

PRELIMINARY AGENDA

FLORIDA INLAND NAVIGATION DISTRICT Board of Commissioners Meeting

9:00 a.m., Friday, October 16, 2015

Hyatt Regency Pier Sixty-Six Hotel,
2301 S.E. 17th Street Causeway,
Fort Lauderdale, Florida, USA, 33316-3107

Item 1. **Call to Order.**

Chair Blow will call the meeting to order.

Item 2. **Pledge of Allegiance.**

Commissioner Chappell will lead the Pledge of Allegiance to the United States of America.

Item 3. **Roll Call.**

Secretary McCabe will call the roll.

Item 4. **Consent Agenda.**

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

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

RECOMMEND: Approval of the Consent Agenda.

A) City of Dania Beach Small-Scale Derelict Vessel Removal Application, Broward County, FL.

Item 5. **Additions or Deletions.**

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

RECOMMEND: Approval of a final agenda.

Item 6. **Public Comments.**

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

Item 7. Board Meeting Minutes.

The minutes of the following meetings are presented for approval.

- September 12, 2015, - 1st Public Budget & Tax Hearing (Pls see back up pages 7-11)
- September 12, 2015 - Finance & Budget Committee Mtg. (Please see back up pp 12-14)
- September 12, 2015 - Board Meeting (Please see back up pages 15-38)
- September 24, 2015 - Final Public Tax & Budget Hearing (Pls see back up pp 39-49)

RECOMMEND: Approval of the minutes as presented.

Item 8. Comments from the U.S. Army Corps of Engineers.

The U.S. Army Corps of Engineers (USACE) project update will be presented in November.

Item 9. Staff Report on Broward County Area Projects.

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

(Please see back up pages 50-68)

Item 10. Presentation and Discussion of the Economic Analysis Update for the Dania Cut-off Canal Deepening Post-Project Completion, Broward County, FL.

In October 2014, the Board recommended evaluating the post-project benefits of the District's completed deepening of the Dania Cut-Off Canal project. Working with the Marine Industries Association of South Florida (MIASF), staff contracted with Thomas J. Murray and Associates, Inc. to conduct this evaluation.

Mr. Murray is also the Associate Director for Advisory Services at the William & Mary Virginia Institute of Marine sciences (VIMS). He has been invited to provide a brief summary of the study's finding and answer any questions.

Note that the study showed a marked increase in ALL aspects of the investigated economic parameters.

(Please see back up pages 69-95)

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

Item 11. Acceptance of the Qualified Low Bid for the Broward County Intracoastal Waterway Deepening Project, Broward County, FL.

A Request for Qualifications (RFQ) was distributed for the referenced project. On August 23, 2015, the Board short-listed the respondents to three (3) potential bids. Bids were received on October 6, 2015 to conduct the deepening of the Intracoastal Waterway (IWW) from Port

Item 11. (cont.)

Everglades north to the Las Olas Bridge. This project will increase the depth of the IWW from the current -10' Mean Low Water (MLW) to -15' MLW. The total length of the dredging area is approximately 11,250 feet in length, with 175,000 cu/yds of material expected to be removed from the existing channel. Included is an alternate bid for an area surrounding the Las Olas Bridge.

Three bids were received for this project. The low bid, \$16,923,550.00 (alternate bid \$200,000.00) from Cashman Dredging has been evaluated and qualified by Taylor Engineering.

(Please see back up pages 96-104)

RECOMMEND: Approval of the qualified low bid from Cashman Dredging in the amount of \$16,923,550.00 for the Broward County Intracoastal Waterway Deepening Project, Broward County, FL.

Item 12. **Agreement with the Marine Industries Association of South Florida for Additional Communication Services for the Broward Intracoastal Waterway Deepening, Broward County, FL.**

The Marine Industries Association of South Florida (MIASF) has offered to assist the Navigation District with communication and public coordination for the Broward Intracoastal Waterway (IWW) Deepening Project. The MIASF currently contracts with Starmark, a well-established communication firm in south Florida. The District would utilize the professional services of Starmark, as well as the MIASF organization.

The proposed agreement between the District and the MIASF would be for nine (9) months in duration, at a maximum amount of \$5,000 per month.

(Please see back up pages 105-114)

RECOMMEND: Approval of the proposed agreement with MIASF for public relations and communication services to support the Broward IWW Deepening Project, Broward County, FL.

Item 13. **Washington Report.**

The District's federal governmental relations firm has submitted a status report concerning activity on the District's federal issues and is scheduled to provide a brief presentation.

(Please see back up pages 115-116)

Item 14. **Agreement Extension – Federal Professional Legislative Services.**

The District's current agreement with Alcalde & Fay for professional services in federal legislative matters is expiring at the end of October. Last year, the Board considered this firm's requested extension. At that time the Board requested that Alcalde & Fay provide additional focus on the legislative aspects of the District's federal agenda, particularly federal permitting and review.

Item 14. (cont.)

The firm responded well, and has spent much of their past year's efforts tracking and initiating potential federal legislative changes that could benefit the District, including Water Resources Development Act (WRDA), the Magnuson-Stevens Act reauthorization and a Coast Guard bill.

Alcalde & Fay have done an excellent job representing the District for over 10+ years, and they have assisted in securing over \$35+ million in federal funding for the Intracoastal Waterway during that time. The recommendation includes a two-year contract, with a mutual clause for an additional one (1) year extension, with no increase in the monthly fee.

(Please see back up pages 117-120)

RECOMMEND: Approval of the proposed agreement extension of Alcalde & Fay for federal professional legislative services.

Item 15. **Dredged Material Management Area DU-9 Environmental Matters Agreement, Duval County, FL.**

In 2000, the Navigation District (District) obtained a permit to construct Dredge Material Management Area (DMMA) DU-9 in Duval County. Initial work on the site uncovered soil and ground water contamination and work was halted. In 2004, the District pursued the construction of that portion of the site not affected by contamination to facilitate a necessary forthcoming dredging project.

As the responsible party, the previous property owner worked with FDEP to satisfy a consent order to mitigate the contamination and monitor the site. After 15 years, and seeking to resolve this issue, the previous property owner has received a conditional closure letter from FDEP requiring "institutional controls on the property".

In September of 2014, the Board requested that staff work with the previous land owners to construct an agreement that delineated each parties' responsibilities and limited the District's future exposure and liability for site conditions. Over the course of the past year, the previous land owner, their representatives, staff, the District's attorney and the District Engineer have negotiated an "Environmental Matters Agreement" which limits the District's liability and allows the previous owners to obtain a Site Rehabilitation Completion Order (SRCO).

In addition, the approval of this agreement will allow the District to complete the permitting of, and construct, the full DMMA. The agreement also provides for a Release, Hold Harmless and Covenant Not to Sue.

(Please see back up page 121-199)

RECOMMEND: Approval of an Environmental Matters Agreement with Estuary Corporation (& BJD Timberlands LLC., a related corporation), including the Executive Director and District Attorney negotiation of minor revisions, for DMMA DU-9, Duval County, FL.

Item 16. Resolution 2015-08 for Acceptance of Commissioner Registered Mail.

On rare occasion, staff receives registered mail for a Commissioner at the District office, 1314 Marcinski Road, Jupiter, FL 33477. In order to legally accept this mail on behalf of a Commissioner, it is necessary to obtain prior written approval from the individual. Staff has crafted Resolution No. 2015-08 authorizing the acceptance of registered mail addressed to a Commissioner at the District office.

(Please see back up page 200)

RECOMMEND: Approval of Resolution No. 2015-08 authorizing the acceptance of registered mail addressed to a Commissioner at the Navigation District office, Palm Beach County, FL.

Item 17. Finance and Budget Committee Report.

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

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

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

Item 18. Additional Staff Comments and Additional Agenda Items.

a) **FEC Agreement for Crossing Maintenance at DMMA SL-2.**

(Please see back up page 201)

Item 19. Additional Commissioners Comments.

Item 20. 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**

First Public Tax and Budget Hearing

5:30 p.m., Friday, September 11, 2015

City of West Palm Beach City Hall, Flagler Gallery

401 Clematis Street

West Palm Beach, Palm Beach County, Florida 33401

ITEM 1. Call to Order.

The First Public Tax and Budget Hearing of the Board of Commissioners of the Florida Inland Navigation District was called to order by Chair Blow at 5:30 p.m.

ITEM 2. Pledge of Allegiance to the Flag.

Commissioner Isiminger led the pledge of allegiance to the flag of the United States of America. The Board observed a one-minute moment of silence, remembering those who lost their lives on September 11, 2001.

ITEM 3. Roll Call.

Assistant Executive Director Janet Zimmerman called the roll and Chair Blow, Vice-Chair Cuozzo, Treasurer Netts, Secretary McCabe, Commissioners Chappell, Dritenbas, Isiminger, Sansom, and Williams were present. Ms. Zimmerman stated that a quorum was present. She noted that Commissioner Crowley, Commissioner Donaldson and Commissioner O'Steen were not present. Commissioner Donaldson arrived to the meeting at 5:35 p.m.

ITEM 4. Announcement of the Per Cent by Which the Proposed Millage Rate Exceeds the Calculated Rolled-Back Rate.

Mr. Crosley stated that the calculated rolled-back rate is 0.0320 and the District's proposed millage rate is 0.0345, which is a 7.81% increase over the calculated rolled-back rate. He noted that the District is not increasing the millage rate, but this is considered a tax increase because property values have increased.

ITEM 5. Invitation for Public Comments.

Chair Blow stated that he would like to open the floor for public comments on the proposed budget. There were none.

ITEM 6. Comments by District Commissioners.

Chair Blow asked if there were any comments from the Commissioners.

Commissioner Isiminger stated that he is going to vote for the rolled-back rate. The District's budget shows that all funds have been committed, but that does not mean that funding will be completely expended next year. He feels that if the District were to expend all funding next year, the District has plenty of funding in reserve to cover any budget overages.

Commissioner Sansom noted that even though the District's proposed millage rate of 0.0345 is slightly over the rolled-back rate the District did not raise the millage rate. He noted that this rate is one-third the amount that the District is authorized to collect. As a regular member of the Finance and Budget Committee, he can say that only about \$200,000.00 of the District's funding is not committed and that funding is not considered surplus funds. He noted that the District does not hold a funding reserve. The District may have to budget funding for a number of years to acquire enough funding to complete a

project, such as a large dredging project or construction of a Dredged Material Management Area. (DMMA).

Chair Blow noted that the District has not increased the millage rate and has maintained or reduced the millage rate for the past 18 years.

Treasurer Netts noted that as property values increase, so does the public demands on services. During the recession, city and county projects decreased and with the upturn in property values, the District needs to be prepared to fund projects that were held back during the slowdown.

Commissioner Sansom suggested creating a five-to-ten year plan and dedicating funding for the development and construction of all of the District's DMMA's.

Chair Blow stated that it is important that the District's Financial Statements explain the projects and the commitment of District funds.

Secretary McCabe asked about the rolled-back rate. Mr. Crosley stated that because the county funding cap for the Assistance Program is calculated from the millage rate, the program funding would be cut by approximately 8 per-cent if the calculated rolled-back rate is adopted.

Secretary McCabe suggested that it is a false predicate to believe that a non-rolled-back rate is considered a tax increase. She cannot think of any other area of business or real life that conducts business this way.

ITEM 7. Amendments to the Tentative Budget.

Chair Blow asked if there were any amendments to the tentative budget. He noted that once the millage rate is set today, it cannot be increased, but can be lowered at the District's Final Tax Hearing. He asked for any additional questions. There were none.

ITEM 8. Re-computation of the Tentative Tax Millage Rate.

Mr. Crosley stated that the proposed millage rate remains the same as previously announced.

ITEM 9. Announcement of the Per Cent by Which the Re-Computed Proposed Millage Rate Exceeds the Calculated Rolled-Back Rate.

Mr. Crosley announced that the percent by which the re-computed proposed millage rate of 0.0345 exceeds the calculated rolled-back is still 7.81%.

ITEM 10. Additional Public Comments on the Budget Amendments and Tax Millage Re-computation.

Chair Blow asked for any additional public comments on the budget amendments and the tax millage re-computation. There were none.

ITEM 11. Adoption of the Tentative Tax Millage Rate.

Chair Blow stated that the proposed millage rate for FY 2015-2016 is 0.0345 mills. Chair Blow asked for a motion to adopt the tentative tax millage rate.

Treasurer Netts made a motion to adopt a tentative millage rate of 0.0345 for FY 2015-2016. The motion was seconded by Commissioner Sansom. Chair Blow asked for any additional discussion. Hearing none, a vote was taken and the motion passed. Commissioner Isiminger opposed the motion.

ITEM 12. Adoption of the Tentative Budget.

Treasurer Netts made a motion to adopt the tentative budget as presented. The motion was seconded by Commissioner Sansom. Chair Blow asked for any additional discussion. Hearing none, a vote was taken and the motion passed. Commissioner Isiminger opposed the motion.

ITEM 13. Final Tax Hearing.

Mr. Crosley stated that the Final Tax Hearing be will held on Wednesday, September 23, 2015, at 5:30 p.m. at the City of Fellsmere Community Center, 56 N. Broadway Street, Fellsmere, Indian River County, Florida 32948.

Mr. Crosley thanked commissioners for attending and noted that it is equally important that we have a quorum at the Final Tax Hearing which will be held in Indian River County.

Chair Blow noted that all assistance projects must have their permits to qualify for funding by the time the Final Tax Hearing starts.

Mr. Crosley stated that staff will be contacting commissioners whose counties are over the assistance program funding cap and help them prioritize their project funding.

Commissioner Sansom made a motion to approve the date, time, and location of the District's Final Public Tax Hearing, as presented. The motion was seconded by Secretary McCabe. Chair Blow asked for any additional discussion. Hearing none, a vote was taken and the motion passed.

Mr. Crosley announced that Governor Scott appointed Michael O'Steen as the FIND Duval County Commissioner.

ITEM 14. Adjournment.

Chair Blow asked if there were any additional comments or discussion. There was none.

Chair Blow stated that hearing no further business the meeting was adjourned at 5:57 p.m.

**SYNOPSIS OF THE MINUTES OF THE
FLORIDA INLAND NAVIGATION DISTRICT**

Finance and Budget Committee Meeting

8:30 a.m., Saturday, September 12, 2015

Residence Inn Marriott West Palm Beach Downtown City Place

455 Hibiscus Street

West Palm Beach, Palm Beach County, Florida 33401-5825

ITEM 1. Call to Order.

Committee Chair Netts called the meeting to order at 8:30 a.m.

ITEM 2. Roll Call.

Assistant Executive Director Janet Zimmerman called the roll and Chair Netts, Vice-Chair Cuozzo, and Secretary McCabe, were present. Ms. Zimmerman stated that a quorum was present. Commissioner Sansom arrived to the meeting at 8:33 a.m.

ITEM 3. Additions or Deletions.

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

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

ITEM 4. Public Comments.

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

ITEM 5. Financial Statements for July of 2015.

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

Mr. Crosley stated that staff changed the District's tax collections account to Seacoast National and staff has setup that checking account as an ACH (electronic) payment account. He stated that the electronic payments will be e-mailed to the appropriate Officer with signatory capabilities for approval. The Seacoast Money Market account receives 0.60% interest. He noted that staff is diligent about shopping for the best interest rates.

Mr. Crosley stated that the TD Bank Money Market Account was closed and opened as a Certificate of Deposit receiving 0.62% interest.

Mr. Crosley noted that the State of Florida has closed the State Board of Administration Account (SBA) Fund "B" and those funds were transferred to the SBA Fund "A" account. The BB&T checking account and the SBA Fund "A" account will be closed and moved into the District's Seacoast National checking account.

Mr. Crosley stated that the DMMA FL-3 construction project is 90% complete. He also noted that the Dania Beach Marina Waterway Assistance Project has been completed.

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

ITEM 6. July 2015 Budget Summary and Project Status Expenditure Reports.

Mr. Crosley presented the Expenditure and Project Status Reports for July of 2015. He asked for 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 (3) actions were taken from August 12, 2015 through September 3, 2015 and is presented for committee review. He asked for any questions. There were none.

ITEM 8. Additional Agenda Items or Staff Comments.

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

ITEM 9. Additional Commissioners Comments.

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

ITEM 10. Adjournment.

Chair Netts stated that hearing no further business the meeting was adjourned at 8:39 a.m.

**SYNOPSIS OF THE MINUTES OF THE
FLORIDA INLAND NAVIGATION DISTRICT**

Board of Commissioners Meeting

9:00 a.m., Saturday, September 12, 2015

Residence Inn Marriott West Palm Beach Downtown City Place

455 Hibiscus Street

West Palm Beach, Palm Beach County, Florida 33401-5825

ITEM 1. Call to Order.

Chair Blow called the meeting to order at 9:00 a.m.

ITEM 2. Pledge of Allegiance.

Commissioner Isiminger led the Pledge of Allegiance to the Flag of the United States of America.

ITEM 3. Roll Call.

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

ITEM 4. Consent Agenda.

Chair Blow asked if there were any comments or questions regarding the Consent Agenda.

Mr. Crosley noted that staff has been talking to Indian River County for a number of years regarding the District's Small-Scale Derelict Vessel Removal Program. He commented that it is nice to see it come to fruition.

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

ITEM 5. Additions or Deletions.

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

Mr. Crosley stated that there are no formal additions or deletions to the meeting agenda. He noted that he has passed out a memo about the proposed remote board meeting attendance criteria and a letter from the District's Congressional representatives.

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

ITEM 6. Public Comments.

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

ITEM 7. Board Meeting Minutes.

Chair Blow asked if there were any comments or questions regarding the August 21, 2015 Finance and Board Meeting Minutes. There were none.

Commissioner Williams made a motion to approve the August 21, 2015 Board Meeting and Finance Committee Meeting Minutes, as presented. The motion was seconded by Treasurer Netts. Chair Blow asked for discussion. Hearing none, a vote was taken and the motion passed.

ITEM 8. Comments from the U.S. Army Corps of Engineers.

Ms. Shelley Trulock, the Intracoastal Waterway (IWW) Project Manager with the U.S. Army Corps of Engineers (USACE), stated that the Plans and Specifications for construction of DMMA O-7 are proceeding and should be completed at the end of November, 2015. The road design and survey are moving forward. She stated that the project is planned for advertisement in March of 2016 and contract award in May of 2016. She has reached out to the USACE's Small Business Contractors to brainstorm the best path forward for this construction project. She is planning to present the Project Work Order at the January 2016 FIND Board Meeting.

Ms. Trulock stated that the USACE is moving forward with the IWW Broward Reach I dredging project permitting. They hope to utilize the USACE dredge to complete this project. Borings completed last year show that the material is 10% fine and can be placed on the beach. The project will remove approximately 50,000 cubic yards of material from the Federal Channel utilizing near-shore material disposal. FIND will receive a Work Order for this project around February of 2016.

Ms. Trulock stated that Ms. Tori White, with the USACE Regulatory Division, has reviewed the seagrass survey for the IWW Broward Reach I dredging project and found that there is no seagrass within the Federal Channel. It was noted that there are some sparse patches of seagrass within anchor zones, which is workable for project operations. Also, no coral was found within the Federal Channel. Because this is a small-quantity project, the most cost effective way to pursue the dredging would be utilization of a USACEs' dredge, either the Currituck or Murden.

Ms. Trulock stated that development of the Plans and Specifications for the IWW St. Augustine and Matanzas Reach of the IWW is ongoing. A hydrographic survey will be performed to verify the amount and location of the shoaling. This project will be completed by the USACEs' small business MATOC contracting process. Ms. Trulock will present a dredging Work Order at the March of 2016 FIND Board Meeting. She stated that the project is planned for advertisement in April of 2016, contract award in June of 2016 and a Work Order brought to FIND in March of 2016.

Chair Blow stated that the St Augustine Port, Waterway, and Beach District has received a lot of pressure to address the beach erosion on the North side of the inlet. He noted that material has never been placed north of the inlet before. The agency has worked with Taylor Engineering to obtain the required permits to place material on that beach and the residents are hoping that the District's dredged material will be placed on Vilano Beach. Ms. Trulock stated that the USACEs' permit will only allow beach placement of the IWW material at Anastasia State Park, which is south of the Inlet. Chair Blow noted that the current Inlet Management Plan now calls for one-third of the dredged material to be placed north of the Inlet. Chair Blow asked Ms. Trulock to contact Taylor Engineering to discuss their permit status. Mr. Crosley stated that at this time, the permit does not include dredged material on the beach. He noted that the District's dredged material does not stay on the beach for an extended period of time.

Dr. Taylor stated that the St. Augustine Inlet Management Plan was completed several years ago. The plan showed that the ebb-shoal in St. Augustine is growing almost equally from sand moving in from both the north and the south. He noted that this is

somewhat unusual and also stated that the ocean shorelines are eroding into the Inlet from both the north and south.

Ms. Trulock stated that she is skeptical that the Port District's permit will be ready in time for the District's project. She noted that the dredged material will not be compatible for beach placement and the District's project cost may increase because of the expense to run a pipeline to the north.

Ms. Trulock stated that funding for the new boundary survey and legal description for DMMA SJ-1 will be received. She expects the project work to be completed within 30 days.

Ms. Trulock thanked Taylor Engineering for contacting her about the borings that were needed in Nassau County and the Crossroads areas. She stated that the USACE and Taylor Engineering worked together and determined that there are a several areas that additional data needs to be gathered. She stated that Taylor Engineering put together a list and she has forwarded the information to Wilmington. The work will be coordinated with the Snell, which is coming to south Florida to provide a work estimate. She stated that the boring data will then be sent to Taylor Engineering.

Ms. Trulock stated that the Jacksonville District's new Colonel, Colonel Jason A. Kirk will be the Key Note Speaker at the Atlantic Intracoastal Waterway Association in November and will also attend the District's January 15, 2016 Community Outreach Event in St. Johns County.

Commissioner Williams asked if the mapping of the IWW south of Fernandina is on the USACE's work list. Ms. Trulock stated that she and the USACE's Engineering Department have been working with Taylor Engineering on this area of the IWW, which

has never been mapped. The actual project will map Jacksonville north to the Florida/Georgia border.

Commissioner Williams asked about a dredging timeline. Mr. Crosley stated approximately one and one half years. Dr. Taylor stated that he is working to complete this project quickly. Mr. Crosley stated that he expects to receive a Task Order next week and the item will be on the District's October 16, 2015 agenda.

Commissioner Chappell asked about the status of putting the District's IWW survey files, including the Right-of-Way to the edge of the channel along with bathymetric information, into a KMZ, Auto CAD or PDF format on the District's web site. Mr. Crosley stated that staff has been coordinating data with the USACE. Also, staff has advertised a Request for Proposal (RFP) for a GIS Consultant. The District needs to update the GIS coverage. Ms. Zimmerman noted that currently the District's surveys can be downloaded from the web site. Ms. Trulock noted that the USACE is working to standardize the survey data so entire waterway data is read the same.

Dr. Taylor noted that over the years the survey data has been completed in different ways and is not reliable. He stated that a standardized survey approach needs to be developed with complete oversight of the surveying operation. He stated that consistent data is important to the District's mission.

ITEM 9. Staff Report on Palm Beach County Area Projects.

Mr. Crosley stated that Phase I of the Dredged Material Management Plan (DMMP) for the Intracoastal Waterway (IWW) in Palm Beach County was completed in 1989. Phase II of the DMMP was completed in 1990 and all major land acquisition was completed in 1991.

Mr. Crosley stated that the 50-year dredging projection for the 43 miles of channel in Palm Beach County is 2.9 million cubic yards and the storage projection is 5.5 million cubic yards. The majority of this dredging (76%) is associated with Jupiter Inlet. The IWW area in the vicinity of the Jupiter Inlet is dredged every two to three years and the material is placed on the beach.

Mr. Crosley stated that six upland Dredged Material Management Areas (DMMA) have been acquired, along with two beach placement areas that will manage dredged material from the waterway. The DMMA on Peanut Island and MSA 641A have been constructed. Easements have recently been re-secured for beach placement of IWW material on the beach south of Jupiter Inlet.

Mr. Crosley stated that in 2013, the USACE completed a maintenance dredging project for Cuts P-1 through P-4 of the IWW in the vicinity of the Jupiter Inlet. This project was funded through supplemental Operations and Maintenance (O&M) funding via Hurricane Sandy relief. This area was last dredged in 2009 and is regularly dredged about every three years. It is scheduled to be dredged again in 2016.

Mr. Crosley stated that a small but limiting shoal in the vicinity of the Parker Bridge in Palm Beach Dredging Reach II was removed in September of 2013. Approximately 5,000 cubic yards of dredged material was placed in MSA 617C and removed by the contractor.

Mr. Crosley stated that the deepening of a portion of the IWW in Reach III north of the Port of Palm Beach has been bid. The low bidder, Cavache, Inc. has been cleared by the District's Engineer. The bid is awaiting acceptance at this September 2015 Board meeting.

Mr. Crosley stated that the deepening of the remainder of Reach III south of the Port to the City of West Palm Beach is under consideration. He noted that this project is strongly supported by the Marine Industries of Palm Beach County.

Mr. Crosley stated that the Palm Beach County Waterways Economic Study was completed in 1998 and updated in 2007 and 2011. The recent study documented up to 831 recreational waterway-related businesses in the county employing 5,879 people, with salaries of \$297.5 million and a total economic impact of \$1.26 billion. He stated that property values were determined to be increased by \$2 billion by the presence of the IWW channel. He stated that there are approximately 33,128 registered vessels in the county.

Mr. Crosley stated that since 1986, the District has provided \$44 million in Waterways Assistance Program funding to 180 projects in the county, having a total constructed value of \$131 million. He stated that the county, 15 waterfront cities, and the Port of Palm Beach have participated in the program. He noted that an additional nine applications are currently being considered for funding assistance for FY 2015-2016.

Mr. Crosley stated that the District's Cooperative Assistance Program has provided funding assistance in the amount of approximately \$2.6 million to Palm Beach County projects.

Mr. Crosley referred to District Site MSA 610, also known as the Jupiter Dog Park and stated that the lease for that site will be up for renewal next year. The site was recently cleared of exotic vegetation by the Town of Jupiter. He noted that past administrations provided 30-year leases on District sites. To better manage District sites, staff feels that lease renewals should be short-term and no longer than five to ten years.

Chair Blow stated that the District should be careful renewing leases on District property. He suggested that a clause be included in each lease clearly stating that this is FIND property and how FIND will use the property. He also suggested not renewing any lease for more than five years and a termination clause should be included in the renewed lease.

ITEM 10. Discussion of Staff Position - Engineer.

Mr. Gerald Ward, 31 West 20th Street, Riviera Beach, FL, stated that he is a Coastal Environmental Engineer and noted that a staff engineer could be a multi-use position. He cautioned the District not to let the position creep into a Chief Engineer position because the employee would cost more and the position would not be as flexible. He stated that the position requirement should be for a Professional Engineer and not a Junior Engineer. A Junior Engineer may not have had the four years of supervision that is required for Professional Engineering Licensing in the State of Florida.

Mr. Crosley stated that at the close of the last Board meeting in July, Commissioner discussion included reference to staff positions and specifically, the consideration of a staff engineer to benefit the District. The salary range for an Engineer is estimated to be between \$60,000.00 and \$125,000.00 annually.

Attorney Breton stated that the staff engineer could assist Mark Crosley, Janet Zimmerman, and provide assistance and coordination with Taylor Engineering, the District's Engineer under continuing contract. This staff engineer would not perform technical design work unless the District provides insurance to cover the project, for any liability from this design work.

Commissioner Williams stated that he feels there are many different ways to dredge and it seems that the District does not look at the various possibilities to dredge the IWW. Another option would be dredging on a continuous basis with smaller, lighter equipment. He feels that the District needs a staff member to explore these options.

Commissioner Dritenbas stated that he likes the idea of hiring a Staff Engineer to be a liaison between the District and Taylor Engineering, but at this time there is no space at the District office for this employee.

Commissioner Dritenbas stated that the District office is small and there is not enough room for an additional staff member without updates and changes being made to that office. He stated that there has been discussion of putting out a Request for Qualifications (RFQ) to conduct a feasibility study of the District office to determine if it can be expanded. This could include a design/build team, if feasible. He noted these two items could take about 1 ½ years.

Commissioner Isiminger stated that he agrees with Mr. Ward that if the District hires a staff engineer, the individual should be a Professional Engineer (P.E.). He noted that Taylor Engineering is doing a great job and the District would not want an in-house engineering performing site and project design. He stated that a Staff Engineer could coordinate and utilize the talents of the District Engineer.

Commissioner Isiminger stated that he has been to the District office many times, and he feels that maintenance work does need to be done to the office, but there is room for another employee. He also noted that perhaps a staff engineer could overlap work with the Information Manager or Field Projects staff.

Secretary McCabe stated that she is trying to determine if something is broken and needs to be fixed by hiring a staff engineer, and she is not hearing that something is broken. She suggested this should be more of a discussion of how we can bring added value to the District with this additional staff position, and she is not hearing how this will be accomplished.

Commissioner Chappell asked how many hours a week is the District's Field Projects Coordinator in the field. Mr. Crosley stated approximately 1/3 to 1/2 of the work week. Commissioner Chappell asked if a staff engineer could do the field work and coordinate projects with Taylor Engineering. Mr. Crosley stated that a staff engineer could assist in the field, work and coordinate projects with Taylor Engineering.

Commissioner Chappell stated that he agrees that Taylor Engineering needs to continue to be a part of this District. He stated that he can see added value with this position by working with Taylor Engineering to coordinate and meet project deadlines.

Commissioner Donaldson stated that Engineers vary from great project managers, and good designers, to good field inspectors. He feels that finding a staff engineer that can perform all of those tasks would be difficult. He feels that the District should focus on the primary tasks that the District would like this employee to perform. Then the District should identify the work areas to show how this position is justified. He noted that the market place is getting healthier and the ability to find talent is diminishing.

Commissioner Sansom stated that if hiring a staff engineer is important to the District's mission and helps to meet that mission, then we should proceed. He stated that moving the District office to a larger space would allow the staff to be more comfortable and to conduct the District's work better.

Treasurer Netts stated that if the District hires an in-house engineer to perform work cheaper than Taylor Engineering was performing, that could add value. But he has not heard anyone say that there is this body of work that can be done by an in-house person better or cheaper than Taylor Engineering can do it. Another way to add value is if this staff member can free up Janet and Mark to perform additional duties. He stated that then, he would like to know what added value activity Janet and Mark would pursue. He stated that he has not heard that the District is failing to meet any obligations by using Taylor Engineering. He noted that staff gives Taylor Engineering a task, Taylor does the task and they send a bill.

