

# **PRELIMINARY AGENDA**

## **FLORIDA INLAND NAVIGATION DISTRICT Board of Commissioners Meeting**

**9:00 a.m., Friday, April 17, 2015**

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

### **Item 1.      Call to Order.**

Chair Chappell will call the meeting to order.

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

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

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### **Item 3.      Roll Call.**

Secretary Netts 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 Committee 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) Keep Nassau Beautiful, Inc. Waterway Clean Up Assistance Program Funding Request for the Annual St. Mary's River Celebration Cleanup Project in Nassau 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 20, 2015 – Finance & Budget Committee Mtg. (Please see back up pp 6 - 8)
- March 20, 2015 – Board Meeting (Please see back up pages 9 - 30)

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 31 - 45)

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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. Shelly Trulock is scheduled to present an update on projects and activities.

(Please see back up pages 46 - 49)

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**Item 10.      Presentation by the U.S. Army Corps of Engineers (USACE) Regarding the Reauthorization of Regional General Permit (RGP) SAJ-93, and Efforts to Initiate Regional Programmatic Permitting of Intracoastal Waterway (IWW) Maintenance Projects.**

The USACE is reviewing their Regional General Permit (RGP) for the Intracoastal Waterway as well as initiating a programmatic review of the permitting of Intracoastal Waterway maintenance projects. Representatives from the USACE have been invited to provide an overview of both of these issues and answer any questions.

It is important that the District consider these items and provide direction to the USACE at this time. 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 50 - 77)

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

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**Item 11. Overview and Discussion of the Proposed Shiloh Launch Program and the Impacts to Public Navigation on the Intracoastal Waterway (IWW), Brevard County, FL.**

Space Florida, an Independent Special District of the State of Florida, is proposing a new private space launch facility in north Brevard County. Referred to as the "Shiloh Launch Complex", once operational, this facility proposes to completely close a 5-mile stretch of the Intracoastal Waterway prior to and immediately following all launch operations.

The USACE has been working on this project for almost two years and a draft technical memorandum (please see back up material) and other material have recently been circulated for stakeholder comments and questions.

Staff is unaware of any projects that have resulted in the complete closure of the IWW, also known as Marine Highway 95. The implications of this project are significant and staff will work with all involved interests to support the project, while maintaining access to the IWW. However, Board comments and direction are requested at this time.

(Please see back up pages 78 - 122)

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

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**Item 12. Review and Discussion of Dredged Material Management Area (DMMA) DU-9, Duval County, FL.**

In 2000, the Navigation District (District) pursued the permitting and construction of our permanent DMMA DU-9 site to support the Palm Valley Dredging project. When the initial site work conducted by the U.S. Army Corps of Engineers (USACE) uncovered soil and groundwater contamination, work was halted. In 2004, following numerous investigations and remediation by the original property owner, the District pursued the construction of that portion of the site that was NOT affected by contamination.

The previous land owner continued their ongoing remediation efforts, and last year approached the District for concurrence of the conditional site closure conditions at this location. After consultation with the District Attorney and the District Engineer, staff requested a scope and fee quote from the District Engineer for permitting the remainder of the site. The Board approved this agenda item at our September 13, 2014 meeting (FIND Work Order No. 14-18).

The site generally appears to be considered remediated by the Florida Department of Environmental Protection (FDEP). However, there were some additional concerns raised during the initial consultation for DMMA site construction permit. At our February 21, 2015 meeting, staff presented the Board with a scope of work and fee quote from Taylor Engineering to address the additional concerns raised by FDEP, as well as perform some additional routine due diligence for site permitting.

**Item 12. (cont.)**

At that meeting, the Board raised concerns pertaining to the remaining contamination at the site. The Board selected to table the agenda item until additional coordination with the previous land owner could be performed. In addition, staff was directed to work with our attorney and the previous land owner to establish an agreement limiting the District's long-term liability for contamination at this site, and to establish conditions should the future use of the site be restricted or incur additional costs to the District.

Staff, the District Engineer, and our attorney have been working with the previous land owner and their representatives to resolve any additional concerns or outstanding issues. Representatives from all concerned parties have been invited to attend our Board meeting to discuss the site's current status, and to answer any questions pertaining to site conditions.

At this point in time, the District is the land owner of the referenced site. We are in need of additional capacity at DMMA DU-9 to support the required dredging operations in the vicinity of this site. To summarize the issue, there appears to be four potential directions the Board could pursue to resolve the current site status.

- 1) Staff recommends continuing to work with the previous land owner and their representatives, FDEP, and our attorney and Engineer to minimize concerns and conditions related to any previous site contamination, and to move forward with the permitting and construction of this site. This should prove to be the least costly alternative to the District and provide the best long-term solution at this location.
- 2) Off-load the existing DMMA site and conduct a subsequent dredging operation. If the District were successful in locating an interested party who could utilize the existing material and off-load it at no costs to the District, there would still be additional material within the site that would need to be off-loaded at a cost to the District. However, it is likely that all of the existing dredged material in the site would need to be off-loaded at the District's cost. The site capacity of the current site is not sufficient to capture all of the required dredging of the related IWW reaches, and subsequent dredging operations would require additional off-loading events, leading to additional costs and considerations.
- 3) Request an alternative site location and negotiate costs and fees associated with moving or "trading" our site with the previous land owner, or pursue the costs and legal ramifications of conducting site condemnation of an alternative site.
- 4) Do nothing while the waterway conditions continue to deteriorate.

(Please see back up pages 1234 - 142)

RECOMMEND: Staff has recommended option one and it was previously approved by the Board at our September 2014 meeting. A subsequent request for additional permitting and engineering costs due to site conditions was tabled by the Board at our February 2015 meeting. Today's agenda item seeks to finalize the Board's direction on the future of DMMA DU-9, in Duval County, FL.

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**Item 13.      Additional Engineering Analysis for Utility Crossing Relocation in Support of the Broward Intracoastal Waterway (IWW) Deepening Project.**

District staff and our Engineer have been diligently working to resolve any and all utility crossing issues within the proposed Broward IWW Deepening Project. To support this effort, FPL has requested a total of \$36,000.00 to complete detailed engineering analysis of relocating two utility crossings within the project.

The utility crossings are within the project area and this work will need to be performed if the District is to proceed with the proposed IWW Deepening project.

(Please see back up pages 143 - 150)

RECOMMEND:      Approval of a cost proposal in the total amount of \$36,000.00 from FPL for a detailed cost estimate to relocate two utility crossings within the proposed Broward IWW Deepening Project, Broward 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.      Tallahassee Report.**

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

(Latest Tallahassee Report to be distributed at the meeting)

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**Item 16.      Washington Report.**

The District's federal governmental relations firm has submitted a status report concerning activity on the District's federal issues. In addition, staff and the participating Commissioners will report on their recent trip to Washington D.C.

(Please see back up pages 151 - 158)

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**Item 17.      Additional Staff Comments and Additional Agenda Items.**

**(A) Status of the MSA 726 Clearing & Landscaping Project located within the City of Pompano Beach, Broward County, FL**

**(B) Florida Anchoring Restrictions & Derelict Vessels**

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**Item 18.      Additional Commissioners Comments.**

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**Item 19.      Adjournment.**

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

**8:30 a.m., Friday, March 20, 2015**

**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 Cuozzo called the meeting to order at 8:33 a.m.

**ITEM 2.      Roll Call.**

Assistant Executive Director Janet Zimmerman called the roll and Committee Chair Cuozzo, Vice-Chair Blow, Commissioner Bowman, Commissioner McCabe, and Commissioner Sansom were present. Ms. Zimmerman stated that a quorum was present.

**ITEM 3.      Additions or Deletions.**

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

**ITEM 4.      Public Comments.**

Chair Cuozzo 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 2015.**

Mr. Crosley presented the District's financial statements for January of 2015.

Mr. Crosley stated that the District's Financial Audit has been completed and will be presented at the District's May, 2015 meeting.

Mr. Crosley referred to the District's State Board of Administration Account (SBA) and noted that \$19,302.15 was released from Fund "B". He stated that the account is now closed with full principal repaid. He stated that Fund "B" will no longer be paying interest and all available funds were released into Fund "A". He stated that any realized gain will be determined in the Spring of 2015, after full liquidation. He noted that at that time, the District will be able to close this account. He stated that the District's Auditor recommended taking this item off the District's books.

Mr. Crosley noted that the District has one CD maturing on April 30, 2015 with Bank United and staff is shopping for the best rate.

Mr. Crosley stated that the District closed two bank accounts, National City PNC and Suntrust Savings. He stated that the funds from National City PNC have been placed in the District's bill paying checking account. He stated that the funds from Suntrust Savings have been placed in Seacoast National and he noted that the bank is responsive to working with the District and has offered the District a .60% Money Market rate.

Vice-Chair Blow noted that the District placed funds in the Fidelity Bank, which is in the Jacksonville area.

Mr. Crosley stated that the District's DMMA DU-8 project is almost completed.

Commissioner Sansom made a motion to approve a recommendation to the full Board of the financial statements for January of 2015. The motion was seconded by Vice-Chair Blow. Chair Cuzzo asked for any additional discussion. Hearing none, a vote was taken and the motion passed.

**ITEM 6. January 2015 Budget Summary and Project Status Expenditure Reports.**

Mr. Crosley presented the Expenditure and Project Status Reports for January of 2015. He stated that based on the last District Budget Amendment, the Annual Budget is now \$89,331,910.00. He asked for any questions. There were none.

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

Mr. Crosley presented the Executive Director's Delegation of Authority actions and stated that three actions were taken from February 10, 2015 through March 10, 2015 and are presented for committee review. He asked for any questions. There were none.

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

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

**ITEM 9. Additional Commissioners Comments.**

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

**ITEM 10. Adjournment.**

Chair Cuozzo stated that hearing no further business the meeting was adjourned at 8:43 a.m.

**MINUTES OF THE  
FLORIDA INLAND NAVIGATION DISTRICT**

**Board of Commissioners Meeting**

**9:00 a.m., Friday, March 20, 2015**

**The Casa Marina Hotel**

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

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

**ITEM 1.      Call to Order.**

Chair Chappell called the meeting to order at 9:04 a.m.

**ITEM 2.      Pledge of Allegiance.**

Commissioner Bowman led the pledge of allegiance to the flag of the United States of America.

**ITEM 3.      Roll Call.**

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

**ITEM 4.      Consent Agenda.**

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

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

**ITEM 5.      Additions or Deletions.**

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

Commissioner McCabe made a motion to approve the final agenda as presented. The motion was seconded by Commissioner Dritenbas. Chair Chappell asked for discussion. Hearing none, a vote was taken and the motion passed.

**ITEM 6.      Public Comments.**

Chair Chappell 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 Chappell asked if there were any comments or questions regarding the February 21, 2015 Board, Finance Committee, and Personnel Committee Meeting Minutes.

Vice-Chair Blow referred to the Board Meeting Minutes, under Item 11 and stated that he would like the paragraph reading "Vice-Chair Blow stated that the District should go to the Estuary Corporation and tell them that the FDEP may not want to know where the plume is located" should include "but, FIND needs to know the location of the plume."

Commissioner McCabe made a motion to approve the February 21, 2015 Board Meeting Minutes and the Finance Committee Meeting Minutes, as amended. The motion was seconded by Vice-Chair Blow. Chair Chappell 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 IWW Indian River Reach I dredging project began January 2, 2015. She stated that she was at the site yesterday and

the project is moving along very well. She stated that to date, approximately 35,000 cubic yards of material has been dredged and placed in DMMA IR-2. She stated that the contractor has been hitting some coquina rock and that is slowing the project. She stated that the contractor is moving from the north to the south and the contractor is doing a fantastic job.

Ms. Trulock stated that a modification to the contract was executed that added the removal of approximately 40,000 additional cubic yards of material, in conjunction with road improvements to the access road at the north end of the DMMA IR-2 site. She stated that an additional \$800,000.00 in Federal funding was provided for this project, therefore reducing the amount of non-Federal funding that will be required to complete the dredging to under \$1 million.

Mr. Trulock stated that this project will remove approximately 340,000 cubic yards of material from the Intracoastal Waterway (IWW) Channel that will be deposited into Dredged Material Management Area (DMMA) IR-2. She stated that the contractor has been encountering large coquina stone within the channel and this is causing more delays than expected. She noted that the new completion date is June, 2015.

Ms. Trulock stated that Plans and Specifications for construction of DMMA O-7 are proceeding. She stated that the team is investigating the use of culverts in lieu of construction bridges across the two drainage ditches. She stated that the project will be coordinated with Taylor Engineering.

Ms. Trulock stated that the Corps would like to move forward with initiation of Plans and Specifications for Broward Reach 1, with 100% Federal funding after DMMA O-7 is advertised for construction. She stated that a Hydrographic Survey was performed



by Morgan and Ecklund, and it was provided to the Corps on June 26, 2014. She stated that there is approximately 50,000 cubic yards of material located within the Federal Channel down to -10-feet, and 80,000 cubic yards of material located within the Federal Channel down to -10+2-feet. She stated that given the small quantity, the most cost effective way to pursue the dredging would be the utilization of an USACE Hopper dredge, either the Currituck or Murden, to dispose of the material in the near-shore. She stated that the nearest approved near-shore or off-shore disposal area is located at Port Everglades (off-shore). She stated that in order to utilize this off-shore disposal option, the USACE would need to obtain a Florida Department of Environmental Protection (FDEP) permit and perform the required National Environmental Policy Act (NEPA) documentation. She stated that from an FDEP standpoint, it may be applicable to add the IWW Reach to the description of the existing Port Everglades permit, after verification of the composition of the material. She stated that the USACE will move on this action as soon as possible.

Ms. Trulock stated that preliminary investigations show near-shore and off-shore disposal options are available; however, adequate NEPA and FDEP permits may or may not be available for specific actions related to IWW dredging.

Commissioner Isiminger asked if the Broward Reach 1 project will have seagrass impacts and inquired if the USACE projects have to mitigate for NMFS for seagrass impacts. Mr. Crosley stated that this could be the test case. Commissioner Isiminger questioned if the USACE could manage the District's dredging projects when the District provides the funding. Mr. Adams noted that the USACE cannot perform deepening projects.

Mr. Crosley stated that the District will be removing exotic vegetation, including Australian Pines on District site MSA 726. He stated that the District will be preparing and using this site for staging in conjunction with the Broward Reach I dredging project. He stated that MSA 726 is also known as Exchange Club Park and is leased by the City of Pompano Beach as a passive public park.

Ms. Trulock stated that Plans and Specifications for DMMA O-23 will begin once DMMA O-7 is advertised for construction.

Ms. Trulock stated that the USACE received \$1.2 million in Federal funding for FY 2015, \$600,000.00 from the President's budget and an additional \$600,000.00 from Work Plan funding. She stated that additionally, she has a FY 2014 carry-over funding of approximately \$300,000.00. She stated that the USACE's Project Management team will coordinate with the FND staff on the best utilization of this funding.

Ms. Trulock stated that the Intracoastal Waterway (IWW) tour is scheduled from April 1 through April 3, 2015. She stated that the trip will begin in Stuart and travel north to Fernandina Beach, Florida. She stated that commissioners planning on attending this tour should contact Ms. Zimmerman.

**ITEM 9.      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. He stated that Phase II of the DMMP was completed in 1993. He stated that 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. He stated that this ranks as the fifth highest dredging projection of the District's 12 counties.

Mr. Crosley stated that six upland Dredged Material Management Areas (DMMA) will manage dredged materials from the waterway. He stated that all sites have been purchased, four 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 Reach 2 by the U.S. Army Corps of Engineers (USACE) in 2013.

Mr. Crosley stated that currently, a Florida Department of Transportation (FDOT) sub-contractor is removing 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. He stated that 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.

Commissioner Sansom asked if this buried pipeline sleeve will be registered with the "Do Not Dig" hotline. Mr. Crosley answered yes.

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.

**ITEM 10.     Presentation on the Intracoastal Waterway Hydrographic Centerline Survey South, Indian River, St. Lucie, Martin, Palm Beach, Broward and Miami-Dade Counties, Florida.**

Mr. Adams stated that last year, the Board approved surveying the entire waterway in two main “sections” (north and south). He stated that Sea Diversified completed the IWW Centerline Survey North, and Morgan and Ecklund completed the IWW Centerline Survey South. He stated that the IWW Centerline Survey North has recently been completed and is currently being reviewed by Taylor Engineering. He stated that Taylor Engineering has completed the review of the IWW Centerline Survey South and will present that information today.

Mr. Adams stated that the Bathymetric Survey from Miami-Dade County to Indian River County identified project channel depths, operational reaches and Dredged Material Management Area (DMMA) locations. He stated that the data identifies areas of concern that can be provided to the United States Army Corps of Engineers (USACE) to determine dredging needs and DMMA construction and operation.

Mr. Adams stated that the 2014 data will be compared to the 2004 survey data and will be used to determine if dredging projections and requirements have changed.

Mr. Adams stated that Miami-Dade County is comprised of 47.92 miles of IWW channel with five operational reaches and three designated DMMA’s. He stated that there are no critical DMMA needs at this time. He stated that the majority of shoaling is at Baker’s Haulover and that Reach continues to require periodic dredging and beach placement of dredged material.

Mr. Adams stated that Broward County is comprised of 25.0 miles of IWW channel with three operational reaches and four designated DMMA's. He stated that there are no DMMA critical needs at this time. He stated that IWW Broward Reach I is the most critical reach with spot shoals, and dredging is being considered by the USACE. He noted that IWW Broward Reach II will be deepened by FIND.

Mr. Adams stated that Palm Beach County is comprised of 46.8 miles of IWW channel with four operational reaches and eight designated DMMA's. He stated that consideration should be given to building a permanent offloading structure at DMMA MSA 617C. He stated that the majority of shoaling in the area is at the Jupiter Inlet and periodic dredging should be continued. He stated that IWW Palm Beach Reach I at the Loxahatchee intersection and IWW Palm Beach Reach IV should be resurveyed in two years. He stated that IWW Palm Beach Reaches II and III show some increased shoaling from 2004, but not sufficient for dredging.

Mr. Adams stated that Martin County is comprised of 22.27 miles of IWW channel with four operational reaches and four designated DMMA's. He stated that DMMA M-5 and DMMA MSA 504B/E may be required to handle the additional material from the Crossroads project. He stated that the majority of shoaling in the area is at Crossroads and periodic dredging should be continued. He stated that in two to three years, construction of DMMA MSA 504B/E by the USACE should be reviewed.

Commissioner Isiminger suggested that the District be involved in the county discussion regarding the Inlet Management Plan. Mr. Crosley stated that the District staff

is involved with the Martin County Inlet Management Plan and also has coordinated with the Town of Jupiter Island for beach placement.

Mr. Adams stated that the Okeechobee Waterway (OWW) is comprised of 15.11 miles of channel with four operational reaches and four designated DMMA's. He stated that the plans and specifications for construction of DMMA O-7 are underway by the USACE. He stated that construction of DMMA O-23 by the USACE should be considered. He stated that the majority of shoaling in the area is located in OWW Reach II. He stated that periodic dredging at Crossroads should be continued. He stated that OWW Reaches III and IV should be considered for dredging in the near future.

Mr. Crosley noted that the OWW is currently authorized as an -8 foot project. He stated that like some other waterways, the District is receiving pressure to deepen the channel to accommodate larger vessels.

Mr. Adams stated that St. Lucie County is comprised of 21.71 miles of IWW channel with three operational reaches and two designated DMMA's. He stated that construction of DMMA M-8 should be a priority. He stated that the majority of shoaling in the area is at the Fort Pierce Inlet. He noted that permitting and design for dredging of IWW St. Lucie Reach I dredging are underway.

Mr. Adams stated that Indian River County comprises of 23.31 miles of IWW channel with three operational reaches and three designated DMMA's. He stated that construction of DMMA's IR-7 and IR-14 should be considered. He stated that the majority of shoaling in the area is at the Sebastian Inlet. He stated that IWW Indian River Reach I is currently being dredged by the USACE.

Vice-Chair Blow asked if these surveys will be on the District's web site. Mr. Crosley answered yes, and stated that once they are finalized and approved they will be placed on the District's web site.

**ITEM 11. Lease of Dredged Material Management Area (DMMA) LT-4A, Palm Beach County, Florida.**

Mr. Crosley stated that following the purchase of DMMA LT-4A in 2009, the District entered into a two-year lease agreement with the existing tenant, Sugar Cane Services, Inc. to continue farming sugar cane on the property. He stated that a one-year lease extension was reviewed and approved by the Board last year. He stated that the tenant has expressed the desire to continue farming this property. He stated that the District has no immediate plans to develop this property and the lease extension is recommended for a two-year extension.

Secretary Netts made a motion to approve a two-year lease agreement extension with Sugar Cane Services, Inc. for the temporary use of DMMA LT-4A, Palm Beach County. The motion was seconded by Vice-Chair Blow. Chair Chappell asked for discussion. Hearing none, a vote was taken and the motion passed.

**ITEM 12. Request from Brevard County to Utilize Dredge Material Management Area (DMMA) BV-4B for Area Muck Dredging, Brevard County, Florida.**

Mr. Crosley stated that Brevard County has approached the District to utilize DMMA BV-4B located near Mims, Florida to dredge muck from the nearby Mims Boat Ramp area within the Indian River Lagoon. He stated that BV-4B has not previously been utilized for dredged material management. He stated that there are significant issues at this site, including wetlands and ground water movement.

Mr. Crosley stated that the county proposed to utilize a portion of the undeveloped site to de-water dredge material and haul it off site. He stated that the site is currently undergoing engineering and permitting, and the District is expected to initiate site construction within the next year. He stated that the dredging needs of this area, IWW Brevard Reach II are significant, but not imminent, so the District could delay site construction for a brief time to accommodate the county.

Mr. Crosley stated that if the Board approves this request, staff will work with the District's Engineer and Attorney to conduct all necessary due diligence and draft a one-year lease agreement, with the possibility of a six-month extension, should the county's project not be completed.

Commissioner Dritenbas asked when the county will begin the project. Mr. Crosley noted that this is a high priority project and the county will start the project in approximately six months. He suggested that the District could begin site construction once the county has completed their project.

Commissioner Sansom made a motion to approve an agreement with Brevard County for a one-year lease, with a possible six-month extension, for the utilization of DMMA BV-4B to support muck dredging of the Mims Boat Ramp area, Brevard County, Florida. The motion was seconded by Commissioner Dritenbas. Chair Chappell asked for discussion. Hearing none, a vote was taken and the motion passed.



**ITEM 13.     Work Order for Artificial Reef Construction for the Intracoastal Waterway (IWW) Deepening Project in the Vicinity of the Port of Palm Beach, Palm Beach County, Florida.**

Mr. Crosley stated that the permit for the IWW Deepening Project in the vicinity of the Port of Palm Beach requires the District to construct .2 acres of artificial reef with a limestone cap for hard-bottom impacts within the navigation channel.

Mr. Crosley stated that this activity would typically become part of the overall bid to construct the deepening project. He stated that the District has the unique opportunity to piggy-back on an existing Palm Beach County contract and utilize the contractor that is leasing DMMA MSA 617C site in Juno Beach. He stated that the contractor is currently installing shoreline stabilization at county and District-owned locations.

Mr. Crosley stated that the contractor is also working to secure suitable reef material from a nearby demolition project that could result in further cost-savings to the District.

Mr. Crosley stated that the terms of the county agreement are transferable to the District, and staff is of the opinion that there is an opportunity to implement the construction of the required mitigation reef in a timely manner at a substantial cost savings.

Mr. Crosley stated that upon Board approval of this item, staff will work with the District's Attorney and Engineer, as well as with the contractor and Palm Beach County, to finalize an agreement directly with the contractor.

Mr. Crosley stated that the contractor has provided a cost estimate of \$67,711.88 to complete this work. He stated that there are additional costs such as project observation and management that are not included in this estimate. He stated that staff is requesting the Board approve a total of \$97,000.00 for this effort.

Commissioner Isiminger stated that the county recently did a project similar to this and the contractor constructed the reef too high. He stated that the reef was hit by a boater. He referred to the project design and stated that he is concerned about constructing a structure with an overhead that could become a cave for divers. He stated that the District should also be careful with the type of materials used to construct this artificial reef and that they need to be inspected for exposed rebar. He stated that he also would like National Marine Fisheries Service (NMFS) to review the proposed project to make sure that it qualifies as a mitigation project. He stated that he feels that this is a good project, but that the District should increase the budget to include Taylor Engineering oversight.

Mr. Crosley stated that the project budget includes 10% for Taylor Engineering monitoring.

Vice-Chair Blow stated that reef construction is regulated by USACE and Florida Fish and Wildlife Conservation Commission permits. He stated that those permits are very clear about artificial reef height below mean low water.

Mr. Crosley stated that Palm Beach County has built many artificial reefs and this contractor has worked on many of those reef projects. He noted that the base of the artificial reef has already been constructed by the county.

Dr. Taylor noted for the record, that his company did not design this reef and he does not know why his company name is on the attachment.

Vice-Chair Blow made a motion to approve the work order with Vance Construction to complete the required Palm Beach IWW Deepening mitigation reef with a total budget of up to \$97,000.00. The motion was seconded by Commissioner Isiminger.

Chair Chappell asked for discussion. Hearing none, a vote was taken and the motion passed.

**ITEM 14.     Scope of Work and Fee Quote for Field Investigations and Preliminary Design Documentation Services for Dredged Material Management Area (DMMA) BV-24A, Brevard County, Florida.**

Mr. Crosley stated that at the regular meeting on December 13, 2014, the District's Board approved a property exchange with Brevard County for DMMA BV-24A. He stated that the District's original property is known as DMMA BV-24, and the proposed property to be exchanged is now referred to as DMMA BV-24A.

Mr. Crosley stated that in order to complete the necessary due diligence for this property exchange, the District will need to conduct field investigations and preliminary site design.

Mr. Crosley stated that the District's Engineer has provided a scope and fee quote to conduct an environmental site documentation report, a site management plan, and an engineering narrative for the referenced property exchange. He stated that the majority of the listed work includes the necessary boundary surveying and environmental analysis that will be completed by the listed sub-consultants.

Mr. Crosley stated that the area is identified as viable Scrub Jay habitat. He stated that the approval of this item will allow the District assurance that the new exchange site will be developable into our necessary and needed permanent District DMMA facility.

Mr. Crosley noted that consistent with the terms of the exchange agreement, the county is responsible for up to \$88,823.38 of this work order, should the property exchange be completed following these investigations.

Dr. Taylor noted that the additional costs include surveying and environmental work.

Commissioner Isiminger asked how the Florida Scrub-Jay (scrub-jay) survey will be completed. Ms. Brownell stated that scrub-jay habitat is critical and the survey must document habitat distribution and scrub-jay utilization of the site. She stated that the field survey with the U. S. Fish and Wildlife Service (USFWS) will include: (1) habitat mapping; (2) scrub-jay population mapping; and (3) a written report. She stated that this work will be completed in accordance with the USFWS Florida Scrub-Jay Survey Guidelines. She stated that the project will take approximately seven days. Mr. Adams stated that the District will then be required to proceed forward under a Section 10 or a Section 7 Consultation that will coordinated provided by the USFWS.

Commissioner Isiminger asked that Taylor Engineering review the scrub-jay survey scope of work and determine that the cost is reasonable.

Vice-Chair Blow asked if staff talked with the county about gopher tortoise relocation. Mr. Crosley stated that staff has discussed the relocation of the tortoises and the county is going to help with that process.

Commissioner Sansom noted that the county has a gopher tortoise relocation program and the District should work with the county.

Commissioner Sansom made a motion to approve the scope of work and fee quote in the amount of \$180,393.94 from Taylor Engineering to conduct field investigations and preliminary design documentation of DMMA BV-24A, Brevard County, Florida that are necessary to complete the proposed property exchange. The motion was seconded by

Commissioner Isiminger. Chair Chappell asked for discussion. Hearing none, a vote was taken and the motion passed.

**ITEM 15. Finance and Budget Committee Report.**

Committee Chair Cuzzo stated that the District's Finance and Budget Committee met before today's Board meeting, and the committee reviewed and recommended approval of the January, 2015 financial statements, the delegation of authority, and the expenditure and project status report.

Treasurer Cuzzo made a motion to approve the recommendations of the District's Finance and Budget Committee of the January, 2015 Financial Statements. The motion was seconded by Commissioner Dritenbas. Vice-Chair Blow asked for discussion. Hearing none, a vote was taken and the motion passed.

**ITEM 16. Tallahassee Report.**

Mr. Crosley stated that the District's Tallahassee Governmental Affairs firm has provided a report on the State Legislative session. He stated that there are a number of Bills that could be of particular interest to the District, but not at this time.

Vice-Chair Blow asked if there is any news on an Anchoring Bill. Commissioner Sansom stated that Senator Dean has proposed an Anchoring Bill, but time will tell if the House accepts it. He stated that the bulk of this Bill addresses the derelict vessel issues and another section will not allow vessel anchoring within 200 feet of the shoreline for more than a certain period of time.

Mr. Crosley stated that during his Washington D.C. visit on behalf of the Atlantic Intracoastal Waterway Association (AIWA), he met with representatives from Boat US. He stated that Boat US is very concerned about the proposed anchoring regulations for

Florida. He stated that Florida's anchoring regulations have become a national concern. He stated that Florida may set precedent with the Anchoring Bill.

Commissioner Sansom stated that the Anchoring Bill is identified as Bill #1548, Vessel Safety. He stated that the proposed anchoring distance is for areas of waterfront developed property, except for safe harbor. He stated that the Bill will not allow anchoring of vessels that are not capable of operating or taking-on, or have taken-on water, or are leaking fuel.

Commissioner Dritenbas noted that the process for derelict vessel removal appears complicated. Vice-Chair Blow stated that local governments need to take the initiative to develop a program to remove derelict vessels.

Commissioner Sansom stated that during the Brevard County derelict vessel removal permitting process, it was discovered that a consultation with the National Marine Fisheries Service (NMFS) was required. Mr. Crosley stated that it is important to remove derelict vessels because of environmental hazards, but because the process takes so long, the vessel becomes fish habitat and NMFS requires mitigation for that habitat. He stated that it is difficult because the process varies for each area.

**ITEM 17. Washington Report.**

Mr. Crosley stated that Chairman Chappell, Commissioner Isiminger, Commissioner Williams, Ms. Zimmerman and Mr. Crosley attended 19 meetings with members of FIND's congressional delegation, the House and Senate Energy and Water Appropriations Subcommittee staff, and Bonnie Bruce, who is handling the reauthorization of the Magnuson Stevens Act (MSA) for Representative Don Young, the ranking Republican on the House Natural Resources Committee and the lead on the MSA

reauthorization. He stated that these meetings resulted in an Appropriations request letter from 11 of the District's congressional delegation.

Mr. Crosley stated that when he met with members of the AIWA in Washington, he showed them the Appropriations request letter and they are all interested in working towards a similar result for their state. He stated that this may lead to congressional letters of support from Virginia to Florida. He stated that these letters are in support of "mini-pot" funding to the USACE.

Mr. Crosley stated that these visits will help to obtain additional funding for the District's waterway projects. He stated that with no earmarks and funding cuts, these mini-pot funds are helpful. He stated that the District needs to have projects ready to go, so when the funding becomes available, the District can immediately move forward.

Mr. Crosley stated that the meeting with FIND, the National Marine Fisheries Service (NMFS), the Southeast Regional Office Jacksonville Corps, and Congresswoman Lois Frankel was productive and gave both FIND and the USACE an opportunity to explain challenges with the Essential Fish Habitat (EFH) consultation process, including permit delays, avoiding channel dredging where EFH is present, and additional project costs due to mitigation. He stated that Congresswoman Frankel challenged the NMFS by asking them whether they thought the mitigation policy makes sense considering the nature of seagrass propagation in the IWW.

Mr. Crosley stated that he received a letter from Roy Crabtree with the NMFS stating that based on the 1996 Magnuson Stevens Fisheries and Conservation Act, they still feel that mitigation for maintenance dredging is appropriate.

Mr. Crosley stated that in July when the new Colonel is appointed to the Jacksonville Division, the District should reach out for his support for the Jacksonville staff to continue working on this issue.

Mr. Crosley noted that Representative Young is very reluctant to introduce any language changes to the Magnuson Stevens Act (MSA). He stated that FIND is requesting that language be included in the MSA that would make a modification to the EFH consultation process so that a consultation would not be required for congressionally authorized waterway and harbor dredging, and also would not be required for waterway and harbors that are routinely dredged.

Chair Chappell asked when FIND will submit the request to Ms. White with the USACE regarding a regional permit for the IWW channel and start that consultation process. Mr. Crosley stated that Ms. White has suggested that the USACE perform a resource survey of the entire IWW in Florida. He noted that FIND recently completed the IWW Channel Hydrographic Surveys, and the Southern section is being finalized. He stated that once the Northern section has also been finalized, the District will transmit that information to the NMFS. He stated that he has concerns regarding completing a resource survey and he is not in complete concurrence with the USACE that this is the right direction to go at this time. He stated that he will be meeting with the USACE to further discuss this issue.

Chair Chappell stated that the District should send a letter to the USACE and state that the District is requesting authorization to maintenance dredge in a congressionally authorized channel, that the USACE is responsible to maintain the channel, and that FIND is now maintaining the channel. He stated that the letter should say that the District is not



going through a process where the District is mapping resources because the District is not going to mitigate for resources. Commissioner Isiminger stated that he feels a letter like that may make it harder for the USACE to act on an individual projects, such as Broward Reach I. He stated that if the USACE sends the letter to the NMFS, it could freeze all projects.

Mr. Adams stated the Ms. White is officially moving forward to re-evaluate the 1993 General permit. He stated that is why she is requesting that all resources are mapped, and she has requested a list of all potential dredging projects for the next ten years. Mr. Crosley stated that he will supply the hydrographic survey and a list of dredging projects, but he is not in favor of resource mapping.

Commissioner Isiminger stated that he feels that the NMFS Programmatic Consultation is a potential trap.

Commissioner Isiminger stated that he attended the Washington D.C. trip and he noted the Mr. Davenport is doing as much as can be done in Washington D. C. to address the District's issues. He stated that Mr. Davenport is efficient and he follows through. He stated that all the meetings that he set up were expecting the District, knew Mr. Davenport, and knew about the District's issues. He stated that Mr. Davenport followed up on each meeting with a letter to each representative. He stated that he was impressed with Mr. Davenport and the way he operates.

Mr. Crosley noted that the agencies that do not ask for funding, do not receive federal funding, and he feels that the D.C. visits help generate some federal funding. He stated that it is the same situation with NMFS. The District may not get action right away, but if the District is persistent, there will eventually be some legislative changes.

**ITEM 18. Additional Staff Comments and Additional Agenda Items.**

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

Mr. Crosley stated that in the near future he would like to present to the Land Acquisition Committee, procurement RFQ's for surveys, seagrass and geo-technical work. He stated that he would like to qualify three firms and provide three-year contracts with a one or two-year extension. He asked for discussion.

Commissioner Dritenbas suggested a five-year contract with a one-year extension, and the right to terminate the contract.

Commissioner Bowman stated that a five-year contract with a one-year extension will draw more aggressive bidders.

