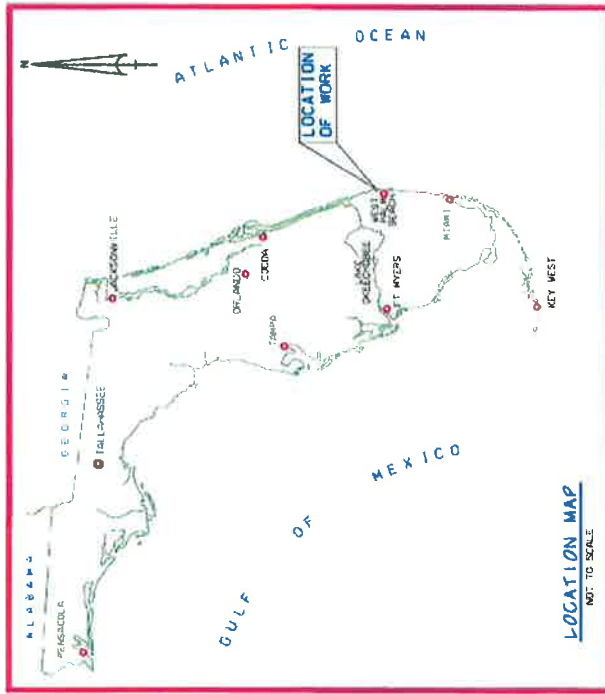
<i>Labor</i>	Hours	Cost	Task Totals
Senior Advisor	4.0	752.00	
Project Professional	32.0	3,488.00	
Staff Professional	16.0	1,376.00	
Senior CAD Designer	24.0	2,712.00	
Total Man-Hours	76.0		
Labor Cost			8,328.00
<i>Total Task 1</i>			8,328.00

**TASK 2: Permitting**

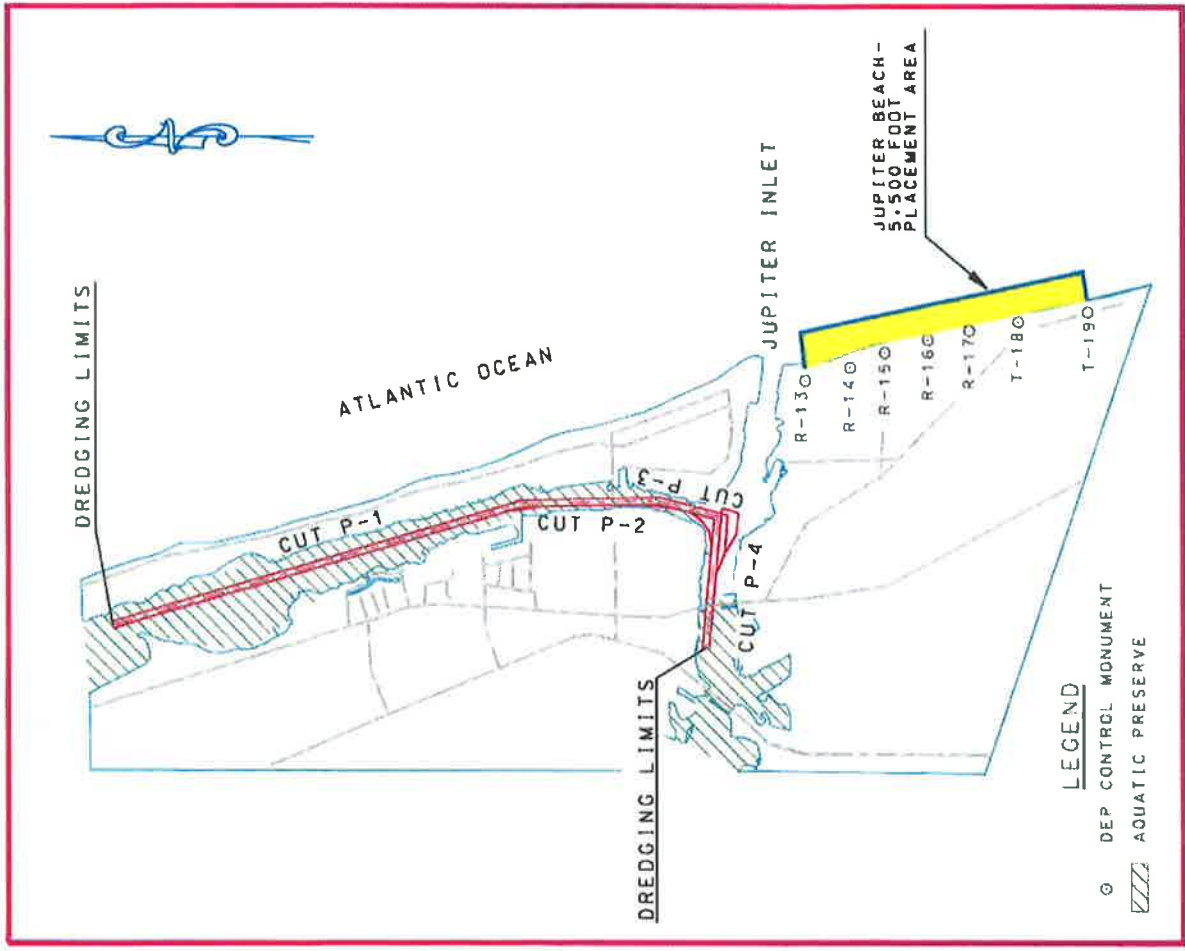
<i>Labor</i>	Hours	Cost	Task Totals
Vice President	2.0	374.00	
Senior Advisor	8.0	1,504.00	
Senior Professional	26.0	3,848.00	
Project Professional	96.0	10,464.00	
Staff Professional	30.0	2,580.00	
Senior CAD Designer	52.0	5,876.00	
Administrative	4.0	208.00	
Total Man-Hours	218.0		
Labor Cost			24,854.00
<i>Non-Labor</i>	Units	Cost	
Pre-app meeting car milage	560.0	302.40	
pre-app meeting per-diem	2.0	128.00	
Non-Labor Cost		430.40	
Fee @ 10.0%		43.04	
Total Non-Labor Cost			473.44
<i>Total Task 2</i>			25,327.44