Mr. Crosley stated that this has been a great discussion. He noted that he is not comfortable with self-promotion but, he feels the District is doing an outstanding job. He does not believe that there is another agency in the State, with six employees that accomplishes as much as the District. He stated that work gets done because staff has a great working relationship with the District attorney, the USACE, and Taylor Engineering. He does not see the need to change anything, at this time.

Treasurer Netts stated that he would like to see the District hire a document scanning company. He stated that he feels that once the documents are scanned and the District has gone paperless, the system could be maintained by the District's IT personnel.

Commissioner Chappell stated that it was very upsetting to him that the District paid a consultant to put Access on the District's computer system. He stated that is something that he can do and he does not understand why the District's IT person could not do it. Mr. Crosley stated that the District had not previously used Microsoft Access and it was beneficial to have a consultant move the District's files to the new system.

Commissioner Chappell stated that the District has an Information Manager and the District is again talking about hiring an IT person to come in and make upgrades to the system. He asked if the District's Information Manager's job description includes IT or does the Information Manager need to be trained to do IT. He stated that from a taxpayer's standpoint, if the District hires someone to do a job, they should be doing the job they are getting paid to do or should receive the training to do that job.

Mr. Crosley stated that the District's Information Manager completes various tasks. He stated that he believes that the District's Information Manager does not have the expertise to install the upgrades to the system, but that the Information Manager is capable of maintaining it.

ITEM 11. Acceptance of the Qualified Low Bid for the Palm Beach Intracoastal Waterway Deepening Project (North), Palm Beach County, Florida.

Mr. Crosley stated that bids were requested to conduct the deepening of the Intracoastal Waterway (IWW) from the Port of Palm Beach, north. This project will increase the depth of the IWW from the current -10' Mean Low Water (MLW) to -15' MLW. The dredging area is approximately 3,500 feet in length and 101,000 cubic yards of material is expected to be removed from the existing channel.

Mr. Crosley stated that two bids were received for this project. Cavache, Inc. bid \$1,185,822.00 and Ferreira Construction bid \$1,989,900.00. The low bidder, Cavache, Inc. has been evaluated and qualified by Taylor Engineering. This contractor has also successfully completed several projects for the District in the past.

Commissioner Chappell made a motion to approve the qualified low bid from Cavache, Inc., in the amount of \$1,185,822.00 for the Palm Beach Intracoastal Waterway Deepening Project (North), Palm Beach County, Florida. The motion was seconded by

Commissioner Vice-Chair Cuozzo. Chair Blow asked for discussion. Hearing none, a vote was taken and the motion passed.

Mr. Chuck Collins, Executive Director, with the Marine Industries Association of Palm Beach County, stated that he would like to thank the District for their waterway maintenance projects. He stated that the waterways are critical to the State of Florida, providing an excess of \$20 billion of economic impact and over 200,000 jobs yearly. Deepening of the IWW is critical to the South Florida Marine Industry by providing services to the mega yachts. Residents and visitors of South Florida can enjoy recreational boating year around. He commended the District for planning ahead for the future of South Florida, the waterways and the Marine Industry.

Mr. Crosley stated that staff has been working with the Marine Industries Association of Palm Beach County on the South Reach Deepening Dredging Project from the Port of Palm Beach south to the City of West Palm Beach.

ITEM 12. Scope of Services and Fee Proposal for Engineering Services for the St. Lucie Reach 1 Maintenance Dredging Project Utility Survey, St. Lucie, County, Florida.

Mr. Crosley stated that in order to finalize the plans and specifications for the forthcoming St. Lucie Reach 1 Dredging Project, it will be necessary to conduct a utility survey of the project area. This area has not been dredged in approximately 40+ years and a survey of this type is instrumental to the success of the project.

Dr. Taylor stated that approximately 80% of the proposed fee is for the actual survey work performed by the sub-contractor (Morgan & Ecklund) on this project.

Commissioner Donaldson noted that there is a significant amount of rock in this area of the waterway. Mr. Crosley noted that the loose rock is similar to the material found during the Indian River Reach I project.

Commissioner Chappell made a motion to approve the proposal and fee quote from Taylor Engineering in the amount of \$49,541.80 for engineering, oversight and implementation of a utility survey for the St. Lucie Reach 1 Maintenance Dredging Project, St. Lucie County, Florida. The motion was seconded by Commissioner Dritenbas. Chair Blow asked for discussion. Hearing none, a vote was taken and the motion passed.

ITEM 13. Assistance Projects Extension Requests.

Ms. Zimmerman stated that a total of eleven Project Sponsors have requested extensions of their FY 2013-14 project agreements. She stated that in addition to the submitted list, the City of Riviera Beach has also requested a one-year project extension for the City of Riviera Beach Marina Project. She noted that this request is being made by the City to completed additional paperwork requested by the District.

Commissioner Dritenbas made a motion to approve the revised listing of eleven project agreement extensions for one additional year. The motion was seconded by Commissioner Sansom. Chair Blow asked for discussion.

Mr. Gerald Ward, 31 West 20th Street, Riviera Beach, FL, stated that he is a Coastal Environmental Engineer and noted that it is distressing to see this many projects requesting project extensions. He suggested that commissioners work with their communities to make the projects and permitting issues become a priority.

Commissioner Sansom noted that project permits must be place in before the District approves the project. These delays are not because of project permit delays. Most of these delays have to do with applicant funding issues.

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

ITEM 14. Major Project Cost Estimate Modification – Miami-Dade County Matheson Marina Floating Dock Renovations (Project #DA-14-173), Miami-Dade County, Florida.

Ms. Zimmerman stated that Miami-Dade County is requesting a major modification to their Matheson Marina Floating Dock Renovation project. The requested modification consists of a reduction to two docks (Dock E and Dock F) from the eight docks originally approved in this assistance project for renovation. This request originated due to unanticipated costs associated with the project. The overall cost estimate will remain the same.

Ms. Joyce Denny, with Miami-Dade County, stated that the difference between the original dock estimate and the new estimate is that the two docks will be designed and built to last for 20 years. The original project estimate did not include the construction of docks with a 20 year life expectancy.

Commissioner Sansom made a motion to approve a major project cost modification to Project #DA-14-173, Miami-Dade County Matheson Marina Floating Dock Renovations, Miami-Dade County, Florida. The motion was seconded by Treasurer Netts. Chair Blow asked for discussion. Hearing none, a vote was taken and the motion passed.

ITEM 15. Finance and Budget Committee Report.

Committee Chair Netts stated that the District's Finance and Budget Committee met before today's Board meeting. He noted that the Committee reviewed and recommends approval of the July 2015 financial information.

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

ITEM 16. Washington Report.

Mr. Crosley noted that at this time of year, there is not a lot of activity in Washington. The House and Senate are adjourned. Congress returned on September 8, 2015.

Mr. Crosley referred to the 2014 Water Resources Reform and Development Act (WRRDA) and noted that Representatives Frankel and Rouzer have agreed to send a letter to Secretary Darcy to request that the U.S. Army Corps of Engineers (USACE) carry out the assessment of the Atlantic Intracoastal Waterway and Gulf Intracoastal Waterway identified in the WRRDA. Other Representatives that have agreed to sign on to the Frankel/Rouzer letter include: Mica, Clawson, Murphy, Hastings, Deutch, Wasserman Schultz, Jones, Rice, Carter, and Early Carter. There was language in the WRRDA Bill that said the USACE would complete an Economic Assessment of the IWW and when the time came to complete that assessments, the USACE simply stated that they do not have the resources to complete the Economic Assessment. The Atlantic Intracoastal Waterway Association (AIWA) and FIND have working with Mr. Davenport to get our congressional

members to write letters to the USACE requesting that they complete this Waterway Economic Assessment.

Mr. Crosley noted that Mr. Davenport's contract will be up for renewal in October. He noted that Mr. Davenport is scheduled to attend the District's October Board meeting.

ITEM 17. Additional Staff Comments and Additional Agenda Items.

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

A. Feasibility Study for Office Update.

Mr. Crosley stated that the current Florida Inland Navigation District office was constructed in 1986. At that time, the building was designed to provide office space for the District's two staff members, and meeting space for bi-monthly meetings of the Board.

Mr. Crosley stated that thirty years later, the District has six employees and is in need of technological updates, additional office space and functionality. Updates to the office would support the District's efforts to implement a paper-reducing, electronic filing system.

Mr. Crosley stated that with the Board's approval, staff proposes to develop a Request for Qualifications (RFQ) with an initial budget of \$25,000.00 to hire an architect and explore the various options available for the District's office improvement, including relocation or updates.

Mr. Crosley noted in addition to the updates, the office is in need of normal maintenance and repair including but not limited to, paint, carpet or floor replacement, window repairs, and storm shutter replacement.

Commissioner Chappell asked about doing a design build with a contractor.

Commissioner Dritenbas stated that a Feasibility Study will look at the buildings mechanical systems; space analysis; potential for growth; review typical office space by position; fresh air make-up for the air conditioning system; impact windows; hurricane shutters; and bring the building up to minimum building codes. This building is critical for the District's records and if a major hurricane were to hit, this building could be shut down. He stated that upon completion of the Feasibility Study, the District can move to design-build within the guidelines.

Commissioner Williams asked if the Feasibility Study would include evaluation of moving the District office to another building. Commissioner Dritenbas answered yes.

Secretary McCabe asked the size of the District office. Mr. Crosley answered approximately 2400 square feet.

Mr. Crosley stated that the Florida Fish and Wildlife Conservation Commission (FWC) has a large office and storage/shop area on the same site as the District's office. He stated that the District owns all the property and the FWC has a lease for their buildings.

Secretary McCabe stated that staff should at least talk to the FWC about their plans for that building.

Commissioner Dritenbas noted that the data that should be included in the RFQ are the property FIND owns, the FWC lease information, and site expansion rights.

Treasurer Netts made a motion to approve a budget of \$25,000.00 to initiate a Request for Qualifications for selection of an architect for the District's planned office update, Palm Beach County, Florida. The motion was seconded by Vice-Chair Cuozzo. Chair Blow asked for discussion. Hearing none, a vote was taken and the motion passed.

B. RFQ for Economic Study Update.

Mr. Crosley stated that the District's Economic Impact Data is outdated and it is time to perform a new study. He stated that staff proposes to develop a Request for Qualifications (RFQ) to perform an Economic Study Update of the District's waterways. He stated that the original study included boat ramp surveys and analysis of property codes. He stated that the Board should decide if the District should update the current study information or perform a totally new study. The economic data has proven valuable locally and when staff travels to Washington D. C.

Treasurer Netts stated that the Economic Study of the Waterways is the most valuable tool the District has because it provides the necessary information to justify the funding spent to maintain the District's waterways and Waterways Assistance Program.

Commissioner Williams stated that the study should include all information, recreational and commercial.

Commissioner Donaldson stated that the new study should include full information and be done thoroughly.

Secretary McCabe stated that this report should include the full economic value of the waterways resulting from the District's work and projects.

Vice-Chair Cuzzo suggested hiring a new firm and adding other information to the updated study including the economic impact created from the District's Waterways Assistance Program/Projects.

Mr. Crosley stated that he is hearing that the Board wants the Waterway Economic Impact Study fully updated and done correctly. The Board concurred.

C. RFP for GIS Services.

Mr. Crosley stated that the Request for Proposals (RFP) to update the District's GIS program has been advertised. This project will update the District GIS program.

Vice-Chair Cuozzo requested that he and Commissioner Isiminger also review the proposals.

D. Proposed Remote Meeting Attendance.

Mr. Crosley stated that he, Chair Blow and Attorney Breton have been working to develop a potential criteria for implementing a remote Board meeting attendance policy. He reminded Commissioners that the District does not hold its Board meetings in the same location each month. He noted as long as the hotel has powerful Internet connections, the equipment should work well.

The proposed policy is summarized as follows:

1. A commissioner will be permitted to attend up to two meetings remotely in a twelve month period.
2. No more than two commissioners may remotely attend a board meeting.
3. A commissioner who wishes to remotely attend a board meeting must notify FIND staff via email at least 48 hours prior to the date of the board meeting.
4. If more than two commissioners request to remotely attend a board meeting then the Chairman and Executive Director will attempt to coordinate with all of the requestors to arrive at a fair and mutually acceptable resolution. Priority will be given to (1) illness or disability of the commissioner or the commissioner's family, (2) unavoidable business or professional conflicts, and (3) scheduled vacations and other personal conflicts. All

remaining commissioners must attend the meeting in person or they will be recorded as absent.

5. If allowing one or more commissioners to attend remotely would preclude having a quorum of at least six (6) Commissioners physically at the meeting, the request will be denied. He asked for Board discussion.

Commissioner Sansom stated that he feels that this is a good policy to implement. He suggested adding strong Internet connection to the criteria of hotels considered by the District.

Treasurer Netts stated that initially he was in favor of this policy, but the more he considers it, the more cumbersome it seems. The quality of participation does not justify the expense of the system. He stated that he has attended remote meetings and sometimes it is hard to hear what is being said and you cannot see anything that is going on, including PowerPoint presentations.

Secretary McCabe stated that she also does not support this. She serves on the Florida Bar and several times a year they meet via remote services. She said that sometimes there is something about it that does not work, and the work that could not get done telephonically gets done at the next meeting.

Secretary McCabe asked if the number of meetings a FIND Commissioner must attend is governed by statute. Attorney Breton answered no and stated that he understands that the Commissioner attendance records becomes a factor upon re-appointment.

Commissioner Isiminger stated that he shares Treasurer Netts view.

Vice-Chair Cuzzo stated that he supports this item and he noted that he has a telephone at home that supports this type of system with a video camera. Also, any

presentation can be connected to a computer and the Commissioner can go to My PC and see the presentation.

Chair Blow noted that this policy has been drafted in a way so that it would not be abused. He noted that this system is an option for emergency situations, if a Commissioner cannot attend a meeting but would like to participate in the discussion.

Vice-Chair Cuozzo noted that there is no replacement to being in the same room for these meetings.

Vice-Chair Cuozzo made a motion to approve moving forward with a District Remote Board Meeting Attendance Criteria as Board policy as presented. The motion was seconded by Commissioner Sansom. Chair Blow asked for discussion. Hearing none, a vote was taken and the motion passed. Treasurer Netts and Commissioner Isiminger voted against the motion.

ITEM 18. Additional Commissioners Comments.

Chair Blow asked if there were any additional commissioner comments.

Secretary McCabe stated that last evening's Community Outreach Event was very nice and she really enjoyed the Fishing Tournament Display.

Commissioner Donaldson stated that as the District looks at our future Long-Range Capital Plan, we should also review future District staffing and office space requirements.

Commissioner Chappell noted that the October 16th Board Meeting will be held in Broward County. The Commissioners will be taking a tour of the New River at 4:30 p.m. and a bus will return the Commissioners from the Community Outreach Event.

Mr. Crosley noted that staff is hopeful to have a contractor bid for the Broward Deepening Project on the October Agenda for Board approval. If that happens, staff and

the Marine Industries Association of South Florida will do a time certain press conference announcement about the project.

Commissioner Chappell stated that the Marine Industries Association of South Florida has hired a Public Relations Firm, Starmark, to handle public relations for this project.

ITEM 19. Adjournment.

Chair Blow stated that hearing no further business the meeting was adjourned at 11:54 p.m.

**SYNOPSIS OF THE MINUTES OF THE
FLORIDA INLAND NAVIGATION DISTRICT**

Final Public Tax & Budget Hearing

5:30 p.m., Wednesday, September 23, 2015

Fellsmere Community Center

56 N. Broadway Street

Fellsmere, Indian River County, Florida 32948-6604

ITEM 1. Call to Order.

Chair Blow called the Final Public Tax and Budget Meeting of the Florida Inland Navigation District to order at 5:31 p.m.

ITEM 2. Pledge of Allegiance to the United States of America.

Commissioner Dritenbas led the Pledge of Allegiance to the Flag of the United States of America.

ITEM 3. Roll Call.

Secretary McCabe called the roll and Chair Blow, Commissioner Dritenbas, Commissioner Isiminger, Commissioner Sansom, and Commissioner Williams were present. Commissioner Crowley and Commissioner Donaldson participated by telephone. Treasurer Netts, Commissioner Chappell, and Commissioner O'Steen were absent. Secretary McCabe stated that a quorum was present. Vice-Chair Cuzzo arrived at 5:39 p.m.

**ITEM 4. Announcement of the Per Cent (7.81%) by which the Proposed
Millage Rate of 0.0345 exceeds the Calculated Rolled-Back Rate
(0.0320).**

Chair Blow announced that the proposed millage rate of 0.0345 exceeds the calculated rolled-back rate of 0.0320 by 7.81%.

ITEM 5. Invitation for Public Comments.

Chair Blow asked if there were any public comments from the audience. There were none.

ITEM 6. Amendments to the Budget.

Mr. Crosley stated that if the District adopts the rolled-back millage rate, the District's Budget would be reduced by \$1,772,000,313.00.

**6A. Amendments.
Waterways Assistance Projects.**

Mr. Crosley stated that the City of Fernandina Beach has requested a revision to their application for a Managed Mooring Field Capacity Increase, Phase IA construction project. The city is requesting that the project be modified to a Phase I, design and engineering project. The project will include the mooring field, but does not incorporate other project elements of the existing marina. The funding amount would be reduced by \$650.00.

Commissioner Sansom made a motion to approve the City of Fernandina Beach, request to revise the Managed Mooring Field Capacity Increase, Phase I, as presented. The motion was seconded by Commissioner Dritenbas. Chair Blow asked for discussion.

Commissioner Isiminger asked if Commissioner Williams was in favor of this modification. Commissioner Williams answered yes.

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

Ms. Zimmerman noted that two projects received their permits today: the City of Jacksonville, County Dock Boat Ramp Phase II project; and the Palm Beach, West Palm Beach Living Shorelines project. These two projects are now considered eligible for funding.

Ms. Zimmerman stated that if the District adopts the rolled-back millage rate of 0.0320 per cent, the Assistance Program County funding caps availability would be.

Nassau County	\$ 168,656.00
Duval County	1,296,670.00
St. Johns County	500,293.00
Flagler County	175,623.00
Volusia County	676,150.00
Brevard County	736,721.00
Indian River County	353,551.00
St. Lucie County	406,360.00
Martin County	459,219.00
Palm Beach County	3,760,822.00
Broward County	3,714,822.00
Miami-Dade County	5,713,419.00
Total	\$17,962,306.00

Commissioner Isiminger submitted that the District's total Assistance Program budget would not be cut by adopting the rolled-back rate. Ms. Zimmerman stated that is correct but note if the 0.0320% millage rate is adopted, there are several counties whose available funding would be affected by that rolled-back rate. Those counties are: Nassau, Duval, Flagler, Volusia, Indian River, and Martin Counties. Counties are impacted differently by the rolled-back rate, based on the amount of funding they have requested.

Commissioner Isiminger stated that the FY 2015-2016 Assistance Budget is \$14 million even without the rolled-back, so the rolled-back is not hurting the Assistance Budget.

Secretary McCabe stated that the rolled-back does hurt the Assistance Program. The District cannot aggregate the funding from all the counties evenly. In Volusia County, for example the rolled-back rate would affect the county that is already requesting funding over their available funding. Because of the funding cap, Volusia County has already reduced the funding for one grant and a rolled-back millage rate would reduce funding for another project.

Commissioner Donaldson noted that the Assistance Program can be funded up to 85 per cent of each counties tax revenue, provided funding for the primary needs of the District are met. If the District's primary funding needs are greater, the Assistance Program must be cut by that amount. He asked if the District adopts the rolled-back rate, will there be enough tax revenue to meet the primary needs of the District. Mr. Crosley answered yes.

Commissioner Isiminger stated that he would be in favor of reducing the Assistance Program funding for all District Counties.

Commissioner Sansom stated that historically, there are District Counties that do not ask for assistance funding up to their funding cap. In setting up the District's Assistance Program budget, a calculated estimate is used to set that budget, based on requests, permits and other variables necessary for this program.

Commissioner Sansom stated that for the last several years, the District has had to provide funding for dredging projects that should have been funded by the Federal Government. The District is required to purchase the land and build the Dredged Material Management Areas and the Federal Government is required to provide the funding and perform the maintenance dredging of the Federal Channel. That alone should be enough for this District to not adopt the rolled-back millage rate.

Chair Blow stated that this District is also funding the deepening the IWW in Broward and Palm Beach Counties to generate an increase in economic activity and create jobs for South Florida.

Commissioner Donaldson stated that Governor Scott has made a strong commitment for tax cuts and that is what this District needs to focus on. He stated that he supports going

to the rolled-back millage rate of 0.0320. He reminded commissioners that the District's primary mission is the IWW and the secondary mission is the Assistance program.

Secretary McCabe stated that it may be easier for a commissioner to favor the rolled-back rate when their county has not applied for Assistance funding up to the county funding cap.

Commissioner Sansom stated that in 1986, the Florida Legislature gave the Florida Inland Navigation District (FIND) the responsibility to develop an Assistance Program, available to local and state government. Dredging was the District's initial responsibility and at that that time, the Assistance program became a critical part of this agency continuing to exist. In 1986, the future of FIND was at a critical point in the Legislative history, the Florida Legislature was considering abolishing FIND and giving the dredging responsibility to another state agency, then called the Department of Natural Resources. The Legislature then determined that another agency could not manage a program to enhance the marine economy in Florida as well as FIND could. That was when FIND received two missions, dredging and the Assistance Program.

Commissioner Dritenbas asked how the Cooperative Assistance Program budget is calculated. Mr. Crosley stated that it is not based on county tax revenue calculations, it comes from the District's general budget.

Chair Blow stated that the Board needs to decide what millage rate will be approved so that staff can calculate the assistance funding.

ITEM 7. Comments by District Commissioners.

Chair Blow asked if there were any comments from the Commissioners.

Commissioner Isiminger stated that the District's main mission is to maintain the Intracoastal Waterway (IWW). He stated that the District is budgeting \$14 million for the Waterway Assistance Program and \$1.8 million for the Cooperative Assistance Program. This funding is part of a \$24 million budget. He noted that is more than fifty percent of the District's budget. He feels that the District approves and funds too many projects and some are projects that not part of the District's main mission. He stated that there should be some competition for the District grant funds.

Commissioner Isiminger referred to the District's budget and stated that the District's funds that are identified as committed and the funds are not committed the way that he would commit funding in a budget. Those funds may be committed, but not all of those funds will be spent next year. Instead of budgeting for three years, he would propose the District only budget for one year and place the committed funding in a Capital Reserve Account.

Commissioner Sansom stated that all Assistance projects sign a contract with the District. Once that contract is signed, the District is committed to funding that project as long as the applicant proceeds and completes that project. The District must commit funding for that project because it is obligated. Non-Discretionary funding is budgeted but not obligated. None of this budget is reserve funding.

Chair Blow stated that the only item in the Budget that may be considered reserve funding is the \$1 million for hurricane and emergencies.

Commissioner Williams noted that it is very late in the process to be having this discussion.

Commissioner Isiminger stated that he has brought this subject up at several previous meetings and at the First Public Tax Hearing.

Attorney Breton stated that staff has cleared the rule governing the adoption of the District's Millage Rate with the Department of Revenue (DOR) and a Board majority of seven votes is required for the motion to be approved. Mr. Scambler stated that for the DOR to certify the 0.0345 Millage Rate, a majority of the District's Governing Body, seven votes, must approve the motion. Mr. Crosley stated that for any Millage Rate, there must be seven votes approving that millage rate.

Commissioner Williams made a motion to adopt Resolution No. 2015-06 with a final millage rate of 0.0345. The motion was seconded by Vice-Chair Cuzzo. Chair Blow asked for discussion. Hearing none, a vote was taken and the motion failed. Vice-Chair Cuzzo, Commissioners, McCabe, Dritenbas, Sansom and Williams voted yes. Chair Blow and Commissioners Crowley, Donaldson, and Isiminger voted no.

Chair Blow made a motion to adopt Resolution No. 2015-06 with a final rolled-back millage rate of 0.0320. The motion was seconded by Commissioner Isiminger. It was noted that the Chair cannot make a motion. Chair Blow retracted his motion.

Commissioner Sansom made a motion to adopt Resolution No. 2015-06 with a final millage rate of 0.03325. The motion was seconded by Commissioner Williams. Chair Blow asked for discussion. Hearing none, a vote was taken and the motion failed. Vice-Chair Cuzzo, Secretary McCabe, Commissioners Dritenbas, Sansom Williams voted yes. Chair Blow, Commissioners, Crowley, Isiminger, Donaldson voted no.

Commissioner Isiminger made a motion to adopt Resolution No. 2015-06 with a final millage rate of 0.0320. The motion was seconded by Donaldson. Chair Blow asked for discussion. Hearing none, a vote was taken and the motion passed. Chair Blow, Secretary

McCabe, Commissioners Crowley, Donaldson, Dritenbas, Isiminger, Sansom voted yes. Vice-Chair Cuzzo and Commissioner Williams voted no.

Waterways Assistance Projects.

Commissioner Sansom stated that the adopted rolled-back millage rate would change the Waterways Assistance funding availability for the District's counties. Six counties will be over their funding cap. So that each county meets their statutory and rule funding limit, an announcement of project funding changes of the affected counties needed to be made.

Vice-Chair Cuzzo stated that to meet their statutory and rule funding limits in Martin County, reduce Martin County; Phipps Park Shoreline Stabilization and Access project by \$8,970.00; Martin County, Charlie Leighton Park Accessible Floating Dock project by \$8,969.00; and the City of Stuart, Shepard Park Improvements project by \$17,938.00.

Commissioner Williams stated that to meet their statutory and rule funding limits in Nassau County, reduce the City of Fernandina Beach, Breakwater Dock Safety Enhancements, Phase II project by \$5,694.00.

Chair Blow stated that, to meet their statutory and rule funding limits in Duval County, reduce Pottsburg Creek Dredge, Phase II project by \$25,506.00; and Metro Park Dock Replacement by \$25,506.00.

Chair Blow stated that to meet their statutory and rule funding limits in Flagler County, reduce Flagler County, Boater Improvements at Herschel King Park by \$6,064.00; and Moody Boat Launch and Restrooms by \$6,063.00.

Commissioner Dritenbas stated that to meet their statutory and rule funding limits in Indian River County, reduce City of Sebastian Working Waterfront Park, Phase 2A project by

\$11,449.00; and Indian River County, Archie Smith Fish House Phase IIA project, Restoration by \$16,172.00.

Secretary McCabe stated that to meet their statutory and rule funding limits in Volusia County, reduce City of Daytona Beach Riverfront Park project by \$20,000.00; Daytona Beach Day Docks, Phase I by \$20,000.00; and Volusia County, Smyrna Dunes Park Fishing Pier by \$12,623,000.00.

Mr. Crosley stated that the remainder of the funding reduction will be removed from the IWW dredging account.

Cooperative Assistance Project.

Ms. Zimmerman noted that there are four applications in this program. All applications have received their permits and are eligible to be funded at the total recommended funding level of \$1,883,286.00.

ITEM 8. Re-computation of the Final Tax Millage Rate.

Chair Blow stated that the re-computation of the final tax millage rate is 0.0320 mills.

ITEM 9. Announcement of the Per Cent by Which the Re-computed Final Millage Rate Exceeds the Calculated Rolled-Back Rate.

Mr. Crosley stated that the millage rate still exceeds the rolled-back rate by 0.0%.

ITEM 10. Additional Public Comments on the Budget Amendments and Tax Millage Re-computation.

Chair Blow asked if there were any comments from the public regarding the amendments to the budget. None were heard.

ITEM 11. Final Announcement of the Florida Inland Navigation District's rolled-back rate for FY 2015-2016 (0.0320), the final proposed millage rate for FY 2015-2016 (0.0320), and the per cent by which the re-computed final millage rate exceeds the calculated rolled-back rate for FY 2015-2016 (0.0%).

Chair Blow stated that the proposed millage rate of 0.0320 is 0.0% above the calculated rolled back-rate of 0.0320 mills. He stated that the final tax millage rate for FY 2015-2016 is 0.0320 mills.

ITEM 12. Adoption of the Final Tax Millage Rate, Resolution No. 2015-06.

Chair Blow presented District Resolution No. 2015-06 adopting the final millage rate of 0.0320 for taxation of the properties lying within the boundaries of the Florida Inland Navigation District for the year commencing October 1, 2015 and ending September 30, 2016.

Commissioner Isiminger made a motion to adopt Resolution No. 2015-06 with a final millage rate of 0.0320, as amended. The motion was seconded by Commissioner Dritenbas. Chair Blow asked for discussion. Hearing none, a vote was taken and the motion passed. Vice-Chair Cuozzo voted against the motion.

ITEM 13. Adoption of the Final Budget, Resolution No. 2015-07.

Mr. Crosley presented District Resolution No. 2015-07 adopting the final budget for the Florida Inland Navigation District for the fiscal year commencing October 1, 2015 and ending September 30, 2016 with the amended amount of a final budget of \$95,206,913.00.

Commissioner Sansom made a motion to adopt Resolution No. 2015-07 and a final FY 2015-2016 budget of \$95,206,913.00, as amended. The motion was seconded by Commissioner Dritenbas. Chair Blow asked for discussion. Hearing none, a vote was taken and the motion passed. Vice-Chair Cuozzo voted against the motion.

ITEM 14. Adjournment.

Chair Blow stated that hearing no further business the meeting was adjourned at 7:00 p.m.



BROWARD COUNTY PROJECT STATUS UPDATE

October 2015

Dredged Material Management Plan

Phase I of the Dredged Material Management Plan (DMMP) for the Intracoastal Waterway in Broward County was completed in 2003. Phase II of the DMMP was completed in 2004. (Please see the attached maps).

The 50-year dredging projection for the 25 miles of channel in Broward County is 33,644 cu/yds. and the storage projection is 72,334 cu/yds. This is the lowest dredging projection of any of the District's 12 counties. The majority of this dredging (81%) is associated with the Hillsboro Inlet area.

Three upland Dredged Material Management Areas (DMMA) and one beach placement area will manage dredged materials from the waterway. A western long term storage site was suggested in the original DMMP, but this has not been pursued actively because of costs and logistics. Land acquisition possibilities, especially for waterway access, continue to be a challenge in this County, however, the District remains open to future acquisition opportunities through exchange or at a reasonable cost.

Waterway Dredging

The District conducting the deepening of the Intracoastal Waterway from the 17th Street Causeway north past the Las Olas Bridge. The project is in the bid phase and construction is expected to commence by the end of 2015. Funding for this project continues to accumulate in the budget to complete project construction. This project will create navigation and docking opportunities for deep draft and larger vessels, and result in an increase in marine-related business. This has been successfully demonstrated when the District successfully completed the deepening of the Dania Cut-Off Canal between the Port and US Route 1. The completion of that project, with a project depth of -15' MLW, lead to the stimulus of additional marine-related business on the waterway. The ICW Deepening expected to result is similar marine-related benefits. Both of these projects are cooperative efforts with the Marine Industries Association of South Florida, Broward County (and Port Everglades), and the cities of Fort Lauderdale and Dania Beach. (Please see attached location maps).