Ms. Zimmerman noted that staff distributed a Florida Fish and Wildlife Conservation Commission (FFWC) Anchoring Survey Summary.

**ITEM 19. Additional Commissioners Comments.**

Chair Chappell asked if there were any additional Commissioner comments.

Commissioner McCabe thanked Commissioner Bowman for yesterday's Community Outreach. She noted that the event was very nice.

Commissioner Bowman stated that he has enjoyed his tenure with the District. Multiple commissioners thanked Commissioner Bowman for his service.

Multiple commissioners welcomed Commissioner Dritenbas back.

Chair Chappell noted that during the Washington D.C. visit, staff noticed various people wearing lapel pins identifying their organization or company. He stated that District lapel pins would be a good thing for the District to purchase.

**ITEM 20.     Adjournment.**

Chair Chappell stated that hearing no further business the meeting was adjourned at 11:23 a.m.



## FLAGLER COUNTY PROJECT STATUS UPDATE

April 2015

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### **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 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. Last year, the Board approved the construction of this site, and currently the site is approximately 50% complete.

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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. This project is likely to be undertaken again in 2016 or 2017.

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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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**FIND**



## FLAGLER COUNTY PROJECT STATUS UPDATE

April 2015

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### **Waterways Assistance Program**

Since 1986, the District has provided \$ 2.3 million in Waterways Assistance Program funding to 24 projects in the County having a total constructed value of \$ 4.8 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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### **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: the Economic Impact of Flagler County Waterways.

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**FIND**



## FLAGLER COUNTY PROJECT STATUS UPDATE

April 2015

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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.

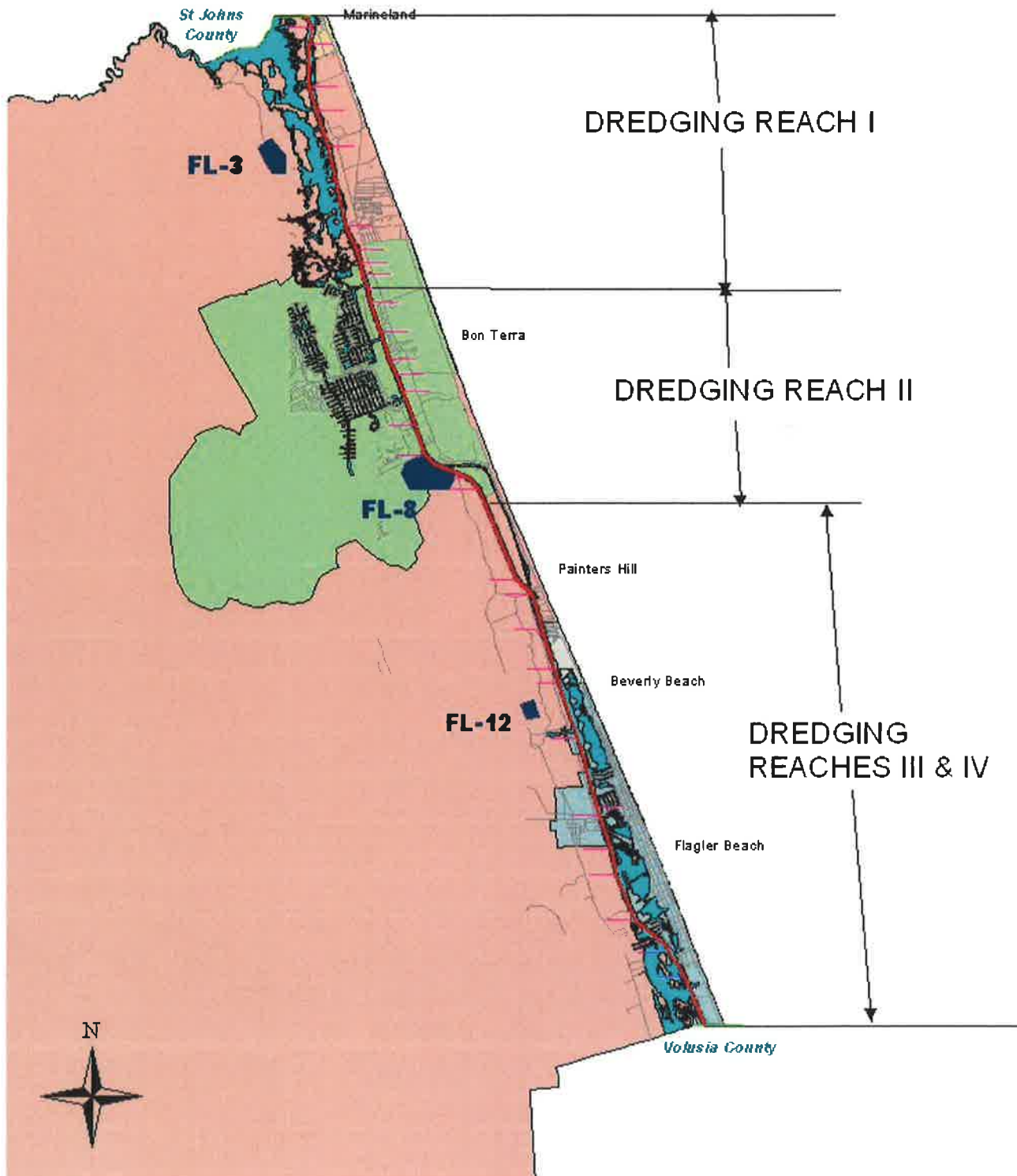
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### **Small-Scale Spoil Island Enhancement and Restoration Program**

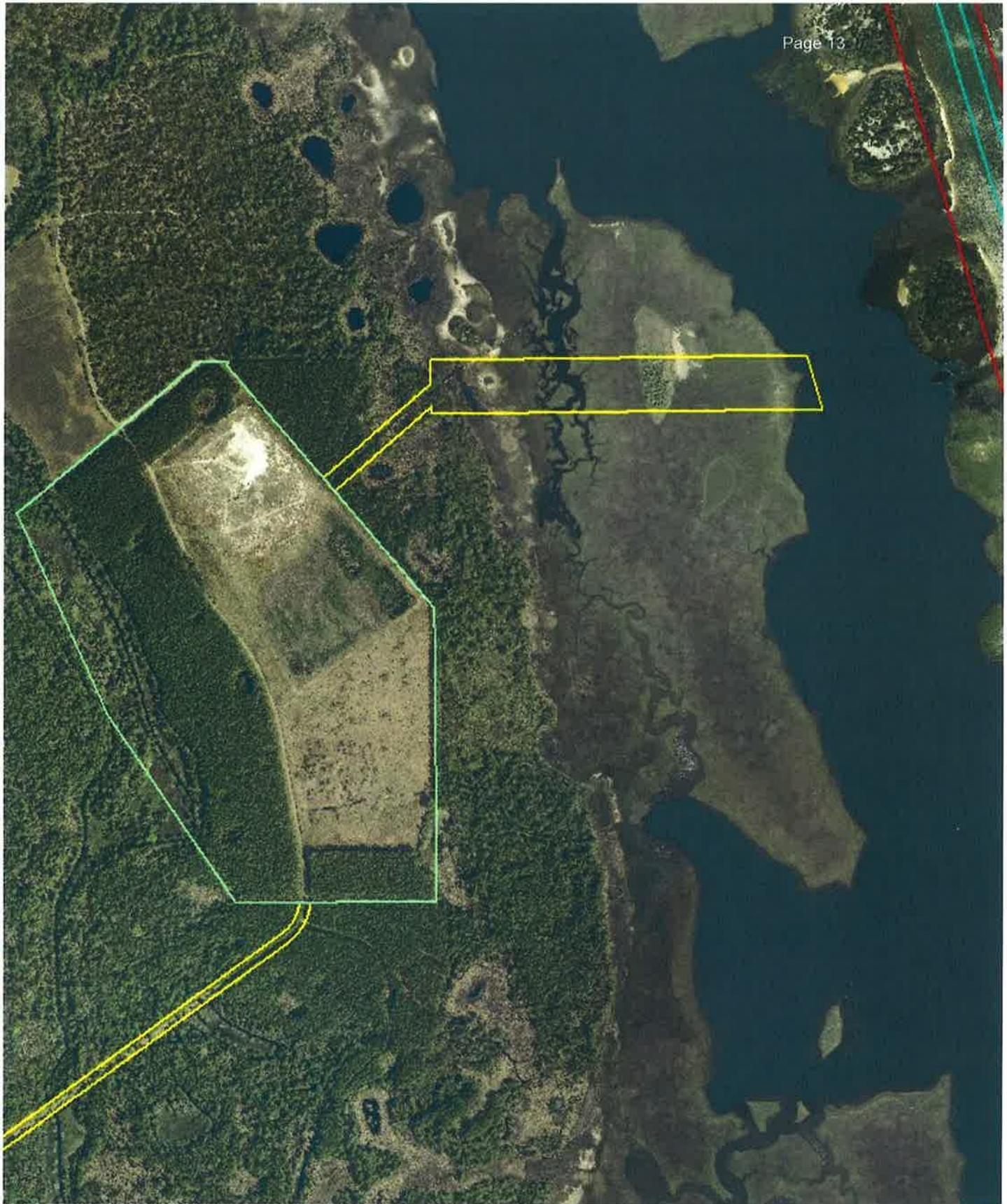
To date, no spoil island enhancement or restoration projects have been funded in Flagler County.





**FIND**

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-3

## Legend

Feature 1

FL-3

Old King Rd N







1000 ft

Google earth

© 2015 Google





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

## DREDGED MATERIAL MANAGEMENT AREA FL-8





# DMMA FL-8

## Legend

FL-8

Feature 1

FL-8

N Ocean Shore Blvd

Old A1A

Alm Coast Pkwy SE





Front Park Rd

Sweetwater Ct







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

## DREDGED MATERIAL MANAGEMENT AREA FL-12





**DMMA FL-12**

**Legend**

Feature 1

FL-12

Heron Dr

Harbor View Dr

Colbert Ln

Google earth

© 2015 Google

600 ft

N





# 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



# 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*.

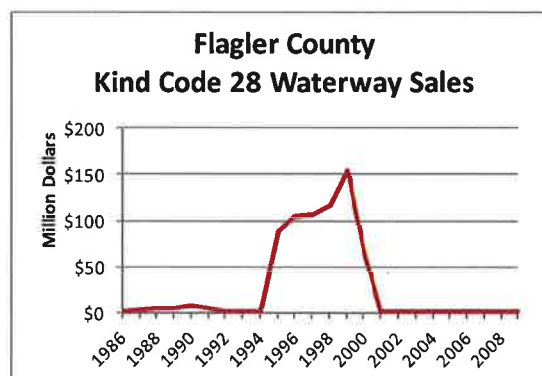
### Updating of Previously Estimated Benefits

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

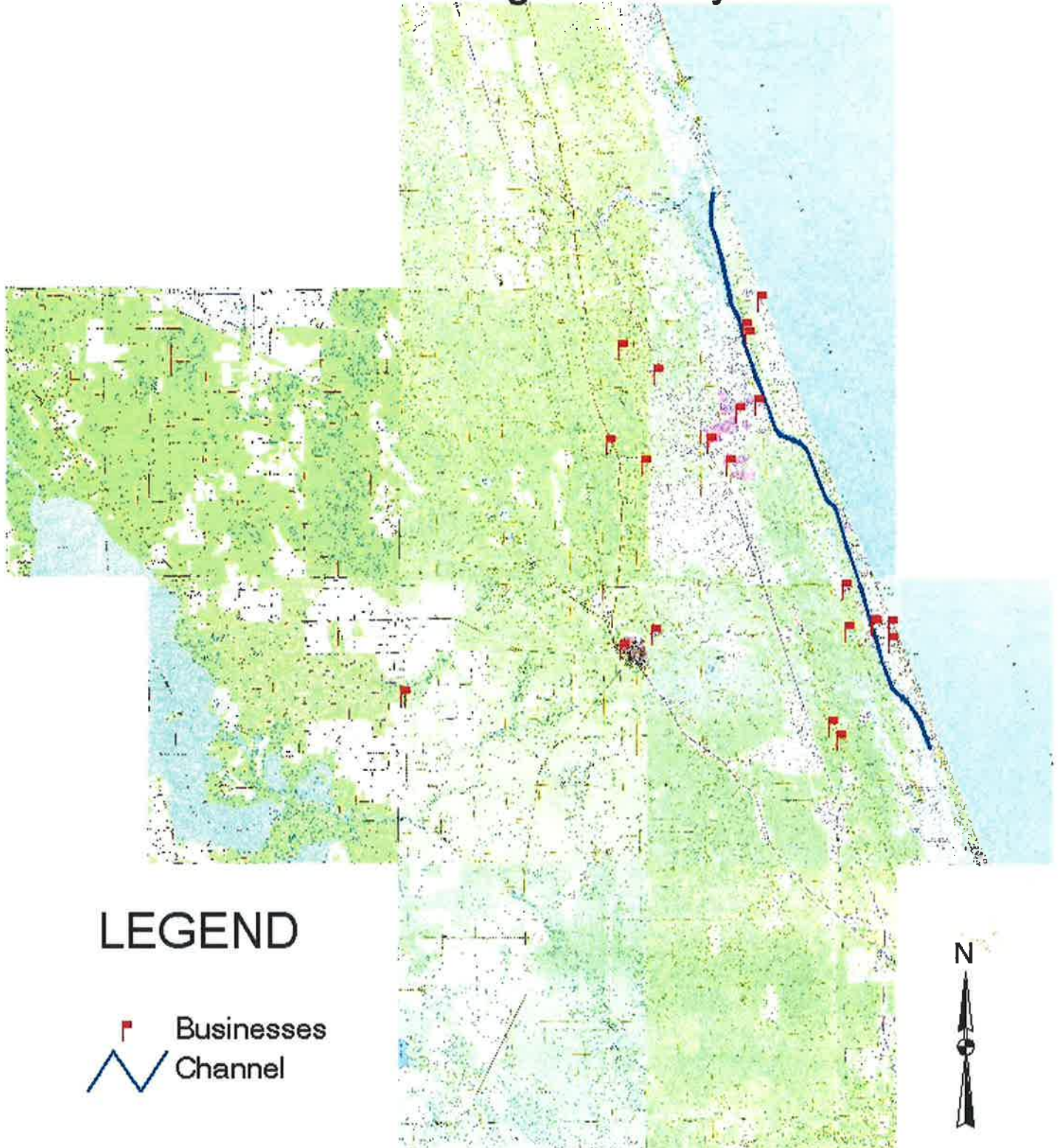
- Current existing conditions: \$4.9 million
- Cessation of maintenance: \$3.9 million
- Increased maintenance: \$4.9 million

### 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

Location Map

## Waterway Related Businesses in Flagler County





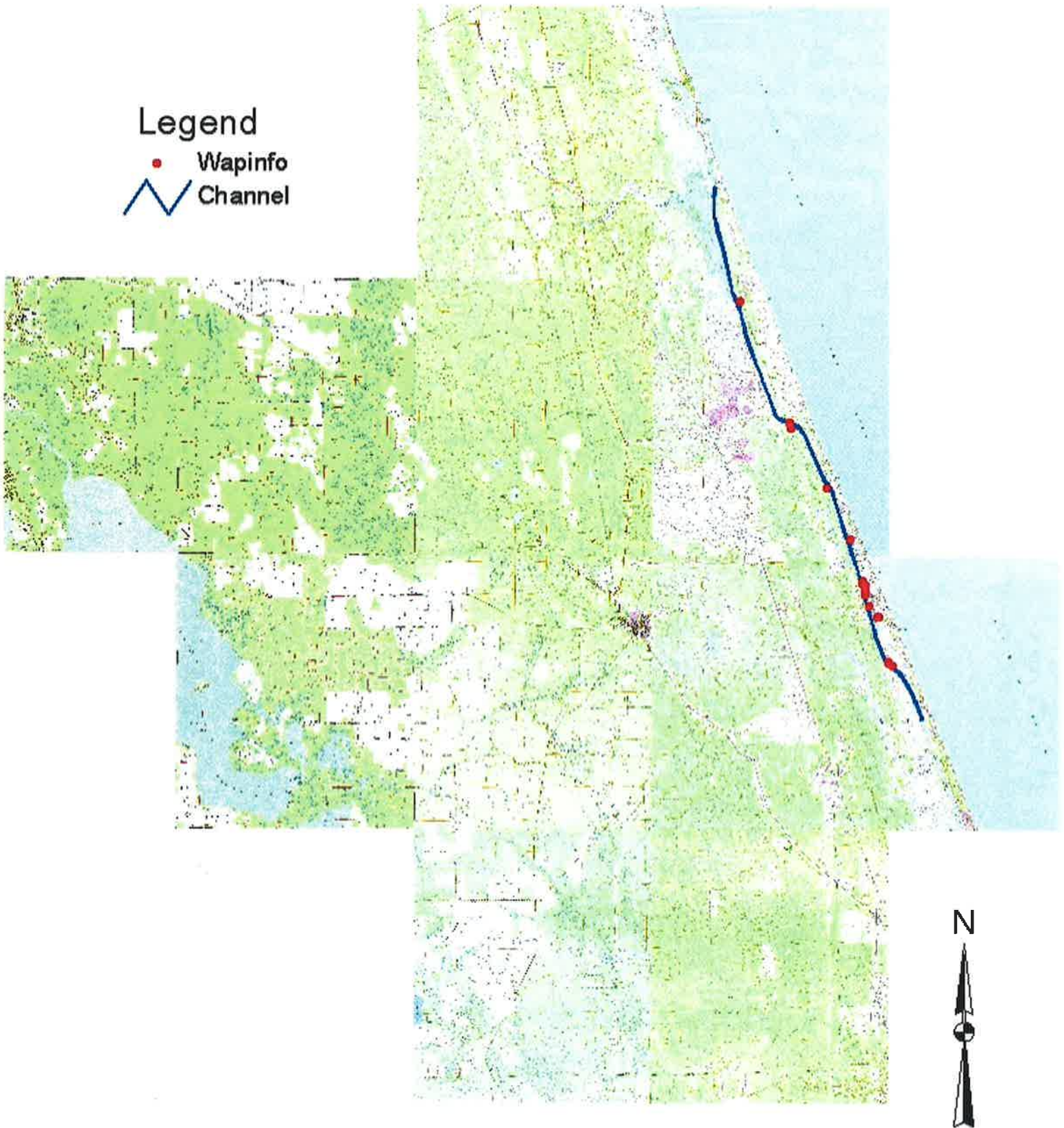
**FLORIDA INLAND NAVIGATION DISTRICT  
WATERWAYS ASSISTANCE PROGRAM PROJECTS  
IN FLAGLER COUNTY  
1986-2015**

Project Name	Project Number	Project Sponsor	Grant Amount	Total Cost
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 II	FL-FB-00-9	City Of Flagler Beach	\$75,000	\$150,000
Public Navigation Dredging - II	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 II	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
			<b>\$2,345,661</b>	<b>\$4,831,000</b>

## Waterways Assistance Program Projects in Flagler County

Legend

• Wapinfo  
Channel





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of Engineers®**  
Jacksonville District

**IWW STATUS UPDATE**  
**FIND Board of Commissioners Meeting**  
**April 17, 2015**

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**WORK ACTIVITIES IN FY 15:**

1. IWW: Indian River Reach 1 (Indian River County)
2. DMMA O-7 (Martin County)
3. IWW: Broward Reach 1 (Broward County)



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

**IWW STATUS UPDATE**  
**FIND Board of Commissioners Meeting**  
**April 17, 2015**



AIWW = Atlantic Intracoastal Waterway Norfolk to St. Johns  
IWW = Intracoastal Waterway Jacksonville to Miami (12' and 10' projects)  
DMMA = Dredge Material Management Area

**1. WORK ACTIVITY: IWW Indian River Reach 1 (Indian River County)**

**CONTRACT AMOUNT: TBD**

**DESCRIPTION OF WORK:** Development of plans and specifications for the IWW Indian River Reach 1 and procurement of the O&M dredging contract. Material from this reach is non beach quality and will be placed upland in the newly constructed DMMA IR-2. Preliminary estimates for shoaling quantities include 300,000 cy of material within Reach 1.

**SCHEDULE:**

Submit Exemption Letters to FDEP:	26 Nov 2013A
Contract Advertisement Initiated:	31 July 2014A
Bid Opening:	3 Sept 2014A
Contract Award:	17 Sept 2014A
NTP Issued:	6 Nov 2014A
Preconstruction Conference:	21 Nov 2014A
Mobilization Complete:	1 Jan 2015A
Dredging Complete:	30 June 2015

**FIND WORK ORDER:** Work order for developing plans and specifications for Indian River Reach 1 was approved at the May 2013 FIND Board Meeting. A follow on work order was approved to fund dredging of the Indian River Reach 1 of the IWW in May 2014. Total funding for the contract is as follows: \$1,791,440.73 FIND Contributed Funds and \$4,754,734.27 Federal funding.

**NAME OF CONTRACTOR:** Cavache, Inc., 280 NW 12th Avenue, Pompano Beach, FL 33069 in the amount of \$6,058,675.00. An additional amount of \$487,500 was added to the contract via the modification described below.

**STATUS:** Dredging began on 2 January 2015. To date, approximately 45,000 cy of material has been dredged and placed in DMMA IR-2. The contractor is moving from north to south. A modification to the contract was processed that added approximately 40,000 cy of material to the contract and allowed for road improvements to the access road at the north end of the DMMA IR-2 site. The contractor has been encountering large coquina stone within the channel. This is causing more delays than expected.



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Jacksonville District

**IWW STATUS UPDATE**  
**FIND Board of Commissioners Meeting**  
**April 17, 2015**



**2. WORK ACTIVITY: DMMA O-7**

**CONTRACT AMOUNT: TBD**

**DESCRIPTION OF WORK:** Finalization of plans and specifications and associated environmental coordination for construction of DMMA O-7.

**SCHEDULE O-7 (Tentative):**

Complete Draft P&S:	TBD
Final P&S Ready to Advertise:	
Contract Advertisement Initiated:	
Bid Opening:	
Contract Award:	
NTP Issued:	
Mobilization Complete:	
Construction Complete:	

**FIND WORK ORDER:** Funding for completion of P&S will be funded with 100% federal funding. A work order will be presented to the FIND Board at a later date to fund construction of DMMA O-7.

**NAME OF CONTRACTOR: TBD**

**STATUS:** P&S for DMMA O-7 kicked off on 4 Dec 2014. The team is considering the use of culverts in lieu of construction bridges across the 2 drainage ditches. From an environmental standpoint we would proceed with a supplemental EA to address the different impacts that culverts produce vs. bridges. By going this route with culverts we should be able to reduce the time required to complete p&s, which is why a TBD has been placed on the complete p&s task above. Team went to the site the week of 30 March 2015 to investigate culverts vs. bridges.





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

**IWW STATUS UPDATE  
FIND Board of Commissioners Meeting  
April 17, 2015**



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**3. WORK ACTIVITY: IWW Broward Reach 1 (Broward County)**

**CONTRACT AMOUNT: TBD**

**DESCRIPTION OF WORK:** Development of Plans and Specifications for Broward Reach 1. Corps will move forward with initiation of plans and specifications for this reach, with 100% Federal funding. 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'. 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 TBD**

**FIND WORK ORDER:** P&S are being funded 100% with Federal funding. Dredging will likely be funded with FIND Contributed Funds.

**NAME OF CONTRACTOR:** Dredging performed with a Wilmington District dredge.

**STATUS:** First steps will be FDEP permit and associated NEPA. The nearest approved nearshore or offshore disposal is located at Port Everglades (offshore). In order to utilize this offshore disposal option we would need to obtain an FDEP permit and perform the required NEPA documentation. From an FDEP standpoint, it may be applicable to add the IWW reach to the description of the existing Port Everglades permit, after verification of the composition of the material. The Corps will move out on this action once efforts on DMMA 07 are wrapped up.



REPLY TO  
ATTENTION OF

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

Palm Beach Gardens Regulatory Office  
SAJ-2005-00972 (RGP-GGL)

**March 31, 2015**

## ***PUBLIC NOTICE***

### **REGIONAL GENERAL PERMIT SAJ-93**

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

**PROPOSAL:** To expedite and facilitate processing of Department of the Army permits, the Jacksonville District, U.S. Army Corps of Engineers (Corps) proposes to re-issue Regional General Permit SAJ-93 which gives the Florida Inland Navigation District (FIND) general authority under Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C 403) to maintenance dredge within the federal channel of the Atlantic Intracoastal Waterway (AIWW) and the Intracoastal Waterway (IWW) along the east coast of Florida including Nassau County, Duval County, St. Johns County, Flagler County, Volusia County, Brevard County, Indian River County, St. Lucie County, Martin County, Palm Beach County, Broward County, and Miami-Dade County. This proposal includes the maintenance dredging of the Okeechobee Waterway (OWW) from the Intracoastal Waterway to the western Palm Beach County line within Lake Okeechobee.

**BACKGROUND:** On February 16, 2011, the District Engineer issued Regional General Permit (RGP) SAJ-93 which gives FIND general authority pursuant to Section 10 of the Rivers and Harbors Act of 1899 to maintenance dredge within the authorized federal channel of the AIWW, IWW, and OWW as stated above. The permit expires on February 16, 2016. The term "general permit" means a Department of the Army authorization that is issued on a regional basis for a category of activities when those activities are substantially similar in nature and cause only minimal individual and cumulative environmental impacts. General permits are a way to reduce the burden of the regulatory program on the public and ensure timely issuance of permits while effectively administering the laws and regulations that establish and govern the program. General permits also provide environmental protection because they involve special conditions to ensure no more than minimal individual and cumulative environmental impacts. General permits are reviewed every five years. An assessment of the cumulative impacts of work authorized under the general permit is performed at that time if it is in the public interest to do so. Proposed actions not complying with the conditions of a general permit may still receive authorization via a "standard permit", but the application must be individually evaluated and coordinated with third parties,

including the federal and state resource agencies. Review of an application for a "standard permit" takes additional time to complete as conflict resolution may be required.

A draft of the regional general permit as proposed for re-issuance follows:

**DEPARTMENT OF THE ARMY PERMIT  
REGIONAL GENERAL PERMIT 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), the Corps is proposing to issue a Regional General Permit (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 significantly impact marine resources, including threatened and endangered species, fishery resources, and the essential habitats that support these resources. Regional General Permit 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 regional general permit, 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 wideners, new channels or new accesses, or re-aligning existing channels. Dredging activities may include either mechanical or hydraulic methods.

3. SAJ 93 does not authorize excavation of wetlands, such as mangroves or other forested or emergent aquatic habitats.

4. No discharge of dredged or fill material into waters of the United States is authorized by this permit.

5. 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.

6. Prior to the initiation of any construction, projects qualifying for SAJ-93 must be authorized by the applicable permit required under Part IV of Chapter 373, F.S., by the Department of Environmental Protection, a water management district under s. 373.069, F.S., or a local government with delegated authority under s. 373.441, F.S., 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.

7. Turbidity control measures will be used 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 water quality standards. The Florida Department of Environmental Protection (DEP) may require the applicant to submit a daily turbidity report, which may be verified by federal, state, or local government inspectors.

8. Excavated spoil material shall be deposited at new self-contained upland areas that will incorporate measures that prevent spoil material or return water from entering any water of the United States. The upland disposal area shall be constructed with consideration of the existing onsite drainage patterns, and FIND shall provide verification no onsite or offsite adverse flooding conditions will result from the placement of dredged material. Alternatively, dredged material may be placed in existing Dredged Material Management Areas or other previously approved disposal sites. FIND may allow the dredged material to be utilized for beneficial re-use; however, this RGP does not authorize the beneficial re-use activity into waters of the United States.

## **B. SPECIAL CONDITIONS FOR SUBMERGED AQUATIC VEGETATION (SAV):**

**9.** This RGP authorizes both direct and indirect dredging impacts to submerged aquatic vegetation (SAV) within the limits of the federal channel and side slopes if the seagrass is within a reach that has been dredged since 2002 and for all reaches regardless of when the dredging occurred where compensatory mitigation has been successfully completed. In these instances, no pre-construction seagrass survey is required.

**10.** In areas within the known range of SAV that do meet condition 9 above, the FIND shall complete a pre-dredging survey, as follows:

**a.** The pre-dredging survey may be limited to the channel and side-slopes. Surveying the areas landward of the side slopes is not required, unless indirect effects on seagrass are reasonably anticipated, or seagrass is observed within 25-feet of proposed dredged footprint. Other areas outside of the proposed dredged area, but within the scope of the project such as pipeline corridors, temporary mooring piles, vessel turnaround areas, construction staging areas, vessel ingress/egress areas, and upland or dredge material management areas. A 25-foot buffer is required between construction or staging areas (non-dredging) and areas with SAV, mangroves or other aquatic resources. The pre-dredging survey shall identify and define existing SAV beds and other aquatic resources. The survey shall indicate water depths and bottom contours.

**b.** If SAV is observed within a proposed dredge footprint which was dredged prior to 2002, the proposed dredging project may proceed under the SAJ-93 only in instances where the identified SAV can be avoided, and a minimum 25-foot buffer between the SAV and the dredging activities can be implemented. The survey will clearly identify the limits of all SAV beds in their entirety, and the seagrass polygons will be illustrated on the engineering construction plans (plan view and cross sections). In addition, the size, species identified, estimate of percent coverage, and estimate of percent species abundance shall be provided. The pre-dredging survey shall be conducted prior to each dredging event/cycle and during the period April 1 through September 30. All surveys within the range of Johnson's Seagrass shall fully adhere to the attached *Guidelines for Surveying Johnson's Seagrass* as provided in the Johnson's Seagrass Recovery Plan and as developed by the Johnson's Seagrass Recovery Team. The most current acceptable survey methodology approved by the Corps and the NMFS will be used.

**11.** Impacts to natural hardbottom including nearshore reefs, or resources such as corals or worm rock, or other protected aquatic resources are not authorized. If a project is in an area where these types of resources may be present, 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, FIND may avoid impacts by implementing an approved relocation plan prior to construction. All relocation plans shall

be coordinated and approved by both the Corps and NMFS Habitat Conservation Division prior to verification under this RGP.

**12.** A post construction seagrass survey, or aquatic resource survey, is required for all areas proposed to be utilized during the dredging activities. The post survey will be performed in areas with previously identified seagrass, and will document any alterations to the seagrasses, changes in bottom contours, and any changes to the extent of the seagrasses (e.g., altered bottom strata including coverage by fill, furrowing from pipelines, or scour from boats).

**13.** Within 60 days of completion of the authorized work, FIND 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](mailto:CESAJ-ComplyDocs@usace.army.mil) and [nmfs.ser.monitoringreports@noaa.gov](mailto:nmfs.ser.monitoringreports@noaa.gov)

Hardcopies may be sent to:

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

**14.** In the event that an unauthorized adverse impact to SAV or other aquatic resource has occurred while under construction or as a result of a post-construction survey, the FIND shall coordinate with the Corps to quantify the impact, assess the ecological functional losses, and provide an in-kind compensatory mitigation plan for Corps review and approval.

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

**15. Manatee Conditions:** Prior to issuance of authorization, the dichotomous key entitled, "The Corps of Engineers, Jacksonville District, and the State of Florida Effect Determination Key for the Manatee in Florida" dated 2013 will be used to determine potential manatee impacts. 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 evaluation of the permit application.*

**16. Manatee Conditions:** The FIND shall comply with the "Standard Manatee Conditions for In-Water Work - 2011" provided in Attachment 1 of this permit. FIND shall also comply with all additional dredging protocols described on the Manatee Key 2013 maps 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, FIND shall comply with the restricted dredging protocols required for projects located within WVAAs. Additionally, if a proposed project is within 500-feet of an IMA or WVAA 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 the RGP with the inclusion of any additional applicable special conditions.

**17. Sea Turtle and Smalltooth Sawfish Conditions:** The FIND shall comply with National Marine Fisheries Service's "Sea Turtle and Smalltooth Sawfish Construction Conditions" dated March 23, 2006 and provided in Attachment 2 of this permit.

**18. Biological Opinion:** This permit does not authorize the Permittee to take an endangered species, in particular 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 BO under ESA Section 7, with "incidental take" provisions with which you must comply). The referenced National Marine Fisheries Service Biological Opinion (BO) 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 enclosed BO, 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 BO, 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.

19. If a proposed project is located within Johnson's seagrass designated critical habitat, consultation with the National Marine Fisheries Service may be required. Upon completion of consultation, the Corps may elect to verify the project under the RGP with the inclusion of any additional applicable special conditions.

#### **D. ADDITIONAL SPECIAL CONDITIONS:**

**20.** No work shall be performed until the FIND 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 SAJ 93.

**21.** This regional general permit will not obviate the necessity to obtain any other Federal, State, or local permits, which may be required.

**22.** 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.

**23.** SAJ-93 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 to commence in reliance on SAJ-93 will remain in effect provided the activity is completed within 12 months of the date SAJ-93 has expired or was revoked.

**24.** 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.

**25. 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.

**AVOIDANCE AND MINIMIZATION INFORMATION:** RGP-SAJ-93 has been designed to avoid and minimize impacts to aquatic resources by requiring implementation of the following during construction:

A 25-foot buffer will be provided between the dredge footprint (including the associated pipelines and staging areas) and adjacent seagrasses and other aquatic resources outside the federal channel and side slopes.

Minimization of the dredge footprint by avoiding the side slopes will occur in instances where an appropriate level of navigation clearance and safety can be maintained as determined by FIND.

To avoid water quality degradation the projects will be required to comply with the 401 Water Quality Certification issued by the State of Florida in accordance with Section 401 of the Clean Water Act, 33 U.S.C. § 1341.

All dredged material will be disposed at an approved disposal site.

**COMPENSATORY MITIGATION:** No mitigation is proposed under this RGP. The RGP is limited to those areas that have been dredged since 2002 or areas dredged prior to 2002 where compensatory mitigation for aquatic resources has been completed and deemed successful. If post-dredge surveys show inadvertent impacts to SAV or other aquatic resources as a result of the dredge activity, compensatory mitigation will be required.

**CULTURAL RESOURCES:** The Corps determined the permit area within the federal channel has been heavily impacted by urbanization and previous dredging. Due to the past disturbances there will be no potential to adversely affect any historic properties

within the channel, side slopes, or other construction areas. Newly proposed upland disposal sites may require an evaluation in accordance with Section 106 of the National Historic Preservation Act. Our final determination relative to historic resource impacts is subject to review by and coordination with the State Historic Preservation Officer and those federally recognized tribes with concerns in Florida and the Permit Area.

**ENDANGERED SPECIES:** The open waters of the AIWW, IWW, and OWW are within the range of the following species: smalltooth sawfish (*Pristis pectinata*), shortnose sturgeon (*Acipenser brevirostrum*), Atlantic sturgeon (West Indian manatee (*Trichechus manatus*), Johnson's seagrass (*Halophila johnsonii*), swimming sea turtles [green (*Chelonia mydas*), loggerhead (*Caretta caretta*), leatherback (*Dermochelys coriacea*), hawksbill (*Eretmochelys imbricata*), and Kemp's Ridley (*Lepidochelys kempii*)]. The following designated critical habitats (DCH) are within the project area: Manatee DCH, Johnsons seagrass DCH (excluding the federal channel). Areas designated by FWS for the manatee include Warm Water Aggregation Areas and Important Manatee Areas are located within and near the federal channels. The authorization requires during construction implementation of the *Smalltooth Sawfish and Swimming Sea Turtles Construction Conditions* and the *Standard Manatee Conditions for In-Water Work – 2011*.