**Project Total   \$   33,655.44**

ATTACHMENT C



U.S. Army Corps of Engineers Jacksonville District, Jacksonville, Florida	
WATER QUALITY CERTIFICATION APPLICATION FOR MAINTENANCE DREDGING OF THE INTRACOASTAL WATERWAY IN THE VICINITY OF JUPITER INLET WITH BEACH PLACEMENT	
PROJECT LOCATION & LIMITS OF WORK	
PREPARED BY: LEF	REVIEWED BY: DMB
DATE: APR 07	DRAWING NO. 1





**ALCALDE & FAY**

GOVERNMENT &amp; PUBLIC AFFAIRS CONSULTANTS

April 1, 2016

**MEMORANDUM**

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

**FROM:** Jim Davenport

**SUBJECT:** Federal Legislative Report

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**FISCAL YEAR 2017 FUNDING REQUEST TO THE HOUSE ENERGY AND WATER APPROPRIATIONS SUBCOMMITTEE**

On March 14<sup>th</sup>, several members of FIND's congressional delegation and Rep. David Rouzer (R-NC) sent a letter to the House Energy and Water Appropriations Subcommittee, which we prepared, requesting the following:

- \$50 million for navigation
- \$50 million for inland waterways
- \$50 million for small, remote or subsistence harbors

As you know, these line item funding accounts provide the Corps with discretionary spending authority for maintenance dredging of low-commercial use waterways. Obtaining this funding in the Energy and Water Appropriations Bill is a critical first step to ultimately securing maintenance dredging funding for FIND in FY 2017.

Both the House and the Senate will soon proceed with marking up FY 2017 Energy and Water Appropriations legislation, and we will continue to advocate for the funding throughout the appropriations process.

**LEGISLATIVE LANGUAGE PERTAINING TO COMPENSATORY MITIGATION**

We continue to correspond with Senator Bill Nelson and Representative Lois Frankel's office pertaining to the language we drafted stating that compensatory mitigation is not required for maintenance dredging. We are suggesting this language in both the next Water Resources Development Act and the Magnuson Stevens Reauthorization Act and we will continue to keep you apprised of our efforts.



**Congress of the United States**  
**Washington, DC 20515**

March 14, 2016

The Honorable Mike Simpson  
 Chairman  
 House Appropriations Committee  
 Subcommittee on Energy and Water Development  
 2362-B Rayburn House Office Building  
 Washington, DC 20515

The Honorable Marcy Kaptur  
 Ranking Member  
 House Appropriations Committee  
 Subcommittee on Energy and Water Development  
 1016 Longworth House Office Building  
 Washington, DC 20515

Dear Chairman Simpson and Ranking Member Kaptur:

As you develop the FY2017 Energy and Water Appropriations bill, we respectfully request that you include the following report language under the U.S. Army Corps of Engineers Operations and Maintenance Account.

*Report Language Request: Army Corps Operations and Maintenance— The Committee provides \$50 million for Navigation Maintenance.*

*Report Language Request: Army Corps Operations and Maintenance— The Committee provides \$50 million for Inland Waterways.*

*Report Language Request: Army Corps Operations and Maintenance— The Committee provides \$50 million for Small, Remote, or Subsistence Navigation.*

Low commercial use waterways move more than 50 million tons annually, which would have to be moved somehow if not by water transportation. If maintenance of all "low use" projects were fully funded, the Corps budget would be increased by less than \$200 million. Likewise, low, commercial use waterways transport recreational vessels, providing billions in economic output, person wages and increased property values.

Looking forward, many of these waterways serve as marine highways for the U.S. Marine Transportation System linking the various ports along the nation's coastline. In the recent report titled "Beyond Traffic 2045," the U.S. Department of Transportation shows that freight movement throughout the nation is expected to increase by 45% during the next 25 years. Clearly, increased

maintenance of the inland waterway system will need to be funded to be able to support its' portion of this increased freight movement.

These waterways link natural deep-water sections of bays through a series of man-made channels, thereby providing for the safe passage of commercial goods and access to commercial fishing grounds. Maintenance dredging of these waterways allows local sponsors to support the local and regional economies by maintaining and enhancing public navigation channels and inlets, boating access facilities, waterfront parks, and piers and special structures.

As the Subcommittee begins its work on the Energy and Water Appropriations bill, we ask that you give strong consideration to appropriating money for Navigation and Inland Waterways.

Thank you for your careful consideration of our request.

Sincerely,



Lois Frankel  
Member of Congress



Bill Posey  
Member of Congress



Alcee L. Hastings  
Member of Congress



Ileana Ros-Lehtinen  
Member of Congress



Corrine Brown  
Member of Congress



Curt Clawson  
Member of Congress



Debbie Wasserman Schultz  
Member of Congress



Carlos Curbelo  
Member of Congress





Theodore E. Deutch  
Member of Congress



David Rouzer  
Member of Congress



Frederica S. Wilson  
Member of Congress



Patrick E. Murphy  
Member of Congress