Additionally, maintenance dredging of Broward Reach I has currently been scheduled for 2017 with beach-quality dredged material being placed on in the nearshore area of the Hillsboro Inlet. Any non-compatible material would be temporarily places on MSA 726 for removal.

Dredged Material Management Area Development

The existing District-owned Dredged Material Management Areas (DMMA) are currently leased to the City of Pompano Beach (MSA 726, aka: Exchange Club Park; & MSA 727, aka: Alsdorf Park/ 14th Street Boat Ramp) and Broward County (MSA 783) for parks, a boat ramp and port facilities. Through a series of public meetings, the District notified and coordinated with the citizens and officials of the City of Pompano Beach and City of Lighthouse Point regarding the clearing of the



BROWARD COUNTY PROJECT STATUS UPDATE

October 2015

property of invasive plants, planting of a native plant buffer along the site perimeter, and the preparation of MSA-726 to support the forthcoming dredging of Broward Reach I and future dredging or access needs.

Waterways Economic Study

The Broward County Waterways Economic Study was completed in early 2008 and updated in 2011. The study documented 1,767 marine related businesses in the county employing approximately 21,455 people, with salaries of approximately \$1 billion and a total economic impact of \$4.5 billion. Property values were determined to be increased by \$6-7.2 billion by the presence of the ICW channel.

Waterways Assistance Program

Since 1986, the District has provided \$25.8 million in Waterways Assistance Program funding to 118 projects in the County having a total constructed value of \$61.3 million. The County, ten cities, and the Hillsboro Inlet District have participated in the program. (Please see attached map and project listing).

Notable projects funded include: the Fort Lauderdale Riverwalk, construction or rehabilitation of most of the saltwater boat ramps, maintenance dredging of the Dania Cut-Off Canal and the New River System, construction and improvements to the Dania Beach, Hollywood, Birch/Las Olas, Hillsboro Inlet and Cooley's Landing marinas, West Lake Park projects, and improvements to the Hillsboro Inlet channel.

Cooperative Assistance Program

The District's Cooperative Assistance Program has provided funding assistance for the following projects with elements in Broward County: Florida Marine Patrol Officer Funding; Clean Marina Program, Clean Vessel Act, Manatee Acoustic Warning System, Hillsboro Canal Bank Stabilization, and Phase I of the Hugh Taylor Birch State Park Boat Dock project. The District's funding assistance for the Broward County portion of these 18 individual projects was approximately \$459,902.

Interlocal Agreement Program

The District's Interlocal Agreement Program has developed the following projects with elements in Broward County: Dania Canal Deepening, New River Deepening, Clean Marina Program; Clean Vessel Act, the installation and maintenance of Broward County Boating Safety Signage, the Demonstration of a Manatee Acoustic Warning System, and Phase I of basin dredging for the Bahia Mar and Las Olas Marinas.



BROWARD COUNTY PROJECT STATUS UPDATE

October 2015

Waterway Clean Up Program

The District has partnered with the Marine Industries Association of South Florida for over 22 years on their waterway cleanup. The District provides up to \$10,000 per year for this program.

Small-Scale Derelict Vessel Removal Program

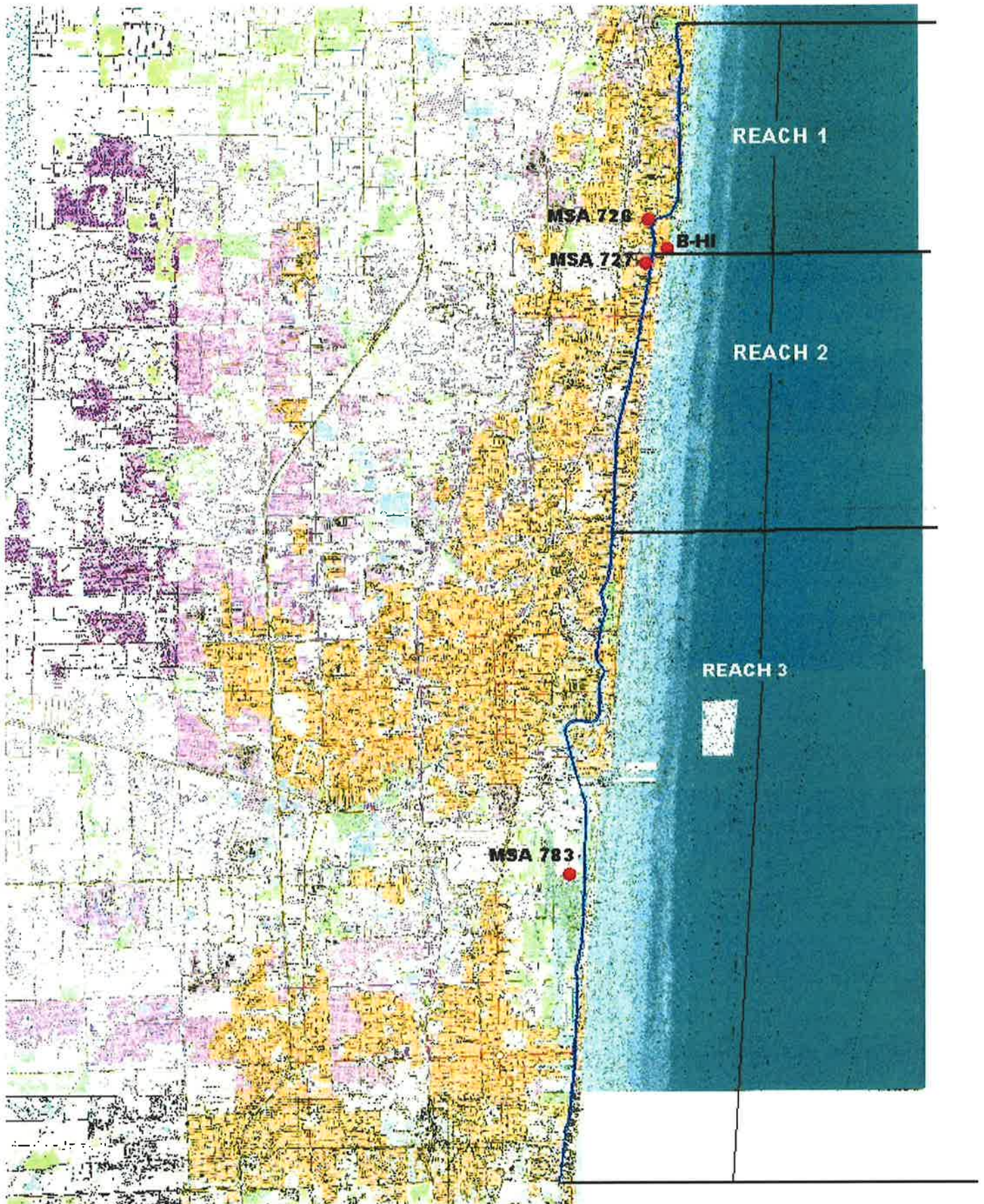
The District has funded four Small-Scale Derelict Vessel removal projects with the City of Fort Lauderdale through this program.

Small-Scale Spoil Island Enhancement and Restoration Program

No projects have been funded yet in Broward County through this program.

Public Information Program

The District currently prints and distributes the following brochures with specific information about Broward County waterways: Boating Safety and Manatee Protection Zone Brochure, Economics of Broward County Waterways, Movable Bridge Guide, and the ICW Channel Conditions Brochure.



INTRACOASTAL WATERWAY
DREDGED MATERIAL MANAGEMENT PLAN
IN BROWARD COUNTY





BEACH PLACEMENT AREA
B-HI



MSA 726

FIND Owned
Channel
ICW Right-of-Way

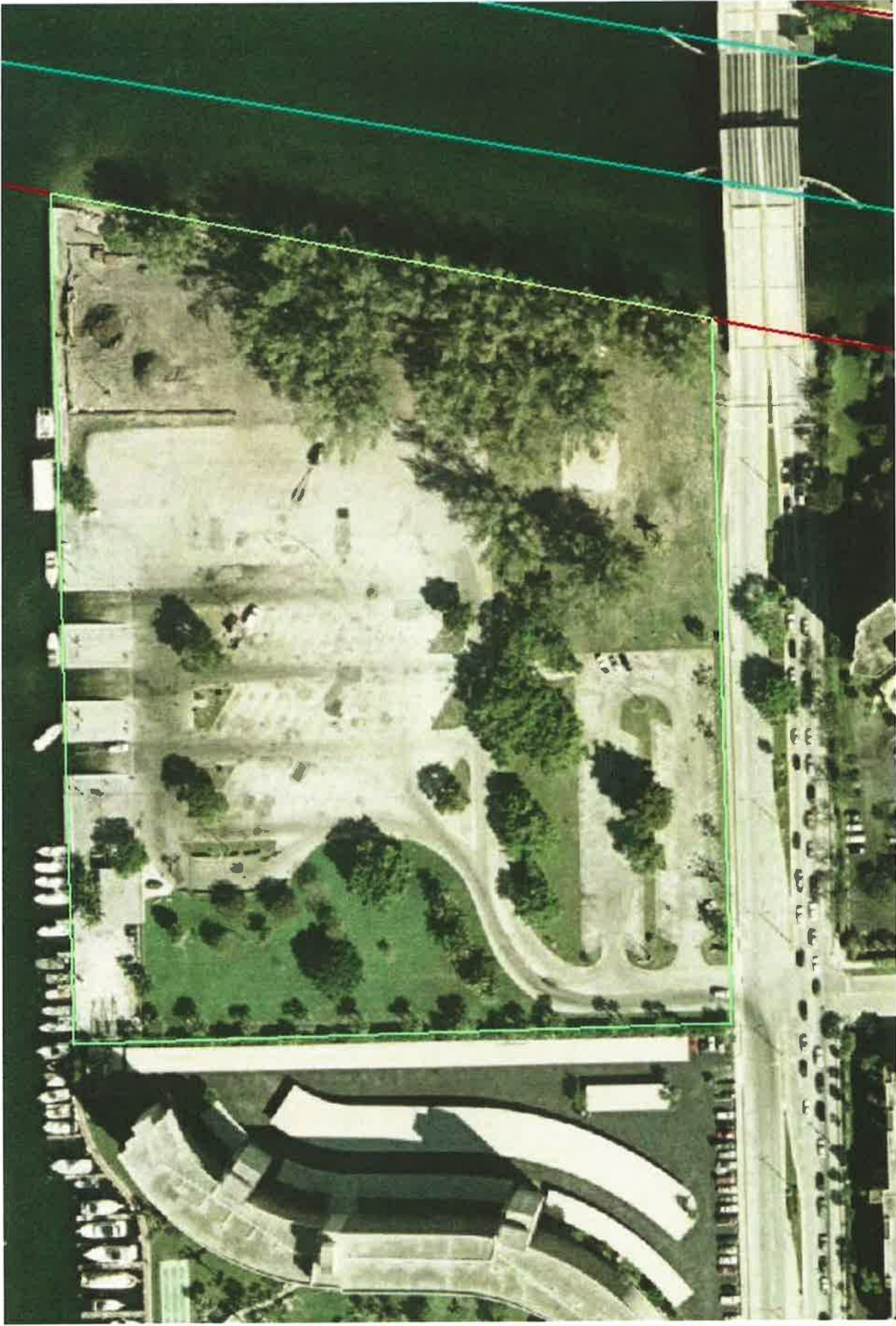


MSA 726 - Exchange Club Park

Google

Imagery Date: 1/18/2014 26°15'36.60" N 80°05'26.48" W elev 5 ft eye alt

1995





 FIND Owned

 Channel

 ICW Right-of-Way

MSA 727



SA 727 - Alsdorf Park/14th Street Boat Ramp

MSA FO-727B



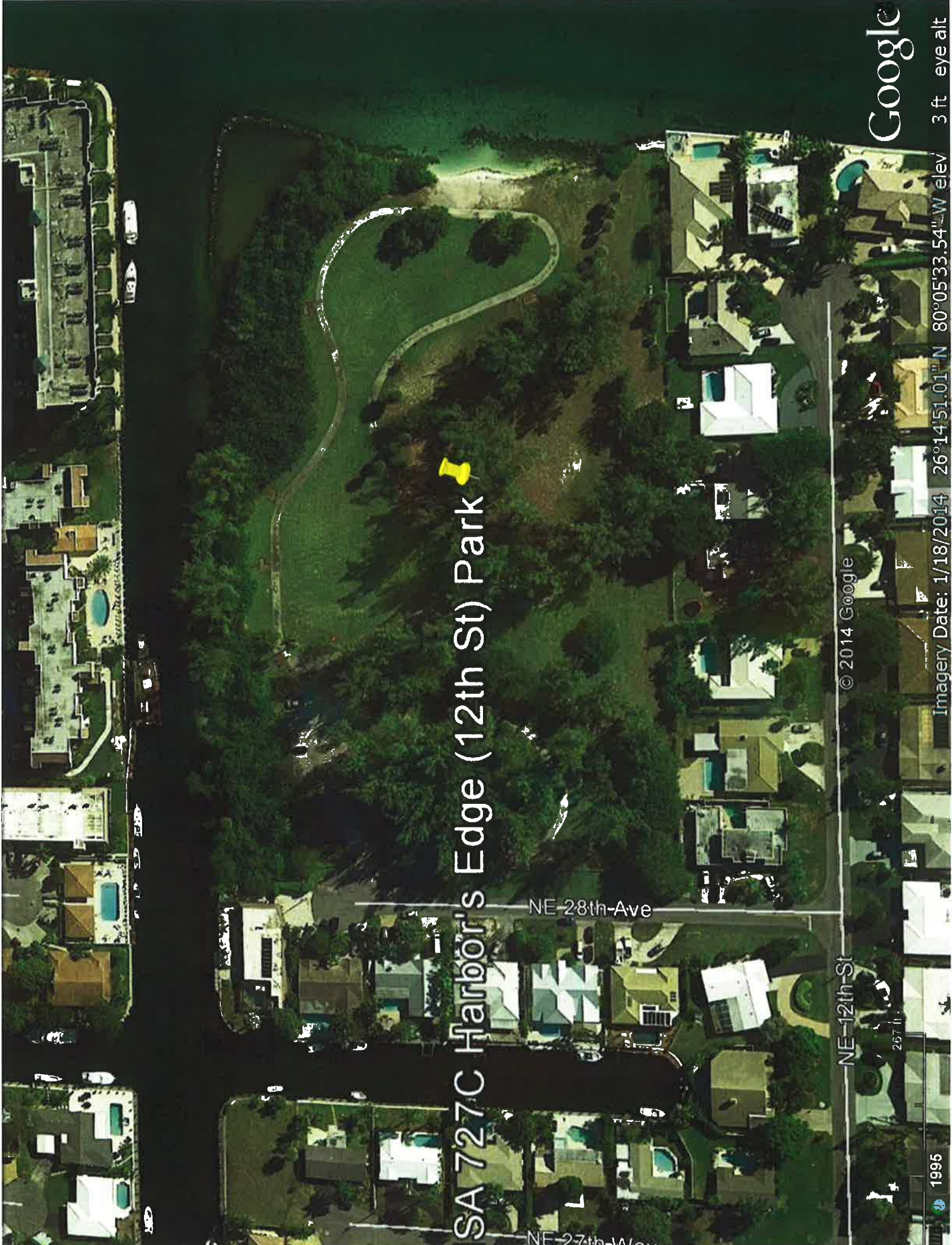
© 2014 Google

Google

NE 14th St 239 ft

1995

Imagery Date: 1/18/2014 26°15'03.99" N 80°05'30.67" W elev 4 ft eye alt



SA 727C Harbor's Edge (12th St) Park

NE 28th-Ave

NE-12th-St

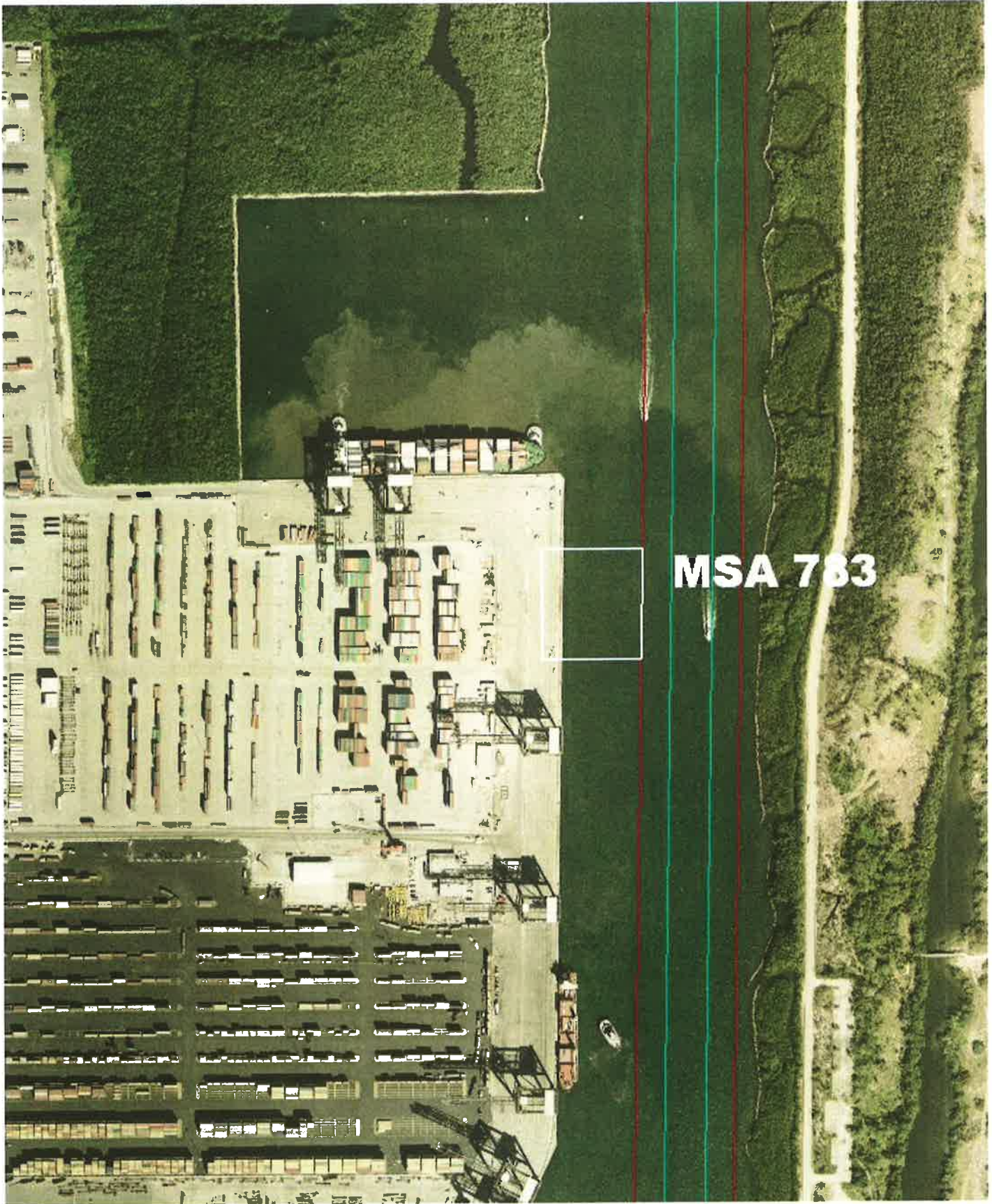
© 2014 Google

Google

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Imagery Date: 1/18/2014 26°14'51.01"N 80°05'33.54"W elev

1996



ECONOMIC BENEFITS OF THE DISTRICT'S WATERWAYS



Purpose

To update economic benefits in Broward County of marine-related activities on the District Waterways, as previously estimated in *An Economic Analysis of the District's Waterways in Broward County*, July 2008, and to provide the general public and Federal, State, and local officials with a clear understanding of the importance of maintaining the waterways.

Scenarios Evaluated

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



ECONOMIC IMPACTS

Current Existing Impacts

- \$4.391 billion in business volume
- \$975.0 million in personal income
- 21,111 jobs
- \$178.3 million in tax revenue

Impacts of Cessation of Waterways Maintenance

- Decrease of \$2.073 billion in business volume
- Decrease of \$469 million in personal income
- Decrease of 10,635 jobs
- Decrease of \$84.6 million in tax revenue

Impacts of an Increase in Waterways Maintenance

- Increase of \$595.1 million in business volume
- Increase of \$138.5 million in personal income
- Increase of 3,094 jobs
- Increase of \$24.6 million in tax revenue

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

- Decrease of \$3.031 billion in business volume
- Decrease of \$668.4 million in personal income
- Decrease of 14,788 jobs
- Decrease of \$122.2 million in tax revenue

Economic Benefits as of April 2011

BROWARD COUNTY



ECONOMIC BENEFITS OF THE DISTRICT'S WATERWAYS

BROWARD 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 July 2008 in *An Economic Analysis of the District's Waterways in Broward Beach County*.

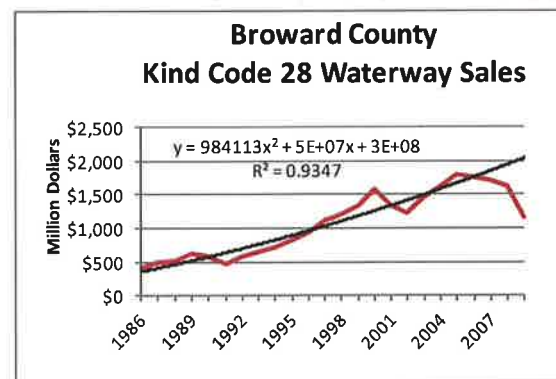
Updating of Previously Estimated Benefits

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

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

Estimating the Impact of the Recession

The impact of the recession was estimated by determining the trend in gross sales of boat dealers over the 20-year period prior to the onset of the recession. This trend was used to estimate the theoretical gross sales if sales had continued to increase at the rates previously experienced. The red line in the figure below illustrates reported actual gross sales of boat dealers and the black line illustrates the trend of those sales. From 2007 to 2009 gross boat dealer sales in Broward County decreased by 31 percent; if the recession had not occurred, it is estimated that gross sales from 2007 to 2009 would have increased by 22 percent.

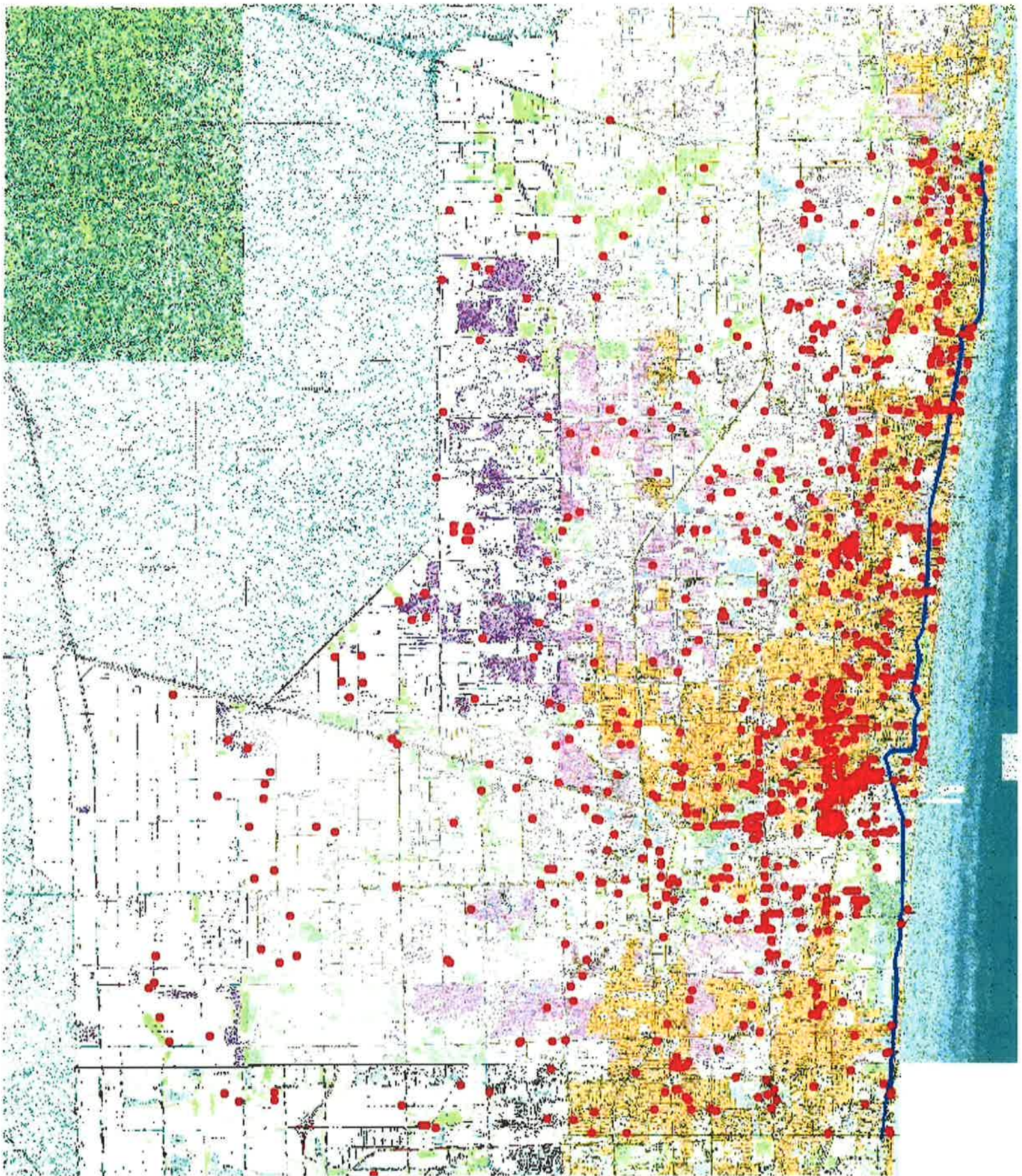


Annual Boater Spending on Gas, Food, and Drinks at Non-Marine-Related Establishments

- Current existing conditions: \$39.9 million
- Cessation of maintenance: \$22.7 million
- Increased maintenance: \$39.9 million
- Assuming no recession: \$52.7 million

Vessel Draft Restrictions Assumed for Each Scenario

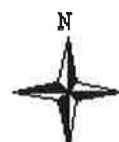
- Current existing conditions: 6.5 feet MLW
- Cessation of maintenance: 3 feet MLW
- Increased maintenance: 10 feet MLW
- Assuming no recession: 6.5 feet MLW



LOCATION MAP

Businesses.shp
Channel

Broward Marine Businesses



**Florida Inland Navigation District
Waterway Assistance Program Projects
1986- 2015**

PROJECT NAME	PROJECT No.	PROJECTS SPONSER	GRANT AMOUNT	TOTAL COST
West Lake Park Boat Dock - Phase II	BR-01-52	Broward County	\$120,000.00	\$240,000.00
Deerfield Island Park Boat Dock - Phase I (Withdrawn)	BR-04-67	Broward County	\$40,000.00	\$80,000.00
Port Everglades I.C.W./ (Transferred To Interlocal)	BR-04-68	Broward County	\$52,675.00	\$140,421.00
Deerfield Is. Boat Dock - P.H. I	BR-05-72	Broward County	\$40,000.00	\$80,000.00
Deerfield Island Park Boat Dock - Phase II	BR-09-85	Broward County	\$200,000.00	\$400,000.00
Secret Woods Nature Center Boat Dock-PH I (Expired)	BR-10-88	Broward County	\$60,000.00	\$120,000.00
South Fork New River Channel Markers - Ph I (Expired)	BR-10-89	Broward County	\$30,000.00	\$60,000.00
Anne Kolb Nature Center Exhibit Renovations	BR-13-101	Broward County	\$250,000.00	\$500,000.00
Deerfield Island Boardwalk Replacement - Phase I	BR-13-102	Broward County	\$50,000.00	\$100,000.00
Deerfield Island Shelter Replace. & Interpretive Signs	BR-13-103	Broward County	\$75,000.00	\$150,000.00
South Fork New River Channel Markers - Phase II	BR-13-104	Broward County	\$60,000.00	\$120,000.00
North Beach Park - Phase I I	BR-89-6	Broward County	\$200,000.00	\$813,700.00
West Lake Park Marina	BR-90-11	Broward County	\$27,500.00	\$55,000.00
West Lake Park Marina	BR-91-12	Broward County	\$300,000.00	\$679,000.00
Bonnet House Wetlands Education Project	BR-92-16	Broward County	\$21,000.00	\$42,380.00
Anne Kolb Nature Center Environmental Education Display	BR-92-17	Broward County	\$260,000.00	\$520,000.00
Intracoastal Waterway Environmental Education	BR-95-32	Broward County	\$46,288.00	\$67,264.00
Dania Cut-off Canal Boaters Park	BR-96-33	Broward County	\$500,000.00	\$1,346,015.00
Secret Woods Nature Center Improvements	BR-97-38	Broward County	\$67,500.00	\$75,000.00
New River Dredging - Phase I (Project Expired)	BR-97-39	Broward County	\$37,000.00	\$55,000.00
Beach Nourishment - Phase I (Project Expired)	BR-97-40	Broward County	\$217,528.00	\$2,172,500.00
West Lake Park Boat Docks - Phase I	BR-98-42	Broward County	\$15,000.00	\$30,000.00
Secret Woods Nature Center - Phase II	BR-99-46	Broward County	\$297,000.00	\$396,000.00
Waterway Maintenance Vessel	BR-DA-91-14	City of Dania	\$30,000.00	\$60,000.00
Dania Cut-off Canal Dredge & Dock Project	BR-DA-92-18	City of Dania	\$28,350.00	\$36,000.00
Dania Cutoff Canal Dredging Study	BR-DA-93-20	City of Dania	\$8,000.00	\$16,000.00
Dania Cut-off Canal Dredging - Phase I	BR-DA-95-29	City of Dania	\$51,750.00	\$69,000.00
Dania Cut-off Canal Dredging - Phase II	BR-DA-96-36	City of Dania	\$149,000.00	\$226,000.00
Griffin Marine Park	BR-DA-99-49	City of Dania Beach	\$161,500.00	\$346,024.00
Dania Cut-off Canal Dredging	BR-DB-02-58	City of Dania Beach	\$180,000.00	\$220,000.00
Mckeithen Park	BR-DB-03-63	City of Deerfield Beach	\$75,000.00	\$150,000.00