The Corps has determined the proposed action *may affect but is not likely to adversely affect* the West Indian manatee and will not affect manatee DCH. The U.S Fish and Wildlife Service (FWS) concurred with this determination for the manatee for the prior authorization of SAJ-93. The Corps will request reinitiation consultation with the FWS by separate letter.

Effects to swimming sea turtles, shortnose sturgeon, and Johnson's seagrass as a result of the proposed action are covered under the Biological Opinions prepared by National Marine Fisheries Service (NMFS) Protected Resources Division (PRD). This includes the *NMFS Regional Biological Opinion on Hopper Dredging Along the South Atlantic Coast* (SARBO) dated October 29, 1997, including all addendums and the *NMFS Maintenance Dredging of the Ports and Intracoastal Waterway within the Range of Johnson's Seagrass Regional Biological Opinion* dated June 4, 2001. No further consultation is necessary for these species. These BOs do not address effects of the proposed action on Atlantic sturgeon, smalltooth sawfish, or corals. The Corps has determined the proposed action may affect, but is not to adversely affect these species. South Atlantic Division is currently consulting at the regional level on the SARBO to address these species.

The Corps has determined the proposed action will have no effect on Johnson's seagrass DCH. If dredging activities such as pipeline placement are proposed within Johnson's seagrass DCH, the Corps will consult with NMFS as appropriate at a project specific level.

**ESSENTIAL FISH HABITAT (EFH):** This notice initiates consultation with the National Marine Fisheries Service on EFH as required by the Magnuson-Stevens Fishery

Conservation and Management Act 1996. Within the permit area of the RGP SAJ-93 the following habitats may be present, tidal freshwater (palustrine), seagrass, unconsolidated bottom, coastal inlets, and muddy, silty bottoms. Seagrass habitat is a Habitat Area of Particular Concern for spiny lobster, white grunt and the Snapper/Grouper Complex. Managed species include various life stages of penaeid shrimp complex, reef fish, stone crab, spiny lobster, migratory/pelagic fish, and snapper/grouper complex.

Our initial determination is that the proposed action would not have a substantial adverse impact on EFH or federally managed fisheries. Our final determination relative to project impacts and the need for mitigation measures is subject to review by and coordination with the National Marine Fisheries Service.

**COMMENTS:** Comments regarding this proposed re-issuance of Regional General Permit SAJ-93 should be submitted in writing to the District Engineer, Attention: Garrett Lips at the letterhead address, or by email at [Garrett.G.Lips@usace.army.mil](mailto:Garrett.G.Lips@usace.army.mil) within 30 days from the date of this notice. Questions concerning this action should be directed to Garrett Lips, at the letterhead address, by telephone at 561-472-3519, or by email at [Garrett.G.Lips@usace.army.mil](mailto:Garrett.G.Lips@usace.army.mil). If no substantive comments are received, the permit will be issued without further notice.

**IMPACT ON NATURAL RESOURCES:** Preliminary review of this application indicates that an Environmental Impact Statement will not be required. Coordination with U.S. Fish and Wildlife Service, Environmental Protection Agency (EPA), the National Marine Fisheries Services, and other Federal, State, and local agencies, environmental groups, and concerned citizens generally yields pertinent environmental information that is instrumental in determining the impact the proposed action will have on the natural resources of the area. By means of this notice, we are soliciting comments on the potential effects of the project on threatened or endangered species or their habitat

**EVALUATION:** The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefits, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including cumulative impacts thereof; among these are conservation, economics, esthetics, general environmental concerns, wetlands, historical properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food, and fiber production, mineral needs, considerations of property ownership, and in general, the needs and welfare of the people. Evaluation of the impact of the activity on the public interest will also include application of the guidelines promulgated by the Administrator, EPA, under authority of Section 404(b) of the Clean Water Act of the criteria established under authority of Section 102(a) of the Marine Protection Research and Sanctuaries Act of 1972. A permit will be granted unless its issuance is found to be contrary to the public interest.

The Corps is soliciting comments from the public; Federal, State, and local agencies and officials; Indian Tribes; and other Interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps to determine whether to issue, modify, condition, or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

**COASTAL ZONE MANAGEMENT CONSISTENCY:** In Florida, the State approval constitutes compliance with the approved Coastal Zone Management Plan. The Corps will prepare a Coastal Zone consistency determination in accordance with the Florida Coastal Management Program and request the State of Florida's concurrence pursuant to the Coastal Zone Management Act 16 U.S.C. § 1451-1465, and its implementing regulation, 15 CFR 930, Subpart C.

**REQUEST FOR PUBLIC HEARING:** Any person may request a public hearing. The request must be submitted in writing to the District Engineer within the designated comment period of the notice and must state the specific reasons for requesting the public hearing.

A handwritten signature in dark ink, appearing to read "D W Kinard", is positioned above the printed name and title.

Donald W. Kinard  
Chief, Regulatory Division



## STANDARD MANATEE CONDITIONS FOR IN-WATER WORK 2011

The permittee shall comply with the following conditions intended to protect manatees from direct project effects:

- a. All personnel associated with the project shall be instructed about the presence of manatees and manatee speed zones, and the need to avoid collisions with and injury to manatees. The permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing manatees which are protected under the Marine Mammal Protection Act, the Endangered Species Act, and the Florida Manatee Sanctuary Act.
- b. All vessels associated with the construction project shall operate at "Idle Speed/No Wake" at all times while in the immediate area and while in water where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will follow routes of deep water whenever possible.
- c. Siltation or turbidity barriers shall be made of material in which manatees cannot become entangled, shall be properly secured, and shall be regularly monitored to avoid manatee entanglement or entrapment. Barriers must not impede manatee movement.
- d. All on-site project personnel are responsible for observing water-related activities for the presence of manatee(s). All in-water operations, including vessels, must be shutdown if a manatee(s) comes within 50 feet of the operation. Activities will not resume until the manatee(s) has moved beyond the 50-foot radius of the project operation, or until 30 minutes elapses if the manatee(s) has not reappeared within 50 feet of the operation. Animals must not be herded away or harassed into leaving.
- e. Any collision with or injury to a manatee shall be reported immediately to the Florida Fish and Wildlife Conservation Commission (FWC) Hotline at 1-888-404-3922. Collision and/or injury should also be reported to the U.S. Fish and Wildlife Service in Jacksonville (1-904-731-3336) for north Florida or Vero Beach (1-772-562-3909) for south Florida, and to FWC at [ImperiledSpecies@myFWC.com](mailto:ImperiledSpecies@myFWC.com)
- f. Temporary signs concerning manatees shall be posted prior to and during all in-water project activities. All signs are to be removed by the permittee upon completion of the project. Temporary signs that have already been approved for this use by the FWC must be used. One sign which reads *Caution: Boaters* must be posted. A second sign measuring at least 8 ½" by 11" explaining the requirements for "Idle Speed/No Wake" and the shut down of in-water operations must be posted in a location prominently visible to all personnel engaged in water-related activities. These signs can be viewed at [MyFWC.com/manatee](http://MyFWC.com/manatee). Questions concerning these signs can be sent to the email address listed above.

# CAUTION: MANATEE HABITAT

All project vessels

## IDLE SPEED / NO WAKE

When a manatee is within 50 feet of work  
all in-water activities must

## SHUT DOWN

Report any collision with or injury to a manatee:

Wildlife Alert:

1-888-404-FWCC(3922)

cell \*FWC or #FWC





**UNITED STATES DEPARTMENT OF COMMERCE**  
**National Oceanic and Atmospheric Administration**  
**NATIONAL MARINE FISHERIES SERVICE**  
 Southeast Regional Office  
 263 13th Avenue South  
 St. Petersburg, FL 33701

## **SEA TURTLE AND SMALLTOOTH SAWFISH CONSTRUCTION CONDITIONS**

The permittee shall comply with the following protected species construction conditions:

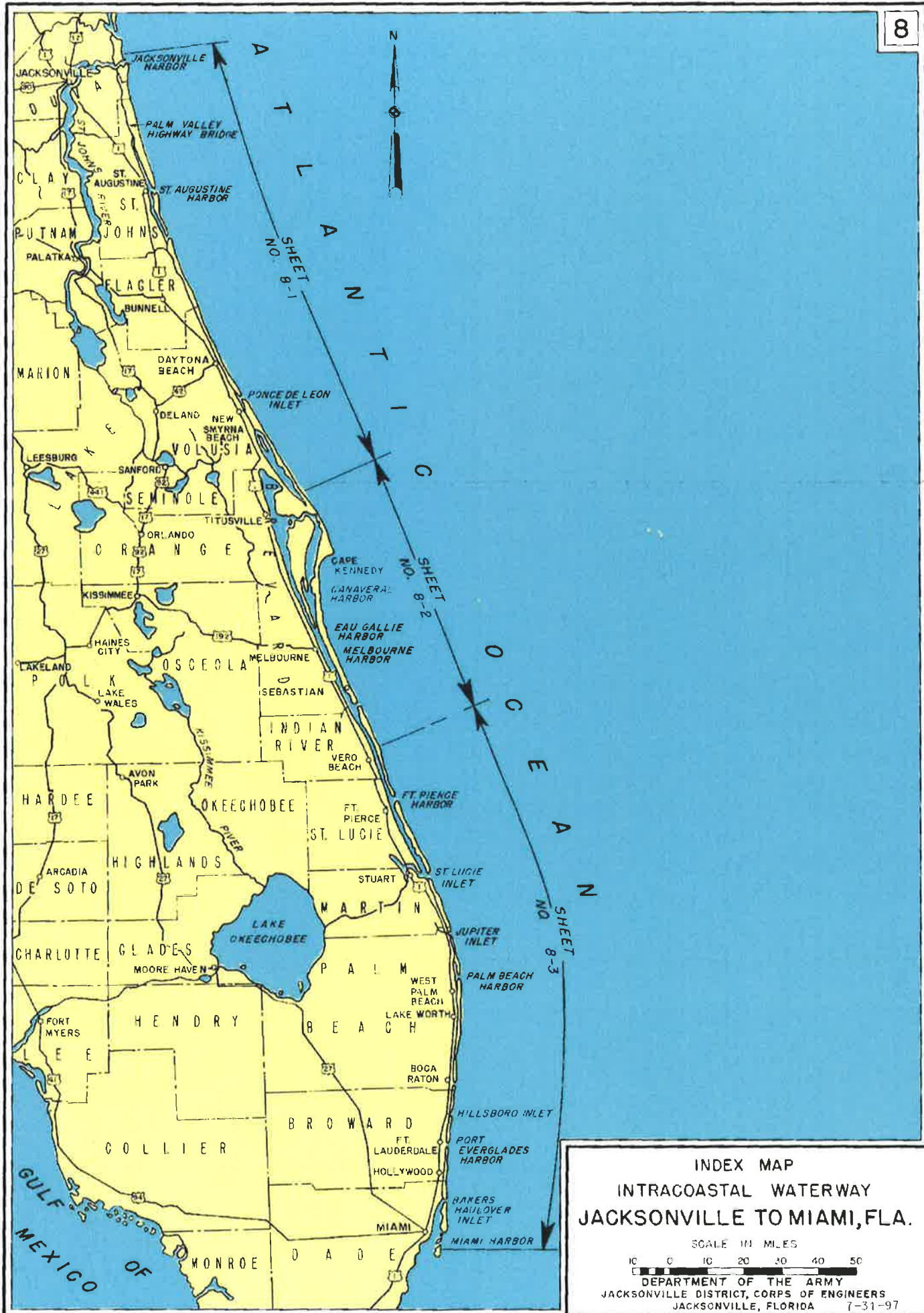
- a. The permittee shall instruct all personnel associated with the project of the potential presence of these species and the need to avoid collisions with sea turtles and smalltooth sawfish. All construction personnel are responsible for observing water-related activities for the presence of these species.
- b. The permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing sea turtles or smalltooth sawfish, which are protected under the Endangered Species Act of 1973.
- c. Siltation barriers shall be made of material in which a sea turtle or smalltooth sawfish cannot become entangled, be properly secured, and be regularly monitored to avoid protected species entrapment. Barriers may not block sea turtle or smalltooth sawfish entry to or exit from designated critical habitat without prior agreement from the National Marine Fisheries Service's Protected Resources Division, St. Petersburg, Florida.
- d. All vessels associated with the construction project shall operate at "no wake/idle" speeds at all times while in the construction area and while in water depths where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will preferentially follow deep-water routes (e.g., marked channels) whenever possible.
- e. If a sea turtle or smalltooth sawfish is seen within 100 yards of the active daily construction/dredging operation or vessel movement, all appropriate precautions shall be implemented to ensure its protection. These precautions shall include cessation of operation of any moving equipment closer than 50 feet of a sea turtle or smalltooth sawfish. Operation of any mechanical construction equipment shall cease immediately if a sea turtle or smalltooth sawfish is seen within a 50-ft radius of the equipment. Activities may not resume until the protected species has departed the project area of its own volition.
- f. Any collision with and/or injury to a sea turtle or smalltooth sawfish shall be reported immediately to the National Marine Fisheries Service's Protected Resources Division (727-824-5312) and the local authorized sea turtle stranding/rescue organization.
- g. Any special construction conditions, required of your specific project, outside these general conditions, if applicable, will be addressed in the primary consultation.

Revised: March 23, 2006

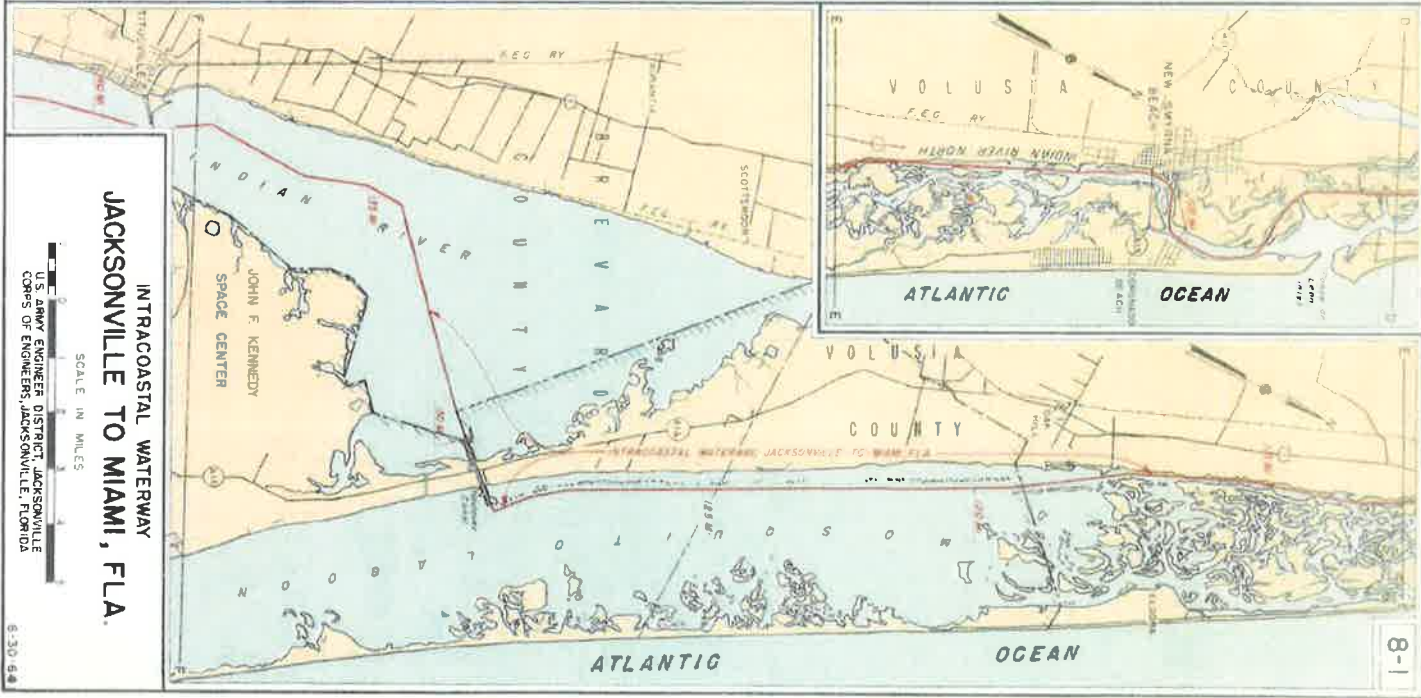
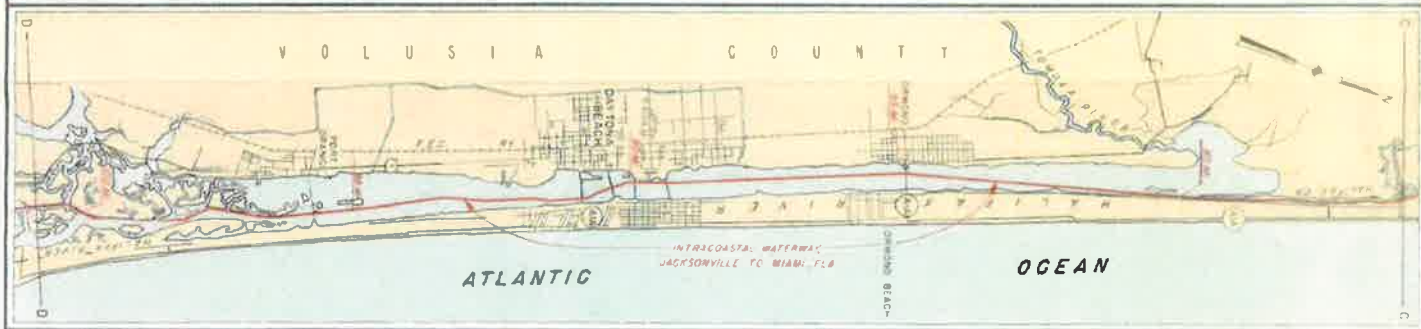
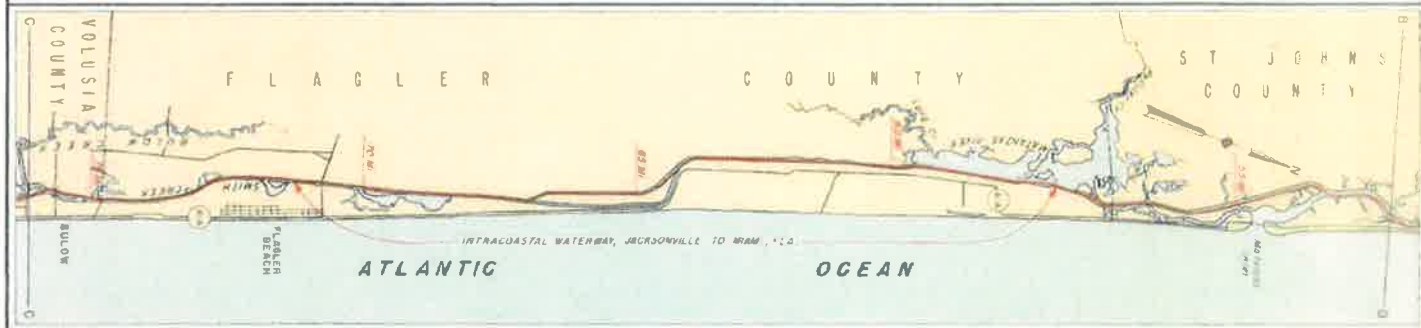
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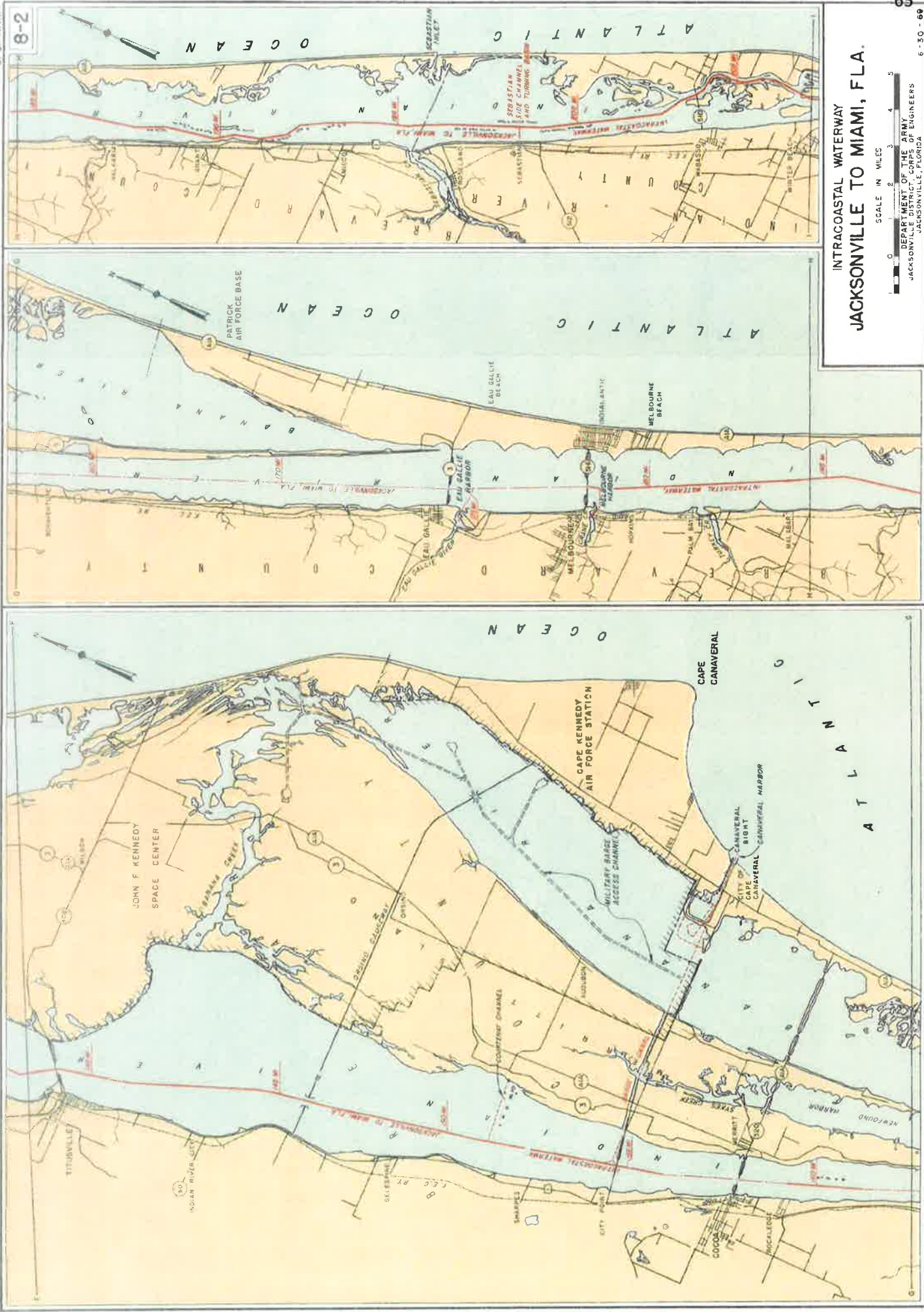


INTRACOASTAL WATERWAY  
JACKSONVILLE TO MIAMI, FLA.

U.S. ARMY ENGINEER DISTRICT, JACKSONVILLE  
CORPS OF ENGINEERS, JACKSONVILLE, FLORIDA

SCALE IN MILES

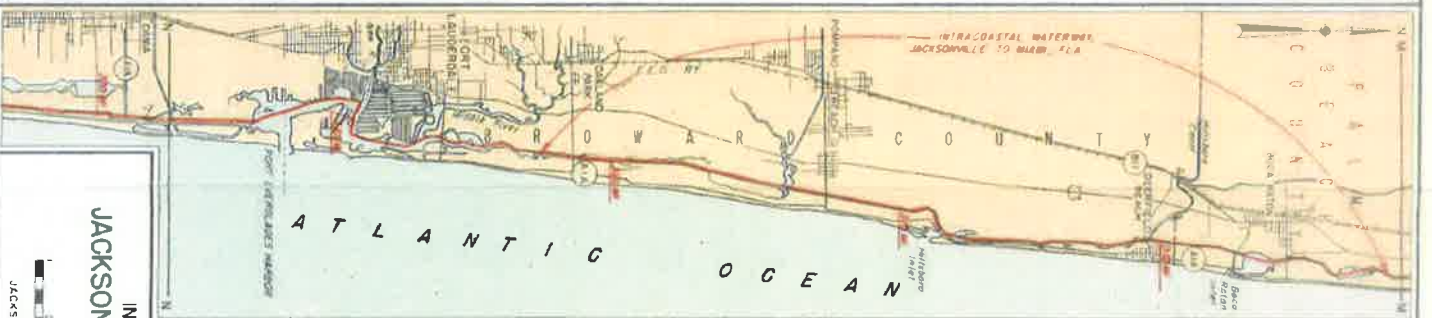
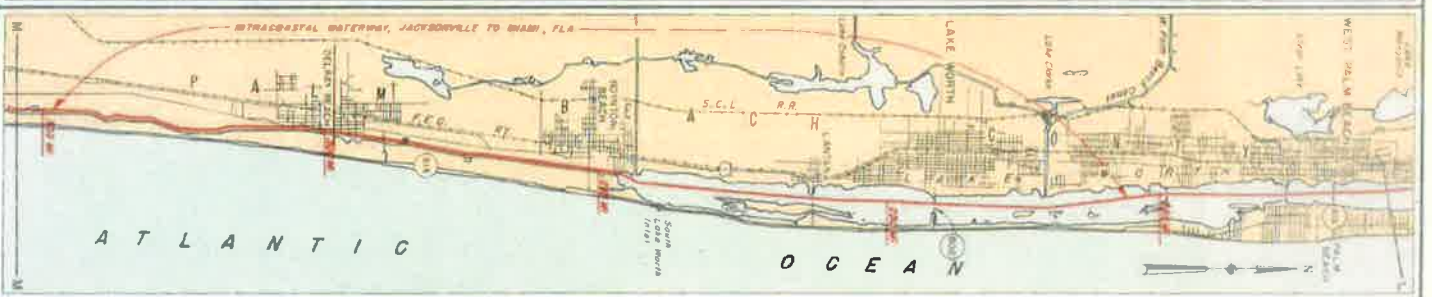
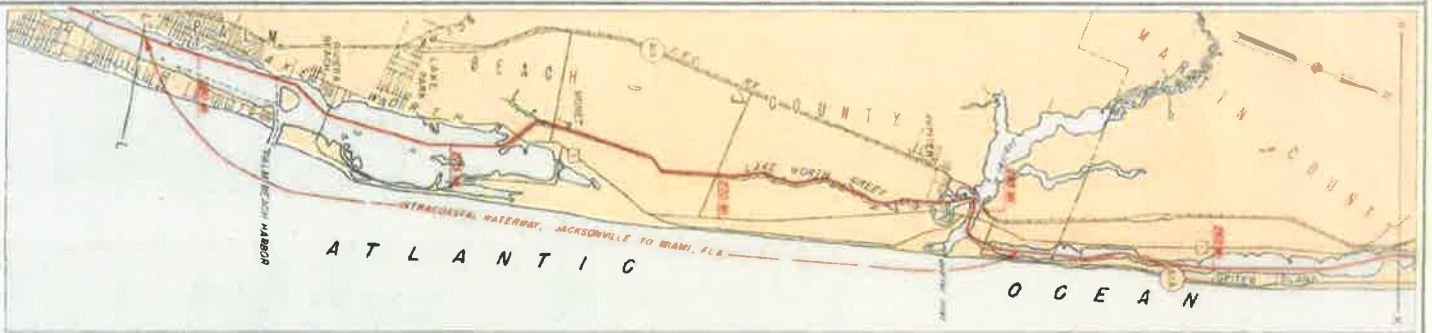
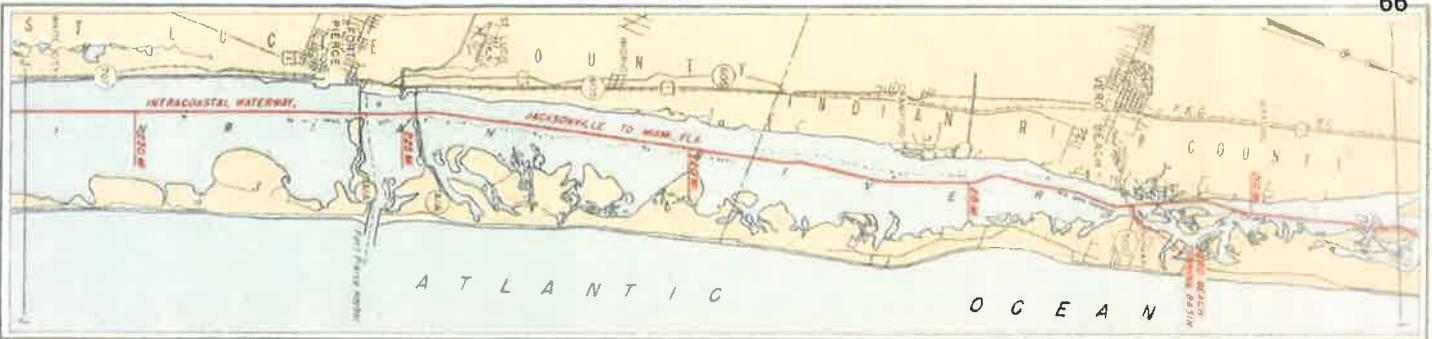




INTRACOASTAL WATERWAY  
JACKSONVILLE TO MIAMI, FLA.

SCALE IN MILES  
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DEPARTMENT OF THE ARMY  
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS  
JACKSONVILLE, FLORIDA





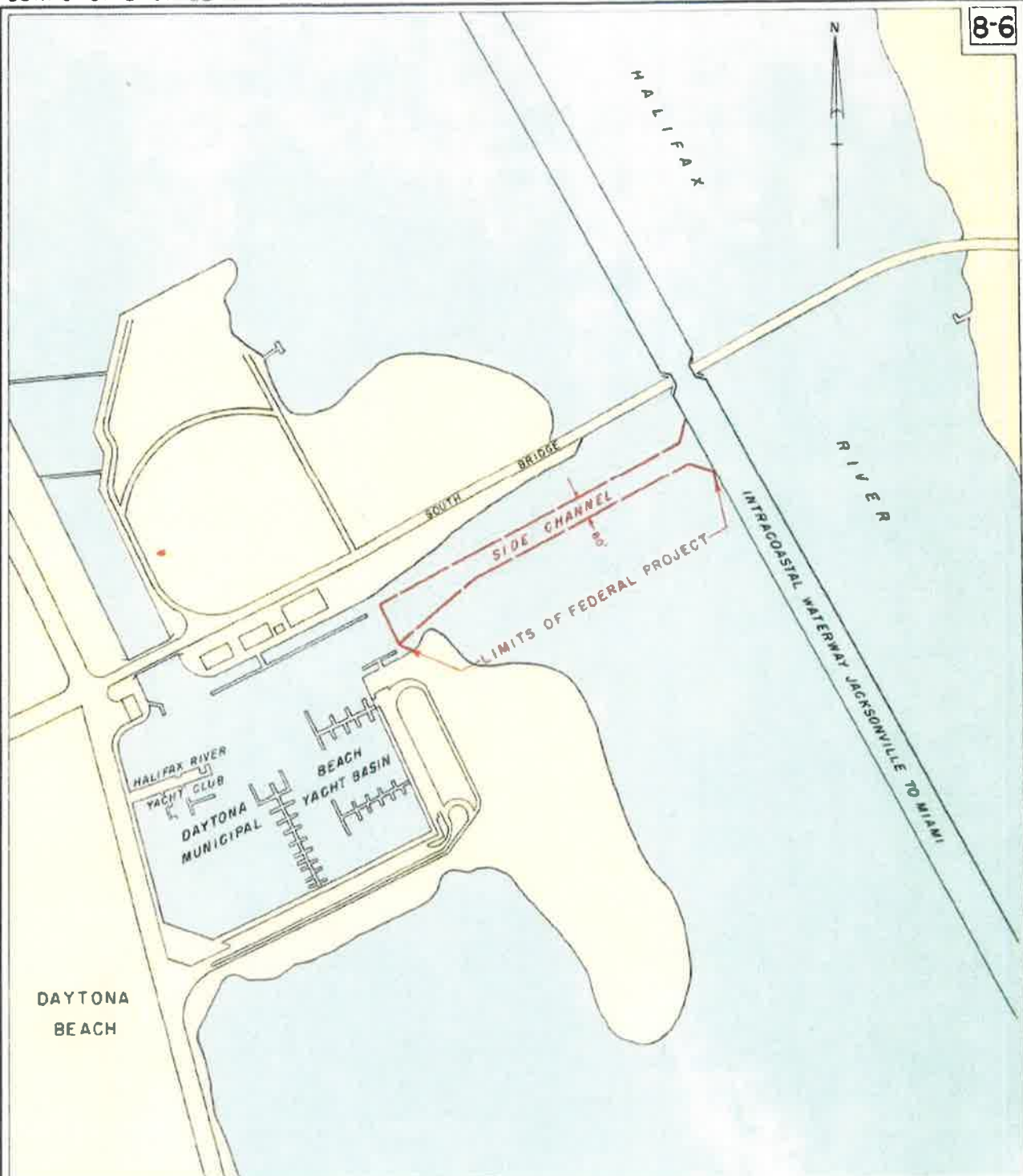
INTRACOASTAL WATERWAY  
JACKSONVILLE TO MIAMI, FLA.

DEPARTMENT OF THE ARMY  
CORPS OF ENGINEERS  
JACKSONVILLE DISTRICT  
JACKSONVILLE, FLORIDA

CORPS OF ENGINEERS

U. S. ARMY

8-6



**PROJECT:** This improvement forms a part of the project for improving the Intracoastal Waterway, Jacksonville to Miami, Florida, and consists of a side channel 8 feet deep and 80 feet wide from the Waterway to the Municipal Yacht Basin. Length of project is about 1,267 feet.