**Florida Inland Navigation District
Waterway Assistance Program Projects
1986- 2015**

PROJECT NAME	PROJECT No.	PROJECTS SPONSER	GRANT AMOUNT	TOTAL COST
Kester Point Marina Boardwalk - Phase I (Withdrawn)	BR-DB-04-69	City of Deerfield Beach	\$150,000.00	\$300,000.00
Marina Restoration & Expansion - Phase I	BR-DB-08-81	City of Dania Beach	\$96,000.00	\$192,000.00
I.T. Parker Dock Replacement	BR-DB-10-90	City of Dania Beach	\$24,400.00	\$48,800.00
Pioneer Park Boat Ramp	BR-DB-11-94	City of Deerfield Beach	\$193,500.00	\$387,000.00
Municipal Marina Renovation Project - Phase I I	BR-DB-12-95	City of Dania Beach	\$1,382,505.00	\$2,765,010.00
Sullivan Park Expansion - Phase I	BR-DB-12-96	City of Deerfield Beach	\$307,500.00	\$615,000.00
Dania Beach Municipal Marina Renovation - Phase I I B	BR-DB-13-105	City of Dania Beach	\$1,000,000.00	\$2,000,000.00
Dania Beach Municipal Marina Rennovations-Phase IIC	BR-DB-14-107	City of Dania Beach	\$617,495.00	\$1,234,990.00
Hillsboro Canal Dredging	BR-DB-97-37	Cities of Boca Raton & Deerfield I	\$500,000.00	\$720,000.00
George English Park Boating Enhancements	BR-FL-00-50	City of Fort Lauderdale	\$350,000.00	\$700,000.00
Navigational Dredging Of The North Fork New River	BR-FL-01-53	City of Fort Lauderdale	\$150,000.00	\$165,000.00
Riverwalk North Improvements	BR-FL-01-54	City of Fort Lauderdale	\$375,000.00	\$793,500.00
Riverwalk South - Phase I	BR-FL-01-55	City of Fort Lauderdale	\$1,000,000.00	\$2,000,000.00
Riverwalk At Marshall's Point - Stage I	BR-FL-02-59	City of Fort Lauderdale	\$951,000.00	\$1,902,000.00
Riverwalk At Stranahan House	BR-FL-02-60	City of Fort Lauderdale	\$398,500.00	\$797,000.00
Keeping Waterways Safe For Boating	BR-FL-03-64	City of Fort Lauderdale	\$155,000.00	\$310,000.00
Riverwalk At Stranahan House - Stage I I	BR-FL-03-65	City of Fort Lauderdale	\$145,000.00	\$313,400.00
Riverwalk South Regional Park - Phase I I I	BR-FL-04-70	City of Fort Lauderdale	\$922,500.00	\$2,000,000.00
New River Floating Dockage	BR-FL-05-73	City of Fort Lauderdale	\$50,000.00	\$100,000.00
New River Floating Day Dockage For Small Boats- Phase I	BR-FL-06-76	City of Fort Lauderdale	\$50,000.00	\$100,000.00
Cooley's Landing Boat Launch Replacement	BR-FL-08-82	City of Fort Lauderdale	\$218,545.00	\$437,090.00
S.E. 15th Street Boat Launch & Marine Complex - Phase I	BR-FL-08-83	City of Fort Lauderdale	\$120,000.00	\$240,000.00
New River Floating Dock Day Dockage For Small Boats	BR-FL-09-86	City of Fort Lauderdale	\$506,560.00	\$1,013,120.00
S.E. 15th St. Boat & Marina Complex-ph I I (Withdrawn)	BR-FL-09-87	City of Fort Lauderdale	\$876,906.00	\$2,283,156.00
S.E. 15th Street Boat Ramp & Marine Complex Development	BR-FL-12-97	City of Fort Lauderdale	\$876,906.00	\$2,283,156.00
FLPD Marine Motors Replacement Boat #5&6	BR-FL-13-106	City of Fort Lauderdale	\$30,000.00	\$65,700.00
FLPD Marine Outboard Motors Replacement Boat #4&7	BR-FL-14-108	Department	\$30,000.00	\$89,800.00
S.W. 7th Avenue Boat Docks	BR-FL-89-4	City of Ft. Lauderdale	\$150,000.00	\$540,000.00
Fire/Rescue Boat	BR-FL-89-5	City of Fort Lauderdale	\$30,000.00	\$71,200.00
Birch/Las Olas Marina Expansion	BR-FL-90-10	City of Ft. Lauderdale	\$80,000.00	\$160,000.00
Cooleys Landing	BR-FL-90-7	City of Ft. Lauderdale	\$96,800.00	\$472,652.00

**Florida Inland Navigation District
Waterway Assistance Program Projects
1986- 2015**

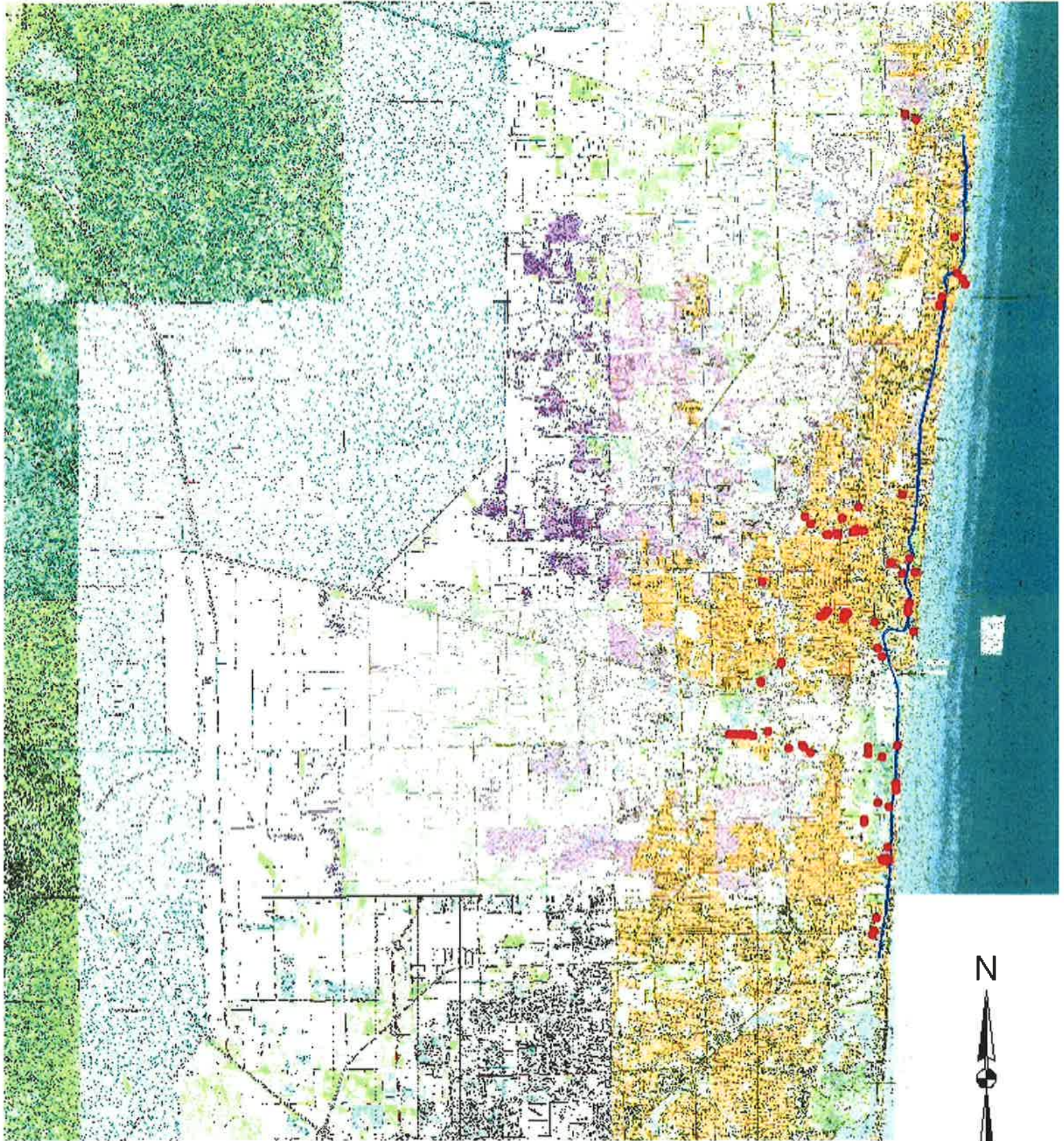
PROJECT NAME	PROJECT No.	PROJECTS SPONSER	GRANT AMOUNT	TOTAL COST
Waterway Signage	BR-FL-90-9	City of Fort Lauderdale	\$23,500.00	\$23,500.00
Birch/ Las Olas Marine Expansion - Phase I	BR-FL-91-13	City of Fort Lauderdale	\$94,000.00	\$188,000.00
New World Aquarium, Inc. Broward's Env. Edu. Ctr.	BR-FL-91-15	City of Fort Lauderdale	\$40,000.00	\$167,300.00
New World Aquarium (Project Expired)	BR-FL-93-22	City of Fort Lauderdale	\$25,000.00	\$250,000.00
New River Dredging - Phase I	BR-FL-94-24	City of Fort Lauderdale	\$75,000.00	\$266,128.00
Birch/ Las Olas Docking Facility Expansion	BR-FL-94-25	City of Fort Lauderdale	\$200,000.00	\$2,000,000.00
New River Dredging - Phase I I I (Agreement Expired)	BR-FL-95-26	City of Fort Lauderdale	\$85,000.00	\$585,000.00
Las Olas Docking Facility Comfort Station	BR-FL-95-27	City of Fort Lauderdale	\$375,000.00	\$1,010,750.00
Bonnet House Waterways Project (Terminated)	BR-FL-95-28	City of Fort Lauderdale	\$62,500.00	\$125,000.00
S.E. 15th Street Boat Ramp Replacement	BR-FL-96-35	City of Fort Lauderdale	\$50,000.00	\$100,000.00
George English Park Boating Facilities	BR-FL-98-43	City of Fort Lauderdale	\$245,000.00	\$490,000.00
New River Dredging - Phase I I I	BR-FL-98-44	City of Fort Lauderdale	\$750,000.00	\$1,000,000.00
North Fork Of The New River Dredging	BR-FL-99-47	City of Fort Lauderdale	\$19,440.00	\$21,600.00
Waterway Cleaning and Improvement Program	BR-HA-90-8	City of Hallandale	\$25,000.00	\$50,000.00
Marine Patrol Equipment	BR-HA-98-45	City of Hallandale	\$6,000.00	\$33,000.00
Hallandale Beach Public Dockage - Phase I	BR-HB-04-71	City of Hallandale Beach	\$27,000.00	\$54,000.00
Hallandale Beach Public Dockage - Phase I I	BR-HB-08-84	City of Hallandale Beach	\$420,495.00	\$840,990.00
Hallandale Beach City Marina	BR-HB-12-98	City of Hallandale Beach	\$347,040.00	\$991,543.00
Hillsboro Inlet Channel Deepening (Cancelled)	BR-HID-93-21	Hillsboro Inlet District	\$20,500.00	\$1,728,700.00
Hillsboro Inlet Channel Improvement	BR-HID-99-48	Hillsboro Inlet District	\$927,276.00	\$3,275,000.00
Hollywood Marina Seawall Reconstruction - Part I	BR-HO-01-56	City of Hollywood	\$272,430.00	\$1,157,600.00
Hollywood Marina Seawall Reconstruction - Phase I I	BR-HO-02-61	City of Hollywood	\$306,370.00	\$612,740.00
Police Pier Relocation	BR-HO-06-77	City of Hollywood	\$12,500.00	\$25,000.00
North Lake Dredging & Boating Improv. (Withdrawn)	BR-HO-07-79	City of Hollywood	\$140,000.00	\$280,000.00
Hollywood Marina Improvements	BR-HO-1	City of Hollywood	\$200,000.00	\$400,000.00
Waterway Master Plan	BR-HO-12-99	City of Hollywood	\$75,000.00	\$150,000.00
Hollywood Marina Expansion Dredging Project(Rescinded)	BR-HO-93-19	City of Hollywood	\$7,500.00	\$15,000.00
Marina Signs	BR-HO-95-31	City of Hollywood	\$7,300.00	\$14,600.00
Intracoastal Waterway Dredging Project	BR-LP-96-34	City of Lighthouse Point	\$6,440.00	\$12,880.00
N.E. 12 Terrace Boat Ramp Canoe & Kayak Launch	BR-OP-10-91	City of Oakland Park	\$75,000.00	\$150,000.00
N.W. 39th Street C-13 Canal & Kayak Launch (Withdrawn)	BR-OP-10-92	City of Oakland Park	\$175,000.00	\$350,000.00

**Florida Inland Navigation District
Waterway Assistance Program Projects
1986- 2015**

PROJECT NAME	PROJECT No.	PROJECTS SPONSER	GRANT AMOUNT	TOTAL COST
Hillsboro Inlet Marina (Expired)	BR-PB-00-51	City of Pompano Beach	\$283,000.00	\$588,400.00
Hillsboro Inlet Marina Facilities - Phase I	BR-PB-01-57	City of Pompano Beach	\$19,500.00	\$78,000.00
Hillsboro Inlet Marina Facilities - Stage I I	BR-PB-02-62	City of Pompano Beach	\$414,500.00	\$829,000.00
Hillsboro Inlet Marina Seawall	BR-PB-10-93	City of Pompano Beach	\$51,775.00	\$162,750.00
Aldorf Park Improvements - Phase I	BR-PB-12-100	City of Pompano Beach	\$91,757.00	\$183,514.00
Intracoastal Water Taxi Station - Phase I	BR-PB-14-109	City of Pompano Beach	\$17,500.00	\$35,000.00
Aldorf Park Improvements - Phase II	BR-PB-14-110	City of Pompano Beach	\$646,915.43	\$1,293,831.00
Aldorf Park Improvements - Phase 2	BR-PB-98-41	City of Pompano Beach	\$195,750.00	\$396,700.00
North Beach Park - Phase I	BR-PD-88-3	Broward County	\$200,000.00	\$1,275,000.00
Harbors Edge Park	BR-PO-87-2	City of Pompano Beach	\$110,000.00	\$220,267.10
Middle River Maintenance Project - Phase I	BR-WM-03-66	City of Wilton Manors	\$37,500.00	\$75,000.00
Middle River Dredging - Phase I I	BR-WM-05-74	City of Wilton Manors	\$213,276.00	\$426,552.00
Richardson Estate Park Dock & Facilities	BR-WM-05-75	City of Wilton Manors	\$123,500.00	\$265,000.00
Snook Creek Boat Ramp	BR-WM-07-80	City of Wilton Manors	\$325,000.00	\$650,000.00
Navigation Channel Dredging & Signage - Phase I	BR-WM-94-23	City of Wilton Manors	\$9,300.00	\$11,640.00
Public Navigation Channel Dredging - Phase I I	BR-WM-95-30	City of Wilton Manors	\$57,600.00	\$107,600.00
FLPD Marine Motors Replacement Boat#12	BR-FL-15-111	City of Fort Lauderdale	\$21,000.00	\$42,000.00
Coontie Hatchee Floating Day Dock	BR-FL-15-112	City of Fort Lauderdale	\$127,000.00	\$254,000.00
Trash Skimming Vessel	BR-FL-15-113	City of Fort Lauderdale	\$20,000.00	\$40,000.00
Las Olas Marina and Access Dredging Phase I	BR-FL-15-114	City of Fort Lauderdale	\$258,898.00	\$466,689.00
Bahia Mar Yachting Center Dredging Phase I	BR-FL-15-115	City of Fort Lauderdale	\$206,543.00	\$297,004.00
Exchange Club Park Improvements	BR-PB-15-116	City of Pompano Beach	\$60,000.00	\$120,000.00
Sullivan Park maritime Village	BR-DB-15-117	City of Deerfield Beach	\$1,833,587.00	\$3,667,174.00

Project Totals \$25,903,400.43 \$62,318,330.10

LOCATION MAP

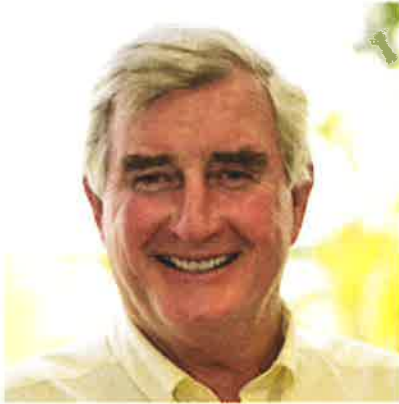


BROWARD COUNTY
WATERWAYS ASSISTANCE PROGRAM PROJECTS



VIRGINIA INSTITUTE OF MARINE SCIENCE

Home » People » Thomas J. Murray



Thomas J. Murray

Associate Director for Advisory Services

Email : tjm@vims.edu

Phone : (804) 684-7190

Office : Clayton House 203B

Department : Marine Advisory Services

Education

- Master of Science, Applied Economics - 1976

Area of Emphasis: "Natural Resources and Regional Development"

Clemson University, Clemson, South Carolina

- Bachelor of Arts, Economics - 1971

Kenyon College, Gambier, Ohio

- *Supplementary Course Work:*

Applied Natural Resource Economics; Economics of Outdoor Recreation; Agricultural Banking; Agricultural Credit Analysis ; Advanced Agricultural Credit Analysis; Agricultural Appraisal; Advanced Agricultural Appraisal.

Research Interests

- Natural Resource Economics
- Regional and Coastal Community Development
- Public Policy Research
- Economic Impact Analysis
- Public Finance
- Marine Advisory and Technical Consultation

Current Projects

- Economic Impact of the 2010 “Macondo Oil Spill” on the Seafood Industry.
- Creating Community and Economic Development Tools for Developing and Retaining Working Waterways & Waterfronts.
- Economic Impact Study of Recreational Boating in Virginia.
- Evaluation of the Economic Impact of the H2-B Visa program on Virginia’s Seafood Industry.
- Virginia Fishery Resource Grant Program Implementation.

Professional Background:

2009 – Present *Associate Director for Advisory Services* - Faculty, College of William & Mary, Virginia Institute of Marine Science, Gloucester Point, Virginia

1999 – 2008 *Marine Business and Coastal Development Specialist* – Faculty, College of William & Mary, Virginia Institute of Marine Science, Gloucester Point, Virginia

1990 – Present *Consulting Economist* – Specializing in the application of economic theory, statistics, and econometrics to evaluate public policy alternatives and provide associated state and federal government-relations representation. Clients range from public agencies to private industry, international consulting firms, universities, and trade associations.

1995 –1999 *Adjunct Senior Research Associate* – School of Policy Studies, Georgia State University; Atlanta Georgia

1990 –1997 *Senior Research Associate* – Center for Economic & Management Research, University of South Florida; Tampa, Florida

1991–1995 *Instructor of Economics* – Hillsborough Community College; Tampa, Florida

1985 – 1990 *Executive Director* – Gulf & South Atlantic Fisheries Development Foundation, Inc.; Tampa, Florida

1982 – 1985 *Loan Officer/Aquatic Specialist* – Federal Land Bank/Federal Intermediate Credit Bank of Columbia, Columbia, South Carolina; Credit and Appraisal Department for joint banks in the 3rd Farm Credit District (N.C., S.C., Ga., Fla.)

1980 – 1982 *Resource Economist* – College of William and Mary, Virginia Institute of Marine Science; Gloucester Point, Virginia

1978 – 1980 *County Extension Director/Marine Advisory Agent - Monroe County Florida* - University of Florida, Institute of Food and Agricultural Sciences; Key West, Florida

1977 – 1978 *Research Assistant* – South Carolina Wildlife and Marine Resources Department; Charleston, South Carolina

1976 – 1977 *Instructor of Economics* – Tri-County Technical College, Pendleton, South Carolina

1973 – 1975 *Graduate Student/Research Assistant* – Clemson University Department of Agricultural Economics; Clemson, South Carolina

Selected Past & Current Public Service and Committee Appointments:

- Chairman, Fisheries Committee of the American Agricultural Economics Association (AAEA)
- Chairman, Gulf of Mexico Marine Fisheries Initiative (MARFIN): State, Federal, Private, Marine Fisheries Research
- Chairman, American Seafood Industry Executive Marketing Team (Washington, D.C.)
- Chairman, Southeastern Shrimp Industry/U.S. Department of Commerce Technology Transfer Task Force
- Chairman, Florida Keys Marine Advisory Council
- Chairman, Florida Keys Boating Improvement Committee
- Appointee, National Fisheries Institute "Fresh Fish Committee" (Washington, D.C.)
- Appointee, Seafood Industry Advisory Committee, Florida Department of Agriculture
- Development Team, IRS Publication 595 "Tax Guide For Commercial Fishermen"
- Technical Steering Committee, U.S. E.P.A. "Gulf of Mexico Program"
- U.S. National Marine Fisheries "Shellfish Growing Waters Task Force"
- Key West Community Development Agency.
- Advisor, Chesapeake Bay National Estuarine Reserve System.
- U.S.D.A. Tidewater Resource Development and Conservation Council.
- Rappahannock Community College Citizen Advisory Committee.

- Governor's Aquaculture Advisory Committee.
- Sea Grant National Sustainable Development Focus Team.

Selected Courses and Professional Development Seminars Conducted:

- *Special Purpose Property: Appraisal Techniques for Aquatic Loan Officers*: Federal Land Bank of Columbia, SC;
- *Financing Shoreside Facilities*: Federal Land Bank of Columbia, SC;
- *Aquatic Credit Training*: 3rd. Farm Credit District Production Credit Associations (NC, SC, GA, FLA);
- *Financing Commercial Fishermen; Loan Officer Training*: 3rd. Farm Credit District Production Credit Associations (NC, SC, GA, FLA);
- *Analysis of Fishing Vessel Sales and Appraisals*: Federal Intermediate Credit Bank of Columbia, SC;
- *Aquatic Credit and Appraisal Training for Bankers*: Federal Intermediate Credit Bank of Columbia, SC;
- *Cash Flow Financing for Credit Officers*: FarmBank Services of Denver, CO;
- *National Aquatic Credit Training*: FarmBank Services of Denver, CO;
- *Record Keeping for Commercial Fishermen*: University of Florida;
- *Tax Preparation for Commercial Fishermen*: University of Florida

Academic Courses Taught:

- Microeconomics
- Macroeconomics
- Natural Resource Economics

Major Areas of Expertise:

- Natural Resource Economics
- Regional Development
- Public Policy Research
- Economic Impact Analysis
- Forecasting
- Data Collection and Analysis
- Survey Research

- Technical Consultation

Recent Selected Clients Include:

- A.T. Kearney, Inc.; Alexandria, Virginia
- Broward County Economic Development Commission
- Burger Boats
- Chilean Salmon Farmers Association; Santiago, Chile
- City of Key West, Florida
- East Coast Fisheries Foundation, Inc.; Narragansett, Rhode Island
- Louisiana Department of Wildlife and Fisheries; Baton Rouge, Louisiana
- Louisiana State University: Center for Coastal, Energy, and Environmental Resources; Baton Rouge, Louisiana
- Marine Industries Association of Florida; Coral Gables, Florida
- Marine Industries Association of South Florida; Fort Lauderdale, Florida
- McKnight & Associates, Inc.; Seattle, Washington
- Massachusetts Government Land Bank; Boston, Massachusetts
- Middle Peninsula District Planning Commission; Saluda, Virginia
- Monroe County Commercial Fishermen, Inc.; Marathon, Florida
- National Marine Fisheries Service; Miami, Florida
- National Marine Manufacturers Association; Chicago, Illinois
- National Oceanic & Atmospheric Administration, Rockville, Maryland
- Ocean Marine, LLC; Portsmouth, Virginia
- P.M. Securities, Inc. Toronto, Canada
- Strom Thurmond Institute of Government and Public Affairs, Clemson University; Clemson, South Carolina
- Yachting Promotions, Inc., Fort Lauderdale, Florida

- Techlaw, Inc., Bethesda, Maryland
- Virginia Department of Health; Richmond, Virginia

Selected Research Reports and Publications:

"Virginia Fishery Resource Grant Program Legislative Report." VIMS Marine Resource Report No. 2014-1. 28 pages.

Murray, Thomas J. and Karen Hudson. 2014. *"Virginia Shellfish Aquaculture – Situation Outlook Report (Results of 2012 Virginia Shellfish Aquaculture Crop Reporting Survey)."* VIMS Marine Resource Report No. 2014-2. VSG-14-02. 20 pages.

"Economic Activity Associated With the 2013 Progressive Insurance Miami International Boat Show." National Marine Manufacturers Association. September 2013.

"Economic Activity Associated with Shellfish Aquaculture in Virginia - 2012." VSG-13-17, VIMS Marine Resource Report No. 2013-4, July 2013.

"Mega Yacht Economic Analysis for the Las Olas Marina Expansion Feasibility Study Fort Lauderdale, Florida." City of Fort Lauderdale, Florida. January 2013.

"VMRR2012 Virginia Fishery Resource Grant Program Legislative Report." VIMS Marine Resource Report No. 2013-1.

"2012 Virginia Shellfish Aquaculture-Situation and Outlook Report". VMRR No. 2013-02. VSG-13-02. March 2013.

"Assessment of the Economic Impacts of Recreational Boating in Virginia ." VMRR. 2012-12.

"Report of the Virginia Institute of Marine Science –the Virginia Fishery Resource Grant Program: 2012." VMRR 2013-1 February 2013.

"2012 cultchless (Single Seed) Oyster Crop Budgets for Virginia. User Manual" VMRR 2012-10. VSG-12-13.

"Virginia Shellfish Aquaculture Situation and Outlook Report – Results of 2011 Virginia Shellfish Aquaculture Crop Reporting Survey." VIMS Report Number 2012-04. VSG-12-07. May 2012.

"A Review of Brokered Boat Sales in Florida under the Sales & Use Tax Cap." Florida Yacht Brokers Association & Marine Industries Association of South Florida. February 2012.

"Analysis of the Economic Impact of H-2B Worker Program On Virginia's Seafood Industry and Economy." VIMS Marine Resource Report No. 2011-12

"Virginia Shellfish Aquaculture Situation and Outlook Report results of 2010 Virginia Shellfish Aquaculture Crop Reporting Survey". VIMS Marine Resource Report No. 2011-11. VSG - 11-06.

Assessment of the Economic Impacts of Recreational Boating in Middlesex County, Virginia. VMRR # 2011-3. VSG-11-02.

"Estimated Economic Impact of Gulf Oil Spill on Virginia's Oyster Industry - July 2010" VMRR # 2010-07.T. Murray and J. Kirkley.

"Virginia Shellfish Growers Survey Report 2008-2009 Situation and Outlook Survey". VIMS Marine Resource Report No. 2009-05. VSG 09-04.

"Assessment of the Economic Impacts of Recreational Boating in the City of Hampton." VIMS Marine Resource Report No. 2009-02. VSG-09-02. VSG-08-08

"Economic Outlook for Expansion of the Eastern Shore Farmers' Market: Seafood Handling, Storage, and Transportation Facility." VIMS Marine Resource Report No. 2008-7.

"Virginia Shellfish Aquaculture-Situation and Outlook Report". VIMS Marine Resource Report No. 2008-02. VSG-08-02. May 2008

"Recent Growth, Current Activity, and Economic Impacts Of Mega Yachts In South Florida 1997 – 2007". The Broward Alliance & Marine Industries Association of South Florida. October 2007.

"Water Access 2007 Conference Proceedings-A National Symposium on Working Waterways and Waterfronts". May, 2007. VSG-07-03. VIMS Marine Resource Report 2007-04.

"Virginia Shellfish Aquaculture-Situation and Outlook Report". VIMS Marine Resource Report No. 2007-02. VSG-07-02. April 2007

"Recent Growth, Current Activity, and Economic Impacts Of Mega Yachts In South Florida – 1997 – 2007". The Broward Alliance & Marine Industries Association of South Florida. October 2007.

Potential Market and Economic Impact of Proposed PORTO MONTENEGRO– Tivat, Republic of Montenegro –. P.M. Securities (Barbados), Inc. February 2007.

"Market Assessment and Feasibility Analysis for Small Scale Aquaculture Development in the Southside of Virginia." VIMS Marine Resource Report No. 2006-11. December 2006.

"Broward's Recreational Marine Industry –Economic Activity Associated with In-Water & Dry Stack Boat Slips–August 2006". Marine Master Plan Committee. Marine Industry Association of South Florida, Inc. Fort Lauderdale, Florida. August 2006

"Economic Activity Associated With the Inaugural "Virginia In-Water Boat Expo September 9-11, 2005". VMRR 2006-01. VSG-06-02. April 2006.

"Tortugas 2000-A Post Mortem: Evaluation of Actual Versus Projected Socio-Economic Impacts of the Dry Tortugas Ecological Reserve". Project Final Report. NOAA Contract NA04NMF4330079. May 2006.

"Virginia Shellfish Aquaculture-Situation and Outlook Report". VIMS Marine Resource Report No. 2006-05.VSG-06-06. April 2006.

"Economic Activity Associated With the Inaugural "Virginia In-Water Boat Expo September 9-11, 2005". VIMS Marine Resource Report No. 2006-01. VSG-06-02. April 2006.

"Economic Impact of the Recreational Marine Industry-Broward, Dade, and Palm Beach Counties, Florida – 2005" forThe Broward Alliance and Marine Industries Association of South Florida. Fort Lauderdale, Florida. January, 2006.

"Economic Contributions of Virginia's Commercial Seafood and Recreational Fishing Industries: A User's Manual forAssessing Economic Impacts." With J.Kirkley VIMS Marine Resource Report No. 2005-9. December, 2005.

"Florida's Recreational MarineIndustry-Economic Impact and Growth 1980-2005" for Marine Industries Association ofFlorida. December, 2005 Miami, Florida.

"The Impacts of The Cruise Ship Industry on the Quality of Life in Key West". ForCity of Key West Naval Properties Local Redevelopment Authority. October 2005.

"Yachting Sector DevelopmentStudy-Strategic Plan" with Acme Consulting Inc. for St. Lucia Ministry ofTourism. June, 2005.

U.S. Caribbean Fish Trap Fishery Costs and Earnings Study 2005. NOAA Technical Memorandum NMFS-SEFSC- 534, 127 p. with Agar, J. J., M. Shivlani, J. R. Waters,M. Valdés-Pizzini, J. Kirkley and D. Suman.

"Economic Activity Associated with theSixty-Fourth Miami International Boat Show & Strictly Sail – February17-21, 2005," (with the University of Florida) prepared for the NationalMarine Manufacturers Association, Inc., Chicago, IL, May 2005.

"Economic Activity Associated with Clam Aquaculture in Virginia– 2004" VSG -05-05. VIMS Marine Resource Report No. 2005-05, Virginia Institute of Marine Science. Gloucester Point, Virginia. July 2005.

"Pilot-scale Production Economics of C. Ariakensis Oysters" VSG -05-03. VIMS Marine Resource Report No. 2005-04, VirginiaInstitute of Marine Science. Gloucester Point, Virginia July 2005.

"Recent Growth, Current Activity and Economic Impacts of Mega Yachts in South Florida 1997 – 2003," prepared forthe Marine Industries Association of South Florida, the Broward Alliance, Ft. Lauderdale, FL,2003.

"Socio-Economic Baseline Development Florida Keys National Marine Sanctuary: 1998-2002" February 2003.

"Geospatial Information System (GIS) Analysis of Florida Keys National Marine Sanctuary Fishing Panels"

February 2003. NOAA/NOS.

"Economic Activity Associated with the Atlantic Intracoastal Waterway" Proceedings of Coastal Zone '03. Baltimore, Maryland. 2003.

"Virginia Marine Trades Workforce Training-A Regional Needs Assessment." Virginia Marine Resource Report 2004-02, VSG -04-02.

"Economic Reliance on Use of Imported Shrimp in the United States." American Seafood Distributor's Association. Washington, D.C. January 2003.

"Economic Analysis of Marine Protected Areas". Proceedings of the International Institute of Fisheries Economics and Trade (IIFET 2002). Wellington New Zealand 2002

"Evaluation of Comparative Watercraft Personal Property Taxation in Northern Neck Localities." Virginia Marine Resource Report 2002-7

"Economic Activity Associated With the 17th Annual Palm Beach Boat Show – March 21-24, 2002" (with the University of Florida) prepared for Marine Industries Association of Palm Beach and Yachting Promotions, Inc.

"Evaluation of Comparative Waterfront Personal Property Taxation in Middle Peninsula Localities." Virginia Marine Resource Bulletin 2001-12.

"Virginia Boating Plan and Access Needs Assessment." Virginia Marine Resource Bulletin 2001-13.

"Boating Growth and Trends" Virginia Marine Resource Bulletin. 2001.

"Virginia Marina Infrastructure Needs Assessment." Virginia Marine Resource Bulletin 2001-2, VSG-01-02.

"Economic Activity Associated with the Miami International Boat Show – February 11-17, 1999," (with the University of Florida) prepared for the National Marine Manufacturers Association, Inc., Chicago, IL, 1999.

"Potential Market for the Ocean Marine Yacht Center," prepared for the Ocean Marine, L.L.C., Portsmouth, Virginia, 1999.

"Economic Impacts of Hurricane Georges on Monroe County Commercial Lobster Fishing, 1998," prepared for the Monroe County Commercial Fishermen, Inc., Marathon, FL, 1999.

"Recent Growth, Current Activity and Economic Impacts of Mega Yachts in South Florida – 1997," prepared for the Marine Industries Association of South Florida, the Broward Alliance, Ft. Lauderdale, FL, 1998.

"Economic Activity Associated with The Thirty-Eighth Annual Fort Lauderdale International Boat Show," (with the University of Florida) prepared for Marine Industries Association of South Florida, Broward Economic Development Council, and Show Management Inc., Ft. Lauderdale, FL, 1998.

"Economic Activity Associated with the Marketing of Fresh Atlantic Salmon from Chile in the U.S.," (with Center for Economic and Management Research, University of South Florida) prepared for Chilean Salmon and Trout Farmers Association, Santiago, Chile, 1997.

"Florida's Recreational Marine Industry – Economic Impact and Growth, 1980-1997," (with R. McHugh) prepared for Marine Industries Association of Florida, Inc., Coral Gables, FL, 1997.

"Economic Impact of the Recreational Marine Industry – Broward County, Florida," (with R. McHugh) prepared for Marine Industries Association of South Florida, Ft. Lauderdale, FL, 1997.

"The Florida Marine Industries '10-90' Sales Tax Initiative," (with R. McHugh) prepared for Marine Industries Association of South Florida, Ft. Lauderdale, FL, 1997.

"Economic Activity Associated with Personal Watercraft Use in Monroe County, Florida," (with R. McHugh) prepared for the Personal Watercraft Industry Association/National Marine Manufacturers Association, Chicago, IL, 1996.

"Economic Impact of Commercial Fisheries in the Florida Keys," (with Center for Economic and Management Research, University of South Florida) prepared for the Monroe County Commercial Fishermen Inc., Marathon, FL, 1995.

"Northeast Multi-Species Fishery Management – A Current Review," prepared for The East Coast Fisheries Foundation, Inc., Point Judith R.I, 1992.

1987-1990. Industry Development and Introduction of TEDs (Turtle Excluder Device) in the Southeastern Shrimp Industry. Conducted for National Marine Fisheries Service, St. Petersburg, FL.

1982-1985. Monthly *"Shrimp Industry Situation and Outlook Report,"* prepared for Farm Credit Banks, Columbia, SC.

"Price Flexibility and Demand Analysis for Virginia Hard Clams; Mercenaria mercenaria," (with W. DuPaul and

A. Kvaternik), Virginia Institute of Marine Science, College of William and Mary, Gloucester Pt., VA, 1981.

"Analysis of Three Site Locations for Crab Meal Production in the Chesapeake Bay Region," (with W. DuPaul), Virginia Institute of Marine Science, College of William and Mary, Gloucester Pt., VA, 1981.

"Feasibility of Shellfish Meal Production in the Chesapeake Bay," (with W. DuPaul), Virginia Institute of Marine Science, College of William and Mary, Gloucester Pt., VA, 1980.

"Economic Impact of Recreational Boating in Virginia," (with J. Lucy and W. DuPaul), Virginia Institute of Marine Science, College of William and Mary, Gloucester Pt., VA, 1980.

"Cost and Returns of Commercial Shrimp Vessels in the South Atlantic," (with D. Liao), South Carolina Wildlife Dept., Ft. Johnson, SC, 1976.

"Mobility of Shrimp Vessels in the South Atlantic," (with D. Liao), South Carolina Wildlife Dept., Ft. Johnson, SC, 1976.

"An Industrial Quality Index of Alternative Coastal Developments," (with B. Dillman), South Carolina Agricultural Experiment Station, Clemson, SC, 1976.

"Economic Impact of S.C. Private Boat Anglers," (with D. Liao), South Carolina Wildlife Dept., Ft. Johnson, SC, 1976.

"Economic Impact of Flood Control; Marion County, S.C.," (with B. Dillman), U.S. Soil Conservation Service, Columbia, SC, 1974.

Invited Public Testimony and Presentations Include:

- U.S. Senate Commerce Committee, regarding the "Reauthorization of the Magnuson Fishery Conservation and Management Act"
- House Merchant Marine and Fisheries Committee, regarding the "Reauthorization of the Magnuson Fishery Conservation and Management Act"
- Smithsonian Institute, "Future of the Coastal Fisheries in Florida"
- Florida Governor and Cabinet Meetings
- Florida Marine Fisheries Commission
- Atlantic and Gulf of Mexico Regional Fisheries Management Councils
- Expert Testimony in Natural Resource issues provided in numerous state and federal courts
- Other formal presentations related to the economics of natural resources have included various media: Magazines, Newspapers, Network and Public Broadcasting Television, Radio, Video.

Professional Associations:

- American Agricultural Economics Association
- International Institute of Fisheries Economics & Trade
- North American Association of Fisheries Economists
- Southern Regional Science Association
- The Coastal Society

Economic Impact of Dania Cutoff Canal Dredging¹

In 2013, the Florida Inland Navigation District (“FIND”) completed dredging of the Dania Cutoff Canal located in Dania Beach, Florida. The deepening of the waterway has proven to be a clear enhancement to navigation and a significant inducement to Dania Cutoff Canal business growth and economic impact.

As a result of the dredging:

- Boat yards are servicing 54% more vessels in 2015, compared to the pre-dredging situation in 2013. The work includes more extensive refit and yacht repair and maintenance projects.
- Boat yard annual service revenues have increased an estimated 59% since 2013, the pre-dredging period.
- The duration of boat yard projects has increased from an average of 30 days in 2013 to 35 days in the current year. Most firms have experienced a qualitative improvement in the types of jobs including more “refit” projects in addition to periodic maintenance services.
- The majority of local boat yards are now reporting waiting lists for service, while none reported waiting lists in 2013, or other recent years prior to the dredging.
- Broward County has realized a \$23.4 million increase in economic output, as a result of the dredging.
- Associated with the Dania Cutoff Canal industries growth, 132 additional jobs, \$6.6 million in labor income, \$9.9 million in value added and nearly \$800k in additional tax revenue have been generated within Broward County.

SUMMARY OF ESTIMATED ANNUAL ECONOMIC IMPACTS ARISING FROM THE DANIA CUT CANAL DREDGING ON BROWARD COUNTY REGION — 2015 (\$)				
IMPACT TYPE	TOTAL	DIRECT	INDIRECT	INDUCED
Output	\$23,448,462	\$10,852,971	\$4,596,081	\$7,999,410
Employment (FTE Jobs)	132	43	24	65
Labor Income	\$6,659,969	\$2,235,853	\$1,443,803	\$2,980,313
Total Value Added	\$9,926,290	\$2,815,120	\$2,285,505	\$4,825,665
Business Taxes (sales, excise, etc.)	\$790,292	\$140,937	\$256,239	\$393,116

¹ Prepared by Thomas J. Murray & Associates, Inc., for the Florida Inland Navigation District, September 2015.

ECONOMIC IMPACT OF DANIA CUTOFF CANAL DREDGING

FINAL REPORT

Prepared by:

THOMAS J. MURRAY & ASSOCIATES, INC.

September 14, 2015

On behalf of

FLORIDA INLAND NAVIGATION DISTRICT

Contact Person and Project Manager

THOMAS J. MURRAY

P.O. Box 1083 ♦ Gloucester Point, Virginia 23062 USA

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Economic Impact of Dania Cutoff Canal Dredging

DRAFT REPORT

Prepared by:

THOMAS J. MURRAY & ASSOCIATES, INC.

September 14, 2015

On behalf of

FLORIDA INLAND NAVIGATION DISTRICT

EXECUTIVE SUMMARY

In 2013, the Florida Inland Navigation District (“FIND”) completed dredging of the Dania Cutoff Canal located in Dania Beach, Florida. The deepening of the waterway has proven to be a clear enhancement to navigation and a significant inducement to Dania Cutoff Canal business growth and economic impact.

As a result of the dredging:

- Boat yards are servicing 54% more vessels in 2015, compared to the pre-dredging situation in 2013. The work includes more extensive refit and yacht repair and maintenance projects.
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- The majority of local boat yards are now reporting waiting lists for service, while none reported waiting lists in 2013, or other recent years prior to the dredging.
- Broward County has realized a \$23.4 million increase in economic output, as a result of the dredging.
- Associated with the Dania Cutoff Canal industries growth, 132 additional jobs, \$6.6 million in labor income, \$9.9 million in value added and nearly \$800k in additional tax revenue have been generated within Broward County.

INTRODUCTION

In 2013, the Florid Inland Navigation (“FIND”) District completed dredging of the Dania Cutoff Canal located in Dania Beach, Florida. The deepening of the waterway was primarily justified as an enhancement to navigation, which would induce economic activity and within the local community and the State of Florida. The dredging of the Dania Cutoff Canal was funded by FIND with a 25% cost share from both Broward County and the City of Dania Beach. There was no project component that would address the actual economic impact of the project in the local area. To begin to evaluate the actual economic activity that grew from the dredging the FIND requested a follow-up assessment to begin to quantify what actually resulted from the investment. This report provides such an evaluation based upon both primary surveys of the project area water dependent businesses and secondary economic data collection and analysis.

Dania Cut Canal Boatyard Survey

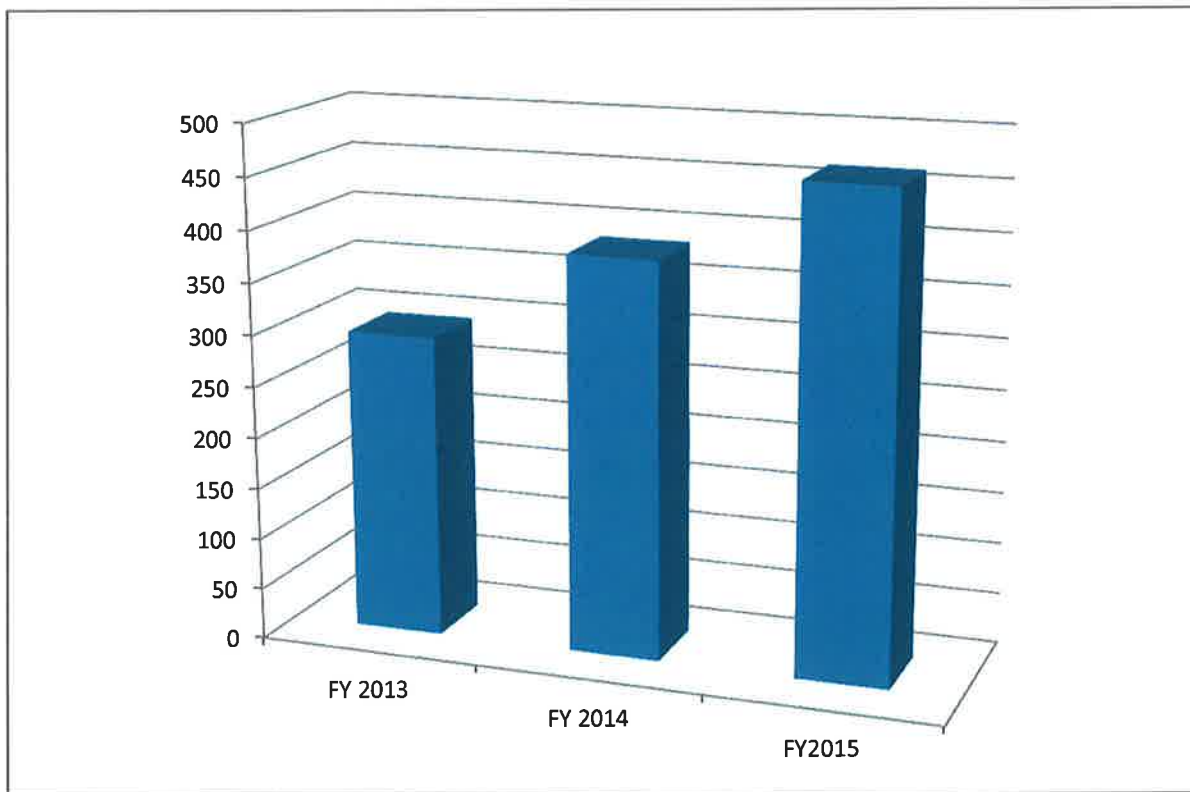
Primarily, the local boatyards are the main recipient of the direct impacts of the yacht activity relying on the Dania Cutoff Canal access. As such, they provide a reasonable basis for developing an estimate of any changes in yacht visitation and expenditures at local boatyards resulting from the channel deepening.

Interviews with boatyards directly involved in building, maintaining, and refitting vessels of the mega yacht category were conducted to gain descriptive and financial information for use in the impact modeling.¹

Because of the small number of such firms, information obtained from the boatyards interviewed is combined to insure against any disclosure of proprietary financial information. While perhaps not complete, the estimates are considered to be representative of yacht repair and mega yacht activity in the region and therefore useful for economic impact estimation.

As seen in Figure 1, the trend at the local boat yards has reportedly been quite positive following the dredging. Not only are the firms accommodating more yacht repair and maintenance projects, additionally the duration and size of those projects has grown from an average of 30 days to 35 days. For most firms the quality of the types of jobs has improved, as there are more “refit” projects in addition to typical maintenance services. They are now reporting waiting lists for service, whereas most did not report waiting lists in 2013 or other years prior to the dredging.

¹ Generally the boatyards are classified as Standard Industrial Classification NAICS 3366612 ((SIC) #3732) “Boat Building and Repairing”. In general, the former classification applies to recreational boats of relatively small size while Ship Building (SIC 3731) includes firms primarily engaged in large commercial vessels such as cargo vessels, tankers, ships, etc.; yachts, either for commercial or recreational use, are also included in this sector. The economic modeling conducted herein relates to the smaller boat yard sector.

FIGURE 1: GROWTH IN BOAT YARD SERVICE 2013-2015 (# PROJECTS)

Typically the boatyard expenditures are of two types:

- Annual haul-out and routine maintenance.
- Periodic vessel haul-out and complete painting and overhaul.

Boatyards interviewed provided information on the numbers of vessels upon which work was completed at their facilities. A summary of the trends in boat yard activity appears below in Table 1.

TABLE 1: GROWTH IN DANIA CUT BOAT YARD ACTIVITY (2013-2015)			
	2013	2014	2015²
Number of Projects	345	441	532
Total Estimated Value	\$22,996,665	\$29,395,737	\$35,461,524

² 2015 data is based on the survey estimates completed during August 2015. The estimate is considered reasonable based upon the 28% increase in actual business activity in the first full year following the dredging project completion. The average revenue per project (\$66,657) is based upon an average for the 6 yards interviewed.

Based on prior boat yard research conducted in the local area, the boatyards clearly experienced significant variability between vessels and each project.³ For example, boatyards complete numerous annual “routine” haul outs for bottom cleaning, painting, etc. Annual repair and maintenance costs are quite difficult to show with “rules of thumb”. The average expenditures at boatyards for mega yacht work had declined since 1997. Managers consistently cited acute cost competition from competitive yards within the Tri-county area, as well as increased competition from outside the region.

Significantly adding to the boatyard’s large yacht activity, every three to four years large yachts are hauled and completely repainted. The cost to haul vessels clearly varies with size. For instance one 150 foot vessel was being hauled and painted during an interview with an estimated cost of \$200,000. Additionally, the vessel’s engines were to be overhauled, at a cost of approximately \$150,000. While in this process at the boatyard, additional central air-conditioning, electrical generator, hydraulic pump and miscellaneous refurbishing were also being conducted. Such related projects added approximately another \$200,000 to the mega yacht project’s cost.

Interior refurbishment on such vessels can cost from \$200,000 to in excess of \$1,000,000. A typical 12-week job at a boatyard in the region could cost \$2 million - \$3 million for a vessel requiring major work.⁴

Many of those interviewed pointed out the expense also for “bright work” and “rigging”. Interior decorating and refitting can be quite expensive particularly with vessels involved in charter markets. Such major overhauls conducted regularly, i.e. every 3-4 years over the life of a yacht, can take anywhere from a few months to a calendar year. Anecdotes around the region’s boatyards were sufficiently numerous to support the overall expenditures concluded here. There were a number of overhauls in various stages of completion at local boatyards at the time of this fieldwork, which will represent additional economic impacts beyond those calculated below.

As variable as the annual expenditures for “fixed” maintenance are to project universally, the operational expenditures of mega yachts also vary greatly. Perhaps the one “constant” in the ownership and operation of a mega yacht is continuation of the maintenance, repair and refitting expenditures associated with the vessel, irrespective of its use.⁵

³ The author has surveyed Dania Cut boatyards periodically since 1997 to obtain information on level of activity and trends in business overall. The surveys provide a reasonably consistent time series from which to evaluate the direct economic impacts of the channel deepening completed in 2013. The estimates of average expenditures at boatyards are derived from an earlier survey of Broward County boat yards which included the Dania Cut firms. (2) (4).

⁴ U.S. Army Corps of Engineers. IWW Limited Reconnaissance Report Palm Beach County.

⁵ In addition to hull and machinery upgrades, major refurbishments on mega yachts typically include such things as deck refurbishments, replacement of galley appliances, electronics, and air conditioning systems; rebuilding pumps and fuel transfer systems, often installing larger tenders and davits; dismantling, redesigning, and replacing all interior spaces from master suite to crew quarters, etc. For a well detailed account of such refurbishments see [ShowBoats International](#) Volume XV Number II, May 1997: “Feadship’s 142’ Cakewalk is Reborn in Florida”.

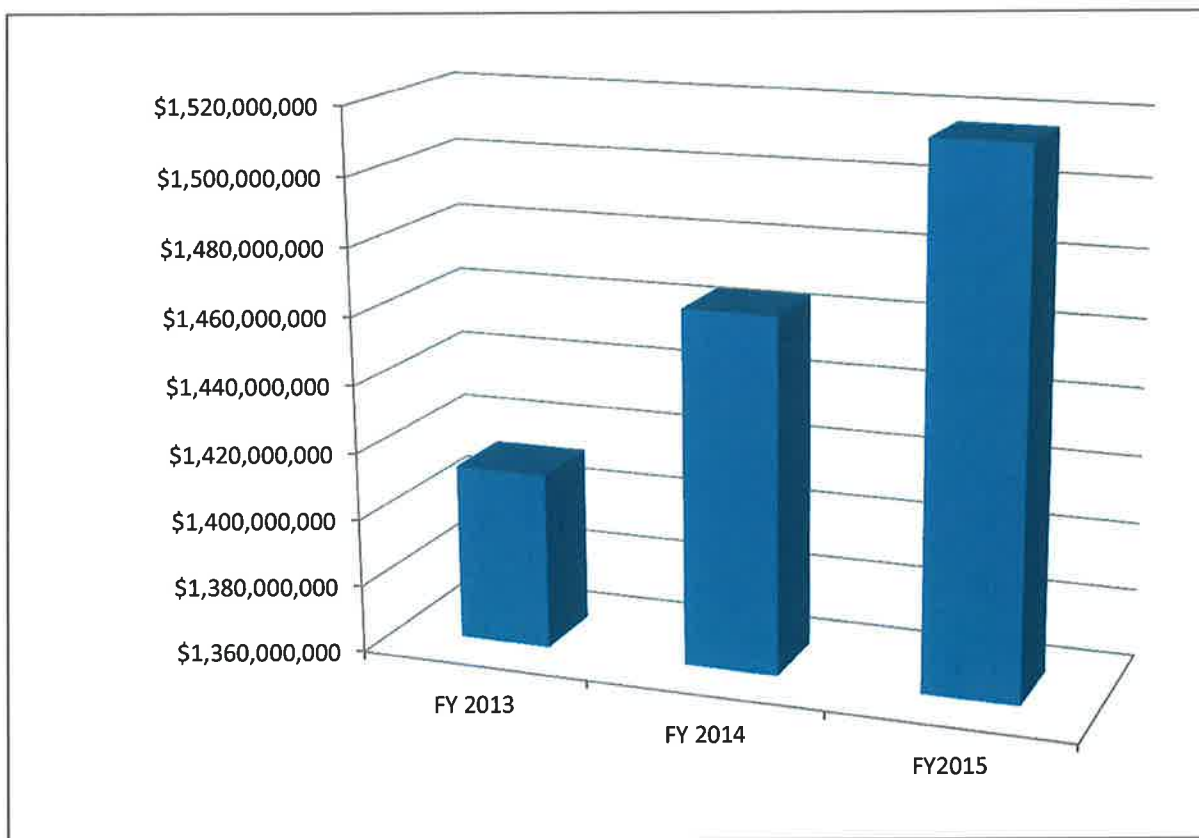
The Dania Cutoff Canal firms interviewed indicated that the dredging has been a “game changer” in the ability of local boat yards to serve larger yacht repair and maintenance demands. The improved ingress and egress “has helped business enormously”. Reportedly there are mega yacht captains who are now prepared to navigate the Canal who would not have done so pre-dredging.

The increase in business prompted by the dredging has further lead to significant increased *induced* investment by local firms to purchase new and larger boat lifts, complete additional privately funded dredging within the yard’s existing harbor, etc. As a result of the dredging one yard interviewed commented that they are seeing a significant increase of larger sailing yachts at their yard, whereby “they are no longer limited by controlling depth only mast height (reportedly 135’). Another reported that it is already a big improvement to the overall South Florida marine industry. They are seeing more deep draft larger vessels at the facility but more inquiries “now that the word is out”.

DISCUSSION

During the interview and survey process the overall economic situation and outlook was discussed with the Dania Cutoff Canal boatyards and related maritime businesses. Generally it was agreed that in addition to the significant boost in activity that arose and continues to grow from the dredging project, the overall marine business economy has been on the upswing. Figure 2 reflects that overall trend in marine business in Broward County as measured by boating related retail sales. (FDOR)

FIGURE 2. BROWARD COUNTY GROSS MARINE SALES FISCAL YEAR 2013-2015

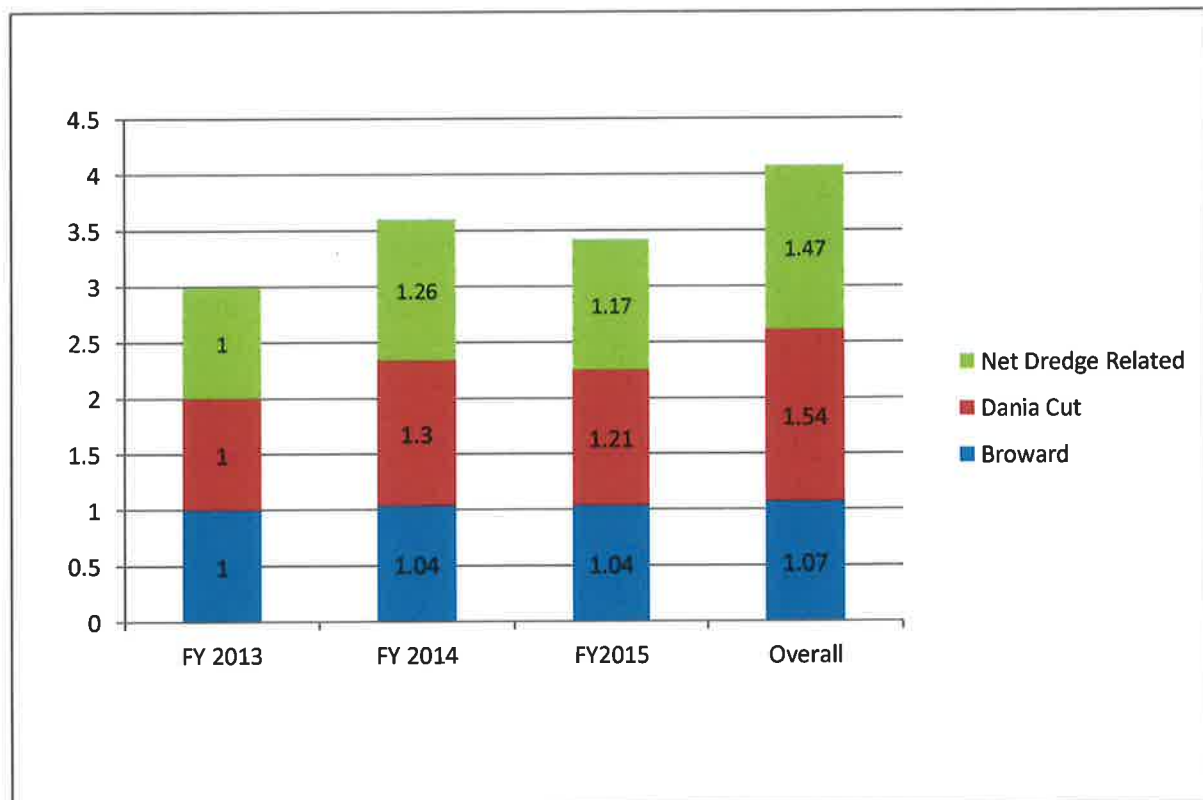


In order to better discern how much of the increase in the Dania Cutoff Canal business activity was actually a “share” of the overall demand a part of the regional economic trend vs. a “shift” in growth which has arisen from the canal deepening, secondary fiscal data was brought into the analysis to develop an adjusted estimate (index) of the dredging related growth.

Figure 3 reflects the trend in overall marine industry activity as evidenced by gross marine industry sales in contrast to the overall Dania Cut growth. The index compares the level of

activity (sales) for the period 2013-2015. The simple index shows the change in overall marine sales in Broward County to the estimated change in sales by boatyards on the Dania Cutoff Canal.⁶ The overall growth reported by the boatyards as a group was 54% over the period. For the Broward marine industry overall the growth is estimated to have been 7% for the same period. For the sake of assessing the dredge impact it is reasonable to attribute 47% of the increase in economic activity as a shift in demand attributable to the channel deepening.

FIGURE 3. BUSINESS GROWTH INDEX BROWARD COUNTY COMPARED TO DANIA CUT CANAL (2013 BASE YEAR)



Adjusting the total 2015 estimated revenues shown in Table 1 for the share of the Dania cut dredging (95.4%) the estimated growth in business activity associated exclusively with the dredging enhancement was \$33.8 million. That represents a *direct* \$10.85 million increase in business at the Dania Cutoff Canal boatyards associated with the deeper controlling depth.

⁶ The Recreational Marine Business Sales Tax data are provided by the Florida Department of Revenue for Fiscal Years 2013-2015.

Economic Impact Estimation

The information collected is utilized in estimating the initial economic activities in the Fort Lauderdale economy associated with the Dania Cutoff Canal firms in boat maintenance and repair industry. These economic impacts take the form of initial expenditures, economic output, wages, salaries, and employment.

Values for each of these are estimated by employing the IMPLAN model, computer software and Database package designed for regional economic impact analysis in the United States at the county level (Minnesota Implan Group, Inc., 2013). The analytical framework for IMPLAN is the “input-output” economic modeling approach originally described by Leontief (1959). The model utilizes databases consisting of a set of social/economic accounts which describe the structure of the US economy in terms of transactions between households, governments, and over 500 standardized industry sectors classified on the basis of the primary commodity or service produced. This model utilized the IMPLAN economic data package for Broward County, Florida.

Regional models may be constructed in IMPLAN for any county, group of counties, state or Territory in the United States. Economic impacts for a given region are specified in IMPLAN as a change in final demand, output, or employment for a particular industry sector or social institution, (e.g., households, government). The aggregate economic impact of these changes is calculated by a matrix inversion procedure that develops economic multipliers, which reflect the direct, indirect and induced impacts. Direct, indirect, and induced impacts are set in motion within the County by changes in the supply and demand of boat yard services, which in turn affects the demand for the goods and services associated with conduct of repair and refitting.

ECONOMIC IMPACT OF DANIA CUT CANAL DREDGING – 2015

Broward County and Dania Cutoff Canal boatyards represent a “basic” industry in that they produce a product for sale outside the local area. Dollars generated through these out-of-county sales (or consumption locally by non-residents), when re-spent in the community, produce additional countywide economic impacts. A “basic” industry directly affects economic activity in the region when its product is sold outside the local area. These *direct* activities produce additional *indirect* effects in the local economy, as dollars earned through the repair of vessels are re-spent locally.⁷ Indirect effects represent purchases of local products by repair yards. All the indirect effects are additional economic activity in the community and are indicative of additional jobs and income generated by the boatyard businesses.