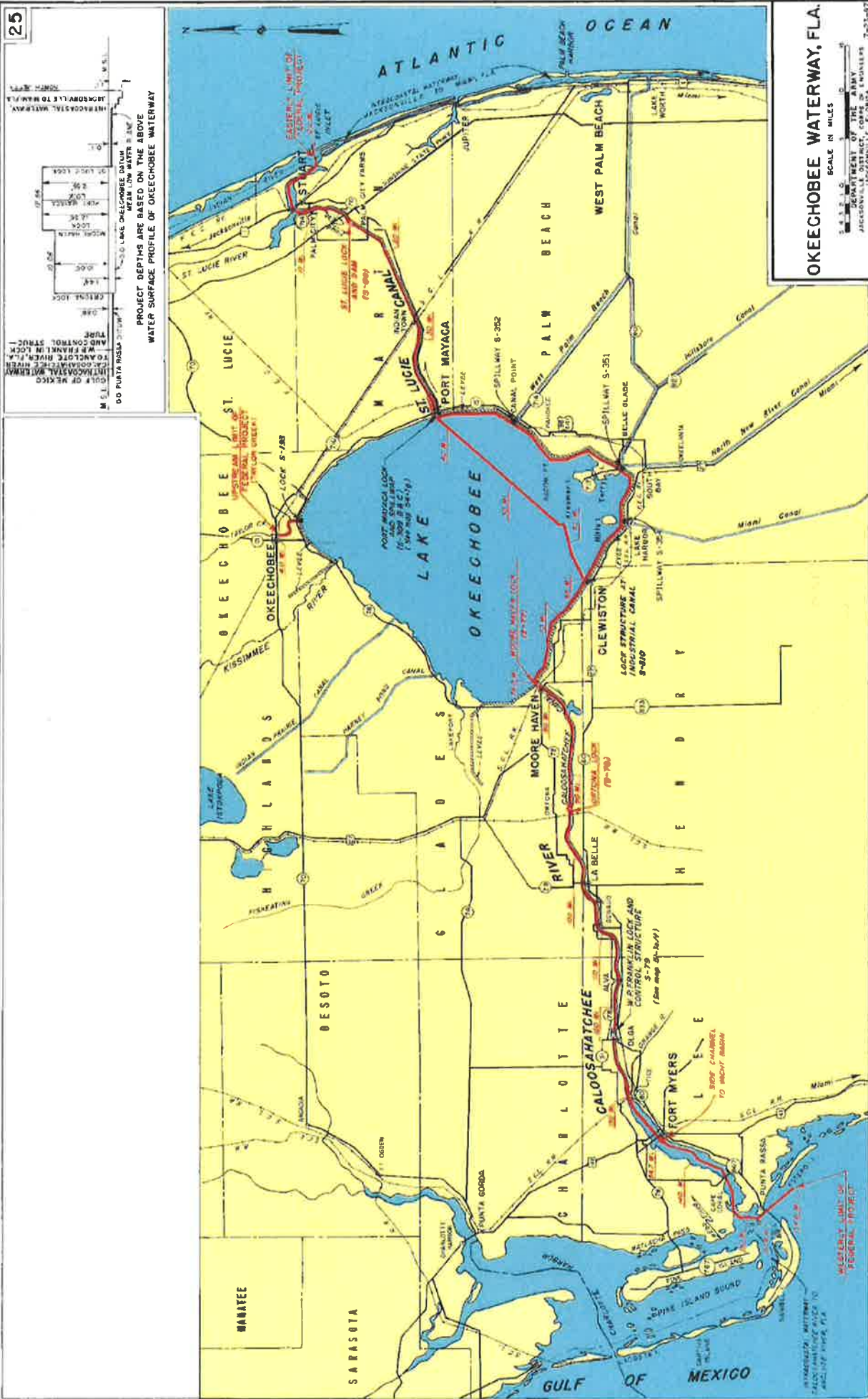
**MEAN TIDAL RANGE:** 0.5 foot.

INTRACOASTAL WATERWAY,  
JACKSONVILLE TO MIAMI, FLA.  
**SIDE CHANNEL**  
DAYTONA BEACH, FLA.

SCALE IN FEET  
200 0 200 400 600

DEPARTMENT OF THE ARMY  
ENGINEERING DISTRICT NO. 1  
JACKSONVILLE, FLORIDA  
6-30-71





### **Programmatic Essential Fish Habitat (EFH) Consultations.**

- Programmatic EFH conservation recommendations can give an agency early and consistent guidance on NMFS concerns and proposed solutions, such as best management practices.
- Because effects on EFH will often depend on site specific or design information, programmatic consultation may not prevent the need for individual consultation on actions in the program.
- It is important for NMFS to work with the Federal action agency in determining the extent of the activities covered by a programmatic consultation and in developing the programmatic EFH conservation recommendations.
- Information Needs:
  - Forecast of reaches requiring maintenance in X number of years
    - Identify areas within reaches requiring maintenance
    - Identify areas of seagrass affected by proposed maintenance activities
  - Quantify seagrass within maintenance areas (footprint & side-slope)
    - Identify method for calculating impacts
  - Identify mitigation
    - Restoration/Enhancement/Creation/Preservation
    - Service Area
    - Long-term Protection/Preservation Mechanisms
    - Monitoring and Adaptive Management
    - Identify method for determining mitigation credit-debit

A Federal agency may request programmatic consultation by providing NMFS with an EFH Assessment to include:

1. A written description of the program, including the nature and approximate number of the actions (annually or by some other appropriate time frame).
2. An analysis of the effects of the actions on EFH and associated species and their life history stages, including cumulative effects.
3. The Federal agency's conclusions regarding the magnitude of such effects.
4. Proposed mitigation.

Optional contents of an EFH Assessment:

1. The results of on-site inspections.
2. The views of recognized experts on affected habitat or fish species.
3. A review of pertinent literature
4. An alternatives analysis.
5. Other relevant information.



**UNITED STATES DEPARTMENT OF COMMERCE**  
 National Oceanic and Atmospheric Administration  
**NATIONAL MARINE FISHERIES SERVICE**  
 Southeast Regional Office  
 263 13th Avenue South  
 St. Petersburg, Florida 33701-5505  
<http://sero.nmfs.noaa.gov>

F/SER4:DD

**MAR 9 2015**

**REC'D** *M*

**MAR 13 2015**

**Florida Inland  
 Navigation District**

Mark T. Crosley  
 Executive Director  
 Florida Inland Navigation District  
 1314 Marcinski Road  
 Jupiter, Florida 33477-9498

Dear Mr. Crosley:

Thank you and the Florida Inland Navigation District (FIND) Board members and staff for arranging the meeting with Representative Lois Frankel, the U.S. Army Corps of Engineers (USACE), and members of my staff, at the West Palm Beach city library on February 18, 2015, to discuss the National Marine Fisheries Service (NMFS) Essential Fish Habitat (EFH) consultation process as it applies to USACE permitting.

The 1996 amendments to the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA) established a requirement to identify and protect important marine and anadromous fisheries habitat. The purpose of addressing habitat in the MSFCMA was to further one of the Nation's important marine resource management goals – maintaining sustainable fisheries. The South Atlantic Fishery Management Council identifies seagrass as EFH for several species, including spiny lobster, white grunt, gray snapper, mutton snapper, and goliath grouper. In addition to being EFH, seagrass is a habitat area of particular concern (EFH-HAPC). To be considered an EFH-HAPC, a habitat must provide important ecological function, be sensitive to human-induced environmental degradation, be subject to stress from development activities, or be a rare habitat type.

I understand FIND is concerned about the Southeast Region's application of the 2002 regulations implementing the MSFCMA EFH requirement; specifically our practice of recommending compensatory mitigation for maintenance dredging activities adversely affecting seagrass. Seagrass habitat is extremely valuable to managed fisheries, and we strongly favor conservation as the best management practice for this habitat. If an area has not been dredged since the 2002 EFH regulations were published and that area is found to contain seagrass habitat, then we recommend that impacts to seagrass be avoided. If avoidance is not practicable, then we recommend the project minimize impacts to seagrass. When a project impacts seagrass, then we recommend that project adopt compensatory mitigation for the impacted seagrass habitat. We recommend this compensatory mitigation only once for each seagrass area that is impacted post implementation of the 2002 EFH regulations. We do not seek mitigation for subsequent maintenance dredging activities that impact seagrass at the same sites.

These EFH conservation recommendations are non-binding. The USACE may choose to accept the recommendations, suggest a different way to minimize adverse effects to EFH, or reject the recommendations upon providing us with a written explanation of its decision. However, our



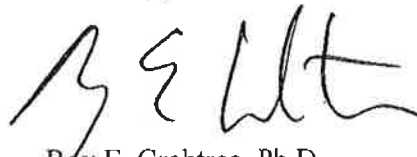
experience is that the USACE accepts most conservation recommendations from the NMFS Southeast Region.

While permittee-responsible mitigation remains an option for FIND, establishment of seagrass mitigation bank(s) or in-lieu fee program(s) would be an efficient and effective mechanism to ensure compensation is provided consistent with the Compensatory Mitigation Rule issued by the USACE and the Environmental Protection Agency in 2008. The reduced risk and uncertainty afforded by successful, up-front mitigation also provides greater flexibility in computing compensation needs. In 2006, former FIND Executive Director David Roach discussed mitigation bank options with my staff and USACE staff. Resuming this discussion, particularly in light of the recent USACE permit authorizing mitigation credits for FIND at the Snook Islands Mitigation Area, may be beneficial. Additionally, partnering with a non-governmental organization or a local government to establish an in-lieu fee program for seagrass mitigation could also be an avenue to consider and may afford more flexibility for meeting FIND's needs.

My staff remains committed to work with permit applicants and Federal action agencies to foster an understanding of EFH consultation requirements and identify the most efficient interagency mechanisms to fulfill agency responsibilities. In that regard, the NMFS Southeast Region will work with the USACE to explore the possibility of a programmatic consultation, recognizing this type of consultation requires extensive coordination and detailed information (e.g., dredging forecasts, bathymetry and benthic surveys, and proposed compensatory mitigation plans) which must be provided by FIND.

An effective EFH consultation process is vital to ensuring Federal actions are consistent with the MSFCMA resource management goals and sustainable economic development. I encourage continued efforts to resolve this matter and I have requested my staff cooperate in any related effort to this end.

Sincerely,



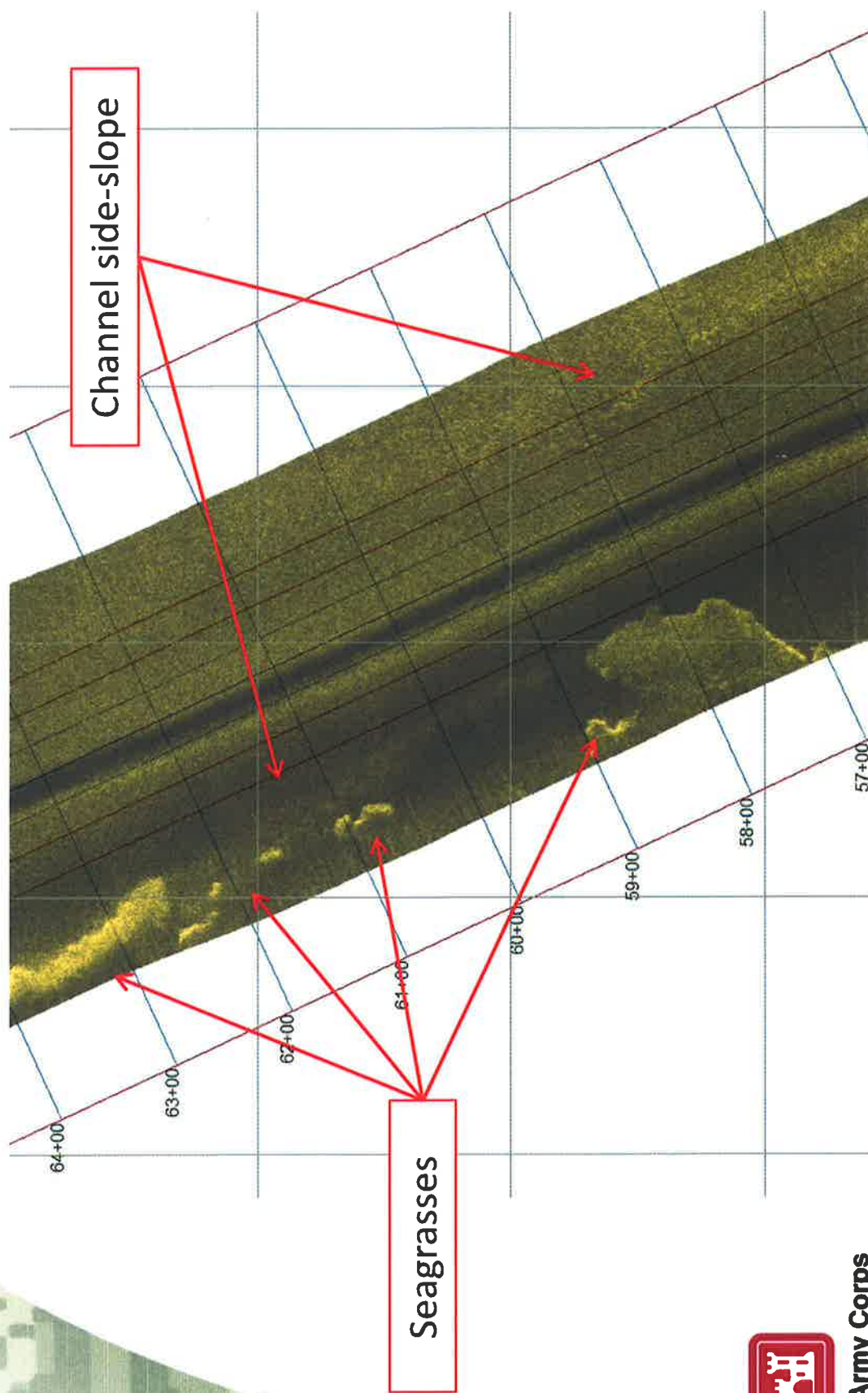
Roy E. Crabtree, Ph.D.  
Regional Administrator

cc:

F/HC1, Buck.Sutter@noaa.gov  
F/FX, Christopher.Holmes@noaa.gov  
F/HC2, Kara.Meckley@noaa.gov  
F/SER, Kim.Amendola@noaa.gov  
F/SER, Heather.Blough@noaa.gov  
F/SER4, Virginia.Fay@noaa.gov  
F/SER4, Pace.Wilber@noaa.gov  
F/SER4, Jocelyn.Karazsia@noaa.gov



# Centerline Side-scan Data



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



REPLY TO  
ATTENTION OF

CESAD-PDS-O

DEPARTMENT OF THE ARMY  
SOUTH ATLANTIC DIVISION, CORPS OF ENGINEERS  
ROOM 9M15, 60 FORSYTH ST., S.W.  
ATLANTA GA 30303-8801

create file<sup>73</sup>  
LAU  
Mitigation for  
maintenance  
2010  
LAU 03-1.01

MEMORANDUM FOR: Commander, Jacksonville District

SUBJECT: Mitigation for Maintenance Dredging

1. Reference Memorandum, CESAJ-PD, 9 October 2009, subject as above (copy enclosed).
2. USACE policy does not require mitigation for maintenance dredging as long as a navigation channel continues to be maintained at or near authorized dimensions. If an authorized channel is not maintained over an extended period of time, such that substantially changed physical conditions evolve that eventually support and sustain significant ecological resources, mitigation requirements associated with restoring channel dimensions at some future date must be addressed on a case-by-case basis (EP 1165-2-1). If a change is determined to be significant, the district must evaluate the impacts and explore alternatives such as channel realignment to avoid or minimize impacts to the resources of concern. Any re-evaluation would include, at a minimum, a NEPA review and an economic analysis to determine the continued viability of maintaining the project.
3. Our responsibility to mitigate for environmental impacts is specifically limited in WRDA 1986 and WRDA 2007 to authorized projects where "construction" has not commenced as of 17 November 1986 and which necessitate the mitigation of fish and wildlife losses. This authority and responsibility also extends to a substantial change in an O&M project which results in impacts to significant ecological resources. Current Army budgetary guidance allows USACE to seek Construction General funding for mitigation required by WRDA 1986 or WRDA 2007, as well as Operations & Maintenance funding for mitigation that is required due to a changed condition as long as the project is determined to be viable.
4. Any re-evaluation of an existing O&M project to determine mitigation requirements should follow existing O&M budget guidance and should be coordinated in advance with SAD Planning and Operations CoPs to ensure policy compliance. Questions may be directed to Mr. Dylan Davis, CESAD-PDS-O, at 404-562-5130 or Mr. Daniel Small, CESAD-PDS-P, at 404-562-5224.

FOR THE COMMANDER:

Encl

LESTER S. DIXON, P.E.  
Director of Program



REPLY TO  
ATTENTION OF

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

CESAJ-PD

9 OCT 2009

MEMORANDUM FOR Commander, SAD, Community of Practice,  
PDS-O/Whittington and PDS-P/Payne

SUBJECT: Mitigating for Maintenance Dredging

1. On several occasions recently, the issue of Corps policy for mitigating environmental impacts in the Federal channel resulting from maintenance dredging has been problematic for Jacksonville District. During numerous discussions involving Operations, Regulatory, Project Management, Counsel, and Planning, we have been unable to develop a District position on this issue.

2. Several factors are relevant:

a. The specific issue we face is mitigation of impacts to protected sea grasses, particularly where a given channel has not been regularly maintained and sea grasses have re-colonized within the channel proper. This phenomenon appears to be largely restricted to the Jacksonville District AOR; in other parts of the region and country, water temperature and clarity do not support sea grasses at the depths we find them occurring in Florida.

b. Published guidance is somewhat ambiguous. It seems clear that we have authority to mitigate environmental impacts associated with O&M Activities (S. 906(b) WRDA 1986); however it has long been the Army's budgetary policy not to seek funding to implement this provision. Section 2036 of WRDA 2007, requiring consistency in mitigation requirements between the Regulatory Program and the Civil Works program, has been determined by Corps Headquarters to apply to pre-authorization situations only. However, EP 1165-2-1 states that reinstatement of maintenance dredging must be "environmentally sound" (para 11-15b.). Our informal survey of other districts across SAD and the Corps indicates that there is a wide variation in the interpretation and application of this guidance.

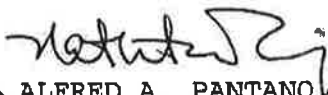
3. Legal, environmental and cost implications of the policy interpretation may be significant. We are currently at an impasse over this issue with respect to the Florida Inland Navigation District permit application and potential FDEP permit

CESAJ-PD

SUBJECT: Mitigating for Maintenance Dredging

conditions for the Bakers Haulover project, and we are sensitive to the potentially precedent-setting nature of our project-specific decisions. To that end, we are seeking definition through SAD on the Corps position.

4. My staff and I are available to discuss this issue at your convenience.

  
ALFRED A. PANTANO, JR.  
Colonel, Corps of Engineers  
Commanding





DEPARTMENT OF THE ARMY  
SOUTH ATLANTIC DIVISION, CORPS OF ENGINEERS  
ROOM 9M15, 80 FORSYTH ST., S.W.  
ATLANTA, GEORGIA 30303-8801

REPLY TO  
ATTENTION OF

CESAD-PDS-P

31 AUG 2007

MEMORANDUM FOR COMMANDER, JACKSONVILLE DISTRICT (CESAJ-PD)

SUBJECT: Port Everglades Navigation Study – Policy Guidance Request

1. Reference Memorandum, CESAJ-PD-PN, 22 June 2007, subject as above.
2. The response to this specific policy guidance request is based upon existing USACE project planning guidance contained in ER 1105-2-100, Appendix C (Environmental Evaluation and Compliance). The District has requested policy guidance in regard to the fish and wildlife mitigation requirements associated with potential channel improvements (deepening and widening) to an existing federally constructed and maintained navigation project – specifically Port Everglades, Florida.
3. Appendix C (Paragraph C-3.d (4)(b)) states that “impacts of alternative plans shall be evaluated based upon the extent, intensity, and duration of the impact on *significant (emphasis added)* ecological resources, compared to the “future without plan” condition.” The significance of the affected resources in the study area (and the associated non-monetary values) “shall be based upon technical, institutional and public recognition of the ecological, cultural, and aesthetic attributes” (Paragraph C-3.d (4) (a)). Resource scarcity and/or uniqueness (from a national, regional, state, and local perspective) are important considerations in determining significance (Paragraph C-3.d (4) (a)).
4. Based upon information provided with the District request and additional insights gained by SAD staff during several interagency meetings on this project, the existing “footprint” of the entrance channel at the authorized Port Everglades project can be generally characterized as follows. The existing channel bottom consists of unvegetated, unconsolidated sandy material, interspersed with some rock rubble. Since the existing entrance channel was cut through a rock formation, the “side slopes” along the entrance channel consists of vertical or near-vertical rock walls or ledges containing hard ground habitat characterized by hard and soft corals and sponges intermixed with calcareous algae and associated hard ground flora and fauna. A portion of the hard ground habitat along both sides of the seaward end of the entrance channel would be removed by construction of a proposed channel flare (widening). The hard ground habitat along both sides of the inner portion of the entrance channel, where no widening would occur, would essentially remain unaffected by potential channel improvements.
5. When considering navigation channel improvements at any project, all areas that would be affected by construction must be considered in the impact analysis and associated mitigation

CESAD-PDS-P

SUBJECT: Port Everglades Navigation Study – Policy Guidance Request

planning. However, all affected habitats would not necessarily be considered "significant" per our planning guidance. Additionally, deepening a channel in certain areas may result in habitat characteristics similar to pre-project conditions, for which recovery of the benthic communities would likely occur within a few weeks or months. For such areas within a channel improvement "footprint," separable mitigation measures would not be justified or appropriate.

6. The District staff has clearly indicated that any coral reef habitat that would be affected by extending the navigation channel seaward, as well as hardground habitat on the rock walls/ledges along the channel that would be removed where the channel is widened, are both being fully considered in the ongoing mitigation planning for the potential Port Everglades project. The District has further determined that existing channel bottoms (with characteristics as described in paragraphs 4 and 5 above) as well as hardground habitat along the inner portion of the entrance channel (that would be unaffected by proposed channel improvements) will not require consideration for separable mitigation measures. We find the District's approach to be consistent with mitigation planning guidance contained in ER 1005-2-100, Appendix C. It is also consistent with the general position expressed by USACE in the recent GRR/EIS for channel improvements at Miami Harbor, as outlined in paragraph 4 of the referenced District memorandum.

7. We are aware that the Florida Department of Environmental Protection (DEP) has developed guidance regarding mitigation requirements for dredging of existing channels. With respect to future maintenance dredging requirements associated with Port Everglades (either as currently maintained or following any future authorized channel improvements), we cannot envision any scenario that would support a requirement for additional mitigation measures as long as the District insures that the channel continues to be maintained at, or near, authorized dimensions. However, if any authorized navigation channel is not maintained over an extended period of time, such that substantially changed physical conditions evolve that eventually support and sustain significant ecological resources, mitigation requirements associated with *restoring* authorized channel dimensions at some future date will be addressed on a case-by-case basis with SAD and HQUSACE staff. }



8. We note that the District and the Federal and state resource agencies are using a Habitat Equivalency Analysis (HEA) methodology as the habitat-based approach for developing mitigation recommendations. We applaud the pursuit of the interagency team approach in conducting the HEA. Please insure the HEA and associated supporting documentation meets the Planning model certification requirements specified in EC 1105-2-407.

9. We have coordinated this response with pertinent HQ personnel. If you have any questions, contact Mr. Dennis Barnett, CESAD-PDS-P, at (404) 562-5225.

FOR THE COMMANDER:

WILBERT V. PAYNES

Chief, Planning and Policy Community of Practice



March 10, 2015

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

RE: Proposed Shiloh Launch Complex

Dear Mr. Crosley,

Space Florida is an Independent Special District of the State of Florida, created by Chapter 331, Part II, Florida Statutes, for the purposes of fostering the growth and development of a sustainable and world-leading space industry in Florida. Space Florida has embarked on an aggressive campaign to attract, enable and grow the commercial space industry in Florida. Space Florida is in the process of planning a commercial space launch complex near the Shiloh area located on the northern end of Kennedy Space Center north of Haulover Canal and west of the Intracoastal Waterway (Mosquito Lagoon).

As you are aware based on your conversations with U.S. Army Corp of Engineers and Space Florida staff, the FAA is the lead Federal agency for preparing the Environmental Impact Statement (EIS) for the project. As part of the EIS, FAA will require an understanding of the impacts of public access restrictions around the launch pad and overflight areas. These restricted areas are anticipated to include a 5-mile stretch of the Intracoastal Waterway and Atlantic Ocean for relatively short periods of time. Space Florida understands that launches from the proposed Shiloh Launch Complex will require support from your organization for waterway restrictions.

Space Florida would like to engage your organization to discuss procedures for waterway access restrictions and security zones. Space Florida requests that FIND engage in this process and review the attached document which outlines Space Florida's draft plan for waterway access restrictions.

Please contact me at (410) 440-1839, or by email at [jkuzma@spaceflorida.gov](mailto:jkuzma@spaceflorida.gov) to discuss the process necessary to initiate the requested assessment.

Sincerely,

  
James Kuzma  
Chief Operating Officer

Enclosure: Shiloh Public Access Control Closure Plan 12-22-2014

SF 15-211-md-Jk

**SPACE FLORIDA CONFIDENTIAL/PROPRIETARY/TRADE SECRET**

**S P A C E F L O R I D A**

505 Odyssey Way • Suite 300 • Exploration Park • FL 32953  
www.SpaceFlorida.gov • f: 321.730.5307 • p: 321.730.5301



March 16, 2015

Ms. Stacey Zee  
 FAA Office of Commercial Space Transportation  
 800 Independence Avenue SW  
 Washington, D.C. 20591

**RE: Proposed Shiloh EIS Alternative Identified by FAA Cooperating Agencies**

Dear Ms. Zee:

This letter is intended to assist the FAA in addressing written review comments received from cooperating agencies regarding the Draft Description of Proposed Actions and Alternatives (Draft DOPAA, September 2014) for the Space Florida-proposed Shiloh Launch Complex in Volusia and Brevard counties.

In our review of the comments, we noted that three agencies – NASA, U.S. Army Corps of Engineers (USACE), and U.S. Fish and Wildlife Service (USFWS) – specifically referenced the area south of State Road 402. This area is identified on the current NASA Kennedy Space Center (KSC) Master Plan as Pads 39C and 39D (see Attachment 2). The cooperating agencies commented that these sites should be thoroughly assessed in alternatives to Space Florida's Proposed Action to site two vertical launch facilities in the Shiloh area of KSC.

As you know, the area of KSC north/northwest of Pad 39B and south of State Road 402 was previously evaluated by Space Florida for possible candidate vertical launch sites that could meet our purpose and need and site selection criteria. An analysis was performed on the general area prior to the release of the KSC Master Plan, and then re-visited by Space Florida when KSC published its current concept of future land use which identified the location of two designated pads – 39C and 39D.

Both reviews by Space Florida concluded that siting the capability proposed for Shiloh in this vicinity would not meet the project purpose and need, and would violate a number of the defined criteria. Space Florida provided for FAA inclusion in the Draft DOPAA the rationale as to why it had not further considered that area of KSC for the location of two vertical launch pads with the required design capabilities, site characteristics, and operating environment. Significant considerations in our assessment were the anticipated environmental impacts to wetlands and open waters in the vicinity, and to public access to Canaveral National Seashore's Playalinda Beach.

NASA, USACE, and USFWS have recommended to FAA that this area of KSC should be more thoroughly and independently assessed to determine if it offers a practicable alternative that should be considered (see Attachments 3-5).

This would also address the more generalized comments of other agencies and public stakeholder input that a KSC geographic location south of State Road 402 should be evaluated in more detail in the EIS.



While we continue to have concerns that the area south of State Road 402 can provide a practicable alternative, we accept that further analysis is needed to adequately address the question to the satisfaction of the cooperating agencies which have identified Pad 39C and 39D as a potentially reasonable alternative. More detailed evaluation and documentation of NASA's future development plans for this area and operational/risk analysis related to Pad 39B must be part of this assessment.

While the draft DOPAA was out for review, it came to Space Florida's attention that a NASA KSC study had been performed for a prospective launch operator (see Attachment 6). The KSC study identified a different location for Pad 39C than was depicted on the Master Plan future land use map. It defined a candidate location sufficient in size to accommodate a single, exclusive-user vertical launch facility. Based on our March 4, 2015 call with NASA, we understand that this site will be evaluated in NASA KSC's Programmatic EIS. The site identified is further to the northwest of existing Pad 39B with a separation distance of greater than 1.5 miles between the launch points of the notional Pad 39C and existing Pad 39B. That separation would meet one of Space Florida's key project criteria if there were no pads constructed or sited in the area originally defined in the Master Plan.

We also understand, subject to written confirmation by NASA KSC, that this site would be located and accessed outside the KSC security perimeter "fence line," thus allowing Space Florida and the facility user unencumbered access and operational autonomy.

Therefore, it is Space Florida's position that the single launch facility concept identified in the KSC study as a candidate site for a Pad 39C could be included by the FAA in a revised DOPAA as an EIS alternative for one of the two Shiloh-area pads identified in the Proposed Action. If this approach is chosen to address the cooperating agency comments, Space Florida would recommend this site be assessed with the proposed footprint and impacts required for a heavy-lift site capability (i.e. to accommodate vehicles of up to 4 million pounds of thrust).

To enable this inclusion of an alternative that offers a different geographic location for one of the two proposed vertical launch facilities in the Proposed Action, Space Florida has identified three necessary amendments to the site criteria definitions:

- For Criterion 4, Space Florida acknowledges the input of USACE and NASA that EIS consideration of the environmental impacts upon wetlands and other resource categories at the Pad 39C site would be evaluated versus the impacts to the affected environment at either Shiloh site in order to determine the Least Environmentally Damaging Practicable Alternative. Unlike the Shiloh sites, the notional Pad 39C footprint will have wetland impacts. It would remain our intent to avoid (where practical) and/or minimize impacts to wetlands and flood-prone areas in this alternative.
- For Criterion 6, Space Florida accepts that the property comprising the two vertical launch facilities may not be contiguous. Impacts from non-contiguous operations, such as extended utility and transportation corridors, will need to be evaluated.



- For Criterion 11, Space Florida accepts that the support area may be located up to 25 miles from a vertical launch facility. All other site selection criteria and Space Florida's purpose and need remain unchanged.

To assist FAA and cooperating agencies in resolving the Draft DOPAA comments, Space Florida has prepared and attached a shaded map of the KSC area south of State Road 402 and north of existing Pad 39B that bounds the property that could be considered when applying operational and safety setback distances included in the Space Florida site criteria (see Attachment 1).

The new notional Pad 39C site defined in the referenced KSC study and expected to be generally described as a single vertical launch facility alternative in NASA KSC's Programmatic EIS is indicated along with (1) the required 1.5 miles separation line from Pad 39B and (2) a 2.5 mile Overflight Exclusion Zone boundary line that would require facility evacuation and public access controls during launch and landing operations. This should assist the discussion in moving forward for the March 24, 2015 meeting with the Cooperating Agencies.