Direct and indirect activities associated with boatyards in Fort Lauderdale then produce additional (*induced*) local impacts. These impacts are associated with the spending of income earned in the direct and indirect activities. This spending translates into local retail sales, local bank deposits, and the purchase of a diverse mix of consumer goods. An assessment of the total economic impact of a basic industry, such as Dania Cut Canal boatyards, must consider the sum of the direct, indirect, and induced activities. In essence, the local boat yard sales to owners from outside the community trigger a chain of local spending, which generates income and leads to additional spending. This process, however, is not infinite in nature. At each round of spending, for example, some dollars are lost (leaked) from the local economy. Leakages are in the form of savings in non-local institutions, taxes/fees paid to the state and federal governments, and payments for goods and services used in the boat yard activity, which are initially purchased outside the local area. Thus, the true economic impact from non-local sales Dania Cut located businesses is represented by the new dollars remaining after accounting for the various “leaks” in the economy.

Thus, the total economic activities and impacts to the Broward County economy initiated by Dania Cut boatyard activity are estimated. The *direct*, *indirect*, and *induced* effects, are expressed in standard impact terms of economic output (sales of seafood), personal incomes, total value added (wholesale margin), and employment is estimated via the IMPLAN model. The estimates of business activity for 2013-2015 are used. .

As the increases in business activity accrues at Dania Cutoff Canal businesses the changes spread throughout Broward County as well. In order to capture the multiplication of the direct boat yard impacts an input output model is used here to quantify the growth using various traditional economic impact measures.

To summarize Table 2 below; as a result of the Dania Cutoff Canal dredging Broward County has realized a \$23.4 million increase in economic output. Associated with this growth 132

⁷ See Appendix 1 for a Glossary of Economic Impact modeling definitions.

additional jobs, \$6.6 million in labor income, \$9.9 million in value added and nearly \$800k in additional tax revenue have been generated.

TABLE 2: SUMMARY OF ESTIMATED ANNUAL ECONOMIC IMPACTS ARISING FROM THE DANIA CUT CANAL DREDGING ON BROWARD COUNTY 2015 REGION — (\$)

Impact Type	Total	Direct	Indirect	Induced
<i>Output</i>	\$23,448,462	\$10,852,971	\$4,596,081	\$7,999,410
<i>Employment (FTE Jobs)</i>	132	43	24	65
<i>Labor Income</i>	\$6,659,969	\$2,235,853	\$1,443,803	\$2,980,313
<i>Total Value Added</i>	\$9,926,290	\$2,815,120	\$2,285,505	\$4,825,665
<i>Business Taxes (sales, excise, etc.)</i>	\$790,292	\$140,937	\$256,239	\$393,116

The magnitude of the estimated economic impact is directly related to the number and size of work orders at the boat yards. In a real sense, the values reported herein also provide an estimate of the economic impact that would be lost to the local economy when vessels lose water access to Dania Cut and its working waterfront, often choosing alternatives out of the region.

Finally, it should be understood that the increase in economic activity directly resulting from the public investment in dredging the Dania Cutoff Canal will result in recurring annual impacts years after the project's completion. In addition to the impact on the boat repair sector there will be growth in expenditures by yacht owners while their vessels are in the area. Travel and entertainment expenditures by high net worth yacht owners or their representatives will add additionally to the boat yard impacts estimated herein.

APPENDIX 1. GLOSSARY OF INPUT-OUTPUT TERMS

Direct effects/impacts: Direct impacts represent the revenues, value-added, income, or jobs that result directly from an economic activity within the study area or a regional economy.

Employment or Jobs: Represents the total numbers of wage and salaried employees as well as self-employed jobs. This includes full-time, part-time and seasonal workers measured in annual average jobs.

Indirect Business Taxes: Include sales, excise, and property taxes as well as fees and licenses paid by businesses during normal operations. It does not include taxes on profits or income.

Indirect effects/impacts: Indirect effects occur when businesses use revenues originating from outside the region, or study area, to purchase inputs (goods and services) from local suppliers. This secondary, or indirect business, generates additional revenues, income, jobs and taxes for the area economy.

Induced effects/impacts: Induced effects or impacts occur when new dollars, originating from outside the study area, are introduced into the local economy. Induced economic impacts occur as the households of business owners and employees spend their earnings from these enterprises to purchase consumer goods and services from other businesses within the region. This induced effect generates additional revenues, income, jobs and taxes for the area economy.

Input-Output Analysis: The use of input-output models to estimate how revenues or employment for one or more particular industries, businesses or activities in a regional economy impact other businesses and institutions in that region, and the regional as a whole.

Input-Output Models: A mathematical representation of economic activity within a defined region using inter-industry transaction tables or matrices where the outputs of various industries are used as inputs by those same industries and other industries as well.

Labor Income: All forms of employment compensation, including employee wages and salaries, and proprietor income or profits.

Local/ Resident revenues/expenditures: Local revenues or spending represent simple transfers between individuals or businesses within a regional economy. These transactions do not generate economic spin-off or multiplier (indirect and induced) effects.

Margins: Represent the differences between retail, wholesale, distributor and producers prices.

Non-resident /Non-local revenues/expenditures: When outside or new revenues flow into a local economy either from the sale of locally produced goods and services to points outside the study area, or from expenditures by non-local visitors to the study area, additional economic repercussions occur through indirect and induced (multiplier) effects.

Other Property Type Income: Income in the form of rents, royalties, interest, dividends, and corporate profits.

Output: Revenues or sales associated with an industry or economic activity.

Total Impacts: The sum of direct, indirect and induced effects or economic impacts.

Value-added: Includes wages and salaries, interest, rent, profits, and indirect taxes paid by businesses.

In the IMPLAN results tables, Value-added equals the sum of Labor Income, Other Property Type Income, and Indirect Business Taxes.

REFERENCES CONSULTED

“Economic Impact of the Recreational Marine Industry – Broward, Dade and Palm Beach Counties, Florida.” Greater Fort Lauderdale Alliance, Marine Industries Association of South Florida. October 2014. Thomas J. Murray & Assoc., Inc.

“South Florida Recreational Marine Business Index”. Marine Industries Association of South Florida. January 2014. Thomas J. Murray & Assoc., Inc.

“Mega Yacht Economic Analysis for the Las Olas Marina Expansion Feasibility Study Fort Lauderdale, Florida.” City of Fort Lauderdale, Florida. January 2013. Thomas J. Murray & Assoc., Inc.

“Recent Growth, Current Activity and Economic Impacts of Mega Yachts in South Florida 1997 – 2003,” prepared for the Marine Industries Association of South Florida, the Broward Alliance, Ft. Lauderdale, FL, 2003. Thomas J. Murray & Assoc., Inc.

Minnesota IMPLAN Group, Inc “IMPLAN Professional 3.0, Economic Impact and Social Accounting Software and Data,” 2013 IMPLAN State Package for Broward County, Florida. . Stillwater, MN. <http://www.implan.com>

FLORIDA INLAND NAVIGATION DISTRICT**BROWARD DEEPENING BID OPENING,
BROWARD COUNTY, FLORIDA**

2 p.m. October 6, 2015

Bid List

<u>NAME OF FIRM</u>	<u>PROJECT BID</u>
Great Lakes Dredge and Dock 2122 York Rd Oak Brook IL 60523	<u>\$19,675,600</u> Alt: \$2,595,000
Cashman Dredging 549 South Street Quincy, MA 02169	<u>\$16,923,550</u> Alt: \$200,000
Orion Marine Group 5440 West Tyson Ave Tampa, FL 33611	<u>\$16,955,162.50</u> Alt: \$271,000

FLORIDA INLAND NAVIGATION DISTRICT
1314 Marcinski Road
Jupiter, FL 33477

MEETING MINUTES
BROWARD DEEPENING BID PACKAGE OPENING
October 6, 2015

A Public Meeting was held pursuant to Florida Statutes Section 255.0518 on October 6, 2015, 2 p.m. to open bid packages for the Broward Deepening Project. Mark Crosley, Executive Director of the District, called the meeting to order at 2:00 p.m.. Those in attendance were Chuck Reiche with Orion Marine Group, Josh Rusk, with Cashman Dredging, Christy DiFelice with Great Lakes Dredge and Dock and Janet Zimmerman, Assistant Executive Director, FIND.

Mr. Crosley verified that each bid package was received in accordance with the Instructions to Bidders. Mr. Crosley stated bidders were prequalified and narrowed down to the following companies: Great Lakes Dredge and Dock, Cashman Dredging and Orion Marine Group.

Mr. Crosley then opened each bid package and read aloud the name of the bid company, as follows:

NAME OF BID COMPANY

Great Lakes Dredge & Dock \$19,675,600, Alt: \$2,595,000

Cashman Dredging \$16,923,550, Alt: \$200,000

Orion Marine Group \$16,955,162.50, Alt: \$271,000

There being no other business, Mr. Crosley adjourned the meeting at 2:05 p.m.


Janet Zimmerman
Assistant Executive Director



SECTION 00 41 63A



BID SCHEDULE
INTRACOASTAL WATERWAY DEEPENING;
BROWARD COUNTY, FLORIDA

BIDDER: GREAT LAKES DREDGE & DOCK COMPANY, LLC

ALL BID ITEMS SHALL INCLUDE ALL COSTS FOR FURNISHING TO THE OWNER ALL MATERIALS, EQUIPMENT, SUPPLIES, AND PERMITS INCURRED IN PROVIDING ALL WORK SHOWN ON THE INTRACOASTAL WATERWAY DEEPENING PROJECT DRAWINGS AND OUTLINED IN THE CONTRACT SPECIFICATIONS FOR CONSTRUCTION.

BASE BID ITEMS

ITEM	DESCRIPTION	UNITS	QUANTITY	UNIT COST	TOTAL COST
LUMP SUM					
0001	Insurance	LS	1	\$ 25,000. ⁰⁰	\$ 25,000. ⁰⁰
0002	Mobilization/Demobilization	LS	1	\$ 3,625,000. ⁰⁰	\$ 3,625,000. ⁰⁰
0003	Environmental Protection	LS	1	\$ 235,000. ⁰⁰	\$ 235,000. ⁰⁰
0004	Manatee Observation	LS	1	\$ 95,000. ⁰⁰	\$ 95,000. ⁰⁰
0005	Dredged Material Management Area Operation and Restoration	LS	1	\$ 1,316,000. ⁰⁰	\$ 1,316,000. ⁰⁰
0006	Surveys and Record Drawings	LS	1	\$ 285,000. ⁰⁰	\$ 285,000. ⁰⁰
0007	Temporary Access Truck Route	LS	1	\$ 320,000. ⁰⁰	\$ 320,000. ⁰⁰
UNIT COST					
0008	Mechanical Dredging and Material Placement	CY	175,000	\$ 68.40	\$ 11,970,000. ⁰⁰
0009	Dewatered Dredged Material Off-Site Transport	CY	144,000	\$ 10.40	\$ 1,497,600. ⁰⁰
0010	Dewatered Dredged Material On-Site Transport	CY	36,000	\$ 4.50	\$ 162,000. ⁰⁰
0011	In-Channel Subaqueous Debris Removal and Disposal	TONS	10	\$ 500.00	\$ 5,000. ⁰⁰
ALLOWANCE ITEMS					
0012	Port Security - Background Checks, Identification Badges, applicable Dockside Permits, and Security Personnel	LS	1	\$ 140,000.00	\$ 140,000.00

TOTAL **BASE** BID (ITEMS 0001 THRU 0012) \$ 19,675,600.⁰⁰

AMOUNTS SHALL BE SHOWN IN BOTH WORDS AND NUMBERS. IN CASE OF DISCREPANCIES, THE AMOUNT SHOWN IN WORDS SHALL GOVERN FOR EACH BID ITEM AND TOTAL BID.

TOTAL BASE BID (WRITTEN)

Nineteen million six hundred seventy-five thousand six hundred & no/100 dollars

ALTERNATE BID ITEMS					
A01	Mechanical Dredging and Material Placement	LS	1	\$ 2,595,000. ⁰⁰	\$ 2,595,000. ⁰⁰

Signature of Bidder: Russell F. Zimmerman
 RUSSELL F. ZIMMERMAN, VICE PRESIDENT

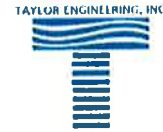
Date: 10-6-2015

Notes:

- (1) Quantities are estimated. Actual quantities may vary.
- (2) All bids must be for the entire work and must have each blank space completed.



SECTION 00 41 63A



BID SCHEDULE
INTRACOASTAL WATERWAY DEEPENING;
BROWARD COUNTY, FLORIDA

BIDDER: Cashman Dredging and Marine Contracting Company, LLC

ALL BID ITEMS SHALL INCLUDE ALL COSTS FOR FURNISHING TO THE OWNER ALL MATERIALS, EQUIPMENT, SUPPLIES, AND PERMITS INCURRED IN PROVIDING ALL WORK SHOWN ON THE INTRACOASTAL WATERWAY DEEPENING PROJECT DRAWINGS AND OUTLINED IN THE CONTRACT SPECIFICATIONS FOR CONSTRUCTION.

BASE BID ITEMS

ITEM	DESCRIPTION	UNITS	QUANTITY	UNIT COST	TOTAL COST
LUMP SUM					
0001	Insurance	LS	1	\$200,000.00	\$200,000.00
0002	Mobilization/Demobilization	LS	1	\$2,300,000.00	\$2,300,000.00
0003	Environmental Protection	LS	1	\$175,000.00	\$175,000.00
0004	Manatee Observation	LS	1	\$157,500.00	\$157,500.00
0005	Dredged Material Management Area Operation and Restoration	LS	1	\$3,750,000.00	\$3,750,000.00
0006	Surveys and Record Drawings	LS	1	\$150,000.00	\$150,000.00
0007	Temporary Access Truck Route	LS	1	\$450,000.00	\$450,000.00
UNIT COST					
0008	Mechanical Dredging and Material Placement	CY	175,000	\$19.30	\$3,377,500.00
0009	Dewatered Dredged Material Off-Site Transport	CY	144,000	\$42.70	\$6,148,800.00
0010	Dewatered Dredged Material On-Site Transport	CY	36,000	\$2.00	\$72,000.00
0011	In-Channel Subaqueous Debris Removal and Disposal	TONS	10	\$275.00	\$2,750.00
ALLOWANCE ITEMS					
0012	Port Security - Background Checks, Identification Badges, applicable Dockside Permits, and Security Personnel	LS	1	\$ 140,000.00	\$ 140,000.00

TOTAL BASE BID (ITEMS 0001 THRU 0012) \$ 16,923,550.00

AMOUNTS SHALL BE SHOWN IN BOTH WORDS AND NUMBERS. IN CASE OF DISCREPANCIES, THE AMOUNT SHOWN IN WORDS SHALL GOVERN FOR EACH BID ITEM AND TOTAL BID.

TOTAL BASE BID (WRITTEN)

- Sixteen million nine hundred twenty-three thousand five hundred fifty ————— Dollars

ALTERNATE BID ITEMS					
A01	Mechanical Dredging and Material Placement	LS	1	\$200,000.00	\$200,000.00

Signature of Bidder:

Dale Pyatt
Manager

Date:

10/6/15

Notes:

- (1) Quantities are estimated. Actual quantities may vary.
- (2) All bids must be for the entire work and must have each blank space completed.



SECTION 00 41 63A

BID SCHEDULE
INTRACOASTAL WATERWAY DEEPENING;
BROWARD COUNTY, FLORIDA



BIDDER: Orion Marine Construction, Inc.

ALL BID ITEMS SHALL INCLUDE ALL COSTS FOR FURNISHING TO THE OWNER ALL MATERIALS, EQUIPMENT, SUPPLIES, AND PERMITS INCURRED IN PROVIDING ALL WORK SHOWN ON THE INTRACOASTAL WATERWAY DEEPENING PROJECT DRAWINGS AND OUTLINED IN THE CONTRACT SPECIFICATIONS FOR CONSTRUCTION.

BASE BID ITEMS

ITEM	DESCRIPTION	UNITS	QUANTITY	UNIT COST	TOTAL COST
LUMP SUM					
0001	Insurance	LS	1	\$ 104,500.00	\$ 104,500.00
0002	Mobilization/Demobilization	LS	1	\$ 1,884,000.00	\$ 1,884,000.00
0003	Environmental Protection	LS	1	\$ 197,000.00	\$ 197,000.00
0004	Manatee Observation	LS	1	\$ 459,000.00	\$ 459,000.00
0005	Dredged Material Management Area Operation and Restoration	LS	1	\$ 3,079,000.00	\$ 3,079,000.00
0006	Surveys and Record Drawings	LS	1	\$ 180,000.00	\$ 180,000.00
0007	Temporary Access Truck Route	LS	1	\$ 136,000.00	\$ 136,000.00
UNIT COST					
0008	Mechanical Dredging and Material Placement	CY	175,000	\$ 53.55	\$ 9,371,250.00
0009	Dewatered Dredged Material Off-Site Transport	CY	144,000	\$ 7.80	\$ 1,123,200.00
0010	Dewatered Dredged Material On-Site Transport	CY	36,000	7.80	280,800.00
0011	In-Channel Subaqueous Debris Removal and Disposal	TONS	10	\$ 41.25	\$ 412.50
ALLOWANCE ITEMS					
0012	Port Security - Background Checks, Identification Badges, applicable Dockside Permits, and Security Personnel	LS	1	\$ 140,000.00	\$ 140,000.00

TOTAL BASE BID (ITEMS 0001 THRU 0012) \$ 16,955,162.50

AMOUNTS SHALL BE SHOWN IN BOTH WORDS AND NUMBERS. IN CASE OF DISCREPANCIES, THE AMOUNT SHOWN IN WORDS SHALL GOVERN FOR EACH BID ITEM AND TOTAL BID.

TOTAL BASE BID (WRITTEN)

Dollars

ALTERNATE BID ITEMS					
A01	Mechanical Dredging and Material Placement	LS	1	\$ 271,000.00	\$ 271,000.00

Signature of Bidder:

Date:

10/06/2015

Notes:

- (1) Quantities are estimated. Actual quantities may vary.
 (2) All bids must be for the entire work and must have each blank space completed.

January 8, 2014

SUMMARY OF THE DEEPENING PROJECT FOR THE INTRACOASTAL WATERWAY IN BROWARD COUNTY, FLORIDA

(USACE FILE NO. SAJ-2009-03523 (SP-SLR), FDEP FILE NO. 06-0283683-006, & BROWARD CO. FILE NO. DF10-1018)

ISSUE: Existing permitted depths in the Intracoastal Waterway ICWW, part of the federally authorized channel, are currently -10 feet (ft) Mean Low Water (MLW). The proposed 2.72-mile project presently requests deepening the channel to -15 ft MLW (with an allowable -2 ft overdredge to achieve and maintain project depth) and temporary placement of the dredged material in 6.6-acre dredged material management area (DMMA) on Port Everglades property. After nearly 4 years of permitting efforts, three issues remain: (1) the Broward County Environmental Protection and Growth Management Department asserted that the contingency mitigation plan approved by Florida Department of Environmental Protection (FDEP) is not sufficient to meet the Broward County regulatory agency standards; (2) Broward County has raised the question whether Deerfield Island, owned by FIND and leased to the County, can be used for mitigation, if required; and (3) Port Everglades must extend its lease for temporary use of the Dredged Material Disposal Area.

BACKGROUND & JUSTIFICATION: The proposed project need originates from an increased number of larger vessels that require a deeper channel for safe navigation and the location of facilities within the project template that service these vessels (Las Olas Marina, Swimming Hall of Fame, and Bahia Mar, etc.). Based on an April 2011 economic analysis of local city, county, and industry groups, implementation of the currently proposed deepening project would result in significant annual benefits of: *\$7.3 million for servicing 160 – 180 ft Loa (length overall) vessels that draft in excess of 10 ft, \$73.7 million for vessels up to 180 – 240 ft Loa vessels that draft in excess of 12 ft, and \$185.3 million for vessels up to 240 – 280 ft Loa vessels that draft in excess of 14 ft.*

The project begins at the 17th Causeway Bridge over the ICWW just north of the Port Everglades Northport Garage and Convention Center northward to a point about 4,000 ft north of the Las Olas Boulevard (State Road 842) Bridge. Based on vessel design drafts, projected future growth, and industry trends described in the 2011 analysis, and to capture the full economic benefit associated with these vessels, engineering guidelines recommended a channel depth between -17 ft and -20 ft MLW.

AVOIDANCE & MINIMIZATION OF ENVIRONMENTAL IMPACTS: The original submerged natural resources survey and dredging template identified 1.83 acres of environmental resources within the project. Due to FIND's commitment to minimize (and in this case, completely avoid) environmental resource impacts (seagrass), FIND reduced the average bottom width of the channel to 110 ft (Figure 1). The dredge template — that provides for a 2:1 side slope, requires a minimum 10-ft buffer from identified seagrasses, and results in the removal of approximately 283,000 cy³ — reflects a compromise between navigational requirements and impacts to existing natural resources.

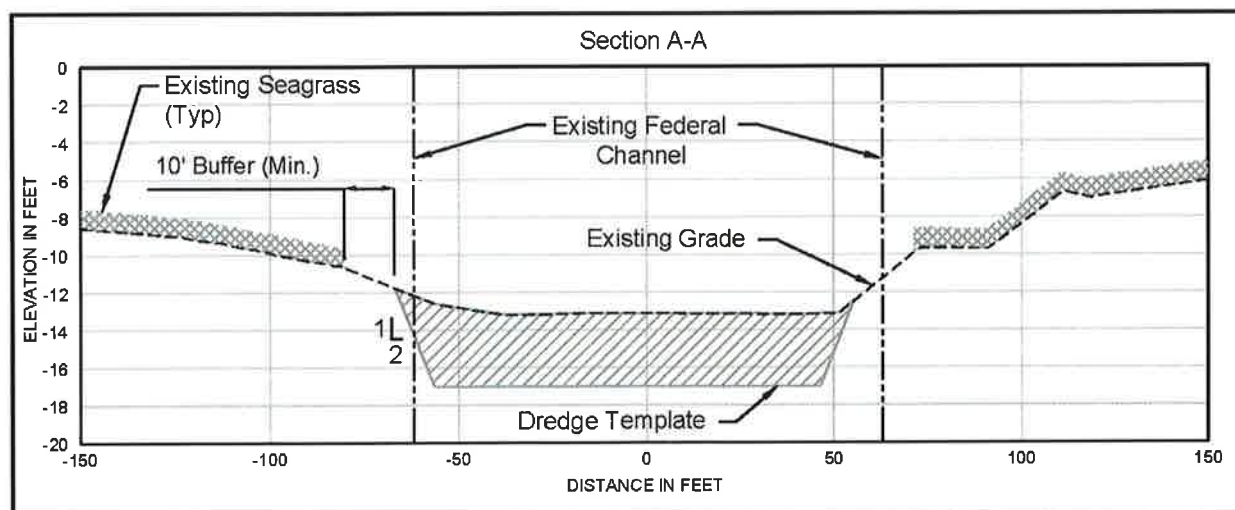


Figure 1. ICWW typical dredging template cross section

CURRENT PLAN: FIND has designed the ICWW dredge template not to impact seagrass. Therefore, there is no requirement for mitigation. To resolve the Broward County Environmental Protection and Growth Management Department's request for contingency mitigation plan, Deerfield Island (owned by FIND and leased to Broward County) has been approved by the FDEP to serve as a possible mitigation site, if needed. Should the proposed project inadvertently impact seagrass during construction, FIND has the potential to utilize a small portion of Deerfield Island Park to create seagrass habitat, while exploring other possibilities.

PROJECT MAP.

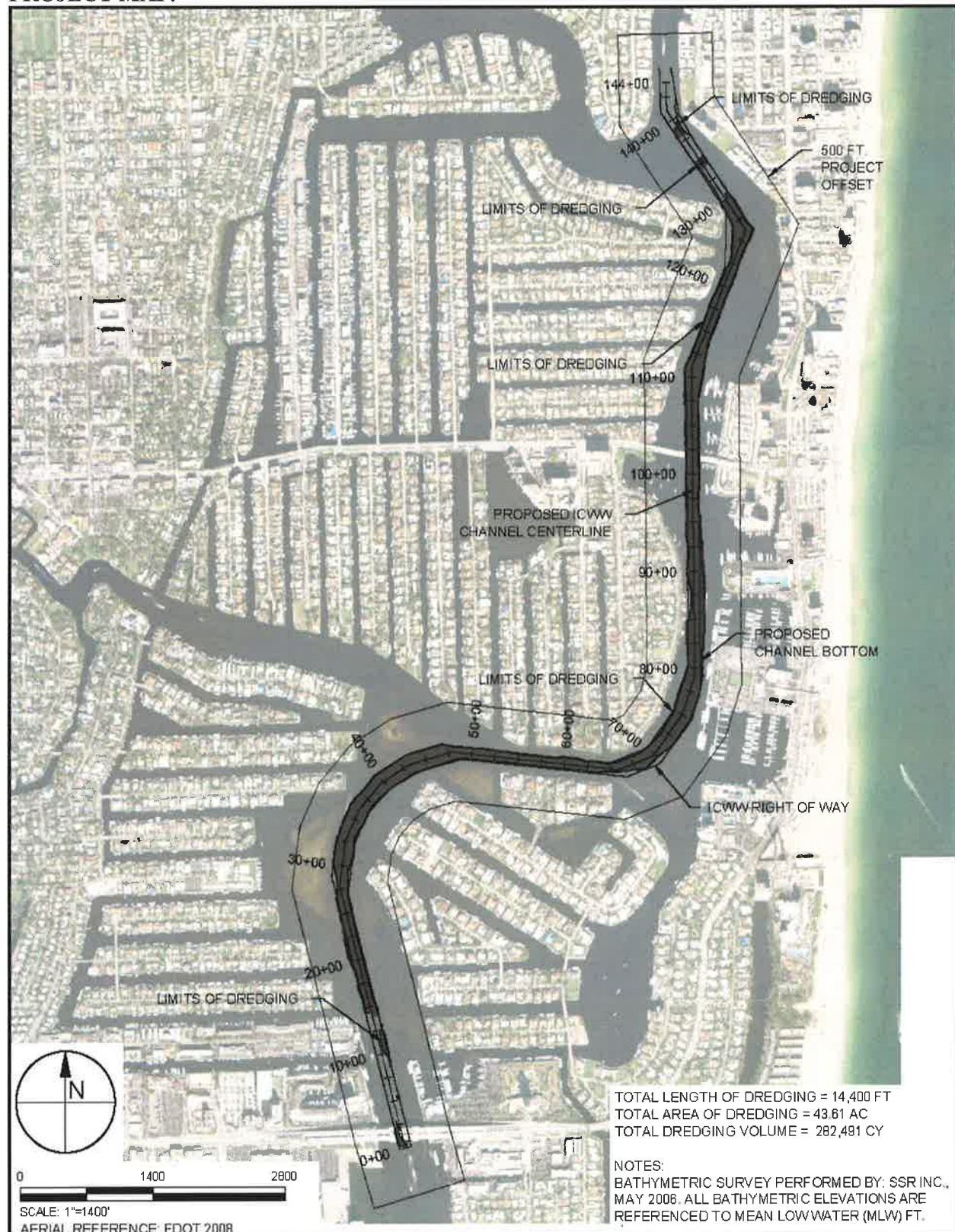


Figure 2. Broward County ICWW Deepening project overview

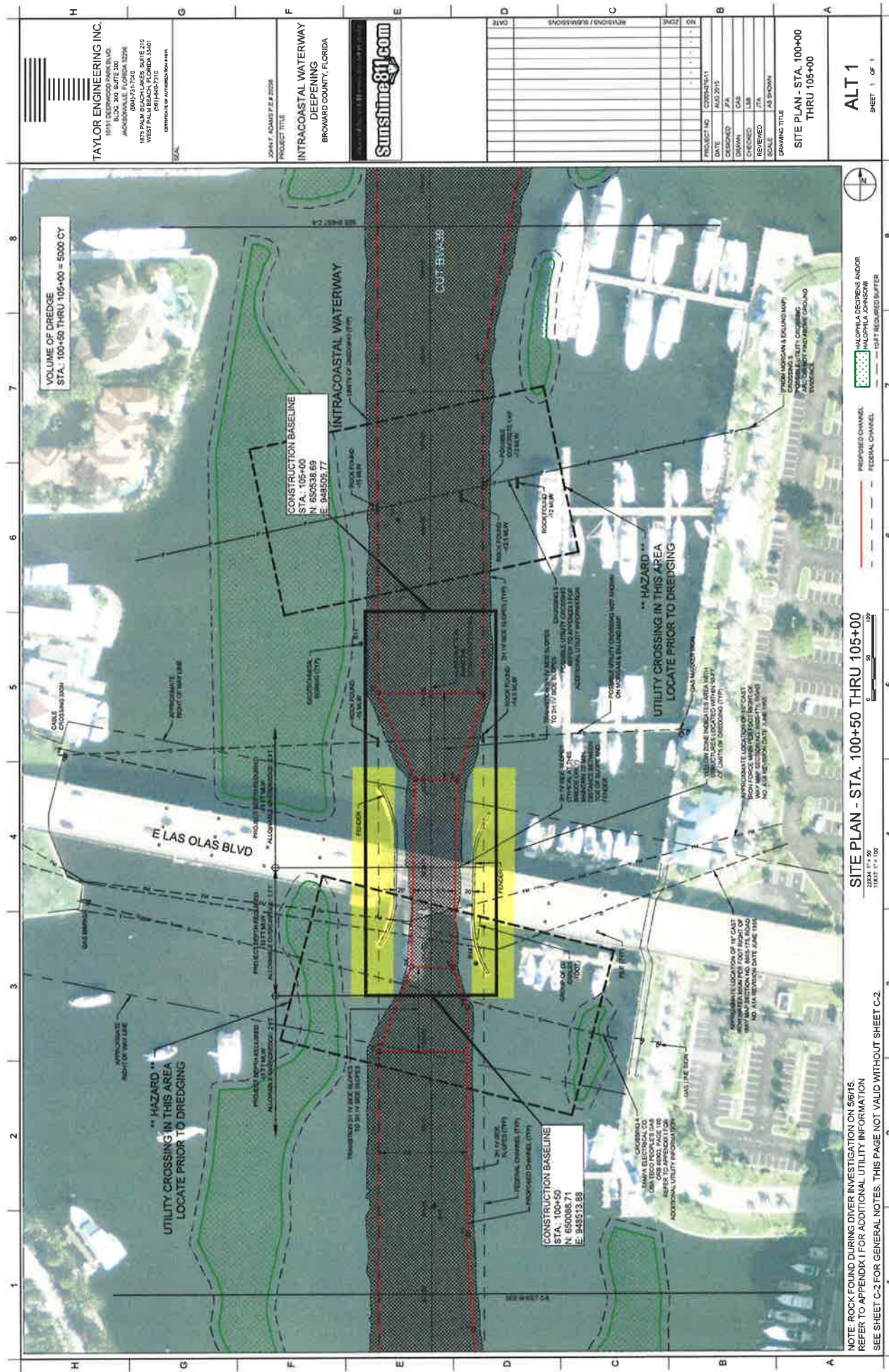
[illegible][illegible][illegible]