Sincerely,

  
James Kuzma  
Chief Operating Officer  
Space Florida

SF 15-214-szs-JK

**Attachments:**

- (1) KSC New Pad 39C Alternative with Space Florida's Constraints Maps
- (2) NASA / KSC Master Plan Reference
- (3) NASA DOPAA Comment (December 2014)
- (4) United States Fish & Wildlife Services References (January – October 2014)
- (5) United States Army Corps of Engineers Correspondence (December 12, 2014)
- (6) KSC New Pad 39C Site Reference - Excerpt from NASA/KSC GSDO-S-205 Launch Site Options (Final) Study Results (July 2, 2014)

## Attachment 1

### **New Site Alternative with KSC-provided Pad 39C Alternative with Space Florida's Constraints Maps**

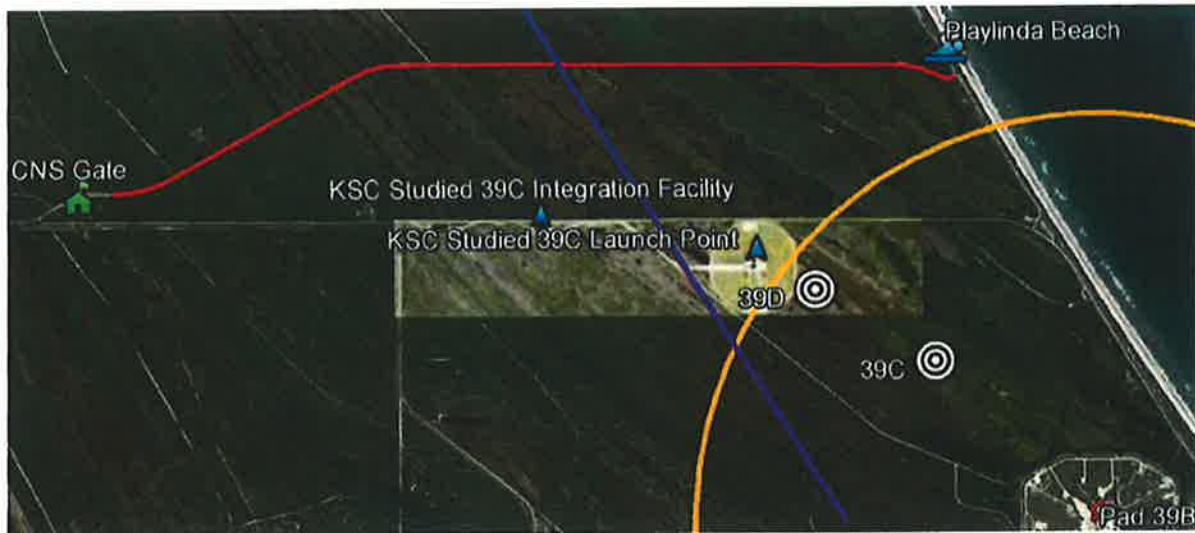
- KSC-provided Pad 39C Alternative



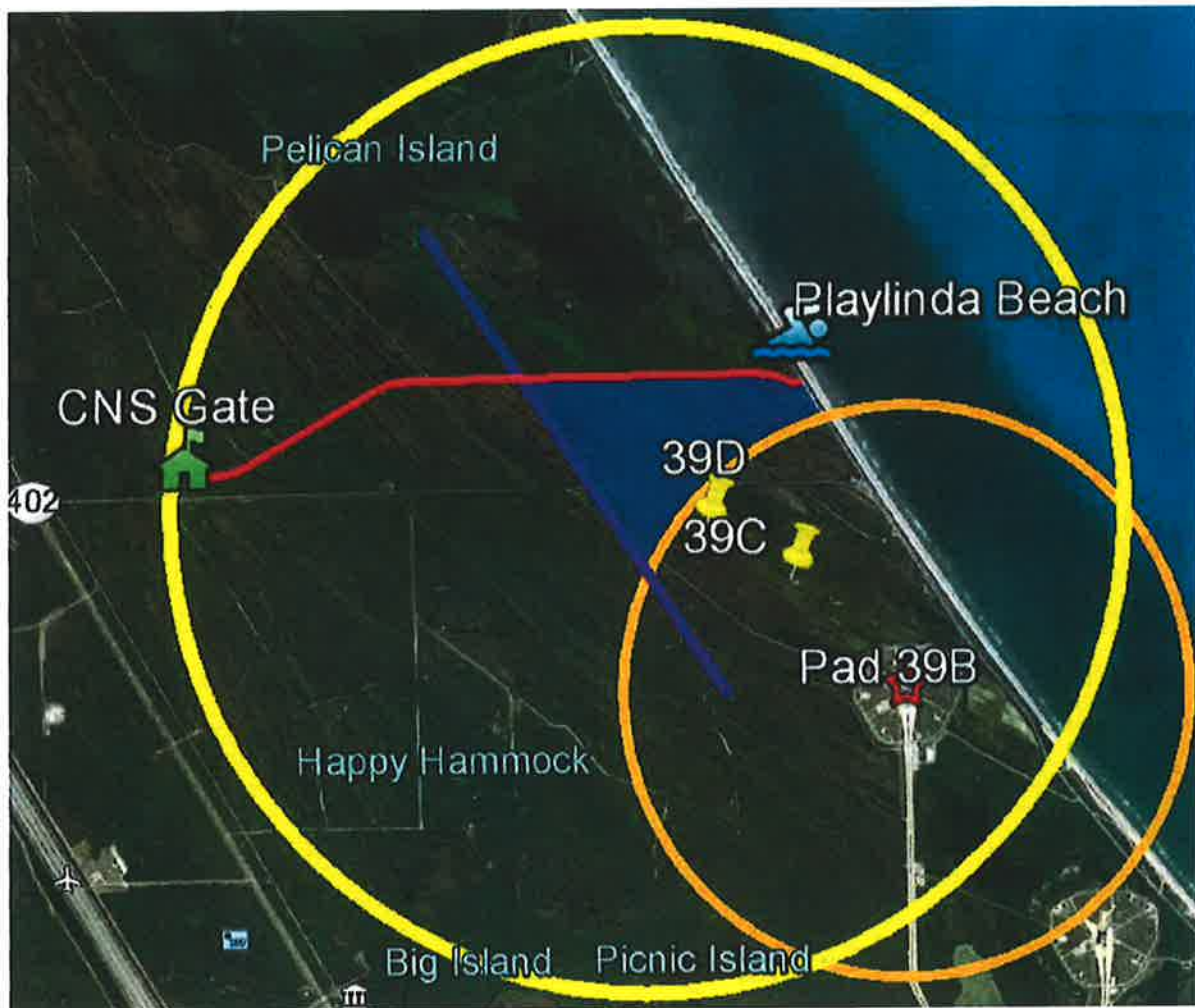
- Based on KSC-proposed launch site alternative, Pad 39C, and Space Florida's Shiloh EIS updated criteria, Space Florida has assembled the constraints map below.
  - Orange circle – 1.5 mile setback constraint from existing Pad 39B
  - Purple line – 2.5 mile OEZ setback constraint from Kennedy Parkway and the Saturn V Center (Visitor Complex tour stop)
  - Red line – SR 402 road constraint as described by the cooperating agencies.
  - Yellow circle - notional 2.5 mile OEZ (Kennedy Parkway remains open but SR 402, Playlinda Beach, and Pad 39B would be closed for launch.
  - Purple shading – potential launch point for consideration



- KSC-provided Pad 39C Alternative overlay with constraints:



- Potential launch point area (in purple) and Public Closure Area (in yellow):

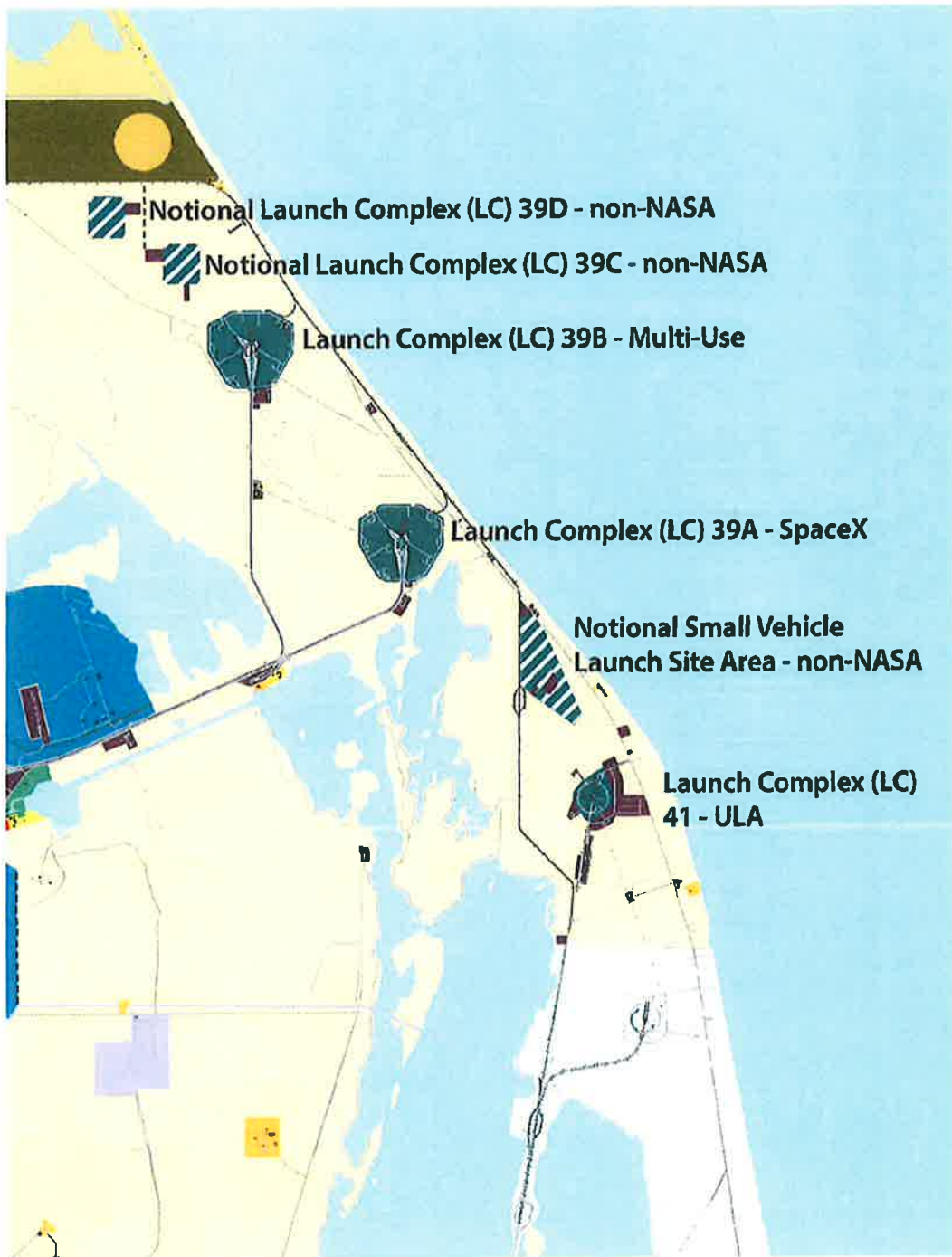




## Attachment 2

### NASA – KSC Master Plan Reference

- Kennedy Space Center Master Plan 2012 – 2032, Accessed 3/9/15  
<http://masterplan.ksc.nasa.gov/Intro/Future-Development-Plan/Land-Use-Plan/Future-Land-Use>



Florida Department of Transportation  
Aviation and Spaceports Office  
Spaceport Program and Project Development Services  
Contract Number C9C69  
Task Work Order #8



## TECHNICAL MEMORANDUM

### PROPOSED SHILOH LAUNCH COMPLEX LAUNCH SITE PUBLIC ACCESS CONTROL REQUIREMENTS

Date Submitted: December 22, 2014

**PREDECISIONAL: DELIBERATIVE DRAFT, DO NOT CITE OR QUOTE**

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FIGURE 7: SHILOH LAUNCH PAD 2 – ACCESS CONTROL FOR 90° LAUNCH AZIMUTH

FIGURE 8: SHILOH LAUNCH PAD 2 – ACCESS CONTROL FOR 100° LAUNCH AZIMUTH

## 1.0 PURPOSE

Space Florida is preparing an application to the Federal Aviation Administration (FAA) Office of Commercial Space Transportation (FAA AST) seeking a license to operate the proposed Shiloh Launch Complex (Figure 1) pursuant to 14 CFR Part 420. To meet the license application requirements for 14 CFR § 420.53, a licensee is responsible for describing how it will control public access to prevent unauthorized access to the launch site during launch or other hazardous operations. These controls on public access are one of the primary responsibilities of the site licensee to ensure that FAA AST public safety standards are met. In the performance of its obligations under the National Environmental Policy Act (NEPA) FAA AST must evaluate potential impacts to the affected environment that could result from the issuance of the site operator's license to Space Florida for the proposed project, including potential impacts for compliance with the requirements for public access controls.

The purpose of this Technical Memorandum is to detail the specific areas at and near the proposed site that would be affected by operations conducted at either of the two vertical launch pads of the proposed project. These areas are defined by the requirements resulting from different anticipated launch trajectory azimuths supported by either of the two pads.

## 2.0 SCOPE

The scope of this Technical Memorandum includes the two proposed launch pads at the Shiloh Launch Complex and three anticipated launch trajectories from each of these two pads. The three trajectories evaluated include one at a 35° true compass heading, representing the most northeasterly flight direction to be considered, a 90° true compass heading for an easterly flight direction, and a 100° true compass heading for an east-southeasterly flight direction, the most southeasterly flight direction to be considered. These six launch scenarios, which include the return trajectory of a fly-back booster element if utilized, envelope all of the possible flight azimuths that Space Florida will seek to have permitted under the requested FAA AST site license. Three maps, highlighting areas of public interest and proposed public access control points, illustrate the required controlled access areas for each launch pad and will enable an analysis of potential impacts by the FAA's Environmental Impact Statement contractor. In addition, the areas that would be affected by public access controls required for pre-launch hazardous tests of the vehicle (i.e. launch vehicle "wet dress" fueling tests and static on-the-pad engine firings) are defined for each launch pad, illustrated with a single map (Figure 2) of the Shiloh Launch Complex vicinity.

The proposed logistics and generalized timelines for how the public access control responsibilities of the licensee would be implemented are also included in this Technical Memorandum at a high level to support the EIS evaluation. It is anticipated that a more detailed definition of these operations, together with draft or finalized agreements with appropriate federal, state, and local support agencies, will be included in the final license application submitted to FAA AST.

### **3.0 LAUNCH SITE LICENSEE'S RESPONSIBILITY TO CONTROL PUBLIC ACCESS**

As an FAA-licensed site operator, Space Florida would be responsible for ensuring public access controls are in place to meet FAA public safety standards in accordance with 14 CFR § 420.53, Control of Public Access. A site operator must prevent unauthorized, unescorted individuals from entering hazards areas, not otherwise controlled by a launch operator. The site operator may achieve this by use of security personnel, surveillance systems, physical barriers, or other means approved as part of the licensing process. The site operator is also required by Section 420.57 to provide timely notifications of scheduled pre-launch or launch activities requiring the activation of public access controls in accordance with agreements with the U.S. Coast Guard District and the FAA Air Traffic Control Authorities. Notification is also required to local officials, and all owners of land adjacent to the launch site. Coordination with other federal agencies, including United States Air Force (USAF) 45<sup>th</sup> Space Wing, National Aeronautics and Space Administration (NASA), U.S. Fish and Wildlife Service, and National Park Service, are also anticipated to be required through procedures approved as part of the license process.

### **4.0 DESCRIPTION OF LAUNCH SITE OPERATIONS REQUIRING PUBLIC ACCESS CONTROLS**

#### **4.1 Pre-launch flight element or commodities transportation operations**

No public access controls are anticipated to be required for the transport of flight elements or commodities (e.g. propellants) to the launch site. For the over highway transport of very long/wide or slow moving loads (e.g. launch vehicle core stages, spacecraft), some short-duration, localized traffic flow management may be needed at transport points along the highway routes leading to the offsite processing facilities and the vertical launch facilities. These brief interruptions to local traffic flow would be accomplished with flagmen and/or security escorts and scheduled for times of minimal traffic use of the affected routes.

#### **4.2 Pre-launch "wet dress" rehearsals and static engine firings**

A launch operator may perform an operation to fill the launch vehicle's propellant tanks with their respective oxidizer and fuel as a means of verifying all propellant line connections and propellant filling procedures. The operation is typically identical to the procedure performed on launch day to load the vehicle's liquid propellants, except the operation is halted, launch does not occur, and the propellant is drained back into the storage tanks at the operator's site. The launch team staffs the Launch Control Center and proceeds through a countdown operation usually referred to as a "wet dress" rehearsal for launch day. The hazardous portion of the operation begins with the start of propellant loading into the vehicle's tanks and ends when the drain back of the propellant is completed and the site declared safe for normal access. This operation typically is performed over a period not exceeding 6 to 8 hours. Some or all of these "wet dress" rehearsals may include a very short duration firing of the launch vehicle engines as a validation of system readiness for launch. The vehicle remains attached to the launch pad during this brief firing, with typical durations less than 10 seconds. The safety clear area for these operations depends on the size and type of launch vehicle. For the heavy-class liquid fueled vehicles that are envisioned to be potential users of the Shiloh Launch Complex, a conservative upper limit for the required "clear area" for control of public entry/access is a



radius of 5,280 feet – one mile – from the launch vehicle on the pad (Figure 2). The one mile distance exceeds the minimum public separation distance for a fully fueled launch vehicle for any of the prospective users, and a lesser “clear area” radius could reduce some of the access area control requirements described in this document. USFWS has indicated to include closures, restrictions, and interruptions to normal activities at MINWR and CNS.

#### **4.3 Launches**

Launches from either pad require access controls be put in place to ensure the public remains a safe distance from the launch vehicle during its flight trajectory to the open offshore waters of the Atlantic Ocean. The FAA defines this safety clear zone as the Overflight Exclusion Zone (OEZ), and has established conservative boundaries for this area based on launch vehicle payload lift capacity. For the types of launch vehicles proposed for the Shiloh Launch Complex, the OEZ required to meet the FAA standard listed in Table 1 of §420.19 for large orbital launch vehicles is the area within 2.1 nautical miles (2.5 miles) of the launch point, and the area contained within 2.5 miles along the launch vehicle’s flight path (Figures 3 – 8). This portion of the flight corridor must remain clear of the public during the flight of the launch vehicle. The procedures for defining the OEZ are provided in §420, Appendix A.

#### **4.4 Public Access Control Point Definitions and Purposes**

As used in this Technical Memorandum, the term “check point” means a point staffed by the site operator, launch operator, or supporting enforcement organizations for the purpose of ensuring that any person proceeding past the point has the appropriate authorization credentials, or receives specific instructions as to any conditions/restrictions on traffic past that point. The term “hard road block” means a vehicular traffic control point that has been established and staffed by the site operator, launch operator, or supporting enforcement organizations to prevent any further traffic beyond that point.

### **5.0 DESCRIPTION OF GENERAL AREAS AFFECTED BY REQUIRED SAFETY CLEAR ZONES**

Space Florida would need to prevent unauthorized, unescorted individuals from entering hazard areas, not otherwise controlled by a launch operator. Space Florida could achieve this by use of security personnel, surveillance systems, physical barriers, or other means approved as part of the licensing process. Space Florida would also be required by 14 CFR §420.57 to provide timely notifications of scheduled pre-launch or launch and landing activities requiring the activation of public access control in accordance with agreements with the FAA, KSC, MINWR, CNS, U.S. Army Corps of Engineers (USACE), USAF 45th Space Wing, U.S. Coast Guard, USFWS, Florida Fish and Wildlife Conservation Commission, Brevard County Parks and Recreation, and Brevard and Volusia County law enforcement.

#### **5.1 Areas within the NASA boundaries of Kennedy Space Center**

Except for limited areas described in section 5.2, all of the area requiring public access control is under the jurisdiction of NASA and located within the existing boundaries of the Kennedy Space Center (KSC). The affected space center areas are contained within the KSC-designated

Operational Buffer in the northern portion of KSC, generally to the north of the Haulover Canal. Operational Buffer/Public Use areas as defined in the KSC Master Plan correspond to publicly accessible areas of Merritt Island National Wildlife Refuge and the Cape Canaveral National Seashore for recreational use in the northern portion of KSC, as a conditional use subject to the operational activities associated with KSC's mission. In agreements with both the U.S. Fish and Wildlife Service (USFWS) and the U.S. National Park Service (NPS), NASA retains the authority to close public access to these areas as may be required for operational needs related to space transportation uses. The affected areas shift with the FAA-required OEZ, as determined by the notional launch vehicle flight azimuth from each pad. Some areas are affected by all launches, while others are only affected by specific flight azimuths from one or the other of the two pads.

#### **5.1.1 KSC Areas managed as Canaveral National Seashore by NPS**

The Canaveral National Seashore (CNS) areas generally affected by all Shiloh launches include the approximately 12-mile stretch of remote beach known as Klondike Beach. No vehicular traffic controls are required because access is already restricted by NPS to foot traffic only, and individuals must have a daytime-only access permit from NPS. The NPS limits the number of these to no more than 25 permits per day at each end of the seashore. No access controls will be required for any part of Playalinda Beach, Blackpoint Wildlife Drive, or Scrub Ridge Trail, in the southern portion of the seashore, for any Shiloh launch. The southernmost parking lot, Lot 5, of Apollo Beach which lies within the northern district of the CNS and within the NASA property boundary, will require temporary public access restriction for launches requiring a 35° flight azimuth from either pad. Both launches and pre-launch "wet dress" rehearsals/static engine firings will require public access controls to land areas within the CNS north of Haulover Canal and east of Kennedy Parkway North. Portions of Mosquito Lagoon subject to access restrictions due to launch safety requirements will include the Intracoastal Waterway and the waters/islands located generally from the Haulover Canal northward to the KSC property boundary, depending on the required flight azimuth. Only one flight azimuth scenario from Launch Pad 2 (100°) would require safety restrictions in Mosquito Lagoon to the southeast of Haulover Canal.

#### **5.1.2 KSC Areas managed as Merritt Island National Wildlife Refuge (MINWR) by the USFWS**

The only areas of MINWR within KSC affected by launch or pre-launch operations access control requirements are the portions of the refuge from the Haulover Canal northward to the KSC property boundary. Except for restrictions required for the one flight azimuth scenario from Launch Pad 2 referenced above, the popular visitor areas along the northern bank of Haulover Canal, including the Manatee Viewing Area, would remain unaffected by Shiloh launches or pre-launch operations.

## 5.2 Areas outside the NASA boundaries of Kennedy Space Center

### 5.2.1 Areas of Canaveral National Seashore outside KSC

The only affected area of Canaveral National Seashore is in the 1,088-acre parcel transferred by NASA to the Department of Interior subsequent to the establishment of Canaveral National Seashore. That parcel, generally known as the “Bill’s Hill” tract, has not been developed by NPS. Even on that tract, any future development of permanent structures by NPS would require coordination with NASA to ensure consistency with public safety and the needs of the space program of the nation. The southern portion of that tract would be affected by access controls for only one flight azimuth scenario from Launch Pad 1 (35°).

### 5.2.2 Areas of Merritt Island National Wildlife Refuge outside KSC

Of the MINWR boundary consisting of 142,032 acres, 2,727 acres are located outside the boundaries of KSC. A combination of USFWS-owned land, private inholdings, and State of Florida lease and management agreements make up this portion of the refuge, located along the western shore of the Indian River Lagoon headwaters in the Turnbull Creek area. A narrow strip of this land located east of the Florida East Coast Railroad line would be affected by access control requirements for Launch Pad 1. Any of these areas which represent private-owned land (e.g. Florida East Coast right-of-way holdings or parcels included in the USFWS boundaries which remain under private ownership) may require negotiation of arrangements with the owners regarding temporary access restrictions. Space Florida, USFWS, MINWR and private owners within the MINWR boundary will need to coordinate the measures necessary to ensure that private property in the Public Access Control area remains clear and the public is protected during launch and landing operations. The necessary control measures shall have needed agreements, payments, or other measures/methods that would be needed between all applicable parties to allow for the closure of private property.

### 5.2.3 Areas of Brevard County and Volusia County Mainland

The only areas of the Brevard County and Volusia County mainland that would be affected by public access restrictions are control points at entrances to the MINWR day use area of Turnbull Creek, potential access points to the OEZ from trail roads in the NPS Bill’s Hill tract, and Brevard County’s Scottsmoor Landing boat launch park. Those control points would be activated for launches, but would not be required for pre-launch operations for “wet dress” rehearsals/static engine firings. There would be no requirement for diverting traffic on U.S. 1 or the local roads in the North Brevard and South Volusia rural neighborhoods west of the railroad.

#### 5.2.4 Areas of Indian River Lagoon outside KSC

The only area of Indian River Lagoon requiring public access control beyond the waters included within the KSC property boundary is the area along the western shore from just south of Scottsmoor Landing to the Indian River Lagoon headwaters.

#### 5.2.5 Areas of offshore waters of the Atlantic Ocean

An offshore waters control area is anticipated to be required to the U.S. jurisdictional limits of 12 nautical miles seaward.

### 6.0 PROPOSED ACCESS CONTROL POINTS FOR WET DRESS TESTS/STATIC FIRINGS

**Refer to FIGURE 2 for access control points for the wet dress tests/static firings.**

Proposed access control points for these operations are located for effective access management and to ensure that the public remains outside the safety clear area of 5,280 feet (1 mile) from the launch pad for the duration of these activities (Figure 2).

#### 6.1 Shiloh Launch Pad 1 control points for vehicular traffic include:

- a. Check point at intersection of U.S. 1 and Kennedy Parkway North. No thru southbound traffic permitted, with traffic detoured to Max Brewer Parkway via U.S. 1.
- b. Local traffic permitted only for authorized access.
- c. Hard road block at 1 mile north of Pad 1 entrance road.
- d. Check point at Beacon 42 turnoff. No thru northbound traffic permitted.
- e. Local traffic permitted only for authorized access and for users of WSEG boat ramp and Pine Flatwoods Trail.
- f. Hard road block on Kennedy Parkway North beyond WSEG boat ramp turnoff (Taylor Road).

#### 6.2 Shiloh Launch Pad 2 control points for vehicular traffic include:

- a. Check point at intersection of U.S. 1 and Kennedy Parkway North. No thru southbound traffic permitted, with traffic detoured to Max Brewer Parkway via U.S. 1.
- b. Local traffic permitted only for authorized access.
- c. Hard road block at 1 mile north of Brevard-Volusia County line.
- d. Check point at Beacon 42 turnoff. No thru northbound traffic permitted.
- e. Local traffic permitted only for authorized access northbound beyond Beacon 42 turnoff.
- f. Hard road block on Kennedy Parkway at Patillo Creek Road.

#### 6.3 Shiloh Launch Pad 1 control points for boating traffic include:

- a. No interruptions required for Intracoastal Waterway (ICW) boat traffic.
- b. No boating traffic restrictions in Mosquito Lagoon or Indian River Lagoon.

- c. Boating not permitted on the impoundment waters within the cleared area. Control monitoring points on Shiloh Marsh Road to be established at the required clear zone perimeter points.

#### **6.4 Shiloh Launch Pad 2 control points for boating traffic include:**

- a. No interruptions required for ICW boat traffic.
- b. WSEG ramp not open for use during operation.
- c. No boating traffic restrictions in Mosquito Lagoon except for near shore waters inside of spoil islands west of ICW, from WSEG boat ramp to approximately ICW Marker 31
- d. No boating into Griffis Bay.
- e. Boating not permitted on the impoundment waters within the cleared area. Control monitoring points on Shiloh Marsh Road to be established at the required clear zone perimeter points.

#### **6.5 Pedestrian traffic considerations and controls include:**

- a. Hiking on marked, established refuge trails not in the safety clear zone can continue as normal.
- b. Hiking on the Shiloh Marsh Road foot trail is restricted only between the northern and southern monitoring posts established at the required clear zone perimeter points.

### **7.0 PROPOSED ACCESS CONTROL POINTS FOR LAUNCH OPERATIONS**

Proposed access control points for launch events are located for effective access management and to ensure that the public remains outside the safety clear area defined by the OEZ of 2.5 statute miles along the launch vehicle flight path from the moment of launch until it is downrange beyond U.S. territorial limits.

#### **7.1 Shiloh Launch Pad 1 Control Points For Vehicular Traffic Include:**

##### **7.1.1 Proposed Pad 1 control points required for 35° launch trajectory include the following and are shown on Figure 3.**

- a. Check point at intersection of U.S. 1 and Kennedy Parkway North. No thru southbound traffic permitted, with traffic detoured to Max Brewer Parkway via U.S. 1 or 5A/I-95. Authorized access only.
- b. Hard road block at U.S. 1 and Kennedy Parkway North at start of launch vehicle fueling (approximately 4 hours prior to launch).
- c. Check point at Bill's Hill Road, authorized access only.
- d. Hard access control points to be determined in consultation with USFWS to preclude off-road vehicles and pedestrians from inadvertent entry into OEZ by use of dirt roads/trails in Bill's Hill tract.
- e. Check point at A1A, Canaveral National Seashore (CNS) Apollo Beach Parking Lot 4, becomes hard road block at 2 hours prior to scheduled launch, Parking Lot 5 cleared at 2 hours prior to scheduled launch.



- f. Hard road block at U.S. 1 entrance to Shiloh Marsh Road.
- g. Checkpoint at Huntington Avenue and Dixie Way, Scottsmeer, authorized access only to Scottsmeer Landing (Brevard County Park).
- h. Checkpoint at Kennedy Parkway North at Beacon 42 boat ramp road. Only authorized access permitted beyond. Becomes hard roadblock at start of vehicle fueling (approximately 4 hours before launch).

**7.1.2 Proposed Pad 1 control points required for 90° launch trajectory include the following and are shown on Figure 4.**

- a. Check point at intersection of U.S. 1 and Kennedy Parkway North. No thru southbound traffic permitted, with traffic detoured to Max Brewer Parkway via U.S. 1 or 5A/I-95. Authorized access only.
- b. Hard road block at U.S. 1 and Kennedy Parkway North at start of launch vehicle fueling (approximately 4 hours prior to launch).
- c. Hard access control points to be determined in consultation with USFWS to preclude off-road vehicles and pedestrians from inadvertent entry into OEZ by use of dirt roads/trails in Bill's Hill tract.
- d. No restrictions on A1A, Apollo Beach.
- e. Hard road block at U.S. 1 entrance to Shiloh Marsh Road.
- f. Checkpoint at Huntington Avenue and Dixie Way, Scottsmeer, authorized access only to Scottsmeer Landing (Brevard County Park).
- g. Checkpoint at Kennedy Parkway North at Beacon 42 boat ramp road. Only authorized access permitted beyond. Becomes hard roadblock at start of vehicle fueling (approximately 4 hours before launch).

**7.1.3 Proposed Pad 1 control points required for 100° launch trajectory include the following and are shown on Figure 5.**

- a. Check point at intersection of U.S. 1 and Kennedy Parkway North. No thru southbound traffic permitted, with traffic detoured to Max Brewer Parkway via U.S. 1 or 5A/I-95. Authorized access only.
- b. Hard road block at U.S. 1 and Kennedy Parkway North at start of launch vehicle fueling (approximately 4 hours prior to launch).
- c. Hard access control points to be determined in consultation with USFWS to preclude off-road vehicles and pedestrians from inadvertent entry into OEZ by use of dirt roads/trails in Bill's Hill tract.
- d. No restrictions on A1A, Apollo Beach.
- e. Hard road block at U.S. 1 entrance to Shiloh Marsh Road
- f. Checkpoint at Huntington Avenue and Dixie Way, Scottsmeer, authorized access only to Scottsmeer Landing (Brevard County Park)
- g. Checkpoint at Kennedy Parkway North at Haulover Canal north-bank/Manatee Viewing Deck access roads. Only authorized access permitted beyond. Becomes hard roadblock at start of vehicle fueling (approximately 4 hours before launch)

**7.2 Shiloh Launch Pad 2 Control Points For Vehicular Traffic Include:**

**7.2.1 Proposed Pad 2 control points required for 35° launch trajectory include the following and are shown on Figure 6.**

- a. Check point at intersection of U.S. 1 and Kennedy Parkway North. No thru southbound traffic permitted, with traffic detoured to Max Brewer Parkway via U.S. 1 or 5A/I-95. Authorized access only.
- b. Hard road block at U.S. 1 and Kennedy Parkway North at start of launch vehicle fueling (approximately 4 hours prior to launch).
- c. Hard access control points to be determined in consultation with USFWS to preclude off-road vehicles and pedestrians from inadvertent entry into OEZ by use of dirt roads/trails in Bill's Hill tract.
- d. Check point at A1A, CNS Apollo Beach Parking Lot 4, becomes hard road block at 2 hours prior to scheduled launch, Parking Lot 5 cleared at 2 hours prior to scheduled launch.
- e. Checkpoint at Huntington Avenue and Dixie Way, Scottsmeer, authorized access only to Scottsmeer Landing (Brevard County Park).
- f. Checkpoint at Kennedy Parkway North at Haulover Canal north-bank/Manatee Viewing Deck access roads. Only authorized access permitted beyond. Becomes hard roadblock at start of vehicle fueling (approximately 4 hours before launch).

**7.2.2 Proposed Pad 2 control points required for 90° launch trajectory include the following and are shown on Figure 7.**

- a. Check point at intersection of U.S. 1 and Kennedy Parkway North. No thru southbound traffic permitted, with traffic detoured to Max Brewer Parkway via U.S. 1 or 5A/I-95. Authorized access only.
- b. Hard road block at U.S. 1 and Kennedy Parkway North at start of launch vehicle fueling (approximately 4 hours prior to launch).
- c. Hard access control points to be determined in consultation with USFWS to preclude off-road vehicles and pedestrians from inadvertent entry into OEZ by use of dirt roads/trails in Bill's Hill tract.
- d. No restrictions on A1A, Apollo Beach.
- e. Checkpoint at Huntington Avenue and Dixie Way, Scottsmeer, authorized access only to Scottsmeer Landing (Brevard County Park).
- f. Checkpoint at Kennedy Parkway North at Haulover Canal north-bank/Manatee Viewing Deck access roads. Only authorized access permitted beyond. Becomes hard roadblock at start of vehicle fueling (approximately 4 hours before launch).

**7.2.3 Proposed Pad 2 control points required for 100° launch trajectory include the following and are shown on Figure 8.**

**Proposed Shiloh Launch Complex  
Launch Site Public Access Control Requirements**

- a. Check point at intersection of U.S. 1 and Kennedy Parkway North. No thru southbound traffic permitted, with traffic detoured to A. Max Brewer Parkway via U.S. 1 or 5A/I-95. Authorized access only.
- b. Hard road block at U.S. 1 and Kennedy Parkway North at start of launch vehicle fueling (approximately 4 hours prior to launch).
- c. Hard access control points to be determined in consultation with USFWS to preclude off-road vehicles and pedestrians from inadvertent entry into OEZ by use of dirt roads/trails in Bill's Hill tract.
- d. No restrictions on A1A, Apollo Beach.
- e. Checkpoint at Huntington Avenue and Dixie Way, Scottsmeer, authorized access only to Scottsmeer Landing (Brevard County Park).
- f. Checkpoint at Kennedy Parkway North approximately ½-mile south of Haulover Canal. Only restricted access permitted beyond. Becomes hard roadblock at start of vehicle fueling (approximately 4 hours before launch).
- g. Hard road block at Kennedy Parkway North at Haulover Canal north-bank/Manatee Viewing Deck access roads. Haulover Canal north-bank and Manatee Viewing Deck lot cleared at 1 hour prior to scheduled launch.

**7.3 Shiloh Launch Pad 1 Control Points For Boating Traffic Include:**

**7.3.1 Proposed Pad 1 control points required for 35° launch trajectory include the following and are shown on Figure 3.**

- a. ICW must be clear of all vessels between Channel Marker 31 (G) and Channel Marker 14 (R) at time of scheduled launch and for duration of launch operation. Check Points will be maintained at both locations beginning 4 hours prior to scheduled launch.
- b. Thru traffic in both directions permitted for vessels under motor power only (remaining underway at minimum speed of 5 mph) until 90 minutes prior to scheduled launch at which time ICW traffic is held outside the designated channel markers until conclusion of launch operation.
- c. No boating traffic of motor-powered or non-motorized watercraft is permitted within the launch-day OEZ control points extending from the launch pad on a true heading of 35° across Mosquito Lagoon between both of the designated ICW markers, and extending for 12 nautical miles seaward from the Atlantic coastline.
- d. No boat launch site within the defined clear zone will be accessible on launch day, and will be closed to access one hour after sunset the day prior to launch.
- e. Scottsmeer Landing boat ramp is closed from one hour after sunset the day prior to launch through the conclusion of the launch operation.
- f. Boating traffic of motor-powered or non-motorized watercraft is restricted in the northern Indian River Lagoon areas to waters south of 28°45.00'.

**7.3.2 Proposed Pad 1 control points required for 90° launch trajectory include the following and are shown on Figure 4.**

- a. ICW must be clear of all vessels between Channel Marker 37 (G) and Channel Marker 19 (G) at time of scheduled launch and for duration of launch operation. Check Points will be maintained at both locations beginning 4 hours prior to scheduled launch.
- b. Thru traffic in both directions permitted for vessels under motor power only (remaining underway at minimum speed of 5 mph) until 90 minutes prior to scheduled launch at which time ICW traffic is held outside the designated channel markers until conclusion of launch operation.
- c. No boating traffic of motor-powered or non-motorized watercraft is permitted within the launch-day OEZ control points extending from the launch pad on a true heading of 90° across Mosquito Lagoon between both of the designated ICW markers, and extending for 12 nautical miles seaward from the Atlantic coastline.
- d. No boat launch site within the defined clear zone will be accessible on launch day, and will be closed to access one hour after sunset the day prior to launch
- e. Scottsmeer Landing boat ramp is closed from one hour after sunset the day prior to launch through the conclusion of the launch operation.
- f. Boating traffic of motor-powered or non-motorized watercraft is restricted in the northern Indian River Lagoon areas to waters south of 28°45.00'.

**7.3.3 Proposed Pad 1 control points required for 100° launch trajectory include the following and are shown on Figure 5.**

- a. ICW must be clear of all vessels between Channel Marker 43 (G) and Channel Marker 19 (G) at time of scheduled launch and for duration of launch operation. Check Points will be maintained at both locations beginning 4 hours prior to scheduled launch.
- b. Thru traffic in both directions permitted for vessels under motor power only (remaining underway at minimum speed of 5 mph) until 90 minutes prior to scheduled launch at which time ICW traffic is held outside the designated channel markers until conclusion of launch operation.
- c. No boating traffic of motor-powered or non-motorized watercraft is permitted within the launch-day OEZ control points extending from the launch pad on a true heading of 100° across Mosquito Lagoon between both of the designated ICW markers, and extending for 12 nautical miles seaward from the Atlantic coastline.
- d. No boat launch site within the defined clear zone will be accessible on launch day.
- e. Scottsmeer Landing boat ramp is closed from one hour after sunset the day prior to launch through the conclusion of the launch operation.

- f. Boating traffic of motor-powered or non-motorized watercraft is restricted in the northern Indian River Lagoon areas to waters south of 28°45.00'.

#### **7.4 Shiloh Launch Pad 2 Control Points For Boating Traffic Include:**

##### **7.4.1 Proposed Pad 2 controls required for 35° launch trajectory include the following and are shown on Figure 6.**

- a. ICW must be clear of all vessels between Channel Marker 38 (R) and Channel Marker 19 (G) at time of scheduled launch and for duration of launch operation. Check Points will be maintained at both locations beginning 4 hours prior to scheduled launch.
- b. Thru traffic in both directions permitted for vessels under motor power only (remaining underway at minimum speed of 5 mph) until 90 minutes prior to scheduled launch at which time ICW traffic is held outside the designated channel markers until conclusion of launch operation.
- c. No boating traffic of motor-powered or non-motorized watercraft is permitted within the launch-day OEZ control points extending from the launch pad on a true heading of 35° across Mosquito Lagoon between both of the designated ICW markers, and extending for 12 nautical miles seaward from the Atlantic coastline.
- d. No boat launch site within the defined clear zone will be accessible on launch day, and will be closed to access one hour after sunset the day prior to launch
- e. Scottsmoor Landing boat ramp is closed from one hour after sunset the day prior to launch through the conclusion of the launch operation.
- f. Boating traffic of motor-powered or non-motorized watercraft is restricted in the northern Indian River Lagoon areas to waters south of 28°44.00'.

##### **7.4.2 Proposed Pad 2 controls required for 90° launch trajectory include the following and are shown on Figure 7.**

- a. ICW must be clear of all vessels between Haulover Canal (east end) and Channel Marker 22 (R) at time of scheduled launch and for duration of launch operation. Check Points will be maintained at both locations beginning 4 hours prior to scheduled launch.
- b. Thru traffic in both directions permitted for vessels under motor power only. (remaining underway at minimum speed of 5 mph) until 90 minutes prior to scheduled launch at which time ICW traffic is held outside the designated channel markers until conclusion of launch operation (hold point at south end will be Channel Marker 1).
- c. No boating traffic of motor-powered or non-motorized watercraft is permitted within the launch-day OEZ control points extending from the launch pad on a true heading of 90° across Mosquito Lagoon between both of the designated ICW markers, and extending for 12 nautical miles seaward from the Atlantic coastline.



- d. No boat launch site within the defined clear zone will be accessible on launch day, and will be closed to access one hour after sunset the day prior to launch.
- e. Scottsmoor Landing boat ramp is closed from one hour after sunset the day prior to launch through the conclusion of the launch operation.
- f. Boating traffic of motor-powered or non-motorized watercraft is restricted in the northern Indian River Lagoon areas to waters south of 28°44.00'.

**7.4.3 Proposed Pad 2 controls required for 100° launch trajectory include the following and are shown on Figure 8.**

- a. ICW must be clear of all vessels between Haulover Canal Bridge and Channel Marker 22 (R) at time of scheduled launch and for duration of launch operation. Check Points will be maintained at both locations beginning 4 hours prior to scheduled launch.
- b. Thru traffic in both directions permitted for vessels under motor power only (remaining underway at minimum speed of 5 mph) until 90 minutes prior to scheduled launch at which time ICW traffic is held outside the designated channel markers until conclusion of launch operation (hold point at south end will be Channel Marker 1).
- c. No boating traffic of motor-powered or non-motorized watercraft is permitted within the launch-day OEZ control points extending from the launch pad on a true heading of 100° across Mosquito Lagoon between both of the designated ICW markers, and extending for 12 nautical miles seaward from the Atlantic coastline.
- d. No boat launch site within the defined clear zone will be accessible on launch day, and will be closed to access one hour after sunset the day prior to launch.
- e. Scottsmoor Landing boat ramp is closed from one hour after sunset the day prior to launch through the conclusion of the launch operations.
- f. Boating traffic of motor-powered or non-motorized watercraft is restricted in the northern Indian River Lagoon areas to waters south of 28°44.00'.

**7.5 Pedestrian Traffic Considerations And Controls Include:**

**Refer to FIGURES 3 through 8 for the general site locations described within this Subsection. Note that specific pedestrian control checkpoints are not identified at this time**

**7.5.1 Seashore foot traffic**

- a. Checkpoint on the beach at the appropriate CNS Apollo Beach parking lot to restrict foot traffic beyond that point until after the launch activity is concluded.
- b. Checkpoint on the beach just north of the Playalinda Beach road terminus to restrict foot traffic beyond that point until after the launch activity is concluded.

### 7.5.2 Refuge trails and back roads hikers

- a. Shiloh Marsh Road foot trail controlled at approximate point of Volusia-Brevard county line for all Pad 2 launches, both vehicular and pedestrian traffic is precluded by clear zone requirements for all Pad 1 launches until after launch conclusion.
- b. Refuge trails and back road hiking that may allow the public to wander into the OEZ for any launch will be controlled with monitors at points identified with assistance of USFWS and NPS.

### 7.5.3 Mainland areas east of FEC Railroad

Mobile patrol along Dixie Way between Huntington Avenue and County Line Ditch Road will be used together with monitoring at end of Sunset Avenue, Coral Avenue, Dunn Road, and County Line Road to ensure pedestrians do not cross over FEC railroad line into OEZ.

## 8.0 JURISDICTIONAL AUTHORITIES AND ROLES

### 8.1 NASA

The property that includes the Shiloh Launch Complex and, except as otherwise noted in this report, all areas affected by public access control requirements, is under the ownership or control jurisdiction of NASA. This jurisdictional authority is pursuant to the original property acquisition authorization by the Congress. This portion of KSC includes the submerged State-owned lands and islands of the Mosquito Lagoon and Indian River Lagoon that are within the space center property boundaries and dedicated to the U.S. Government's use for the space program by acts of the Board of Trustees of the Internal Improvement Trust Fund. NASA has the authority to control and restrict public access to its property for purposes necessary to conduct space launch and related operations, including for purposes necessary for public safety.

### 8.2 U.S. Fish & Wildlife Service (USFWS)

As stated above, Space Florida will be required by 14 CFR 420.57 to provide timely notifications of scheduled pre-launch or launch and landing activities requiring the activation of public access control in accordance with future agreements with FAA, USFWS, CNS, etc. Closures of public use facilities due to actions related to the proposed project may require MINWR Special Use Permits. USFWS permits would be needed for closures of MINWR areas and facilities unless closures of these areas and facilities were somehow also addressed in future agreement(s) NASA creates with Space Florida and/or commercial site operators and the MINWR-KSC agreement are modified to reflect this change.

### 8.3 Federal Aviation Administration

The FAA AST has the authority under 51 U.S.C. Subtitle V, §§ 50901-50923 for oversight of commercial space launch activities. The statutory and regulatory requirements pertaining to

Space Florida operations and to individual launch operators in connection with the Shiloh Launch Complex are described in 14 CFR Chapter III, §400-450.

#### **8.4 U.S. Army Corps. Of Engineers**

The U.S. Army Corps of Engineers has the authority pursuant to 33 U.S.C. §§ 1 and 3 to regulate the proposed closure of waters of the United States to the public for the purpose of conducting launches at the Shiloh Launch Complex. Regulations pertaining to the designation of restricted areas and danger zones can be found at 33 CFR Part 334.

#### **8.5 U.S. Coast Guard (USCG)**

The U.S. Coast Guard District Commander has the authority pursuant to 33 CFR § 165.23 to establish a Safety Zone with details of location, activation, and regulation published and broadcast by a Notice to Mariners. A Safety Zone is defined in this authority as a water area, shore area, or water and shore area to which for safety purposes, access is limited to authorized persons, vehicles, or vessels. Coast Guard vessels and other assets, including vessels operated by the volunteer Coast Guard Auxiliary, are deployed to enforce such Safety Zones. Safety Zones may be established in waters subject to the jurisdiction of the United States, including the territorial sea to a seaward limit of 12 nautical miles.

#### **8.6 Space Florida**

Space Florida is an Independent Special District of the State of Florida with statutory authority under Chapter 331, Part II, Florida Statutes, to own, develop, operate, and maintain space launch and landing facilities, including launch range capabilities, and to enter into agreements with local, state, and federal agencies to carry out its duties and responsibilities. Space Florida's may exercise its rights, powers, and authority within State-designated spaceport territory, including the property boundaries of KSC and Cape Canaveral Air Force Station. Under these authorities, Space Florida may enter into agreements as may be required with NASA, FAA, U.S. Coast Guard, and local jurisdictions including Brevard and Volusia counties, to plan and execute public access control obligations it would have as an FAA AST licensee to operate a launch site.

#### **8.7 Florida Department of Transportation**

Florida Department of Transportation (FDOT) is the State of Florida department with authority and responsibility for state-owned and maintained transportation facilities, including its highway system. FDOT agencies and district offices have jurisdiction over the projects and facilities under their areas of responsibility, and are responsible for the analysis, review, and approval/ permitting of activities requiring temporary traffic re-routing, road/bridge closures, and transport operations requiring special permits.

While not formally identified as an FAA cooperating agency, FDOT will review, comment, and participate as appropriate in the traffic analyses performed in support of the FAA EIS impacts assessment with regard to potential impacts to State owned/operated facilities and its transportation systems.

## 8.8 Volusia County & Brevard County

The proposed Shiloh Launch Complex would have facilities located in both Volusia County and Brevard County. Both jurisdictions have transportation regulatory authorities to manage vehicular traffic usage and flows on local roads, and the respective public safety organizations, the Sheriff's Office, have law enforcement and public safety management authorities in all areas that would be affected by the public access control requirements. Concurrent legislative jurisdiction allows for enforcement of state law on federally-owned land. It is possible that marine law enforcement units of both counties could be employed to help enforce water-area clear zones in addition to other agencies such as the U.S. Coast Guard. Brevard County Parks and Recreation, North District, owns and operates the 3.04-acre Scottsmoor Landing and has jurisdiction over its use.

## 9.0 PROPOSED LOGISTICS FOR VEHICULAR TRAFFIC ACCESS CONTROLS

To effectively implement public access control requirements of its launch site operator license, Space Florida will need to put in place the following operational logistics for the vehicular traffic controls described above:

- a. Staffing and equipment, either by Space Florida or launch operator personnel/contractors, for road checkpoints and hard roadblocks (e.g. temporary traffic cones, barriers, portable lights, restrictions information, radio network communications). Posting of electronic traffic control notification boards at the Max Brewer Bridge, SR 3 and SR 402 intersection, SR 3 and SR 406 intersection, and SR 3 and US 1 intersection no less than 5 days in advance of the activation of any closure period would help ensure public awareness of upcoming route disruptions.
- b. Procedures for identification and verification of authorized access vehicles and/or individuals into controlled areas (via issued badging and/or vehicle placards).
- c. Memorandums of Agreement (MOAs) with offices of the Volusia County Sheriff and Brevard County Sheriff for law enforcement and public safety support as may be required to manage traffic and access controls, to include potential use of "blue light" escorts for vehicle element or critical equipment transport to the launch site.

## 10.0 PROPOSED LOGISTICS FOR MARITIME TRAFFIC ACCESS CONTROLS

To effectively implement public access control requirements of its launch site operator license, Space Florida will need to put in place the following operational logistics for the maritime traffic controls described above:

- a. A Memorandum of Agreement (MOA) between Space Florida and the U.S. Coast Guard (USCG) 7th District to detail procedures for establishing the required Safety Zone and Notifications to Mariners; reimbursement process for USCG-provided support; and operations planning requirements for specific space flight support missions.
- b. Development of an Operations Plan for each space launch mission to determine the requirements for USCG assets, those provided by USCG Auxiliary, and the participation of other state and local agencies (e.g. Florida Fish and Wildlife Commission,

**Proposed Shiloh Launch Complex  
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- Brevard/Volusia vessels). The plan would address ICW traffic management, patrols/positioning for enforcing inland water clear areas, and offshore area safety zone monitoring and enforcement.
- c. Space Florida has been in coordination with the USCG Seventh District Office in Miami (representative Mr. Gene Stratton) regarding the following:
- i. USCG is expected to be the lead agency for ICW closure.
  - ii. The District Commander is Admiral Korn who shares authority with Captain of Port of Jacksonville - Sector Commander.
  - iii. USCG will assess ICW impacts to navigation (frequency and duration).
  - iv. USCG sent a formal request from Space Florida describing the safety zones (Provided on 12/8/14).
  - v. Closest precedence is closures for private payloads launched from federal facilities.
  - vi. USCG wants to understand resource needs for enforcement of safety zone – suggesting and understanding state law enforcement involvement; payment conditions, and funding.
  - vii. Since this is a new activity, USCG wants to ensure they are consistent with rest of nation - policies fair and consistent.
  - viii. USCG Seventh District Office in Miami is doing initial review and has not yet determined who with have authority – Jacksonville or Miami.
  - ix. The USCG approval process will involve public comment since this is a rulemaking process.
- d. Staffing and equipment, either by Space Florida or launch operator personnel / contractors, for boat launch ramp checkpoints (e.g. temporary traffic cones, barriers, portable lights, restrictions information, radio network communications).
- e. “Requirements for the timing of temporary closure of ICW prior to the scheduled launch period and plan for resumption of ICW traffic flow.” If a weather or technical delay results in a rescheduling of the planned launch time to a later point of the same day, a temporary resumption of ICW traffic flow should be accommodated if feasible.

## **11.0 PROPOSED LOGISTICS FOR PEDESTRIAN CONTROLS**

To effectively implement public access control requirements of its launch site operator license, Space Florida will need to put in place the following operational logistics for the foot traffic controls described above:

- a. Staffing and equipment, either by Space Florida or launch operator personnel/contractors, for beach checkpoints at CNS Apollo Beach and Playalinda Beach at the points required by specific launch missions (e.g. CNS-authorized type of vehicle, temporary traffic cones, barriers, restrictions information, radio network communications).
- b. Staffing and equipment, either by Space Florida or launch operator personnel/contractors, for other land checkpoints identified above (e.g. temporary



traffic cones, barriers, portable lights, restrictions information, radio network communications).

- c. Address in MOAs with offices of the Volusia County Sheriff and Brevard County Sheriff law enforcement and public safety support as may be required to enforce foot traffic access controls.

## **12.0 PROPOSED LOGISTICS FOR AERIAL SURVEILLANCE OF CONTROLLED ACCESS AREAS**

To effectively implement public access control requirements of its launch site operator license, Space Florida will need to put in place the following operational logistics for the aerial surveillance of controlled access areas described above:

- a. It is likely that some form of aerial surveillance of the controlled access water and land areas within the OEZ will be required to effectively ensure that all reasonable effort has been made to verify the OEZ is clear of any public.
- b. Aerial surveillance of all areas could be achieved through use of a combination of Unmanned Aerial System aircraft with imaging capability fed to Space Florida or launch operator safety consoles at the Launch Control Center and by crewed rotary or fixed wing aircraft contracted for the function. Use of Unmanned Aircraft Systems (UAS) aircraft will require appropriate and applicable operating FAA permits or regulatory exemptions, as well as coordination with the airspace management authorities.
- c. The MOA with the U.S. Coast Guard, and a possible MOA with NASA KSC, could also provide aerial surveillance assets for normal or contingency operations in connection with Shiloh launch activities.

## **13.0 GENERALIZED TIMELINES FOR ACTIVATION AND DE-ACTIVATION OF CONTROLS**

Only a generalized and notional description of timelines for the proposed activation and de-activation of controls can be developed at this time.

### **13.1 Timelines for "Wet Dress" Rehearsals/Static Firings**

- a. Vehicular traffic checkpoints activated at sunrise on day of test operations
- b. Hard roadblock points activated at start of propellant loading, typically about 4 hours prior to simulated launch time.
- c. Roadblock and checkpoint released and normal access resumes at conclusion of propellant drain back, estimated 2-4 hours after simulated launch time.
- d. Monitor points on Shiloh Marsh Road and other specific locations are staffed at sunrise on day of test operations, released at conclusion of propellant drain back.

### **13.2 Timelines for Launch Operations**

- a. All notifications to mariners, local communities, adjoining property owners, and as otherwise required by license conditions, are issued no later than two days prior to scheduled launch .

- b. Vehicular traffic checkpoints as required on Kennedy Parkway North, Shiloh Marsh Road, and Bill's Hill Road activated at sundown on day before launch.
- c. Hard roadblock points activated at start of propellant loading, typically about 4 hours prior to launch time.
- d. Roadblocks and checkpoints are released and normal access resumes at conclusion of launch operation.
- e. Beach control points are activated with staff in place one hour before seashore gates open on day of launch; restrictions lifted at conclusion of launch operation.
- f. Safety Zone activation for maritime traffic is at one hour after sundown on the day prior to launch for inland water bodies, and at six hours prior to scheduled launch for Atlantic offshore waters; affected boat launch ramps close at one hour after sundown on the day prior to launch.
- g. All assets and monitors required for implementing and enforcing restricted water areas are on station at time of activation.
- h. ICW thru traffic in both directions remains open until 90 minutes before scheduled launch per control schedule and locations described above, with escort and/or monitor vessels as required to ensure ICW clear in the OEZ at launch time.
- i. Pedestrian traffic control points on mainland areas are activated with staff in place at one hour before sunrise on launch day, or at 6 hours prior to launch, whichever occurs first.

#### **14.0 FAA COOPERATING AGENCIES REVIEW COMMENTS**

In the performance of its NEPA obligations, FAA AST has identified several cooperating agencies to assist in the evaluation of potential impacts to the affected environment that could result from compliance with the requirements for public access controls. These cooperating agencies include NASA; NPS; Florida Department of State, Division of Historic Resources, State Historic Preservation Office (SHPO); USFWS; and USACE. The USCG is also anticipated to become a cooperating agency with a lead role in evaluating the establishment and implementation of maritime hazard areas.

The FAA and their cooperating agencies have reviewed summary information and tables derived from this Technical Memorandum, and some reviewed the more detailed information included in a draft of this document.

In addition, the Draft Technical Memorandum was reviewed and commented on by the FDOT and it has been furnished to the USCG Seventh District for continuing coordination and planning regarding the USCG role in assisting the FAA in the EIS evaluation, and in planning for operational implementation if the proposed project is approved.

The review comments identified to date are summarized by agency below. As appropriate, they have been incorporated into this Technical Memorandum. Refinement of requirements and operational procedures for compliance with FAA-required public access controls will continue to be an on-going process.

## FDOT

- i. FDOT should be identified for appropriate roles and authorities regarding the reviews and approvals required for activities impacting State transportation facilities and roadways.
- ii. Traffic analysis should be performed for the proposed closures and detours.
- iii. FDOT would need to share the anticipated state roadway closures/detours with the District Environmental Management Engineer, Bike/Ped Coordinator, Strategic Intermodal System coordinator, District Traffic Operations Engineer (DTOE), Metropolitan Planning Organizations liaison, and the local FDOT Brevard Operations and Maintenance Engineer from the local perspective as well as permitting and coordinating.

## USFWS

- i. Closures of public use facilities due to actions related to the proposed project could require MINWR Special Use Permits.
- ii. Service permits may be required (e.g., for infrastructure and/or other rights-of-way access, any monitoring requirements, any bald eagle take, and/or closures).
- iii. The notification process should include posting of electronic traffic control notification boards at the Max Brewer Bridge, SR 3 and SR 402 intersection, SR 3 and SR 406 intersection, and SR 3 and US 1 intersection no less than 5 days in advance of the activation of any closure period. Note: USFWS Federal Wildlife Officers would not be used to ensure closures of the proposed site; the launch site operator and Space Florida would be responsible for providing appropriate security prudent for the protection of the public. Describe the interruptions and restrictions, including estimated times or delay or traffic stoppage, to MINWR management, Canaveral National Seashore management, visitor access and use, and general traffic associated with any traffic delays or stoppages on SR 3 during deliveries of rocket stages, payloads, and other materials.
- iv. Notification at least two days prior to launches and other associated pre-launch operations would also be required to local officials, including KSC, Canaveral National Seashore, and MINWR; all land owners of properties wholly or partially within and all properties or portions of properties adjacent to any area subject to closures, interruptions, and/or restrictions associated with the proposal; and all land owners adjacent to the launch site.
- v. USFWS permits would be needed for closures of MINWR areas and facilities unless closures of these areas and facilities were somehow also addressed in agreement(s) NASA created with Space Florida and/or commercial site operators and the MINWR-KSC agreement were also modified to reflect this change in authority. Describe under the Proposed Action how NASA would provide notice of closures, interruptions, and/or other restrictions to MINWR and Canaveral National Seashore.

Proposed Shiloh Launch Complex  
Launch Site Public Access Control Requirements

1        **NASA**

- 2            i.    There could be multiple temporary closures of the ICW for any single launch  
3                   attempt. Due to weather or technical issues, a launch could be scrubbed for 24  
4                   hours or more. Also, depending on the length of a particular launch window, the  
5                   closures could last for hours. Therefore, there may be more than 48 annual  
6                   events that cause such closures. This should be estimated and factored into the  
7                   analyses.

8  
9        **CNS**

- 10           i.    Because the roads and adjacent cleared areas are within the refuge and the  
11                   proposed action is not a NASA action, FDOT and NPS right-of-way permits would  
12                   be needed for installation of utilities: power lines, communication lines, and  
13                   water lines (50 CFR §29.21). Additionally, if aircraft, manned or unmanned are  
14                   used over the refuge, depending on altitude and other factors, Special Use  
15                   Permits (SUPs) may also be needed. Closures of public use facilities due to  
16                   actions related to the proposed project could also require SUPs.

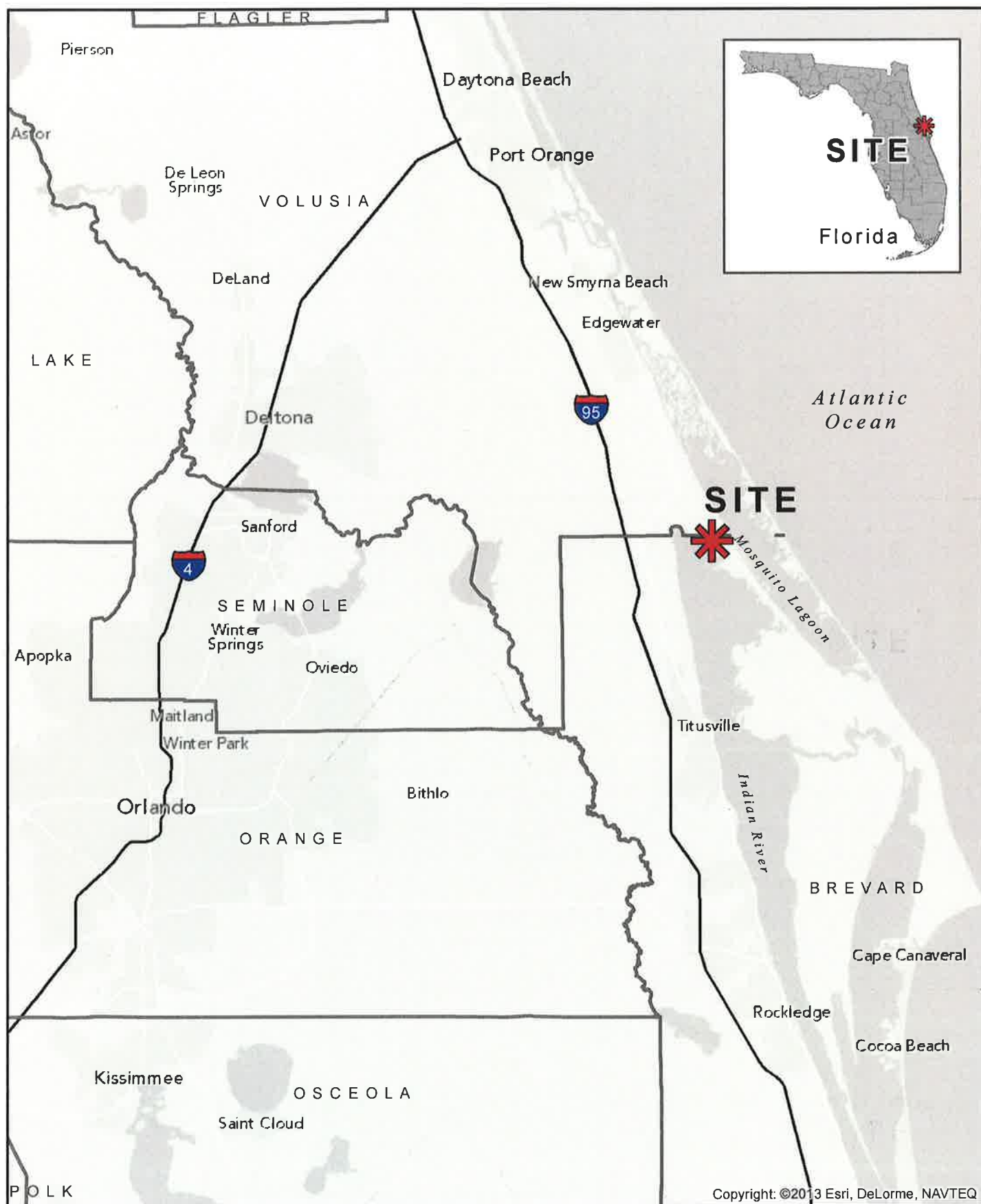
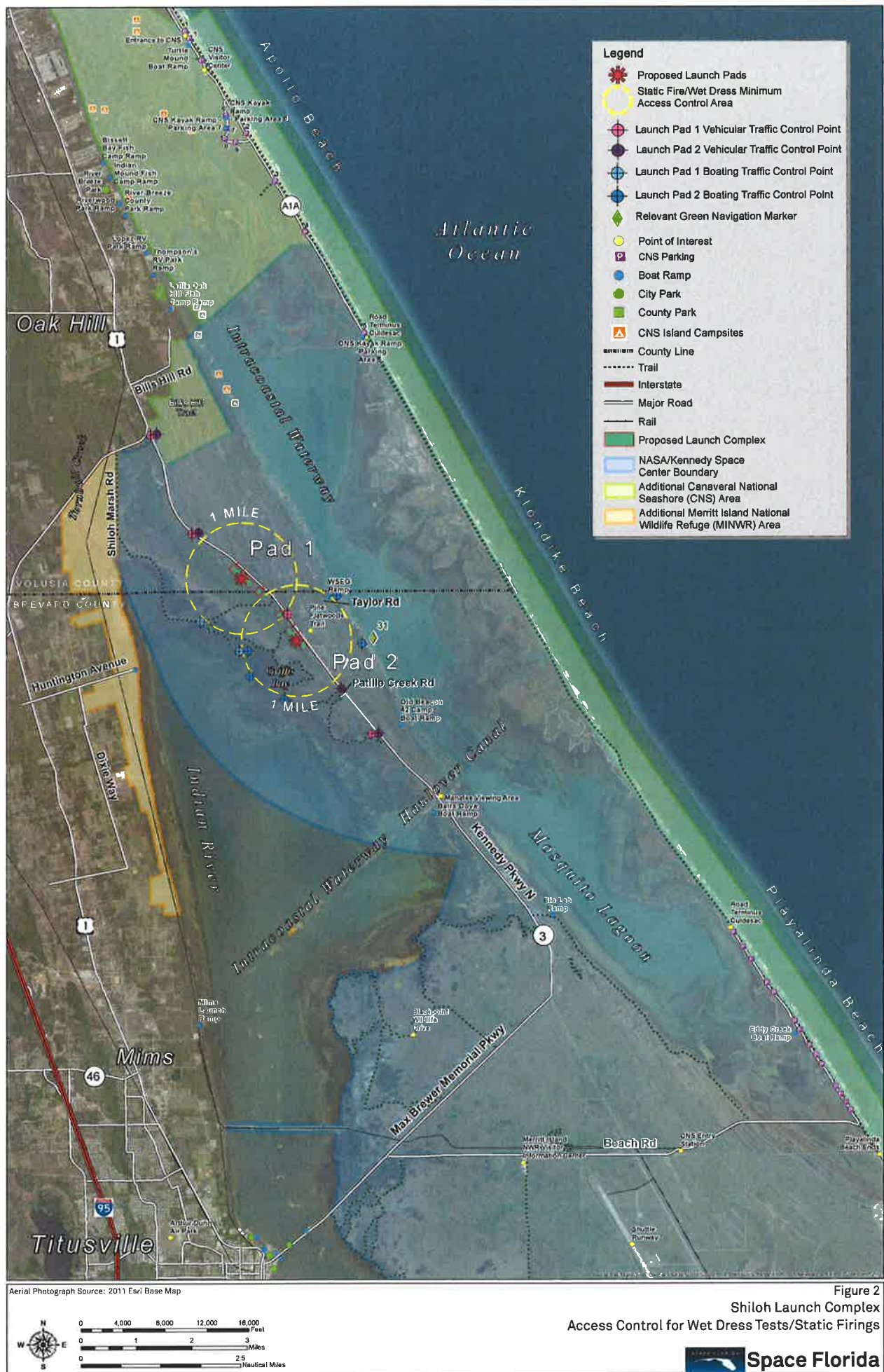


Figure 1  
Shiloh Launch Complex  
Site Location  
**Space Florida**

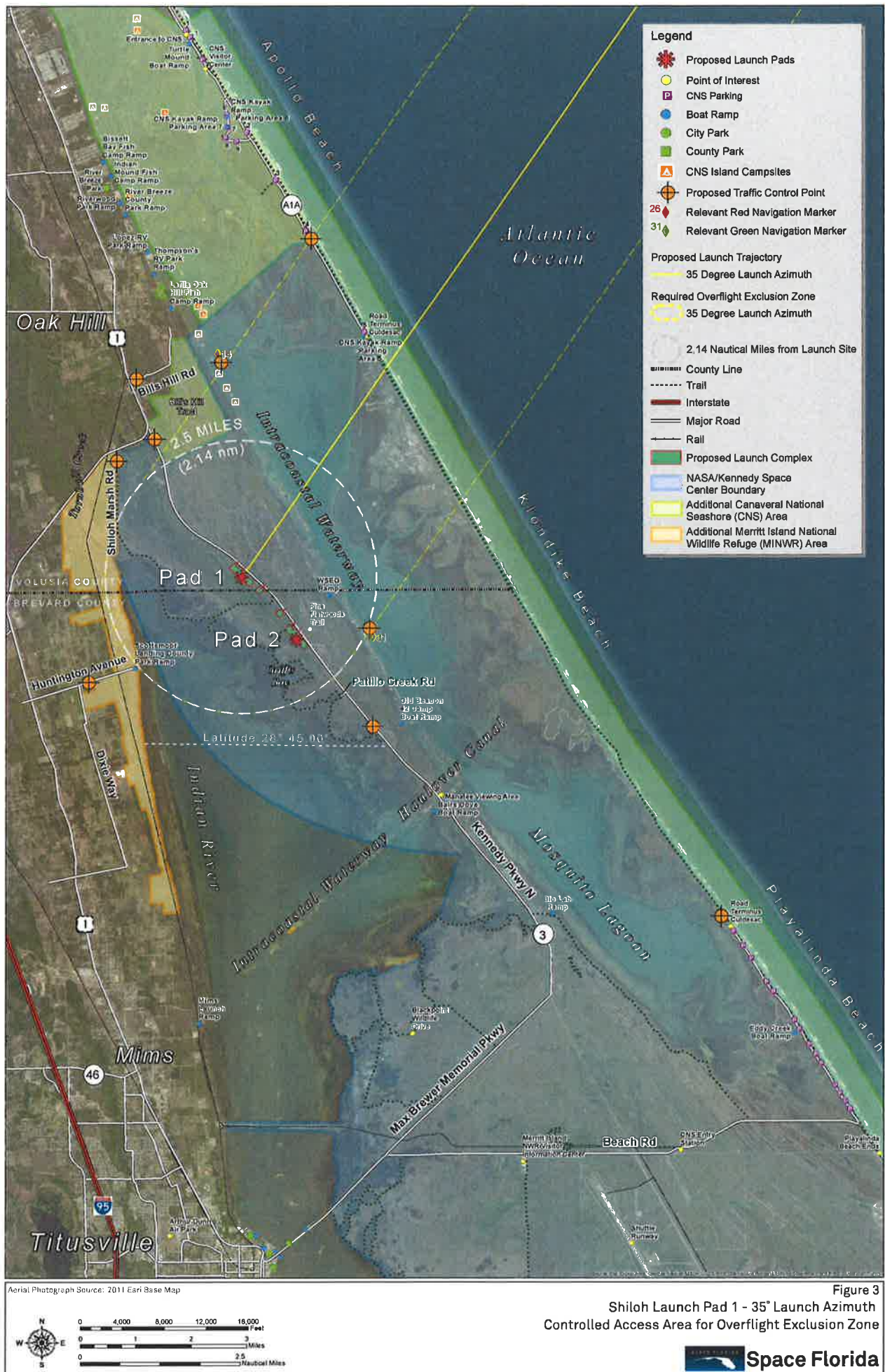


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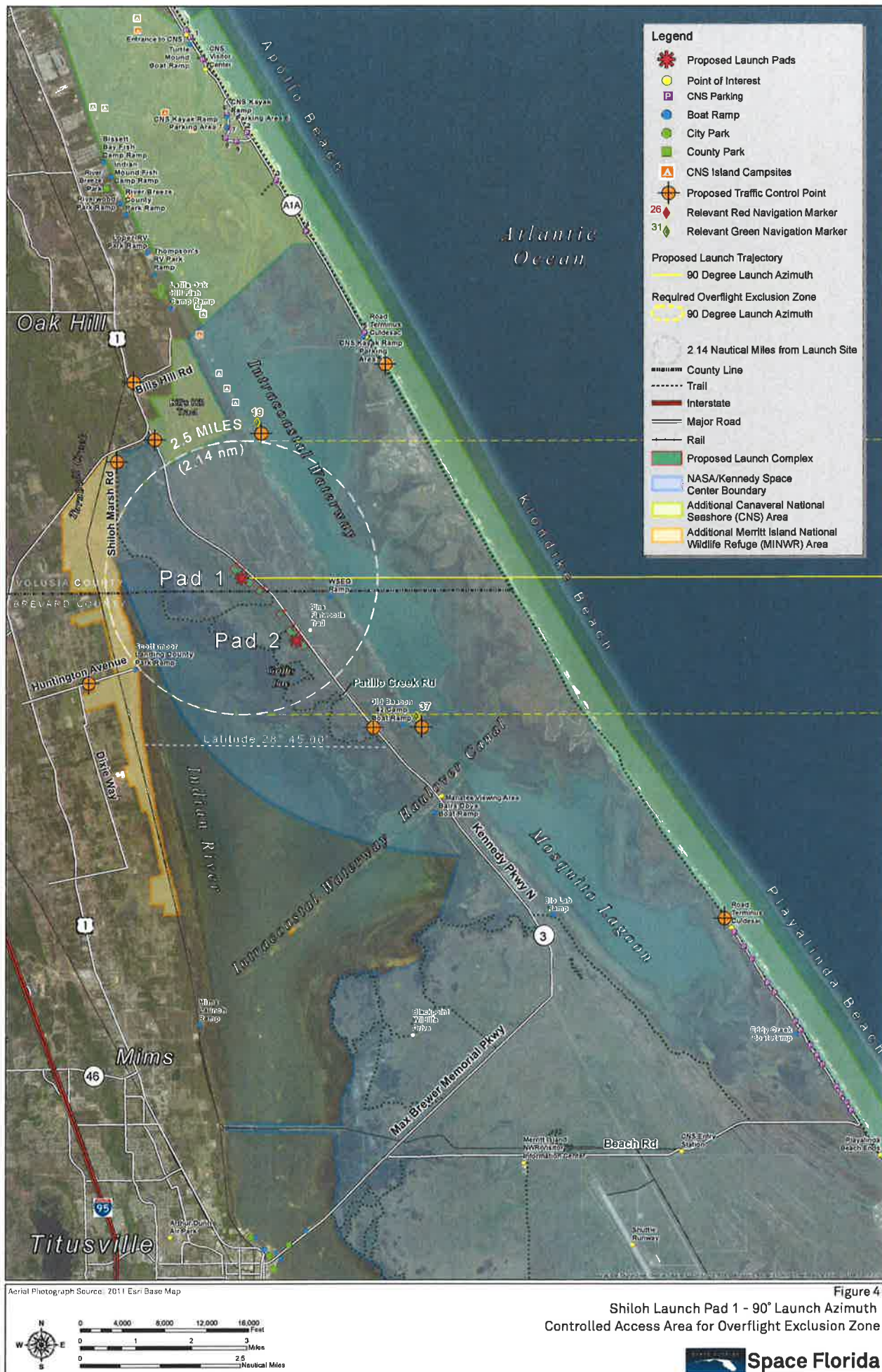




Figure 5  
Shiloh Launch Pad 1 - 100° Launch Azimuth  
Controlled Access Area for Overflight Exclusion Zone













### **Attachment 3**

#### **NASA DOPAA Comment (December 2014)**

- **Comment 59** - Consider adding an explanation of why this proposal is inconsistent with the current KSC Master Plan. The notional locations for Pads 39C and 39D, as indicated in the KSC Master Plan, could be Reasonable Alternatives to the currently proposed Shiloh location and should be considered and assessed in detail as part of the reasonable range of alternatives evaluated in the EIS for the proposed Shiloh Launch Complex. It is likely that these sites could meet the Purpose and Need for a commercial launch site as proposed by the State of Florida. (Commenter: TA-A4C)

## Attachment 4

### **United States Fish & Wildlife Services References (January – October 2014)**

- Letter from United State Department of the Interior, Fish and Wildlife Service to Dr. George C. Nield, Associate Administrator for Commercial Space Transportation, Federal Aviation Administration, dated January 3, 2014.
- Congressional Committee on Oversight and Government Reform Subcommittee on Governmental Operations held at the Kennedy Space Center Visitors Complex on February 10, 2014.
- Letter from Cynthia K. Dohner, Regional Director, United State Department of the Interior, Fish and Wildlife Service, to Stacey M. Zee, FAA Environmental Specialist dated February 21, 2014.