GENERAL NOTES:

1. COORDINATES SHOWN ARE IN U.S. SURVEY FEET AND ARE REFERENCED TO THE FORT LAUDERDALE DATUM. EAST ZONE NORTH AMERICAN DATUM OF 1983.
2. ELEVATIONS ARE REFERENCED TO MEAN LOW WATER WHICH IS 2.1 FEET BELLOW HAD IN THE FORT LAUDERDALE DATUM.
3. BASE DATA REFERENCES AS SHOWN IN THE CONSTRUCTION DRAWING ARE AS FOLLOWS:
 AERIAL REFERENCE - 1907, 2011, GEOTECHNICAL INFORMATION - MAY 2006, ELLS & ASSOCIATES, INC.
 RECENT COUNTY TOWN OF DAVENPORT CANAL DEEPENING PROJECT, BROWARD COUNTY, FLORIDA, S&P PROJECT 15, 561,531, APPENDER 3, BATHMETRIC SURVEY - SEPTEMBER 2014, MORGAN & ELLIOTT INC.
 BATHMETRIC SURVEY, BROWARD COUNTY, INTRACASTAL LOCATION SURVEY - JANUARY 2013, MORGAN & ELLIOTT, INC. AND GEOGRAPHIC, INC.
 MAJOR TOWERS, SEWER AND SEWAGE FLOW SURVEY, SURVEY, TERRAIN, AND ELEVATION SURVEY, BROWARD COUNTY, INTRACASTAL LOCATION SURVEY - SEPTEMBER 2014, MORGAN & ELLIOTT, INC. AND GEOGRAPHIC, INC.
 APPENDIX (LAND COVER) 2014 HYDROGRAPHIC SURVEY, LAS OLAS BOULEVARD, BROWARD COUNTY, INTRACASTAL LOCATION SURVEY - SEPTEMBER 2014, MORGAN & ELLIOTT, INC. AND GEOGRAPHIC, INC.
 WATERWAY, FORT LAUDERDALE, BROWARD COUNTY, FLORIDA, MAY 15, 2015, MORGAN & ELLIOTT, INC. AND GEOGRAPHIC, INC.
 4000 FEET NORTH OF THE LAS OLAS BLVD. BRIDGE (APPROX. 1/2 MILE) ELEVATION SURVEY, BROWARD COUNTY, INTRACASTAL LOCATION SURVEY - SEPTEMBER 2014, MORGAN & ELLIOTT, INC. AND GEOGRAPHIC, INC.
 DML CORBY AND ASSOCIATES, INC. BATHMETRIC SURVEY, 17TH STREET BRIDGE TO THE LAS OLAS BLVD. BRIDGE, BROWARD COUNTY, FLORIDA, MAY 15, 2015, MORGAN & ELLIOTT, INC. AND GEOGRAPHIC, INC.
 4. CANAL DRAINAGE, BROWARD COUNTY, FLORIDA.
 5. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH THE FDOT AND THE ENGINEER AS NECESSARY FOR CONSTRUCTION INSPECTION AND AWARD OF CERTIFICATION. INSPECTION SHALL BE CONDUCTED DURING THE COURSE OF THE WORK. THE CONTRACTOR IS RESPONSIBLE FOR THE COURSE OF THE WORK THAT IS ASSIGNED OR COVERED SO THAT THE ENGINEER'S INSPECTION IS AS NECESSARY FOR INSPECTION. THE COSTS OF THE INSPECTION SHALL BE BORNE SOLELY BY THE CONTRACTOR.
 6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSPECTION OF THE CONSTRUCTION OF THE BRIDGE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSPECTION OF THE CONSTRUCTION OF THE BRIDGE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSPECTION OF THE CONSTRUCTION OF THE BRIDGE.
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GRAPHIC SCALE
 22334: 1" = 500'
 11167: 1" = 1,000'





TAYLOR ENGINEERING INC.
15151 CEDARWOOD PARK BLVD.
SUITE 300
JACKSONVILLE, FLORIDA 32256
904-311-7200
904-311-7205
WWW.TE-FLA.COM
CONSULTING & ENGINEERING

PROJECT TITLE
**INTRACOASTAL WATERWAY
DEEPENING**
BROWARD COUNTY, FLORIDA

DATE
PROJECT NO.
DESIGNED BY
DRAWN BY
CHECKED BY
REVIEWED BY
SCALE

CONSTRUCTION BASELINE
STA. 100+00
N 852538.89
E 948508.77

CONSTRUCTION BASELINE
STA. 100+50
N 850088.71
E 948513.88

PROJECT NO. 200021611
DATE AUG 2015
DESIGNED JFA
DRAWN CAL
CHECKED LUB
REVIEWED JTA
SCALE AS SHOWN

ALT 1
SHEET 1 OF 1
SITE PLAN - STA. 100+00
THRU 105+00

SITE PLAN - STA. 100+50 THRU 105+00
SCALE: 1" = 100'
DATE: 11/1/20

NOTE: ROCK FOUND DURING DIVER INVESTIGATION ON 5/6/15.
REFER TO APPENDIX I FOR ADDITIONAL UTILITY INFORMATION.
SEE SHEET C-2 FOR GENERAL NOTES. THIS PAGE NOT VALID WITHOUT SHEET C-2.

FLORIDA INLAND NAVIGATION DISTRICT INTERLOCAL AGREEMENT

PROJECT NUMBER: ICW- BR-MIASF-15-02

This INTERLOCAL AGREEMENT ("Agreement") made and entered into this _____ day of _____, 20____ by and between the Florida Inland Navigation District (hereinafter the "DISTRICT"), and the Marine Industries Association of South Florida, (hereinafter the "SPONSOR").

In consideration of the mutual promises and covenants contained herein, the parties agree as follows:

1. **PROJECT** - Subject to the provisions of this Agreement, the DISTRICT has determined to provide assistance funding to the SPONSOR to participate in an effort to provide additional public relations and communication services for the Broward Intracoastal Waterway (IWW) Deepening Project, Fort Lauderdale, Florida (Broward County), (hereinafter the "PROJECT"). Said PROJECT is more specifically described in the SPONSOR'S consultant scope of services and cost estimate, which is attached as Exhibit "A" in this agreement ("Scope of Services").

Any modifications to the Scope of Services shall require written advance notice and justification from the SPONSOR and the prior written approval of the DISTRICT. The SPONSOR is also required to review all available correspondence and press to ensure accurate and timely communications are achieved. In addition, the SPONSOR shall delineate between commercial and recreational vessel traffic in the study and include these findings in the final report.

2. **TERM** - The SPONSOR shall commence work on the PROJECT immediately upon the execution of this Agreement and **shall complete the PROJECT and submit all required payment reimbursement information on or before July 30, 2015**, unless the PROJECT period has been extended with the prior written approval of the DISTRICT. In no event other than a declared state of emergency that affects the completion shall the PROJECT period extend beyond 2 year(s) from **October 16, 2016**. The SPONSOR acknowledges this is the only provision to carry over the DISTRICT assistance funding under this Agreement beyond **October 16, 2016**, and that any extension of funding beyond this date shall be at the sole discretion of the DISTRICT.

Any request for extension of funding beyond the dates set forth in the preceding paragraph shall require submittal by the SPONSOR of a request for extension to the DISTRICT no later than 60 days prior to the original project agreement expiration. This request will then be considered by the DISTRICT Board, whose decision shall be final.

3. **ASSISTANCE AMOUNT** - The DISTRICT shall contribute no more than the SPONSOR'S out-of-pocket costs for completion of this PROJECT ("PROJECT AMOUNT"). Payment of funds by the DISTRICT to the SPONSOR (the "ASSISTANCE AMOUNT") will be on a reimbursement basis only, and only for those authorized PROJECT COSTS as shown in and consistent with, Exhibit A and meeting the requirements of Paragraph 5 below and shall not, in any event, exceed \$50,000.00.

Any modifications to the PROJECT'S Cost Estimate (within Exhibit A) shall require written advance notice and justification from the SPONSOR and the prior written approval of the DISTRICT.

4. ~~**MATCHING FUNDS** - The SPONSOR warrants and represents that it has the SPONSOR Match Amount (the PROJECT AMOUNT less the ASSISTANCE AMOUNT) available for the completion of the PROJECT.~~

5. **PROJECT COSTS** - To be eligible for reimbursement under the Agreement, PROJECT COSTS must be necessary and reasonable for the effective and efficient accomplishment of the PROJECT and must be directly allocable thereto. PROJECT COSTS are generally described in Exhibit A. PROJECT COSTS must be incurred and work performed within the PROJECT period, with the exception of pre-agreement costs, if any, consistent with Paragraph 6 below, which are also eligible for reimbursement by the DISTRICT.

6. **PRE-AGREEMENT COSTS** - The DISTRICT and the SPONSOR fully understand and agree that there shall be no reimbursement of funds by the DISTRICT for any obligation or expenditure made prior to the execution of this Agreement unless previously delineated in Exhibit A, and previously approved by the DISTRICT Board at a regularly scheduled meeting. An exception shall be made for preliminary costs within the Executive Director's Authority (Resolution No. 2015-01)

7. **REIMBURSEMENT PROCEDURES** - PROJECT COSTS shall be reported to the DISTRICT and summarized on the Payment Reimbursement Request Form (Exhibit B - Form #90-24) attached as Exhibit B. Supporting documentation including bills and canceled payment vouchers for expenditures shall be provided to the DISTRICT by the SPONSOR or LIAISON AGENT with any payment request. All records in support of the PROJECT COSTS included in payment requests shall be subject to review and approval by the DISTRICT or by an auditor selected by the DISTRICT. Audit expenses shall be borne by the SPONSOR.

Reimbursements may be released in installments, at the discretion of the DISTRICT, upon submittal of a payment request by the SPONSOR or LIAISON AGENT. The DISTRICT may retain up to ten percent of the total project costs until the completion of the PROJECT.

The DISTRICT shall have the right to withhold any payment hereunder, either in whole or part, for non-compliance with the terms of this Agreement.

8. **FINAL REIMBURSEMENT** - The SPONSOR, upon completion of the PROJECT, shall submit to the DISTRICT a request for final reimbursement of the ASSISTANCE AMOUNT less any prior installment payments. The retainage amounts (if any) previously retained by the DISTRICT shall be paid upon (1) receipt of expenses incurred on the PROJECT by the DISTRICT, (2) full completion of the PROJECT to the reasonable satisfaction of the DISTRICT, and (3) submission of Project Completion Certification Form No. 90-13a (Exhibit C). Full completion of the PROJECT shall include the final report, and all reports, findings, copies of data and pictures developed or analyzed by this PROJECT as requested by the DISTRICT. Unless otherwise determined by the DISTRICT, the final reimbursement check shall be presented by a DISTRICT representative to the SPONSOR during a public commission meeting or public dedication ceremony.

9. **RECORDS RETENTION** - The SPONSOR shall retain all records supporting the PROJECT COSTS for three (3) years after the end of the fiscal year in which the Final Payment is released by the DISTRICT, except that such records shall be retained by the SPONSOR until final resolution of matters resulting from any litigation, claim, or special audit that starts prior to the expiration of the three-year retention period.

10. **NONCOMPLIANCE** - The DISTRICT shall have the right to reimbursement, either in whole or part as it may determine, of the funds provided hereunder for noncompliance by the SPONSOR with any of the terms of this Agreement. Upon notification from the DISTRICT, the SPONSOR shall reimburse such funds directly to the DISTRICT. The provisions of this paragraph shall survive completion of the PROJECT.

11. **DISTRICT PROJECT MANAGER** - The Executive Director, or his designee, is hereby designated as the DISTRICT's Project Manager for the purpose of this Agreement and shall be responsible for monitoring performance of its terms and conditions and for approving all reimbursement requests prior to payment.

12. **SPONSOR'S LIAISON AGENT** - The SPONSOR shall appoint a LIAISON AGENT, whose name and title shall be submitted to the DISTRICT upon execution of the Agreement, to act on behalf of the SPONSOR relative to the provisions of the Project Agreement.

13. **STATUS REPORTS** - The SPONSOR or LIAISON AGENT shall submit to the DISTRICT project status reports during the PROJECT term. These Quarterly Reports are to be on Form #95-02a

(Exhibit E). NON-COMPLIANCE by the SPONSOR with the reporting schedule in Exhibit E may result in revocation of this Agreement.

14. **LAWS** - The SPONSOR agrees to obtain and to abide by all federal, state and local permits and proprietary authorizations, and all applicable laws and regulations in the development of the PROJECT.

15. **ACKNOWLEDGMENT** - The DISTRICT shall be recognized in all applicable correspondence, presentations and acknowledged in the final PROJECT as a contributor. The DISTRICT'S logo (Exhibit D) shall be included as applicable.

16. **SOVEREIGN IMMUNITY** - Each party hereto agrees that it shall be solely responsible for the wrongful acts of its employees, contractors and agents. However, nothing contained herein shall constitute a waiver by either party of its sovereign immunity under Section 768.28, Florida Statutes. The SPONSOR acknowledges that the DISTRICT, its employees, commissioners and agents are solely providing funding assistance for the PROJECT and are not involved in the future design, construction, operation or maintenance of any facilities or improvements resulting from implementation of the PROJECT.

17. **INSPECTIONS** - The DISTRICT reserves the right, upon reasonable request, to inspect said PROJECT and any and all records related thereto at any time.

18. **RIGHTS AND DUTIES** - The rights and duties arising under this Agreement shall inure to the benefit of and be binding upon the parties hereto and their respective successors and assigns, and shall, unless the context clearly requires otherwise, survive completion of the PROJECT. The SPONSOR may not assign this Agreement nor any interest hereunder without the express prior written consent of the DISTRICT.

19. **WAIVERS** - Waiver of a breach of any provision of this Agreement shall not be deemed a waiver of any other breach of the same or different provision.

20. **NOTICE** - Any notice required to be given pursuant to the terms and provisions of this Agreement shall be in writing, postage paid, and shall be sent by certified mail, return receipt requested, to the DISTRICT or SPONSOR at the addresses below. The notice shall be effective on the date indicated on the return receipt.

To the DISTRICT at:

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

To the PROJECT SPONSOR at:

Marine Industries Association of South Florida

2312 South Andrews Avenue
Fort Lauderdale FL 33316
Attn: Project Manager

21. **NO JOINT VENTURE** - The DISTRICT's role with respect to the PROJECT is that of a funding assistance authority only and the DISTRICT is not, and shall not be considered to be, an agent, partner, or joint venturer with the SPONSOR.

22. **GOVERNING LAW** - The validity, interpretation and performance of this Agreement shall be controlled and construed according to the laws of the State of Florida.

23. **ENTIRE UNDERSTANDING** - This Agreement, including any exhibits made a part hereof, embodies the entire Agreement and understanding of the parties and supersedes all prior oral and written communications between them. The terms hereof may be modified only by a written amendment signed by both parties hereto.

IN WITNESS WHEREOF, the parties hereto have caused these presents to be executed the day, month and year aforesaid.

WITNESSES:

FLORIDA INLAND NAVIGATION DISTRICT

By: _____
Executive Director

DATE: _____

WITNESSES:

SPONSOR

By: _____

Title: _____

DATE: _____

MARINE INDUSTRIES ASSOCIATION OF SOUTH FLORIDA

ESTIMATE

Estimate No. 32675

October 6, 2015

Marine Industries Association of South Florida
 FIND Fort Lauderdale Project
 Attn: Phil Purcell

Florida Inland Navigation District (FIND) Fort Lauderdale Project

Fort Lauderdale Project Goals:

- 1) Gain Awareness for Success of the Dania Cutoff Canal Dredging. (Economic impact, current benefits and future opportunities)
- 2) Educate the Business Community on the upcoming dredging of 17th Street to Sunrise.
- 3) Introduce Fort Lauderdale Project to the General Public in a positive way prior to its commencement of the project.

Project Business Context:

With the upcoming deep-water dredge project that will be taking place in Fort Lauderdale, there will be a communications plan developed to connect with key stakeholders. Additionally, in light of the Miami Herald article that appeared on September 19, 2015 on the Miami-Dade dredge, a media relations plan is recommended. Starmark is prepared to execute plans to effectively address issues in a current and timely manner.

One of the considerations for FIND is to have a plan crafted that would include responses to be provided by potential local community advocates which may include the Marine Industries Association of South Florida (MIASF); the Greater Fort Lauderdale Alliance's Port Everglades Action Team and possibly the Broward Workshop's Urban Core Committee. Starmark is positioned and ready to serve as the contact with these organizations.

Client Responsibility

Starmark is hereby authorized to commence the project herein defined or any part thereof upon the client's approval of this Estimate. This approval hereby authorizes Starmark to undertake, at client's expense, all necessary commitments, including expenditures to outside suppliers, toward the completion of the project, or any part thereof, on behalf of the client.

If the client requests changes or alterations, or if there are changes in the specifications or scope of the project outlined herein and those changes or alterations cause the actual cost to exceed the agreed upon Estimate by more than ten (10%) percent, then and in that event, Starmark shall revise said Estimate and issue an Estimate Change Order advising client of the amount of the cost increase.

In the event any stage of the project requires more than [30] days for completion, then the client hereby agrees to compensate Starmark for the services rendered during said stage.

Statement of Terms

The undersigned hereby acknowledges and agrees that:

1. Payments will be made according to the agreed upon terms as outlined above.

2. 1.5% interest/month will be charged on all accounts over 45 days past due from invoice date.

3. In the event that payment of any outstanding balance is not received within 75 days from date of invoice, Starmark services will be interrupted and all work will be placed on a COD basis until the account is brought up to date. Reinstatement fees may apply.

4. Client agrees to pay all costs, expenses and attorney fees incurred in the collection of any past due indebtedness whether or not suit is filed.

5. Client agrees to pay all applicable sales tax as required by law.

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MARINE INDUSTRIES ASSOCIATION OF SOUTH FLORIDA

ESTIMATE

Estimate No. 32675

October 6, 2015

Project Success Factors:

- 1 - Communications plan for timed outreach to include:
 - Positive Media Coverage of Dania Beach Cutoff study
 - First story placement, simultaneously to Oct. 16 Board Meeting at Pier 66.
 - Initial confidential rollout to key business community leaders
 - Notification to city commissioners of both the positive Dania Beach Cutoff study.
 - Notification to city and county commissioners of plans for upcoming announcement on Nov. 4 of new dredging project between 17th St and Sunrise.
- 2 - Messaging document for key organization leaders involved, including MIAF, FIND, Alliance, Workshop, Port Everglades Action Team
 - Align messaging with the Dania Cutoff success
 - Include benefits such potential grants to marinas on the intracoastal to remain a competitive boating destination.
- 3 - Begin dredge on a positive note with minimal resistance.
 - November pre-boat show Intracoastal Ceremony with Coast Guard
- 4 - Be prepared with a crisis plan that includes among others:
 - Comprehensive list of stakeholder contacts whose customers could be potentially impacted by unforeseen events.
 - Education of stakeholders on action steps associated with unforeseen events.
 - City coordination plan with any potential event
 - Key media notification plan on potential event
 - Ongoing private updates to key government and business leaders.
- 5 - Private presentation tool/s for key meetings.
 - Digital presentation without handout

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MARINE INDUSTRIES ASSOCIATION OF SOUTH FLORIDA

ESTIMATE

Estimate No. 32675

October 6, 2015

Starmark's scope of services could include some or all of the following based on monthly priority meetings with FIND representatives:

Preparation of a Communications Plan to include key messages to stakeholders in Fort Lauderdale/Broward County;

Development of a Crisis Plan to include draft responses to potential media scenarios;

Serving as key contact with community organizations and their representatives who may be determined as potential ambassadors for the deep dredge;

Creation of a presentation to provide information facts for groups and key stakeholders;

Development of key action steps associated with organizations that may be impacted by any potential adverse scenario that could arise from the deep-water dredge;

Work with designated representatives who would be receiving calls associated with any environmental issues;

Help to monitor developments, which could be embraced at the County level;

Tracking of positive updates that may be shared with the progress of deep water dredge with key stakeholders;

Creation of strategies with positive announcements and developments to place these efforts in the best light possible and

Starmark will be available to take on additional tasks, which may arise as part of the deep-water dredge.

Client Responsibility

Starmark is hereby authorized to commence the project herein defined or any part thereof upon the client's approval of this Estimate. This approval hereby authorizes Starmark to undertake, at client's expense, all necessary commitments, including expenditures to outside suppliers, toward the completion of the project, or any part thereof, on behalf of the client.

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4. Client agrees to pay all costs, expenses and attorney fees incurred in the collection of any past due indebtedness whether or not suit is filed.

5. Client agrees to pay all applicable sales tax as required by law.

MARINE INDUSTRIES ASSOCIATION OF SOUTH FLORIDA

ESTIMATE

Estimate No. 32675

October 6, 2015

**Monthly Agency Service Retainer (Based on Average of
32 Executive Hours per Month for 9 Months*)**

\$5,000.00

***Hours will be reported on a quarterly basis.**

Estimate Total: \$45,000.00

Terms: First month's fee due upon approval. Subsequent fees will be invoiced on the first of the month with 30-day terms. Contract hours will be reviewed quarterly. Contract duration is 9 months and can be renewed.

Approved

Date

Client Responsibility

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4. Client agrees to pay all costs, expenses and attorney fees incurred in the collection of any past due indebtedness whether or not suit is filed.
5. Client agrees to pay all applicable sales tax as required by law.

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EXHIBIT A

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Help to monitor developments, which could be embraced at the County level;

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Creation of strategies with positive announcements and developments to place these efforts in the best light possible and

Starmark will be available to take on additional tasks, which may arise as part of the deep-water dredge.

Monthly Agency Service Retainer (Based on Monthly Average of 32 Executive Hours for 9 Months*):

\$5,000.00

*Hours will be reported on a quarterly basis.

These services are provided through an agreement of Starmark International, Inc., with the Marine Industry Association of South Florida.

ALCALDE & FAY

GOVERNMENT & PUBLIC AFFAIRS CONSULTANTS

October 2, 2015

MEMORANDUM

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

FROM: Jim Davenport

SUBJECT: Federal Legislative Report

FISCAL YEAR 2016 APPROPRIATIONS

On September 30th, the House passed a short-term Continuing Resolution (CR), which the Senate passed earlier that day, narrowly avoiding a government shutdown. The bill was signed by the President later that evening.

The CR, which funds the federal government until December 11th received strong bipartisan support in the Senate and was approved by a vote of 78-20, ultimately overcoming a failed effort earlier this week by Senator Ted Cruz (R-TX) to prevent a vote on the bill due to objections over funding for Planned Parenthood. The bill passed the House by a vote of 271-151. Of note, only 91 Republicans in the House voted in favor of the CR. Thus, while the threat of government shutdown has ended, that threat will likely return in December as Congress will once again be faced with deciding how to fund the government for the remainder of FY 2016.

The debate over FY 2016 funding will be coupled with debates regarding expiring tax provisions and raising the debt ceiling. In anticipation of such a debate, Senate Majority Leader Mitch McConnell (R-KY) announced during a press briefing that he and outgoing Speaker John Boehner (R-OH) had spoken briefly with the President last week about opening up negotiations on a budget deal that would provide top-line discretionary spending limits for both FY 2016 and 2017, which he said he expected would begin "very soon." Such a deal would likely allow Congress to avoid another potential budget showdown and/or government shutdown during an election year.

ASSESSMENT OF THE INTRACOASTAL WATERWAY

As a follow up to our previous report, on September 9th members of FIND's congressional delegation along with members representing North Carolina, South Carolina and Georgia sent a letter to Secretary Jo-Ellen Darcy of the Army Corps of

Engineers requesting that the Corps carry out the assessment of the Atlantic Intracoastal Waterway and Gulf Intracoastal Waterway. The assessment was authorized in the 2014 Water Resources Reform and Development Act (WRRDA).

The letter, which was sent to you on the 9th, was led by Representatives Lois Frankel (D-FL) and David Rouzer (R-NC), and received the support of Representatives John Mica (R-FL), Curt Clawson (R-FL), Patrick Murphy (D-FL), Alcee Hastings (D-FL), Ted Deutch (D-FL), Debbie Wasserman Schultz (D-FL), Ander Crenshaw (R-FL), Ted Yoho (R-FL), Walter Jones (R-NC), Tom Rice (R-SC), and Earl Carter (R-GA). We will send you a copy of the response from the Corps once we receive it.

REGIONAL GENERAL PERMIT

As you know, we arranged a conference call with Tori White on September 3rd to discuss progress on the Regional General Permit (RGP). The call was important so that we could understand the direction the Corps is taking with their proposed RGP.

Ms. White said a few things of note about the RGP, including:

- side scan sonar will *likely* show that there is not much seagrass in the IWW *channel*;
- the Corps is asking for a General Concurrence on Essential Fish Habitation (EFH) consultations because maintenance dredging would have a minimal impact on EFH;
- if National Marine Fisheries Service (NMFS) does not support the Corps conclusions on “minimal impacts” and asserts the impacts are “adverse”, then the Corps will argue that dredging impacts are not “substantially adverse.” NMFS will likely assert that maintenance dredging impacts are greater than minimal in places where seagrasses are present and will likely request that FIND comply with conservation recommendations in places where seagrass is present;
- the Corps will not allow NMFS to assert that EFH must be “avoided” because it is not practical; and
- NMFS lost opportunity to elevate RGP.

The Corps and NMFS meet on October 23rd and we will follow up with Ms. White at the conclusion of the meeting.

The development of the RGP is important to our efforts on Capitol Hill to advocate that mitigation should not be required for maintenance dredging, and we will continue to support the Corps as they move forward with the RGP.

Please contact us with any questions.

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AGREEMENT FOR PROFESSIONAL SERVICES
BETWEEN THE FLORIDA INLAND NAVIGATION DISTRICT AND
ALCALDE & FAY, LTD.

The following is an agreement (this "Agreement") between the Florida Inland Navigation District, Florida, hereinafter referred to as "FIND" and the firm of Alcalde & Fay, Ltd., a Virginia corporation, hereinafter referred to as "A&F".

WHEREAS, A&F provides professional services in the field of government relations and advocacy, including legislative procedure, regulatory processes, public policy, and appropriations and grant programs administered by the Federal government; and

WHEREAS, FIND deems it in their best interest to employ A&F to provide FIND with services in the field of government relations and advocacy, including legislative procedure, regulatory processes, public policy, and appropriations and grant programs administered by the Federal government.

NOW, THEREFORE, in consideration of the mutual covenants contained herein, the parties hereto agree as follows:

PART I - SPECIFIC PROVISIONS

- A. PROFESSIONAL SERVICES TO BE PROVIDED: A&F will provide government relations and advocacy, including legislative procedure, regulatory processes, public policy, and appropriations and grant programs administered by the Federal government, including but not limited to:
1. Assisting FIND in securing additional operation and maintenance funding for the maintenance of Atlantic Intracoastal Waterway, Intracoastal Waterway and Okeechobee Waterway Projects in Florida by working with the U.S. Congress, the Administration, the Office of Management and Budget, and the U.S. Army Corps of Engineers.
 2. Assisting FIND in securing a modification to the federal law to exempt FIND from compensatory mitigation requirements in the maintained channels of the Atlantic Intracoastal Waterway, the Intracoastal Waterway and the Okeechobee Waterway.
 3. Monitoring and reporting to FIND on Federal legislative and regulatory issues that may impact FIND.
 4. Providing appropriate reports and backup information to discuss proposed Federal legislation and regulatory issues that may impact FIND to the Executive Director prior to regularly scheduled Board meetings for review by FIND's Board.
 5. Monitoring and advising FIND on other national advocacy efforts related to the U.S. inland waterway system, including coordination with other inland waterway efforts by the Atlantic Intracoastal Waterway Association, the

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National Waterways Conference, the Marine Industries Associations of Florida or other waterway interests as identified and tasked by FIND.

6. Assisting FIND in other areas as may be requested in writing by FIND.

- B. PAYMENT: The parties have determined the most efficient and economical method to compensate for A&F's services to be provided is by a monthly retainer. The monthly retainer shall be deemed earned by A&F upon FIND being invoiced by A&F.
- (i) MONTHLY RETAINER: A&F's compensation for the services provided hereunder shall be \$8,500.00 per month. A&F shall submit the monthly \$8,500.00 fee invoice at the first of each month for services to be rendered that month beginning on November 1, 2015.
 - (ii) OUT-OF-POCKET EXPENSES: FIND shall reimburse the contractor for reasonable expenses incurred in connection with A&F's work at actual cost. Expenses that are to be reimbursed include, but not limited to, include: photocopying, postage, telephone, delivery, and telecopy charges. If A&F becomes aware that expenses will exceed \$200.00 during a month, A&F will contact FIND to make them aware of the cause and necessity for the additional expenses. Expenses will be reimbursed to A&F on a monthly basis. All travel expenses will be incurred only following written approval by the Executive Director and will be in accordance with Attachment A unless prior approval is given by FIND.

PART II. GENERAL PROVISIONS

- A. COOPERATION: FIND will cooperate, participate in meetings, and provide any information and documentation as may be reasonably requested by A&F to enable A&F to provide professional services.
- B. KEY PERSONNEL: A&F has represented to FIND that Jim Davenport will act as the primary contact for A&F's services in the performance of A&F's duties hereunder, and has relied on that representation as an inducement to entering into this Agreement.
- C. ASSIGNMENT AND DELEGATION: Except as above, neither party hereto shall assign or delegate any interest in or duty under this Agreement without written consent of the other, and no assignment shall be of any force or effect whatsoever unless and until the other party shall have so consented.
- D. STATUS OF A&F: The parties intend that A&F, in performing its services, shall act as an independent contractor and shall have control of the work and the manner in which it is performed. A&F is not to be considered an agent or employee of FIND and is not entitled to participate in any pension plan, insurance, bonus or similar benefits FIND provides its employees.