#### **ALTERNATIVES**

The Service believes that the potential unavoidable effects of the proposed project as currently presented would be very difficult to mitigate. The Service recommends that the FAA consider and evaluate in the EIS not only the proposed project site, but also alternative sites. The consideration of alternative sites was also suggested during the February 10, 2014 hearing of the Congressional Committee on Oversight and Government Reform Subcommittee on Government Operations held at the Kennedy Space Center Visitors Complex. The January 3, 2014 technical assistance letter outlined the Service's concern that a reasonable range of alternatives be evaluated in the EIS. A potential alternative to be evaluated in the EIS could be a site within the Kennedy Space Center security area, south of State Road 402.

- Letter regarding DOPAA comments dated October 17, 2014.
- <http://www.fws.gov/merrittisland/Shiloh.html> Accessed 3/9/15.

## Attachment 5

### **United States Army Corps of Engineers Correspondence (December 12, 2014)**

Letter from Colonel Alan M. Dodd, Department of the Army, to Daniel Murray, FAA dated 12/12/14, Pages 4-5.

- Page 4 excerpt:

The Corps' review of NASA's Programmatic EIS for Center-wide Operations at Kennedy Space Center suggests alternative sites (pads C and D) are available and may be reasonable alternatives that should be considered for additional study. Further, these alternative locations would likely eliminate the need to temporarily close the AICW and its adjacent waters.

- Page 5 excerpt:

A review of the Shiloh Scoping Summary Report suggests 4,181 comments expressed general opposition to the proposed action. Given the anticipated adverse impact of this proposal on the public interest including the AICW the Corps strongly encourages FAA to consider alternative sites with less damaging environmental and navigational impacts. We appreciate the opportunity to review and comment on the documents and we are look forward to working with you in the near future. If you have any questions regarding this letter, please contact Andrew Phillips at the letterhead address or by telephone at 321-504-3771 extension 14.

Sincerely,



Alan M. Dodd  
Colonel, U.S. Army  
District Commander

## Attachment 6

### KSC New Pad 39C Site Reference (July 2, 2014)

Excerpts from Pages 4 and 8 of NASA/Kennedy Space Center Ground Systems Development & Operations (GSDO) – GSDO-S-205 Launch Site Options (Final) Study Results July 2, 2014 transmitted via email from Robert Freeman (KSC-ADC00) to James Kuzma, Space Florida, on November 7, 2014.



#### Pad Site Summary

- ◆ The new Pad C concept provides the most autonomy of all the pad locations. The proposed location is northwest of Pad B in an area that is currently undisturbed wetland that would require environmental mitigation. This concept co-locates the Pad, Horizontal Integration Facility (HIF), Manufacturing and Refurbishment Facility (MRF), and Vertical Landing Facility (VLF). It is also the most costly option.



National Aeronautics and Space Administration

NASA pre-decisional. Do not disseminate.



#### New Pad C Site

Envisioned launch site location:



National Aeronautics and Space Administration

NASA pre-decisional. Do not disseminate.





# America's Marine Highways

U.S. Department of Transportation

**Mission:** To lead the development and expansion of America's Marine Highway system and to facilitate its integration into the U.S. surface transportation system.

**Legislation:** Established by Section 1121 of the Energy Independence and Security Act of 2007 and amended in Section 405 of the Coast Guard and Maritime Transportation Act of 2012.

**Vision:** The full integration of Marine Highway vessels and ports into the surface transportation system to ensure that reliable, regularly scheduled, competitive, and sustainable services are a routine choice for shippers.



## Description:

America's Marine Highway System consists of over 29,000 nautical miles of navigable waterways including rivers, bays, channels, the Great Lakes, the Saint Lawrence Seaway System, coastal, and open-ocean routes.

## Public benefits include:

- Creating and sustaining jobs on U.S. vessels and in U.S. ports and shipyards;
- Increasing the state of good repair of the U.S. transportation system by reducing maintenance costs from wear and tear on roads and bridges;
- Increasing our nation's economic competitiveness by adding new, cost-effective freight and passenger transportation capacity and reducing landside congestion;
- Increasing the environmental sustainability of the U.S. transportation system by using less energy and reducing air emissions (such as greenhouse gases) per passenger or ton-mile of freight moved. Further environmental sustainability benefits come from the mandatory use of modern engine technology on designated projects;
- Increasing public safety and security by providing alternatives for the movement of hazardous materials outside heavily populated areas;
- Increasing transportation system resiliency and redundancy by providing transportation alternatives during times of disaster or national emergency;
- Increasing national security by adding to the nation's strategic sealift resources.





### Marine Highway Routes:

- Serve as extensions of the surface transportation system.
- Follow established navigable waterways and shipping lanes.
- Are commercially navigable coastal, inland, and intracoastal waters of the United States or connections between U.S. ports on those waterways, described in terms of the specific landside transportation routes (road or rail line) that they supplement or connect. They also include routes between U.S. and Canadian ports on the Great Lakes– Saint Lawrence Seaway System.
- Designated by the Secretary of Transportation as having the potential to benefit the public by providing additional transportation capacity as a part of the surface transportation system.

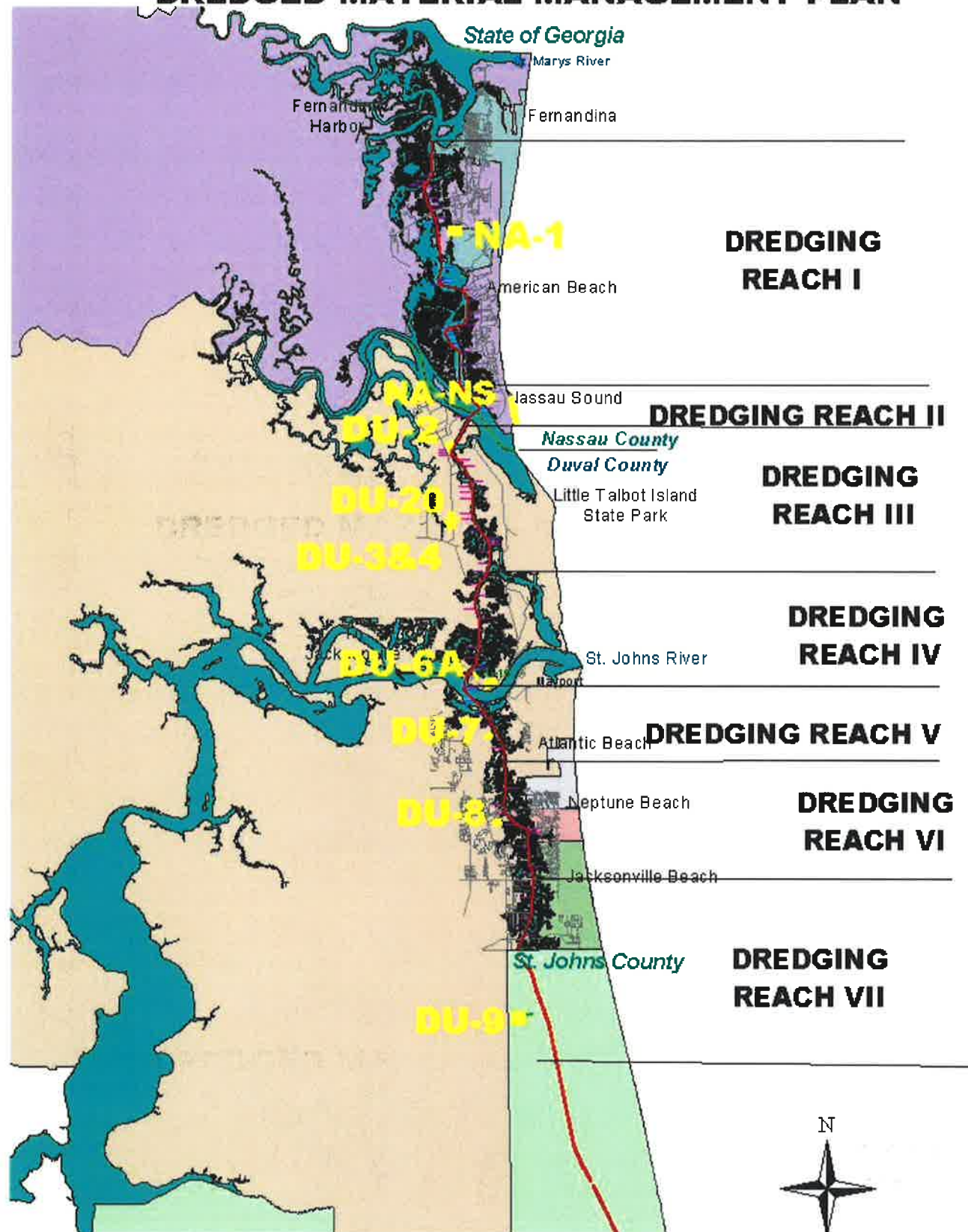
### Marine Highway Projects:

- Projects are designated by the Secretary of Transportation through “Calls for Project” in the Federal Register.
- Each has the potential to offer public benefits and long-term sustainability without long-term Federal support.
- Each receives preferential treatment for any future federal assistance from the Department of Transportation and MARAD.
- Each has the potential to reduce air pollution and traffic congestion along surface corridors as well as provide jobs for skilled mariners and shipbuilders.



For additional information, please e-mail the Office of Marine Highways and Passenger Services at [mh@dot.gov](mailto:mh@dot.gov) or go to [http://www.marad.dot.gov/ships\\_shipping\\_landing\\_page/mhi\\_home/mhi\\_home.htm](http://www.marad.dot.gov/ships_shipping_landing_page/mhi_home/mhi_home.htm).

# NASSAU/DUVAL COUNTIES DREDGED MATERIAL MANAGEMENT PLAN







Legend



2000 ft

DU-9

DMMA DU-9

Google earth

© 2015 Google







April 8, 2015

15-23484

Mike Petrovich, Esquire  
 Hopping Green & Sams, P.A.  
 119 South Monroe Street, Suite 300  
 Tallahassee, Florida 32301

**RE: TECHNICAL ANALYSIS  
 DMMA DU-9: FORMER SLUDGE DISPOSAL AREA NUMBER 2  
 ST. JOHNS COUNTY, FLORIDA**

Dear Mike:

Golder Associates Inc. (Golder) is pleased to provide this technical analysis of data related to the Former Sludge Disposal Area Number 2 (Site), which is part of a larger dredged material management area (referred to as DMMA DU-9) owned by the Florida Inland Navigation District (FIND). After recent meetings with representatives of the Florida Department of Environmental Protection (FDEP) and with FIND's engineering consultant, Taylor Engineering, Inc. (Taylor), three primary concerns have been raised related to residual groundwater contamination at the Site: 1) the potential for contaminants in groundwater generated during construction dewatering to be present at concentrations requiring treatment or special handling of the produced groundwater; 2) the potential for contaminant concentrations to accumulate in surface water within the DMMA DU-9 to concentrations that would cause concern over discharges through the weir outfall structure, and 3) the potential for contaminants to migrate beyond the boundaries of the DMMA DU-9 footprint at concentrations that would be of regulatory concern as a result of operation of DMMA DU-9.

We have evaluated available data related to assessment and remediation of chlorinated solvent contamination at the Site, current hydrologic conditions, design information for the DMMA DU-9 impoundment provided by Taylor, and the anticipated hydraulic conditions that will exist during operation of the impoundment. Our analysis is directed specifically at the three concerns listed above and we have been asked to render an opinion as to the effects that the existing groundwater contamination could have on construction and operation of the proposed expanded DMMA DU-9. A summary of our findings and associated conclusions is provided below.

## **CURRENT SITE CONDITIONS**

Based on information presented in the technical report prepared by CH2M HILL (CH2MH), titled "Supplemental Groundwater Sampling Results and Evaluation" dated November 25, 2013, two contaminants have been detected in groundwater samples collected from site monitoring wells at levels above the groundwater cleanup target levels (GCTLs) in Table I, rule chapter 62-777 F.A.C., but well below the natural attenuation default concentrations (NADCs) in Table V of the same Chapter. These contaminants include vinyl chloride (VC) and cis-1,2-dichloroethene (DCE). Based on our review of available Site data, localized areas of residual groundwater impacts remain in the shallow surficial aquifer at one monitoring well location (TPOC-1), and in the underlying intermediate groundwater zone at five monitoring well locations (DD-02I, DD-3B, DD-6C, DD-8C, and DD-14B). Additionally, comparison of recent analytical results with historical data indicate that contaminant concentrations are either decreasing or stable at the above-referenced monitoring well locations, and it is our understanding that no source materials are known to remain on-site.

Golder Associates Inc.  
 9428 Baymeadows Road, Suite 400  
 Jacksonville, FL 32256 USA  
 Tel: (904) 363-3430 Fax: (904) 363-3445 [www.golder.com](http://www.golder.com)



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Both VC and cis-1,2-DCE are breakdown products of commercially used chlorinated solvents such as tetrachloroethene (PCE) and trichloroethene (TCE). PCE has been widely used as a dry-cleaning solvent and both PCE and TCE have been used as degreasing solvents in various commercial and industrial applications. PCE and TCE break down in the environment due to naturally-occurring chemical conditions and from the action of bacteria adapted to metabolize the compounds. The breakdown chain involves the loss of a chlorine ion from the molecule taking the compound, in the case of PCE, from PCE (four chlorine ions), to TCE (three chlorine ions), to several different DCE compounds having two chlorine ions (including cis-1,2-DCE), to VC (one chlorine ion) and ultimately to ethane (a non-toxic gas compound). Ethane ultimately breaks down further to water and carbon dioxide. The chlorinated compounds are considered contaminants of concern with regard to human health and the environment. Therefore, very conservative, stringent maximum concentrations for these compounds are regulated in drinking water.

The State of Florida considers all groundwater that is not saline (less than 10,000 parts per million total dissolved solids) as potential drinking water. Therefore, the State regulates groundwater as though it might be used for potable purposes. In practice, there are many naturally-occurring conditions that would prevent the use of groundwater, particularly in the shallow surficial aquifer, from being used for potable purposes without treatment. These include the presence of iron, chloride, sulfate and other dissolved constituents; high or low pH; bacterial contamination; and other physical characteristics, such as color or taste, that are considered nuisance criteria. If groundwater at a given site will not be used for potable purposes, the State allows for exceedances of maximum contaminant levels (MCLs) if there are institutional or engineering controls put into place that will prevent the future use of groundwater. This is central to the remaining groundwater contamination at the Site as we understand that FDEP has expressly concurred that the Site qualifies for No Further Action with Institutional Controls in accordance with Rule 62-780.680 (2), Florida Administrative Code. A copy of FDEP's March 17, 2014, written correspondence in this regard is attached.

## ISSUES OF POTENTIAL CONCERN

### Quality of Water Generated During Dewatering and Construction

Based on review of Figure A-1 prepared by Taylor, dated December 2014, the floor of the planned DMMA DU-9 build-out area will be at elevation 11 feet (above National Geodetic Vertical Datum of 1929 (NGVD29)), which will require that groundwater be managed during earthwork activities as the depth to the top of the water table is anticipated to be above this elevation. The degree to which the elevation is below the water table varies based on seasonal fluctuations; therefore, this will depend upon when the work will be conducted. There is also a perimeter road and ditch system that are partially outside the DMMA footprint. It is expected that the system will largely follow the same pattern/design as the constructed northern basin.

Depth to groundwater information from Remedial Progress Report No. 3 (prepared by CH2MH, dated May 2013) indicates that groundwater elevations in the shallow surficial aquifer range from approximately 11.5 to 14.3 feet above mean sea level (ft-msl) across the site. (Note: We assume that the reported groundwater elevations in ft-msl from the CH2MH report are roughly equivalent to elevations in ft-NGVD, and that the conversion factor between the two datums would be less than 12 inches.) Therefore, assuming that the water table would need to be lowered to at least 2 feet below the floor of the DMMA DU-9 build-out area, the target elevation for dewatering would be 9 ft-msl, (approximately 5 feet below ambient water table conditions). Dewatering to this approximate elevation could be conducted using conventional well points screened in the upper surficial aquifer from 4 to 9 ft-msl. In consideration of this type of dewatering approach, the possibility of introducing contaminants into dewatering effluent at concentrations above GCTLs is negligible for the following reasons:

- Groundwater extraction would be limited to the uppermost 5 feet of the surficial aquifer, which essentially negates the possibility of introducing, or influencing, contaminants in the intermediate groundwater zone. Under this scenario, a 20-foot vertical "buffer" would be present between the top of the intermediate zone and the bottom(s) of the well points.



- Impacted groundwater in the shallow surficial aquifer is limited to a localized area around TPOC-1; which is located roughly 240 feet west of the DMMA DU-9 build-out area. Given this distance, along with the amount by which the water table would be lowered, and the estimated hydraulic conductivity of the shallow surficial aquifer, the average linear groundwater velocity can be estimated to determine the amount of time necessary for a particle to travel from the TPOC-1 location to a well point installed at the DMMA DU-9 build-out area. Neglecting the effects of adsorption, Golder estimated this timeframe to be approximately six months. In other words, dewatering operations would have to be ongoing, continuously, for six months before the first arrival of contaminants would be expected to appear at the nearest well point location. Calculations are provided as an attachment to this letter.
- The above-described evaluation does not take into account the effects of adsorption or the effects of dilution and volatilization of the contaminants during groundwater extraction. For these reasons, even if contaminants reach the dewatering system, the concentrations would be expected to be significantly reduced, to levels below the regulatory limits. Based on our experience, this conclusion is both reasonable and probable due to the fact that contaminants will adsorb to organic particulates within the surficial aquifer as they migrate, and that concentrations will be diluted along the groundwater flow path. Furthermore, VC and DCE are highly volatile and unstable in a surface water environment. Further concentration reductions would be expected if contaminants do make their way into the surface water of the operational basin. Lastly, should protection against this perceived concern be desirable, VC and DCE are amenable to treatment using conventional air stripping and/or filtration equipment. However, based on our understanding of site conditions, it is our opinion that this should not necessary.

### Potential for Contaminants in DU-9 Discharge Water

Since construction of the DMMA DU-9 build-out will result in the bottom of the DMMA intersecting the top of the water table, some mixing of accumulated groundwater in the DMMA with return water from dredging operations would be anticipated. However, similar to the dewatering scenario described above, the possibility of introducing contaminants into return water from dredging operations at concentrations above surface water criteria is negligible for the following reasons:

- Groundwater seepage into DMMA DU-9 would be limited to the uppermost 3 feet of the surficial aquifer, which essentially negates the possibility of contaminants from the intermediate zone from entering the DMMA. A vertical "buffer" of approximately 25 feet is present between the top of the intermediate zone and the floor of the planned DMMA DU-9 build-out. Furthermore, groundwater would have to migrate both vertically and horizontally against the pressure gradient created by the water level in DMMA DU-9. It is impossible for water to travel against a pressure gradient in the subsurface.
- Impacted groundwater in the shallow surficial aquifer is limited to a localized area around TPOC-1 (located roughly 240 feet west of the DMMA DU-9 build-out area), where VC and DCE concentrations are well below the NADCs. Given this information, and considering the effects of soil adsorption coupled with ongoing natural attenuation, it is highly unlikely that VC or DCE would appear in seepage entering the DMMA at concentrations above regulatory standards. Also as indicated above, shallow groundwater in the vicinity of TPOC-1 is outside the footprint of the DMMA DU-9 build-out; therefore, there would be a significant horizontal pressure gradient that would prevent migration of contaminants into DMMA DU-9 during operation.
- Golder completed calculations to estimate theoretical concentrations of VC and DCE that would overflow the weir(s) in return water during DMMA operating conditions. The results indicate that the concentrations would be well below regulatory standards, even when highly conservative assumptions are included in the analysis. Calculations are provided as an attachment to this letter.

## Potential of Contaminant Migration during DMMA DU-9 Operation

We understand that the DMMA will be operated approximately once every 10 years over 50 years. This will result in cycles of surficial groundwater mounding in the immediate vicinity of DMMA DU-9, followed by periods where the groundwater levels will return to pre-operational levels. Although operation of the DMMA DU-9 will result in temporary mounding of groundwater in the surficial aquifer, the likelihood that this would significantly influence or alter the distribution of VC or DCE concentrations in either the shallow or intermediate zones is considered negligible. When in operation, shallow groundwater flow characteristics around DMMA DU-9 would be temporarily influenced by a local change in gradient near the top of the water table. Groundwater flow from a mound-type feature is radial, and therefore a temporary reversal in gradient would be expected to the west of DMMA DU-9. This would effectively create a temporary hydraulic barrier that would preclude migration of contaminants from the TPOC-1 shallow plume area toward the Intracoastal Waterway (ICWW). Additionally, due to frictional losses with increasing depth below the mounded area, it is not anticipated that contaminant distribution in the intermediate aquifer would be affected. As mentioned previously, a 20 to 25-foot vertical buffer will exist between the bottom of DMMA DU-9 and the intermediate zone.

The contaminant source material was apparently placed on the site decades ago. Based on our experience with similar sites, we have found that over time the rate of contaminant migration reaches a state of equilibrium with natural attenuation influences that result in biochemical breakdown of the chlorinated solvent source compounds. Additionally, if the source is removed, as was done at this Site, the downgradient extent of groundwater contamination will typically retract, concentrations will decrease, and more breakdown compounds will be present than parent compounds. These are the conditions observed at the Site since source removal activities were completed by CH2MH, and these conditions provide the basis for the Site's eligibility for closure with conditions. Thus, even though periodic filling of the basin will cause fluctuations in the local groundwater flow regime, this will not result in further downgradient migration of contaminants.

## CONCLUSIONS

Based on our review of documents provided, and as discussed above, we conclude the following:

- 1) Dewatering using conventional methods can be completed successfully without introducing contaminants into produced groundwater from dewatering operations at concentrations above GCTLs. More specifically, based on the results of our evaluation, if groundwater extraction is limited to the uppermost 5 feet of the surficial aquifer, it is highly unlikely that VC or DCE from the impacted areas of the shallow and intermediate zones of the surficial aquifer will appear in effluent at concentrations above GCTLs. Conventional air stripping and/or filtration equipment could be made available for treatment of produced groundwater if VC or DCE are determined to be present in at concentrations above GCTLs.
- 2) Based on the attached calculations, we do not believe that seepage into the DMMA will result in an accumulation of VC- or DCE-impacted groundwater that would result in an exceedance of discharge criteria for these constituents in return water from DMMA DU-9 operations.
- 3) Although operation of DMMA DU-9 will result in temporary mounding of groundwater in the surficial aquifer in the immediate vicinity of the DMMA, the likelihood that this would significantly influence or alter the distribution of VC or DCE concentrations in either the shallow or intermediate zones is considered negligible. The changed hydraulic conditions present when the DMMA is filled will maintain the shallow groundwater impacts in the vicinity of TPOC-1 on the western, up-gradient side of the impoundment. The impoundment will thus act as a temporary hydraulic barrier that would prevent the eastward migration of groundwater toward the ICWW.
- 4) The current downgradient extent of contaminants should be the maximum distance travelled by groundwater contaminants at the Site. Given the amount of time that has elapsed since the source material was placed, it is probable that conditions for equilibrium were established between contaminant migration rates and contaminant mass destruction by natural attenuation

mechanisms. Additionally, the subsequent removal of the source material will have had the long-term effect of decreasing contaminant mass, contaminant concentrations, and the downgradient extent of contamination in groundwater at the Site.

Therefore, we believe that the current groundwater contamination present in Sludge Disposal Area Number 2 does not present an impediment to construction and operation of DMMA DU-9. We do not believe that the groundwater contamination, as indicated from the most recent monitoring data, presents a material threat to human health or the environment, and we do not believe that construction or operation of DMMA DU-9 would alter current conditions so as to create such a threat.

We appreciate being given the opportunity to work with you and your client on this project. Please feel free to contact us with any questions or comments concerning this proposal.

Sincerely,

**GOLDER ASSOCIATES INC.**

Michael J. Dickey, PE  
Senior Engineer

James P. Oliveros, PG  
Senior Consultant/Principal

Attachments

JPO/MJD/ams

FN: C:\Users\markc\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Outlook\C6EXKS00\Estuary Corporation DU-9 Technical Analysis.docx





PROJECT	G2014-075
ORGANIZATION	AF
PAGES	1 OF 1
DATE	DEC 2014

## **ENVIRONMENTAL MATTERS AGREEMENT**

This Environmental Matters Agreement ("Agreement") dated \_\_\_\_, 2015, is by and between Estuary, LLC, a Florida limited liability company formerly known as Estuary Corporation ("Estuary") and the Florida Inland Navigation District, an independent special taxing district of the State of Florida ("FIND").

### **RECITALS**

WHEREAS, Estuary owns approximately 26,000 acres in Duval and St. Johns Counties which is known as Dee Dot Ranch; and

WHEREAS, in 1979, a 14.5 acre portion of the Dee Dot Ranch located in St. Johns County and more particularly described in Exhibit "A" attached hereto and made a part hereof by reference (the "Site") was leased by Estuary to Duval Septic Tank Company, Inc. for disposal of municipal sewage sludge authorized by the Florida Department of Environmental Regulation through Permit No. 5016-23054; and

WHEREAS, the Site is also referred to as the former Dee Dot Ranch Sludge Land Farm Disposal Area No. 2; and

WHEREAS, Duval Septic Tank Company, Inc. disposed of sewage sludge at the Site between May 16, 1980 through June 1, 1983; and

WHEREAS, unbeknownst to Estuary, such sewage sludge contained contaminants or pollutants in violation of Permit No. 5016-23054; and

WHEREAS, in the 1980's, the U.S. Environmental Protection Agency ("EPA") identified the Site for CERCLIS evaluation based on information presented by the Florida Department of Environmental Regulation; and

WHEREAS, in 1989, EPA conducted a Site Investigation and prepared a Screening Site Inspection Report reflecting detection of certain constituents in concentrations higher than background samples; and

WHEREAS, a 185 acre parcel, which included the Site, and which is more particularly described in Exhibit "B" attached hereto and made a part hereof by reference, ("DMMA DU-9") was deeded by Estuary to FIND in 1995 for use by FIND and the U.S. Army Corps of Engineers ("ACOE") as a dredge material management area; and

WHEREAS, Estuary did not inform FIND that the Site had previously been used as a sludge land farm disposal area; and

WHEREAS, in 2000, EPA requested that the Florida Department of Environmental Protection ("FDEP") consider taking action at the Site as EPA considered the Site to be a "low priority"; and

WHEREAS, during the time period from 1980-2000, Estuary and FIND were never notified by EPA or FDEP of regulatory concerns regarding the Site; and

WHEREAS, in January 2001, as part of preparation of DMMA DU-9 for dredge material management, FIND's environmental consultant reported odors in soil and qualitative analysis of soil samples reflected elevated levels of contaminants; and

WHEREAS, in March/April 2001, FDEP issued a Notice of Violation and Order for Corrective Action to Estuary alleging improper disposal of industrial or hazardous waste resulting in contamination of soil and groundwater; and

WHEREAS, in November 2002, Estuary entered into Consent Order No. 01-0219, a copy of which is attached hereto as Attachment \_\_\_\_ ("Consent Order") with FDEP regarding assessment and remediation of potential environmental contamination at the Site; and

WHEREAS, from 2003 to 2006, Estuary removed approximately 9,200 tons of sludge and impacted soil, and recovered and treated about 10.3 million gallons of contaminated groundwater from the Site; and

WHEREAS, to date, Estuary has expended significant sums of money for site assessment and remediation; and

WHEREAS, Estuary's remediation efforts have resulted in significant reductions in contaminants at the Site in both the shallow and intermediate groundwater zones of the surficial aquifer; and

WHEREAS, remaining contaminants in groundwater at the Site are localized and confined within the limits of the Site both horizontally and vertically; and

WHEREAS, the surficial aquifer at the Site is not a viable drinking water source and there are no downgradient groundwater uses in close proximity to the Site; and

WHEREAS, there are no development plans for the Site other than dredge spoil disposal; and

WHEREAS, the Site is completely surrounded by property owned by Estuary, providing a significant buffer zone around the Site; and

WHEREAS, on March 17, 2014, FDEP determined that conditional closure is appropriate for the Site in accordance with Rule 62-780.680(2), Florida Administrative Code, conditioned upon FIND's implementation of an institutional control on the Site prohibiting the withdrawal and use of surficial groundwater for potable purposes; and

WHEREAS, in its March 17, 2014, correspondence, a copy of which is attached hereto as Attachment \_\_\_, FDEP stated that any such institutional controls on the Site would not restrict FIND from developing and operating the Site as a dredge material management area; and

WHEREAS, Estuary desires to obtain a Site Rehabilitation Completion Order ("SRCO") from FDEP regarding the Site and to terminate its obligations under the Consent Order; and

WHEREAS, FIND wishes to obtain necessary permits for the construction and operation of DMMA DU-9 as a dredge material management area; and,

WHEREAS, in furtherance of the parties intentions, Estuary and FIND wish to allocate responsibility between them for Environmental Matters at the Site;



## **AGREEMENT**

NOW, THEREFORE, in consideration of the foregoing, and of other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged by each of the undersigned parties, Estuary and FIND further agree as follows:

### **I. DEFINITIONS**

1. "Effective Date" as referred to in this Agreement means the date on which both parties have executed the Agreement.

2. "Environmental Laws" as referred to in this Agreement means: 49 CFR Section 172.101; 40 CFR Part 302, and amendments thereto; Section 311 of the Clean Water Act, 33 U.S.C. Section 1321, et seq.; Section 307 of the Clean Water Act, 33 U.S.C. Section 1317; Section 1004 of the Solid Waste Disposal Act, 42 U.S.C. section 6901, et seq., 42 U.S.C. Section 6903; Section 101 of the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. Section 9601, et seq., 42 U.S.C. Section 9601; Chapter 376 or 403, Florida Statutes, and regulations thereunder in Title 62, F.A.C., as amended; and all other laws concerning or relating to public health and safety, worker/occupational health and safety, and pollution or protection of the environment now or in the future in effect.

3. "Contaminants" or "Contamination" as referred to in this Agreement means those substances listed in Attachment \_\_\_ attached hereto and made a part hereof, together with any degradation products thereof, regardless of concentration.

4. "Release of Contaminants" as referred to in this Agreement means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, disposing, migrating, or placing into the environment of a Contaminant resulting from sludge disposal activities occurring on the Site from May 16, 1980 through June 1, 1983.

### **II. FIND OBLIGATIONS**

FIND agrees to work cooperatively and support Estuary in Estuary's efforts to obtain a SRCO for the Site from FDEP pursuant to Chapter 62-780, Florida Administrative Code and to terminate its obligations under the Consent Order. Estuary and FIND agree that as part of Estuary's efforts to obtain a SRCO from FDEP that Estuary may utilize and rely upon local, state, and federal risk-based corrective action laws, regulations, and policies on the Site, including but not limited to, Chapter 62-780, Florida Administrative Code. FIND agrees to permit institutional controls to be employed on the Site, as necessary, and to execute all documents required to effectuate such institutional controls. FIND agrees that any such institutional controls may be imposed so long as such controls do not unreasonably impact FIND's development and operation of the Site as planned for dredge material management only. FIND agrees that these institutional controls will run with the land in the form of Deed Restrictions that will be recorded by FIND in accordance with Florida real estate laws. As

necessary, FIND agrees to execute a Declaration of Restrictive Covenant in substantially the form attached as Exhibit "B" or as otherwise approved by FDEP.

### **III. ESTUARY OBLIGATIONS**

Estuary agrees to pay all reasonable environmental consultant and attorneys' fees and related costs associated with its efforts to obtain a SRCO for the Site from FDEP. Estuary agrees to pay for the preparation of all documents as well as attendant costs associated with risk-based closure for the Site including the development of and recordation of institutional controls to be placed on the Site which may serve as the basis for FDEP's issuance of a SRCO. In addition, Estuary agrees to pay for preparation of any plans, as necessary, to address extracted groundwater that is determined to contain Contaminants in excess of standards or criteria in applicable Environmental Laws during FIND's development of the Site for dredge material management. Such plans shall be subject to FIND's approval, which shall not be unreasonably withheld or delayed. Estuary also agrees to pay all costs incurred by FIND or the ACOE in managing any such Contaminants in extracted groundwater in accordance with any such plans and applicable Environmental Laws.

### **IV. RELEASE, HOLD HARMLESS and COVENANT NOT TO SUE**

Release, Hold Harmless and Covenant Not to Sue by Estuary. Estuary, for itself and its successors, officers, directors, managers, shareholders, members, agents, servants, employees, beneficiaries, trustees, subcontractors, heirs, assigns and personal representatives (collectively "Estuary Releasors") hereby unconditionally and fully release, hold harmless, and covenant not to sue FIND, its officers, directors, commissioners, employees, agents, successors, assigns and personal representatives (collectively "FIND Releasees") of and from any and all past, present and future obligations, claims (including but not limited to claims for contribution and indemnity), demands, liabilities, damages, lawsuits, judgments, controversies, costs, expenses, fees (including but not limited to attorneys' fees in all courts), penalties, actions, and causes of action of any nature whatsoever, at law or in equity ("Claims"), whether foreseen or unforeseen, matured or unmatured, known or unknown, accrued or not accrued, direct or indirect, latent or patent, discoverable or undiscoverable, which Estuary Releasors ever had, now have or can, shall or may hereafter have, against FIND Releasees related to or arising out of (i) the Release of Contaminants, and (ii) any off-site migration of the Contaminants from the Site onto other real property, including, without limitation, real property owned by Estuary, even if such off-site migration is the result of FIND's construction and use of the dredge material management facility on DMMA DU-9 (collectively, the "Environmental Matters").

## **V. INDEMNIFICATION**

Estuary Releasors hereby agree to indemnify, defend and hold harmless FIND Releasees of and from any and all past, present and future Claims, whether foreseen or unforeseen, matured or unmatured, known or unknown, accrued or not accrued, direct or indirect, latent or patent, discoverable or undiscoverable, related to or arising out of the Environmental Matters.

## **VI. REIMBURSEMENT OF ADDITIONAL COSTS**

Estuary acknowledges that FIND is in the process of designing, permitting and constructing the final phase of the dredge material management facility on DMMA DU-9. Estuary agrees to reimburse any costs incurred by FIND or ACOE in the design, permitting, construction or operation of the dredge material management facility to the extent such costs would not have been incurred but for the presence of the Contaminants at the Site.

## **VII. DISPUTE RESOLUTION**

This Agreement will be construed under Florida Law. Estuary and FIND will have thirty days from the date a dispute arises between them to attempt to resolve the matter through mediation, failing which the parties will resolve the dispute through neutral binding arbitration in the county where the Property is located. The arbitrator may not alter the Agreement terms or award any remedy not provided for in the Agreement. The award will be based on the greater weight of the evidence and will state findings of fact and the Agreement authority on which it is based. If the parties agree to use discovery, it will be in accordance with the Florida Rules of Civil Procedure and the arbitrator will resolve all discovery related disputes. For purposes of this Agreement, "mediation" is the process in which parties attempt to resolve a dispute by submitting it to an impartial mediator who facilitates the resolution of the dispute but who is not empowered to impose a settlement on the parties. Mediation will be in accordance with the Rules of the American Arbitration Association ("AAA") or other mediator agreed on by the parties. The parties will equally divide the mediation fee if any. For purposes of this Agreement "arbitration" is a process in which the parties resolve a dispute by a hearing before a neutral person who decides the matter and whose decision is binding on the parties. Arbitration will be in accordance with the rules of the AAA or other arbitrator agreed on by the parties. Each party to any arbitration will pay its own fees, costs, and expenses, including attorneys' fees, and will equally split the arbitrator's fees of arbitration. In a civil action to enforce an arbitration award, the prevailing party to the arbitration shall be entitled to recover from the non-prevailing party reasonable attorneys' fees, costs, and expenses.

## **VIII. INFORMATION SHARING**

Estuary shall provide FIND copies of all data, reports, other documents, and any other information submitted to any governmental agency concerning compliance with Environmental Laws or arising out of the release of Contaminants without charge.

## **IX. NOTICES**

All notices, requests, demands or other communications required or permitted under this Agreement shall be in writing and shall be delivered to the following:

Estuary:      Jed Davis  
                   Harry Francis  
                   E. Ellis Zahra, Jr., Esq.  
                   Estuary Corporation  
                   P.O. Box 19366  
                   Jacksonville, FL 32245-9366

and

Michael P. Petrovich  
 Hopping Green & Sams  
 119 South Monroe Street, Suite 300  
 Tallahassee, Florida 32301

FIND:          Mark Crosley  
                   Florida Inland Navigation District  
                   1314 Marcinski Road  
                   Jupiter, FL 33477-9498

and

Peter L. Breton  
 Breton, Lynch, Eubanks & Suarez-Murias, P.A.  
 605 North Olive Avenue, 2<sup>nd</sup> Floor  
 West Palm Beach, Florida 33401

#### **X. MISCELLANEOUS**

1. This Agreement may not be amended except by a written agreement signed by both Estuary and FIND.
2. This Agreement shall be governed by the laws of the State of Florida.
3. This Agreement sets forth the entire understanding of the parties with respect to the Environmental Matters associated with the Site, and supersedes all prior and contemporaneous understandings and agreements whether oral or in writing.
4. Each of the undersigned has been represented by separate legal counsel and has had the opportunity to obtain legal advice concerning this Environmental Matters Agreement.

5. The Agreement may be executed in one or more counterparts, each of which shall be an original, but all of which shall constitute one and the same Agreement. Facsimile signatures of this Agreement shall be deemed originals.

6. The undersigned parties certify that they are duly authorized to execute and enter into this Agreement for the parties designated.

IN WITNESS WHEREOF, Estuary and FIND have executed this Agreement on this \_\_\_\_ day of \_\_\_\_\_, 2015.

[INTENTIONALLY LEFT BLANK]



**FLORIDA INLAND NAVIGATION  
DISTRICT**

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

STATE OF FLORIDA :  
COUNTY OF \_\_\_\_\_ :

The foregoing instrument was acknowledged before me this \_\_\_\_\_ day of \_\_\_\_\_, 2015, by \_\_\_\_\_, who is personally known to me [ ] or who has produced \_\_\_\_\_ (type of identification) as identification.

NOTARY PUBLIC:

Signature: \_\_\_\_\_  
State of Florida at Large (Notary Seal)

**ESTUARY, LLC**

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

STATE OF FLORIDA :  
COUNTY OF \_\_\_\_\_ :

The foregoing instrument was acknowledged before me this \_\_\_\_ day of \_\_\_\_\_, 2015, by \_\_\_\_\_, who is personally known to me [ ] or who has produced \_\_\_\_\_ (type of identification) as identification.

NOTARY PUBLIC:

Signature: \_\_\_\_\_  
State of Florida at Large (Notary Seal)

## Mark Crosley

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**From:** Orozco, Geezella <Geezella.Orozco@fpl.com>  
**Sent:** Monday, April 06, 2015 5:20 PM  
**To:** John Adams  
**Cc:** Mark Crosley; Blary, David; Orozco, Geezella  
**Subject:** Utility Crossings  
**Attachments:** Ballpark estimate Seville Street.pdf; Ballpark estimate swimming hall of fame.pdf

John,

Per our meeting last 3/25, please see attached ballpark estimate letters for both the Swimming Hall of Fame and the Seville Street crossing.

In addition, we attempted to start the as-built for the Swimming Hall of Fame crossing last week. We found that due to the depth, channel traffic, and extensive sediment at the bottom of the channel, the as-built will be a greater undertaking than previously anticipated.

We anticipate that the work will require additional cost as well as obtaining an underwater excavation permit in order to dig the bottom of the channel and obtain depth of the crossings.

Please let me know your earliest available date for us to have another conference call to discuss next steps. I will send out a meeting invite.

Thanks,  
 Geezella

---

**From:** John Adams [mailto:JAdams@Taylorengineering.com]  
**Sent:** Tuesday, March 24, 2015 6:15 AM  
**To:** Orozco, Geezella; Musser, Beverly  
**Cc:** mcrosley@aicw.org; Lori Brownell; Blary, David  
**Subject:** RE: Utiltiy Crossings

This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email.

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Thank you. We look forward to working with you to determine the best solutions for FPL & FIND.

**John F. Adams, P.E.**  
*Senior Advisor, Waterfront Group*

---

**From:** Orozco, Geezella [Geezella.Orozco@fpl.com]  
**Sent:** Monday, March 23, 2015 10:38 PM  
**To:** Musser, Beverly; John Adams  
**Cc:** mcrosley@aicw.org; Lori Brownell; Blary, David  
**Subject:** RE: Utiltiy Crossings

John,

I will be managing this project and will be working with David Blary. We have requested as-built information for both the Seville Street and the Swimming hall of fame crossings. We want to make sure we have updated and accurate as-builts to provide to you in order to best coordinate your design and the allowable distance from our crossings.

In the meantime, we will work with our construction standards team to provide the minimum distance we can allow dredging from our crossings.

If you have any questions, please do not hesitate to contact me at 954-644-3013.

Thanks,

**Geezella Orozco**

Central Broward Engineering Lead  
Florida Power & Light Company  
Tel 954.717.2082 | Mobile 954.644.3013  
[Geezella.Orozco@fpl.com](mailto:Geezella.Orozco@fpl.com) | [www.fpl.com](http://www.fpl.com)

---

**From:** Musser, Beverly  
**Sent:** Monday, March 23, 2015 5:10 PM  
**To:** John Adams  
**Cc:** [mcrosley@aicw.org](mailto:mcrosley@aicw.org); Lori Brownell; Blary, David; Orozco, Geezella  
**Subject:** RE: Utilitiy Crossings

**Hi John,**

Please see my responses to your inquiry below:

- Yes, we are still on for the 11:00 conference call scheduled for this Wednesday, 3/25/15
- I do not have a copy of as-built information for Seville Street, but I have copied the Area Manager, David Blary, in the event he has a copy of as-built information
- The Area Manager, David Blary, can respond to the dredge depth question below
- FYI: I have the capability to provide permits/easement information regarding waterway crossings; however, David Blary is the contact person for all other questions.

**Hi David,**

Please see Johns questions below.

Thanks and have a great evening,

Beverly Musser  
FPL Power Delivery  
Environmental Department (ENV/AOB)  
7200 NW 4<sup>th</sup> Street  
Plantation, Fl. 33317  
954-321-2183

Challenges make you discover things about yourself that you never really knew.

---

**From:** John Adams [<mailto:JAdams@Taylorengeeneering.com>]  
**Sent:** Monday, March 23, 2015 3:16 PM  
**To:** Musser, Beverly

**Cc:** [mcrosley@aicw.org](mailto:mcrosley@aicw.org); Lori Brownell  
**Subject:** Utility Crossings

This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email.

I assume we are still on for our 11am conference call??

Concerning the Seville Street Crossing: From the attached permit it appears the line was to be installed at -17.5ftmlw. I believe I have asked this before, but anyway, is there any as-built information as required by the permit? Assuming this line is at -17.5ft, I have discussed with Mark Crosley (FIND) to restricting dredging in this area to -13ft +1ft for a maximum depth of -14ftmlw. We will advise the contractor of the location of the crossing and require that they locate the line via divers and other means to ensure we know to be best of our knowledge the exact depth of the line. Is this something FPL can live with at the Seville St Crossing?

**John F. Adams, P.E.**

*Senior Advisor, Waterfront Group*



10151 Deerwood Park Blvd.  
Bldg. 300, Suite 300  
Jacksonville, FL 32256  
Phone (904) 731-7040  
Cell (904) 434-2571





Florida Power &amp; Light Company

April 6, 2015

John F. Adams  
Senior Advisor, Waterfront Group  
Taylor Engineering, Inc.  
10151 Deerwood Park Blvd.  
Bldg. 300, Suite 300  
Jacksonville, FL 32256

Re: Florida Power and Light Company Utility Crossings at Seville Street, Fort Lauderdale

Dear John,

In response to your request on 3/25/15, the non-binding "ballpark" estimate to replace the existing section of one main line crossing the intercoastal waterway at Seville Street in Fort Lauderdale with sufficient depth to clear the proposed new Intercoastal Waterway channel depth is \$650,000. This amount is an "order of magnitude" estimate **only**. This estimate is not an offer from FPL to perform the requested work and should not be construed or used as such for detailed planning purposes. It is provided strictly to assist your preliminary decision making. FPL shall not be held liable for any variations that may occur between this "order of magnitude" estimate and any detailed cost estimates that may subsequently be provided by FPL.

Should you desire to pursue this matter further by requesting a "binding" detailed Engineering Cost Estimate, an engineering deposit in the amount of \$14,400 will be required. This request must be made in writing and shall specify, in detail, the scope of work to be included in the estimate. Binding Detailed Engineering Cost Estimates are valid for six months and subject to change in the event of a work scope change.

Should you pay an engineering deposit and elect to have the work performed (the work included in the estimate for which the deposit was paid), that deposit will be applied to the FPL work order as customer Contribution in Aid of Construction (CIAC). This applied amount would contribute toward the total CIAC amount determined by the detailed cost estimate, if the CIAC is paid while the estimate is valid. If you elect not to have that work performed, or if no CIAC payment is made while the estimate is valid, the deposit will be withheld by FPL to defray a portion of FPL's cost to produce the estimate.

Should additional detailed estimates be required for work not included in your original request, you may be required to pay any additional FPL engineering costs to produce those estimates.

Please contact me at (954)717-2082 if you have any questions.

Sincerely,

Geezella Orozco  
Engineering Leader  
Distribution Engineering  
Power Delivery  
Office: (954) 717-2082  
Cell: (954) 644-3013



Florida Power &amp; Light Company

April 6, 2015

John F. Adams  
 Senior Advisor, Waterfront Group  
 Taylor Engineering, Inc.  
 10151 Deerwood Park Blvd.  
 Bldg.300, Suite 300  
 Jacksonville, FL 32256

Re: Florida Power and Light Company Utility Crossings at Swimming Hall of Fame

Dear John,

In response to your request on 3/25/15, the non-binding "ballpark" estimate to replace the existing section of five main lines crossing the Intercoastal Waterway at the south side of the Swimming Hall of Fame with sufficient depth to clear the proposed new Intercoastal Waterway channel depth is \$2.25 million. This amount is an "order of magnitude" estimate **only**. This estimate is not an offer from FPL to perform the requested work and should not be construed or used as such for detailed planning purposes. It is provided strictly to assist your preliminary decision making. FPL shall not be held liable for any variations that may occur between this "order of magnitude" estimate and any detailed cost estimates that may subsequently be provided by FPL.

Should you desire to pursue this matter further by requesting a "binding" detailed Engineering Cost Estimate, an engineering deposit in the amount of \$21,600 will be required. This request must be made in writing and shall specify, in detail, the scope of work to be included in the estimate. Binding Detailed Engineering Cost Estimates are valid for six months and subject to change in the event of a work scope change.

Should you pay an engineering deposit and elect to have the work performed (the work included in the estimate for which the deposit was paid), that deposit will be applied to the FPL work order as customer Contribution in Aid of Construction (CIAC). This applied amount would contribute toward the total CIAC amount determined by the detailed cost estimate, if the CIAC is paid while the estimate is valid. If you elect not to have that work performed, or if no CIAC payment is made while the estimate is valid, the deposit will be withheld by FPL to defray a portion of FPL's cost to produce the estimate.

Should additional detailed estimates be required for work not included in your original request, you may be required to pay any additional FPL engineering costs to produce those estimates.

Please contact me at (954)717-2082 if you have any questions.

Sincerely,

Gezella Orozco  
 Engineering Leader  
 Distribution Engineering  
 Power Delivery  
 Office: (954) 717-2082  
 Cell: (954) 644-3013

## Broward Utility Crossings

March 2015

#1 TECO Crossing: Located approximately 80ft below existing channel. No issue concerning dredging project.

City of Fort Lauderdale: There are several existing and abandoned crossings in this area. Further field and City investigation is required. Current knowledge is as follows:

South side of bridge:

16" CIP Waterline located on Atlas Sheet City Water Line and Water Main 16in 4-61-36.

12" Waterline is listed as abandoned on Atlas Sheet City Line 3 and file B4-39-36.

North side of Bridge:

24" DIP Force Main shown on Atlas Sheet City Sewer Line and DE-3090 and located at a depth of about -15 meters.

24" Waterline shown on Atlas Sheet City Water Line and DE-3090 at a depth of about -15 meters.

16" Force Main listed as abandoned on Atlas Sheet City Sewer Line.

#2 Florida Power and Light: There are at least two USACE permits for cable crossings at this area (SAKSP 800.61 (10285) dated Nov 17, 1954 and GP 81-1123 SAJ-14 (MOD) dated Jul 24, 1981). Both permits show cables laid on the bottom of the channel in 26 feet of water. There is sufficient depth for navigation west of the channel in this area. Therefore, FIND will not dredge in this area and no action is required concerning this crossing.

#3 FPL Crossing at Swimming Hall of Fame: This crossing is identified as Easement Number 26581 and USACE Permit (84(3) - 4436 SAJ-14) dated Nov 6, 1984. Google Earth map is not accurate where it shows two feeders by the Swimming Hall of Fame. On the Google Earth map there are two feeders where it says "Progresso" and three feeders where it says "Orchid" (in the water body/ICWW). All five feeders are actually where it says "Progresso", which is from an approximate latitude and longitude of from 26.115953, -80.109468 to 26.115997, -80.108052.

**This crossing will be relocated.**

#4 TECO Crossing: There are two utility gas crossings. The one identified as Crossing #4 is located south of the Las Olas Bridge and appears to be +/-35ft below existing channel. The second line has been retired in place and is located north of the Las Olas Bridge identified as a "Possible Utility Crossing". Information on both is located at TECO Crossing Two Lines, TECO Las Olas Cross Section and Crossing #4 TECO TIF Cover Sheet.

City of Fort Lauderdale: The City has been unable to provide cross sections for these crossings. Therefore, further field investigations must occur.

South Side of Bridge:

There is a 10" or 16" CIP Water Line that has been abandoned. The City cannot locate as-built information on this line. It is noted on City Las Olas Crossing.

There is also a 10" Force Main noted on City Las Olas Crossing for which there is no additional information.

North Side of Bridge:

There is a 16" CIP Water Main located on City Las Olas Crossing and Atlas Sheet Water Line.

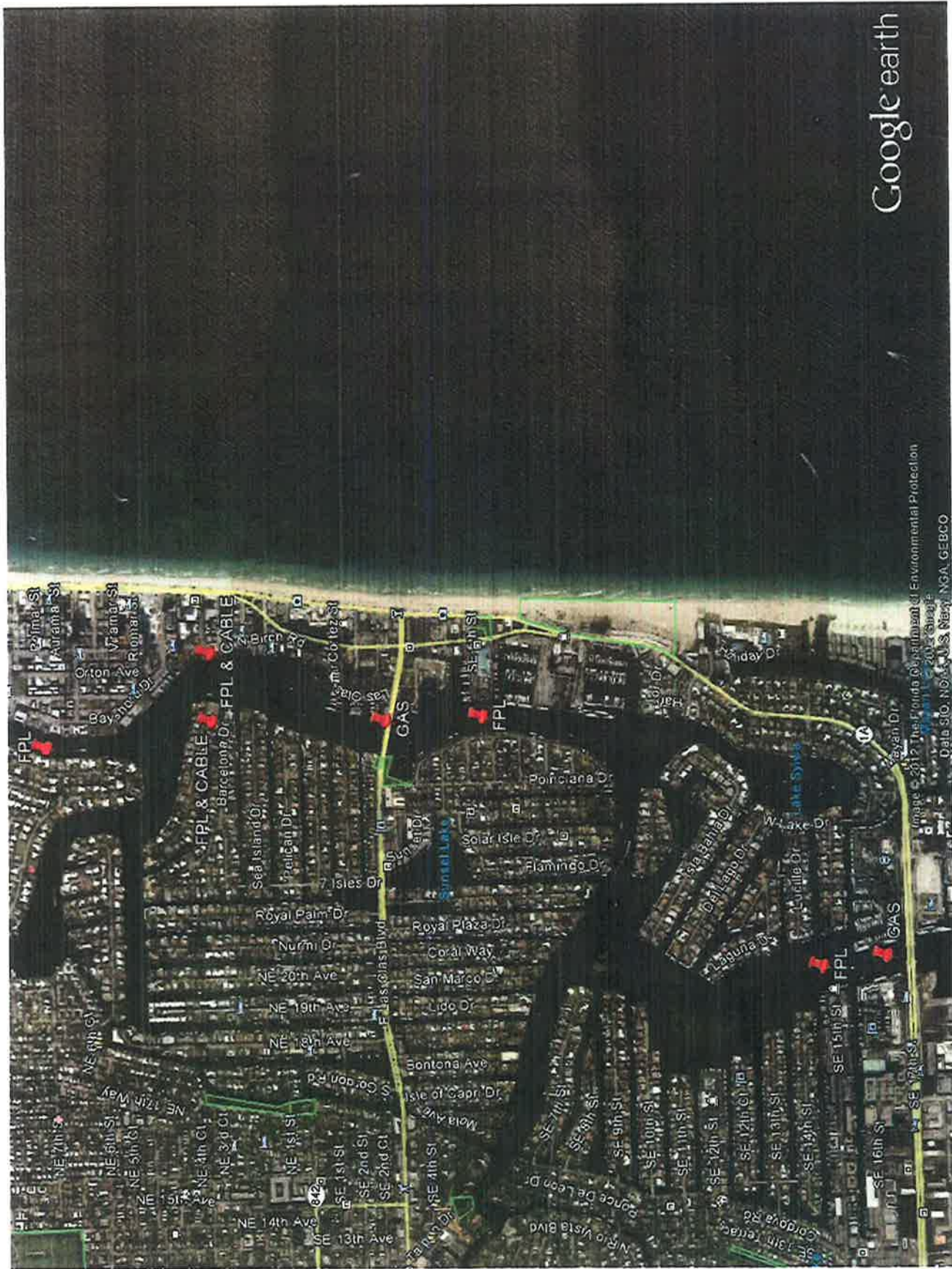
FDOT: Along the south side of the Las Olas Bridge, FDOT has a cable located at approximately -19ft mlw. The plan is to limit dredging at this location to -15ft + 1ft overdepth maximum. We do not anticipate a problem with this plan. This cable is best located on ARC Survey.

#5 No information has been obtained concerning this "Possible Crossing".

#6A TV Cable Crossing: The only information located concerning this is the TIF Package at Crossing #6A TIF Cover Sheet.

#6B FPL Crossing: Information is located at Crossing #6B TIF Cover Sheet and FPL Seville St Crossing Docs which include Google Earth and USACE Permit (199705294 (GP-RR)) dated Aug 13, 1997.

**This crossing will be relocated.**



Google earth

miles  
km

2  
3





**ALCALDE & FAY**

GOVERNMENT &amp; PUBLIC AFFAIRS CONSULTANTS

April 2, 2015

**MEMORANDUM**

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

**FROM:** Jim Davenport

**SUBJECT: Federal Legislative Report**

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**FEDERAL FUNDING FOR THE INTRACOASTAL WATERWAY**

Since our last report, we were successful in obtaining support from several members of FIND's congressional delegation to submit two specific requests to the House and Senate Energy and Water Appropriations Subcommittees, which are: \$50 million for Navigation, and \$50 million for Inland Waterways. On March 16<sup>th</sup>, Representatives Lois Frankel, Bill Posey, Alcee Hastings, Ted Deutch, Carlos Curbelo, Debbie Wasserman Schultz, Corrine Brown, Frederica Wilson, Patrick Murphy and Curt Clawson submitted the request to the Subcommittee (see attached). Note that Congressman Clawson does not represent the Intracoastal Waterway. He does, however, have the Gulf Intracoastal Waterway in his Lee County congressional district, and we reached out to his office to support the request.

We also asked Senator Bill Nelson to submit a similar request to the Senate Energy and Water Appropriations Subcommittee, and from what we understand, he submitted a request.

This morning, we met with the new Senate Energy and Water Appropriations Subcommittee staff, Sharon Haggett, Professional Staff Member, Majority, and Mark Mendenhall, Professional Staff Member, Minority. Sharon and Mark replaced Roger Cockrell in early March. Both Sharon and Mark are long-term Corps of Engineers employees on detail to the Senate. Both spent time at Corps Headquarters. Sharon spent time in Wilmington, NC and is familiar with several projects in the South Atlantic Division. She was aware of the Florida Inland Navigation District. Mark spent time with the Corps in the southwest. They were friendly and we look forward to working with them.

## MAGNUSON STEVENS ACT REAUTHORIZATION

As you know, on March 18<sup>th</sup>, Mark Crosley and I met with Lauren Reamy, Legislative Assistant for Senate Marco Rubio, who is handling Magnuson Stevens Act reauthorization issues for the Senator, who chairs the Subcommittee on Oceans, Atmospheres, Fisheries and Coast Guard. Lauren admitted that she was just brought onboard, and is learning these issues. But we had the opportunity to discuss the Essential Fish Habitat (EFH) consultation issues as it relates to maintenance dredging. It also seems that the Senate is unlikely to introduce its own Magnuson Stevens Act reauthorization bill at this time, and is more likely to rely on the House to pass a bill and send it over to the Senate. Nevertheless, we are going to prepare a letter to Senator Rubio and Senator Nelson, on FIND's behalf, to address this issue and will send you a draft very soon.

On March 19<sup>th</sup>, Jim Davenport met with Bill Ball, Professional Staff and Kiel Weaver, Staff Director for House Resources Subcommittee on Water, Power and Oceans. They are working with Bonnie Bruce, Legislative Assistant to Congressman Don Young (R-AK) to handle the Magnuson Stevens Act reauthorization legislation, H.R. 1335, which was introduced on March 4<sup>th</sup> and referred to the Water, Power and Oceans Subcommittee on March 23<sup>rd</sup>. The bill addresses very specific fish issues, including fish stocks, overfishing, and regional fishery management, but it does not address EFH.

During the meeting, I covered FIND's problem with the EFH consultation process. Kiel and Bill asked whether our issue could be handled outside of the Magnuson reauthorization bill, and I informed them of our meeting in Florida with National Marine Fisheries and the Corps, and that the Corps was attempting to move forward with a regional general permit and/or programmatic consultation that would address the problem, though I confessed that the process could be lengthy and may not ultimately produce what FIND wants. They made the point that the Corps can override NMFS recommendations on a consultation, but I told him the Jacksonville District Office is sensitive to working with NMFS on EFH consultations.

They admitted they are trying/planning to keep the bill tight, as written, because Congressman Young does not want to open it up to opposition from the environmentalists and fishing groups. They are planning to avoid EFH matters.

I informed them that they might be hearing from members of the Florida congressional delegation. They said they are planning to mark-up H.R. 1335 during the second half of April, but were not optimistic that the bill would advance in the Congress this year.

At this point, I have sent a draft letter over to Representatives Posey, Ros-Lehtinen, Murphy and Frankel to ask that they consider contacting Congressman Don Young and ask that language be included in H.R. 1335 that states EFH "[c]onsultation is not required for maintenance dredging in a congressionally authorized waterway or harbor." I have been in touch with staff for these members and they are considering the language request and also the best method to do it.

We will continue to keep you apprised of our efforts, and please contact me with any questions.

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

March 16, 2015

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 FY2016 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.*

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

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 use waterways transport recreational vessels, providing billions in economic output, person wages and increased property values.

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,



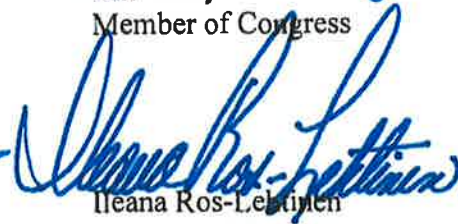
Lois Frankel  
Member of Congress



Bill Posey  
Member of Congress



Alcee L. Hastings  
Member of Congress



Illeana Ros-Lehtinen  
Member of Congress



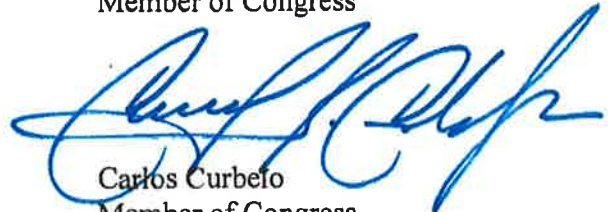
Corrine Brown  
Member of Congress



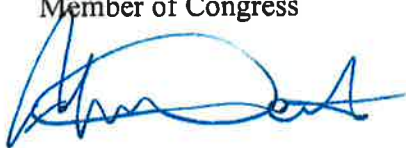
Curt Clawson  
Member of Congress



Debbie Wasserman Schultz  
Member of Congress



Carlos Curbelo  
Member of Congress



Theodore E. Deutch  
Member of Congress



Frederica S. Wilson  
Member of Congress



Patrick E. Murphy  
Member of Congress



## Mark Crosley

---

**From:** James Davenport <davenport@alcalde-fay.com>  
**Sent:** Tuesday, March 31, 2015 10:16 AM  
**To:** Mark Crosley  
**Subject:** Port, Waterways Funds May Have Surplus Next Year

This article helps explain the issue that House Energy and Water Appropriations staffer Angie Giancarlo addressed.

### Port, Waterways Funds May Have Surplus Next Year

By Kellie Mejdrieh, CQ Roll Call

Congress has a self-inflicted problem in funding the nation's ports and waterways infrastructure: There's more money available than lawmakers are likely to spend.

Two funds Congress established decades ago — the Inland Waterways Trust Fund and the Harbor Maintenance Trust Fund — could spend less next year than the revenue they will collect. In the case of the HMTF, the spending is billions below its balance.

Port and inland waterway advocates say there are plenty of projects that need funding. The U.S. Army Corps of Engineers has reported a backlog of lock and dam construction projects and major repair work. Much of that infrastructure was built in the 1930s, and more than half the locks in the country are past their design life of 50 years.

Ports are also under-maintained: The Corps of Engineers has estimated that full channel dimensions of the nation's 59 busiest ports are available less than 35 percent of the time.

Yet the Treasury Department's most recent balance sheet shows the HMTF running a balance of more than \$9 billion. Congress appropriated \$1.1 billion in fiscal 2015, less than the \$1.8 billion in revenue the preceding year. And the president is asking to spend less in fiscal 2016 than Congress appropriated this year.



Upkeep on ports, such as the Port of New Orleans, is dependent on two federal trust funds that could spend less next year than the revenue they will collect. But port and inland waterways advocates say there are plenty of projects that could use an injection of funds. (Courtesy Daniel Foster/Creative Commons (CC BY-NC-SA 2.0))

The Inland Waterways Trust Fund surplus is much smaller, but industry representatives are worried Congress won't spend the revenue that's available. Last year, Congress approved a 9 cents per gallon increase in the diesel fuel tax that barge operators pay, in part to replenish a fund that had been drawn down to unsustainable levels over more than a decade.

Lawmakers' hands are tied by the Budget Control Act that limits discretionary spending. Converting the funds to mandatory programs, a move that would bypass the spending limits, looks unlikely in a Congress inclined to cut spending rather than safeguard it.

### **Harbor Maintenance**

The Harbor Maintenance Trust Fund brought in roughly \$1.8 billion in 2014 in taxes on cargo from importers and domestic shippers using coastal and Great Lakes ports. That fund was established by Congress in 1986 to fund operation and maintenance work on coastal navigation channels, including dredging.

Kristin Decas, who chairs the board of the American Association of Port Authorities, said she's not concerned about the \$9 billion right now. She'd be happy just to get what's raised each year appropriated.

"Our initial goal is just to get full use [of the HMTF revenue collected each year]," Decas said. "The reality is we've made a bunch of progress in getting it to this target."

Rep. Janice Hahn, D-Calif., is leading a push in Congress to make spending from the HMTF mandatory and plans to introduce legislation within months. Her district includes the Port of Los Angeles, one of the nation's busiest shipping hubs.

"It is really a breach of faith, I believe, with the federal government and those who pay this tax," she said. "I'd like to see the caps go away, and have it be a part of mandatory spending. If you collect a tax you have to spend it."

The Congressional Research Service said in a 2011 report the HMTF surplus was effectively lost in the budget, because the fund didn't have a separate account.

### **Inland Waterways**

Waterways Council President Mike Toohey estimates the barge diesel fuel tax will, at its increased level, put at least \$116 million into the Inland Waterways Trust Fund in fiscal 2016.

Toohey said that's more than the \$84.5 million spent from the fund last year. It's also more than the president's request to spend \$53 million from the fund in fiscal 2016.

"Our major concern is they don't spend that 9 cents," Toohey said to reporters earlier this month.

Unlike the HMTF, which pays 100 percent of the cost of dredging operations for most channels, the Inland Waterways Trust Fund pays for 50 percent of the cost of most major rehabilitation or construction projects. The federal government picks up the other 50 percent.

Operations and maintenance costs for inland waterways are funded 100 percent by the federal government.

### **Previous Commitments**

Congress took a stab at making both funds more effective in a piece of legislation last year known as the Water Resources Reform and Development Act.

Navigation groups lauded WRRDA as a plan to gradually increase spending from the HMTF to match what was collected and it established a process to improve project delivery and cost effectiveness of inland waterways projects, in part by limiting how much of the Inland Waterways Trust Fund went to the Olmsted Lock and Dam project on the Ohio River between Illinois and Kentucky. The bill received bipartisan support.

*First posted March 25, 2015 1:55 p.m.*

**Correction**

An earlier version of the story misidentified the ports in Janice Hahn's district.

Sent from Jim Davenport's iPhone



# **PRELIMINARY CONSENT AGENDA**

## **FLORIDA INLAND NAVIGATION DISTRICT Board of Commissioners Meeting**

**9:00 a.m., Friday, April 17, 2015**

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

**Item A.      Keep Nassau Beautiful, Inc. Waterway Clean Up Assistance Program Funding  
Request for the Annual St. Mary's River Celebration Cleanup Project in  
Nassau County, FL.**

Keep Nassau Beautiful, Inc. has submitted a funding request for their Annual St. Mary's River Celebration Clean-up, which also includes the Intracoastal Waterway Cleanup in Nassau County. The District has funded this cleanup in the past and it has been very successful. The request is for \$5,000 and is consistent with the District's program rules.

(Please see back up pages C-2 to C-3)

RECOMMEND      Approval of Keep Nassau Beautiful, Inc. request for \$5,000 in assistance with the Nassau County waterway cleanup.

---





P.O. Box 1434  
Yulee, FL 32041  
(904)261-0165  
800-977-0162  
[www.keeptnassaubautiful.org](http://www.keeptnassaubautiful.org)

April 1, 2015

REC'D

APR - 6 2015

Florida Inland  
Navigation District

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

RE: Waterway Cleanup Assistance

Dear Ms. Zimmerman:

We are requesting \$5,000 in assistance towards our cleanup efforts of the Atlantic Intracoastal Waterway, as well as other waterways within Nassau County.

As you know, rivers, with tributaries that crisscross our interior, bound mainland Nassau County on three sides. Annually, we conduct the St Marys River Celebration (March 28, 2015), a one day volunteer event which focuses on the major waterways of Nassau County.

During this year's event, we had 710 volunteers providing 3,550 hours. Through their efforts we collected approximately 32,000 pounds of refuse and 1425 tires from the St Marys, Amelia (Intracoastal), and Nassau Rivers, over 300 miles of waterways. This is a massive undertaking and requires extensive logistical coordination. Our Site Captains, at 21 separate locations, led the charge and did magnificent jobs in coordinating volunteer efforts and providing for a safe event.

This cleanup is highly resource intensive and requires coordination with numerous community agencies and businesses in order to fully execute a successful event. Your assistance insures our ability to continually increase participation and secure the necessary equipment to fully support the undertaking.

We look forward to a long and beneficial relationship serving the citizens of Nassau County.

Sincerely,

A handwritten signature in black ink, appearing to read 'Todd E. Duncan', is written over a horizontal line.

Todd E. Duncan, MBA  
Executive Director

Attachment:  
Invoice



DATE	INVOICE #
4/1/15	4-001

[illegible]

Keep Nassau Beautiful, Inc. is a 501©3 IRS Non-Profit.  
Federal Identification Number: 59-3092755  
Florida Department of Revenue Certificate of Exemption Number: 85-8012774680C-0