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- E. METHOD AND PLACE OF GIVING NOTICE, SUBMITTING BILLS AND MAKING PAYMENTS: All notices, bill, and payments shall be made in writing and may be given by electronic mail, U.S. mail or personal delivery. Notices, bills and payments sent by mail should be addressed as follows:

FIND: Executive Director
Florida Inland Navigation District
1314 Marcinski Road
Jupiter, FL 33477
(561) 627-3386

A&F: Alcalde & Fay
2111 Wilson Boulevard
8th Floor
Arlington, VA 22201
(703) 841-0626

- F. NON-DISCRIMINATION: A&F shall comply with all applicable federal, state and local laws, rules and regulations in regard to nondiscrimination in employment because of race, color, ancestry, national origin, religion, sex, age, marital status, medical condition, or physical or mental disability.
- G. COMPLIANCE: A&F and FIND shall comply with the Lobbying Disclosure Act and all amendments and the Honest Leadership and Open Government Act of 2007.
- H. TERM OF AGREEMENT: A&F agrees to provide professional services to FIND for a term of two (2) years, commencing on November 1, 2015 and ending on October 31, 2017, with one (1) additional one (1) year renewal period if agreed to by both parties, in writing, prior to the expiration of the term. Either party may terminate this agreement prior to expiration of the term with or without cause upon thirty (30) days written notice to either party.
- I. JURISDICTION: This Agreement and performance hereunder and all suits and special proceedings hereunder shall be construed in accordance with the laws of the State of Florida. In addition, special proceeding or other proceeding that may be brought arising out of, in connection with, or by reason of this Agreement, the laws of the State of Florida shall be applicable and shall govern to the exclusion of the law of any other forum.
- J. PUBLIC RECORD: The parties understand that any record, document, computerized information and program, audio, or video tape, or other writing completed by A&F related directly or indirectly to the Agreement is a public record pursuant to Chapter 119, Florida Statutes, whether in the possession or control of FIND or A&F. Such public records may not be destroyed without the specific written approval of the Executive Director. Upon request by FIND, A&F shall promptly supply copies of said public records to FIND. Nothing contained in this paragraph shall require the disclosure of information that is exempt from public records disclosure pursuant to state or federal law.
- K. MEDIATION: All controversies, claims, and disputes between the parties arising

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out of or related to this Agreement or the interpretation thereof, will first be submitted to mediation by a mediator certified by the Supreme Court of Florida, which mediator shall be selected and retained by FIND. The cost of the mediator's fee shall be borne equally by the parties. The mediation process shall be invoked by written notice from either party. FIND shall retain the mediator and schedule mediation within thirty (30) days of sending or receiving the written notice, or on a date as agreed by the parties. Mediation shall be a condition precedent to filing a lawsuit by either party.

- L. **ATTORNEY'S FEES; COSTS; VENUE:** In the event that any party hereto shall bring an action or proceeding for an alleged breach of any provision of this Agreement, the prevailing party shall be entitled to recover, as part of such action or proceeding, reasonable attorney's fees, paralegal fees, and court costs at both trial and appellate levels. For the purpose of any suit, action or proceeding arising out of or relating to this Agreement, the parties hereby consent to the jurisdiction and venue of any of the courts of record of the State of Florida, Palm Beach County.
- M. **ENTIRE AGREEMENT:** This Agreement constitutes the entire agreement between the parties and supersedes all prior oral or written agreements. No waiver, modifications, additions or addendum to this Agreement shall be valid unless in writing and signed by both the A&F and FIND. This Agreement may be extended by mutual agreement.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed this _____ day of _____, 2015.

WITNESSES:

FLORIDA INLAND NAVIGATION
DISTRICT

By _____

WITNESSES:

ALCALDE & FAY, LTD.

By _____

ENVIRONMENTAL MATTERS AGREEMENT

This Environmental Matters Agreement ("Agreement") dated _____, 2015, is by and among Estuary, LLC, a Florida limited liability company formerly known as Estuary Corporation ("Estuary"), BJD Timberlands, LLC ("BJD") 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, 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 DMMA DU-9 construction, ACOE environmental staff reported potential contamination within soil removed as part of the gopher tortoise relocation efforts; 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 No. 1 ("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, presently, 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 due to the remaining onsite contaminants and its intended use as a dredged material management area, and there are presently no known downgradient groundwater uses in close proximity to the Site; and

WHEREAS, there are currently no development plans for the Site other than dredge material management; and

WHEREAS, in 2014, Estuary conveyed the property surrounding the Site and DMMA DU-9 to BJD, which is owned by the Davis family; 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 No. 2, 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, BJD 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, BJD and FIND further agree as follows:

I. DEFINITIONS

1. "Effective Date" as referred to in this Agreement means the date on which all 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" as referred to in this Agreement means those substances listed in Attachment No. 3 attached hereto and made a part hereof, together with any degradation products thereof, regardless of concentration, resulting from sludge disposal activities occurring on the Site from May 16, 1980, through June 1, 1983. These terms do not include substances, whether listed in Attachment No. 3 or not, that are introduced to the Site through disposal of dredge materials or that are introduced to the Site during construction of DMMA DU-9 and which do not originate 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 and adjacent portions of DMMA DU-9 as may be required by FDEP, including but not limited to, Chapter 62-780, Florida Administrative Code. FIND agrees to permit institutional controls to be employed on the Site and adjacent portions of DMMA DU-9, as may be required by FDEP, 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 "C" 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 engineering designs, drawings and 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 engineering designs, drawings and 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 engineering designs, drawings and plans and applicable Environmental Laws. Estuary agrees to remove all drums, waste containers, piping, equipment and debris remaining on the Site from its remediation work.

IV. RELEASE, HOLD HARMLESS and COVENANT NOT TO SUE

1. 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 Contaminants, and (ii) any off-site migration of Contaminants from the Site onto other real property (collectively, the "Environmental Matters"), 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.

2. Release and Covenant Not to Sue by BJD. BJD, for itself and its successors, officers, directors, managers, shareholders, members, agents, servants, employees, beneficiaries, trustees, subcontractors, heirs, assigns and personal representatives (collectively "BJD Releasors") hereby unconditionally and fully release 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 BJD Releasors ever had, now have or can, shall or may hereafter have, against FIND Releasees related to or arising out of the Environmental Matters, including, without limitation, real property owned by BJD, 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. A notice of this Release and Covenant Not to Sue shall be recorded in the Public Records of St. Johns County, Florida for all real property owned by BJD within the area described on Exhibit D in order to put BJD's successors in title on constructive notice.

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 by third parties, 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

1. 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 additional costs necessarily incurred by FIND or ACOE in the design, permitting, construction or operation of the dredge material management facility, but only to the extent such costs result from regulatory requirements or conditions imposed by a governmental entity having regulatory jurisdiction over the design, permitting, construction, and operation of the dredge material management facility on DMMA DU-9 which would not have been incurred or imposed but for the presence of the Contaminants at the Site. While it is difficult to predict what conditions and circumstances might lead to additional costs, if any, such additional costs might include, but are not limited to: (a) the cost of installing groundwater or surface water monitoring wells and monitoring of same in addition to those otherwise required, for assessing or monitoring the quality of surface water or groundwater at a dredge material management facility; (b) the cost of studies and investigations in addition to those otherwise required; (c) the cost of treatment of decanted water if Contaminants are present at concentrations requiring treatment; (d) the cost of removal and disposal of soil containing Contaminants from the footprint of the dredged material management facility; and (e) the cost of limitations on the rate of decanting water below the design rate, if the cause is directly related to the presence of Contaminants in decanted water; if such actions are required by a governmental entity having regulatory jurisdiction over the design, permitting, construction and operation of the dredge material management facility on DMMA DU-9. The foregoing list is not intended to be comprehensive or all-inclusive.

2. FIND agrees that it will provide written notice to Estuary at least fifteen (15) days prior to agreeing to any regulatory requirements or conditions imposed or proposed to be imposed by a governmental entity as set forth in Section VI.1.. If Estuary determines that such regulatory requirements or conditions are unwarranted, Estuary shall have the right, at its sole cost, to meet with the applicable governmental entity to attempt to have such regulatory requirements or conditions changed or eliminated. To the extent such notice is not timely provided by FIND to Estuary and Estuary can show that it was prejudiced thereby, Estuary shall not be obligated to reimburse any additional costs incurred by FIND or ACOE resulting from such regulatory requirements or conditions. Should the parties disagree as to the applicability of any regulatory requirement or condition imposed or proposed to be imposed by a governmental entity or the manner and cost needed to meet such regulatory requirement or condition, FIND and Estuary shall invoke the dispute resolution provisions of Section VII to resolve such disagreement.

VII. DISPUTE RESOLUTION

This Agreement will be construed under Florida Law. Estuary, BJD and FIND will have ninety (90) 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 arising out of the Environmental Matters 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 and BJD: Jed Davis
 Harry Francis
 E. Ellis Zahra, Jr., Esq.

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, 2nd Floor
West Palm Beach, Florida 33401

X. MISCELLANEOUS

1. This Agreement may not be amended except by a written agreement signed by Estuary, BJD 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, BJD 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)

BJD TIMBERLANDS, 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)

EXHIBIT "A"

[Sketch and legal description of the Site to be provided by Estuary, LLC. Aerial depiction provided as a placeholder.]



EXHIBIT "B"

Legal Description of DMMA DU-9

DU-9

P.A. Number 0524600010

ret
In Clworth
 This instrument was prepared by
 William O. Sealife, Jr., Attorney-at-
 Law, whose address is P.O. Box B,
 Jacksonville, Florida 32203
300 1345

Recorded in Public Records St. Johns County, FL
 Clerk # 95005707 O.R. 1097 PG 1069 11:25AM 03-01-95
 Recording 13.00 Surcharge 2.00

Warranty Deed

St. John's
Property: Condo 1
0524600010
Book 1097
PG 1069

(Reserved for Clerk)

This Indenture, Made the 27th day of February,
 1995, between

ESTUARY CORPORATION, a Florida corporation,

party of the first part, herein called the grantor (The term "grantor" includes the heirs, executors, administrators, successors and assigns of the grantor and should be construed as singular or plural, as the context requires;) and

FLORIDA INLAND NAVIGATION DISTRICT, a special district created pursuant to the laws of the State of Florida, whose Taxpayer Identification Number is: 60-11-114080-52C, and

whose mailing address is: 1314 Marcinski Road, Jupiter, Florida 33477
 party of the second part, herein called the grantee (The term "grantee" includes the heirs, executors, administrators, successors and assigns of the grantee and should be construed as singular or plural, as the context requires.);

Witnesseth, that in consideration of the sum of \$ 10.00 and other valuable considerations paid by the grantee, receipt of which is acknowledged by the grantor, the grantor does hereby grant, bargain, sell and convey to the grantee forever, all the land in St. Johns County, Florida, described as:

The property more particularly described on Exhibit "A" attached hereto and by this reference made a part hereof.

SUBJECT to Covenants, Easements, Reservations and Restrictions of Record.

SUBJECT to the applicable provisions of that certain Agreement dated February 27, 1995, and recorded in O.R. Book 1097, page 1039, public records of St. Johns County, Florida.

(No documentary stamp taxes are due pursuant to Rule 12B-4.014(14), Florida Administrative Code and the decision of *Florida Department of Revenue v. Orange County, et al.*, 620 So.2d 991 [Fla. 1993])

Property Appraiser's Parcel Identification Number: _____

12 1

O.R. 1097 PG 1070

And the Grantor does hereby fully warrant title to said land, and will defend the same against the lawful claims of all persons whomsoever; and that said land is free of all encumbrances except taxes accruing subsequent to December 31, 1994.

IN WITNESS WHEREOF, Grantor has caused this instrument to be executed as of the day and year first above written.

Signed, sealed and delivered
in the presence of:

Harry D. Fawcett
Printed Name: HARRY D. FAWCETT

W.D. Schifano
Printed Name: W.D. SCHIFANO

ESTUARY CORPORATION

By: H.J. Skeeton
Its Vice President
Printed Name:
5050 Edgewood Court
Jacksonville, Florida 32254

Attest: G.P. Bishop, Jr.
Its Secretary
Printed Name:
5050 Edgewood Court
Jacksonville, Florida 32254

(CORPORATE SEAL)

STATE OF FLORIDA
COUNTY OF DUVAL

The foregoing instrument was acknowledged before me by H.J. Skeeton,
Vice President, and G.P. Bishop, Jr., Secretary of ESTUARY CORPORATION, a
Florida corporation, on behalf of the corporation, who are: (check one)
1. ☒ personally known to me OR
2. ☐ who have produced _____

as identification.

Given under my hand and official seal this 27th day of February, 1995.



Notary Public, State of Florida
JANEAN C. BAKER
My Comm. Exp. Apr. 21, 1995
Comm. No. CC 093685

Janean C. Baker
Printed Name: JANEAN C. BAKER
Notary Public, State and County aforesaid.
My Commission Expires: 4-21-95
Notary ID No.: CC 093685

EXHIBIT "A"

O.R. 1097 PG 1071

SITE (PARCEL A)

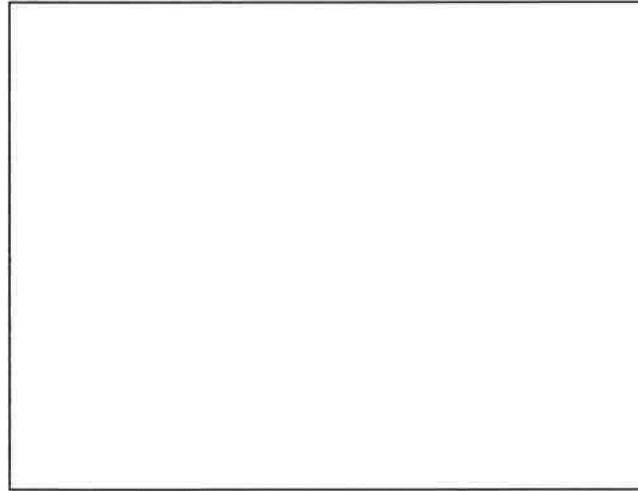
A PARCEL OF LAND LYING IN SECTIONS 19, 30, 39 & 40, TOWNSHIP 3 SOUTH, RANGE 29 EAST, ST. JOHNS COUNTY, FLORIDA; BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

FOR A POINT OF REFERENCE, COMMENCE AT A NORTHWEST CORNER OF ST. JOHNS COUNTY, SAID POINT ALSO BEING ON THE WESTERLY LINE OF SECTION 38 INTERSECTED BY THE SOUTHERLY DUVAL COUNTY AND THE NORTHERLY ST. JOHNS COUNTY LINE; THENCE SOUTH $00^{\circ}37'25''$ EAST ALONG THE WESTERLY LINE OF SAID ST. JOHNS COUNTY LINE, RANGE 29 EAST AND THE EASTERLY LINE OF DUVAL COUNTY, RANGE 28 EAST, A DISTANCE OF 1271.86 FEET TO A SIX (6) INCH ROUND CONCRETE AND BRASS CAP MONUMENT, (DUVAL/ST. JOHNS, GH/JED AS NOTED); THENCE SOUTH $00^{\circ}37'35''$ EAST, A DISTANCE OF 1400.05 FEET TO A FOUR (4) BY FOUR (4) INCH CONCRETE MONUMENT, (LB# 104B AS NOTED); THENCE SOUTH $00^{\circ}37'48''$ EAST, A DISTANCE OF 2070.72 FEET TO A HALF (1/2) INCH IRON PIPE, (LB# 104B AS NOTED); THENCE SOUTH $00^{\circ}36'54''$ EAST, A DISTANCE OF 201.03 FEET TO A SIX (6) INCH ROUND CONCRETE AND BRASS DISK MONUMENT, (DUVAL/ST. JOHNS JED AS NOTED); THENCE SOUTH $00^{\circ}37'38''$ EAST, A DISTANCE OF 227.19 FEET TO A FOUR (4) BY FOUR (4) INCH CONCRETE MONUMENT, (LB# 3624 AS NOTED); THENCE SOUTH $00^{\circ}36'27''$ EAST, A DISTANCE OF 148.42 FEET TO A HALF (1/2) INCH IRON PIPE; THENCE SOUTH $01^{\circ}00'32''$ EAST, A DISTANCE OF 3330.60 FEET TO A POINT ON SAID WESTERLY LINE OF ST. JOHNS COUNTY, RANGE 29 EAST AND THE EASTERLY LINE OF DUVAL COUNTY, RANGE 28 EAST; THENCE NORTH $76^{\circ}11'25''$ EAST DEPARTING FROM SAID COUNTY LINE, A DISTANCE OF 1409.57 FEET TO THE POINT OF BEGINNING;

THENCE CONTINUING NORTH $76^{\circ}11'25''$ EAST, A DISTANCE OF 2376.92 FEET; THENCE SOUTH $01^{\circ}11'25''$ WEST, A DISTANCE OF 2400.00 FEET; THENCE SOUTH $32^{\circ}50'52''$ EAST, A DISTANCE OF 1476.85 FEET; THENCE SOUTH $70^{\circ}11'25''$ WEST, A DISTANCE OF 2249.82 FEET; THENCE NORTH $13^{\circ}48'35''$ WEST, A DISTANCE OF 3949.46 FEET TO THE POINT OF BEGINNING.

EXHIBIT "C"

Declaration of Restrictive Covenant



This instrument prepared by:
Michael P. Petrovich, Esq.
Hopping Green and Sams, P.A.
119 South Monroe Street, Suite 300
Tallahassee, Florida 32301

DECLARATION OF RESTRICTIVE COVENANT

THIS DECLARATION OF RESTRICTIVE COVENANT (hereinafter "Declaration") is made by and between the Florida Inland Navigation District (hereinafter "GRANTOR" or "FIND") and the Florida Department of Environmental Protection (hereinafter "FDEP").

RECITALS

- A. GRANTOR is the fee simple owner of that certain real property situated in the County of St. Johns, State of Florida, more particularly described in Exhibit "A" attached hereto and made a part hereof (hereinafter the "Property").
- B. The FDEP Facility Identification Number for the contaminated site (hereinafter "Site") located on the Property is Site #COM_179673/Project # 245268. The facility name at the time of this Declaration is Dee Dot Ranch Sludge Land Farm – Sludge Disposal Area No. 2.
- C. The approximately 14.5 acre Site has been the subject of site rehabilitation activities pursuant to FDEP rules to address impacts from sludge disposal that occurred at the Site from 1980 to 1983. Corrective action implemented at the Site included sludge and impacted soil removal, impacted groundwater recovery and treatment, monitored natural attenuation, and in-situ augmentation of biodegradation processes. While impacts to groundwater from vinyl chloride (VC) and cis-1,2-dichloroethylene (DCE) have been significantly reduced, concentrations of VC and DCE remain above

FDEP groundwater cleanup target levels (GCTLs) in the shallow and intermediate zones of the surficial aquifer at the Site. The FDEP-approved remedy consists of an institutional control to address remaining concentrations of VC and DCE in the surficial aquifer at the Site located on the Property that are above FDEP's GCTLs. VC and DCE concentrations in groundwater at the Site located on the Property are documented in the following report that is incorporated by reference.

1. Conceptual Groundwater Simulation dated February 19, 2014.
2. Supplemental Groundwater Sampling Results and Evaluation – Dee Dot Sludge Disposal Area No. 2 dated November 25, 2013.
3. Remedial Progress Report No. 3, 18-Month Post-Injection Groundwater Monitoring Report (March 2013) – Dee Dot Sludge Disposal Area No. 2 dated July 29, 2013.
4. Remedial Progress Report No. 2, 12-Month Post-Injection Groundwater Monitoring Report (September 2012) – Dee Dot Sludge Disposal Area No. 2 dated November 29, 2012.
5. Remedial Progress Report No. 1, 6-Month Post-Injection Groundwater Monitoring Report (March 2012) – Dee Dot Sludge Disposal Area No. 2 dated May 30, 2012.

D. The reports noted in Recital C set forth the nature and extent of the contamination described in Recital C at the Site. The reports confirm that contamination as defined by Chapters 62-780, Florida Administrative Code (F.A.C.), exists at the Site.

E. It is the intent of the restrictions in this Declaration to reduce or eliminate the risk of exposure of users or occupants of the Site located on the Property and the environment to the contaminants and to reduce or eliminate the threat of migration of the contaminants.

F. FDEP has agreed to issue a Site Rehabilitation Completion Order with Conditions (hereinafter "Order") upon recordation of this Declaration with respect to the Site. FDEP can unilaterally revoke the Order if the conditions of this Declaration or of the Order are not met. Additionally, if concentrations of VC and DCE increase above the levels approved in the Order, or if a subsequent discharge occurs at the Site, FDEP may require site rehabilitation to reduce concentrations of contamination to the levels allowed by the applicable FDEP rules. The Order relating to FDEP Facility Identification Number Site #COM_179673/Project # 245268 can be found by contacting the FDEP Bureau of Waste Cleanup at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, 850-245-8705.

G. GRANTOR deems it desirable and in the best interest of all present and future owners of the Property that an Order be obtained and that the Property be held subject to certain restrictions, all of which are more particularly hereinafter set forth.

NOW, THEREFORE, to induce FDEP to issue the Order and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged by each of the undersigned parties, GRANTOR agrees as follows:

1. The foregoing recitals are true and correct and are incorporated herein by reference.

2. GRANTOR hereby imposes on the Property the following restrictions and requirements:

- a. There shall be no potable use of the groundwater under the Property to a depth of 60 feet below land surface. There shall be no drilling for water conducted on the Property, nor shall any wells be installed on the Property other than irrigation or monitoring wells pre-approved in writing by FDEP's Division of Waste Management (DWM), in addition to any authorizations required by the Division of Water Resource Management (DWRM) and the Water Management Districts (WMD). For any dewatering activities, a plan approved by FDEP's DWM must be in place to address and ensure the appropriate handling, treatment, and disposal of any extracted groundwater that may be contaminated. After development of the Property for dredge spoil disposal, constructed stormwater features shall not be altered, modified or expanded, and there shall be no construction of new stormwater swales, stormwater detention or retention facilities or ditches on the Property without prior written approval from FDEP's DWM in addition to any authorizations required by the DWRM and the WMD.

3. In the remaining paragraphs, all references to "GRANTOR" and "FDEP" shall also mean and refer to their respective successors and assigns.

4. For the purpose of monitoring the restrictions contained herein, FDEP is hereby granted a right of entry upon and access to the Property at reasonable times and with reasonable notice to GRANTOR.

5. It is the intention of GRANTOR that this Declaration shall touch and concern the Property, run with the land and with the title to the Property, and shall apply to and be binding upon and inure to the benefit of GRANTOR and FDEP, and to any and all parties hereafter having any right, title or interest in the Property or any part thereof. FDEP may enforce the terms and conditions of this Declaration by injunctive relief and other appropriate available legal remedies. Any forbearance on behalf of FDEP to exercise its right in the event of the failure of the GRANTOR to comply with the provisions of this Declaration shall not be deemed or construed to be a waiver of FDEP's rights hereunder. This Declaration shall continue in perpetuity, unless otherwise modified in writing by GRANTOR and FDEP as provided in paragraph 7 hereof. These restrictions may also be enforced in a court of competent jurisdiction by any other person, firm, corporation, or governmental agency that is substantially benefited by

these restrictions. If GRANTOR does not or will not be able to comply with any or all of the provisions of this Declaration, GRANTOR shall notify FDEP in writing within three (3) calendar days. Additionally, GRANTOR shall notify FDEP thirty (30) days prior to any conveyance or sale, granting or transferring the Property or portion thereof, to any heirs, successors, assigns or grantees, including, without limitation, the conveyance of any security interest in said Property.

6. In order to ensure the perpetual nature of this Declaration, GRANTOR shall reference these restrictions in any subsequent lease or deed of conveyance, including the recording book and page of record of this Declaration. Furthermore, prior to the entry into a landlord-tenant relationship with respect to the Property, GRANTOR agrees to notify in writing all proposed tenants of the Property of the existence and contents of this Declaration of Restrictive Covenant.

7. This Declaration is binding until a release of covenant is executed by the FDEP Secretary (or designee) and is recorded in the public records of the county in which the land is located. To receive prior approval from FDEP to remove any requirement herein, cleanup target levels established pursuant to Florida Statutes and FDEP rules must be achieved. This Declaration may be modified in writing only. Any subsequent amendments must be executed by both GRANTOR and FDEP and be recorded by GRANTOR as an amendment hereto.

8. If any provision of this Declaration is held to be invalid by any court of competent jurisdiction, the invalidity of that provision shall not affect the validity of any other provisions of the Declaration. All such other provisions shall continue unimpaired in full force and effect.

9. GRANTOR covenants and represents that on the date of execution of this Declaration that GRANTOR is seized of the Property in fee simple and has good right to create, establish, and impose this restrictive covenant on the use of the Property. GRANTOR also covenants and warrants that the Property is free and clear of any and all liens, mortgages, or encumbrances that could impair GRANTOR'S rights to impose the restrictive covenant described in this Declaration.

IN WITNESS WHEREOF, the Florida Inland Navigation District has executed this instrument, this _____ day of _____, 2015.

GRANTOR
Florida Inland Navigation District

By: _____
Mark Crosley
Executive Director
1314 Marcinski Road
Jupiter, Florida 33477

Signed, sealed and delivered in the presence of:

_____, Date: _____

Witness

Print Name: _____

_____, Date: _____

Witness

Print Name: _____

STATE OF _____)

COUNTY OF _____)

The foregoing instrument was acknowledged before me this _____ day of _____, 2015, by _____ as _____ of Florida Inland Navigation District limited liability company, on its behalf.

Personally Known _____ OR Produced Identification _____
Type of Identification Produced _____

Signature of Notary Public

Approved as to form by the Florida Department of Environmental Protection, Office of General Counsel. _____.

IN WITNESS WHEREOF, the Florida Department of Environmental Protection has executed this instrument, this _____ day of _____, 2015.

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION

By: _____
Name: _____
Title: _____
Division of Waste Management
Bureau of Waste Cleanup
Florida Department of Environmental
Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Signed, sealed and delivered in the presence of:

Witness: _____ Date: _____
Print Name: _____

Witness: _____ Date: _____
Print Name: _____

STATE OF _____)
COUNTY OF _____)

The foregoing instrument was acknowledged before me this _____ day of _____, 2015, by _____ as representative for the Florida Department of Environmental Protection.

Personally Known _____ OR Produced Identification _____
Type of Identification Produced _____

Signature of Notary Public

Print Name of Notary Public
Commission No. _____
Commission Expires: _____

EXHIBIT "D"

[Sketch and legal descriptions of the areas on which institutional controls will be placed will be provided by Estuary, LLC. Aerial depiction provided as a placeholder.]

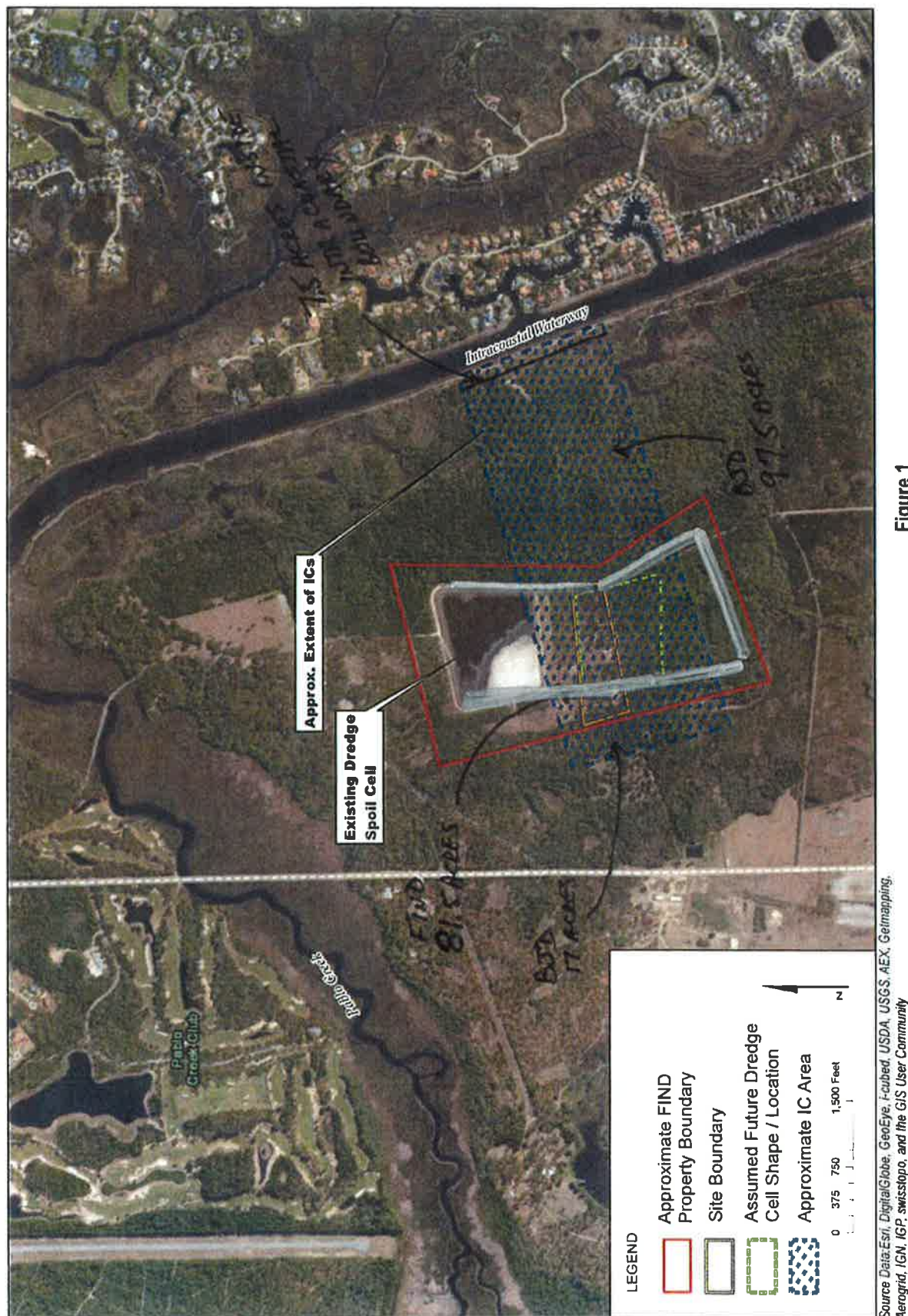


Figure 1

Approximate Extent of Institutional Controls

Conditional Closure Status - Dee Dot Sludge Disposal Area No. 2

CH2MHILL

IC_Extent

ATTACHMENT NO. 1

Copy of FDEP Consent Order OGC Case No. 01-0219

**BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION**

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

IN THE OFFICE OF THE
NORTHEAST DISTRICT

Complainant,

vs.

OGC FILE NO. 01-0219

ESTUARY CORPORATION,

Respondent.

CONSENT ORDER

This Consent Order is entered into between the State of Florida Department of Environmental Protection ("Department") and Estuary Corporation ("Respondent") to reach settlement of certain matters at issue between the Department and Respondent.

The Department finds and the Respondent, while neither admitting nor denying legal liability, acknowledges the following:

1. The Department is the administrative agency of the State of Florida having the power and duty to protect Florida's air and water resources and to administer and enforce the provisions of Chapters 403 and 376, Florida Statutes, and the rules promulgated there under, Title 62, Florida Administrative Code. The Department has jurisdiction over the matters addressed in this Consent Order.
2. Respondent is a person within the meaning of Section 403.031(5), Florida Statutes.
3. Respondent is the former owner of real property located at Latitude 30 °12' 30" and Longitude 81° 26' 15" further described as "Parcel A" in **EXHIBIT I**. This real property was formerly part of the Dee Dot Ranch, an agricultural operation involving cattle, silviculture, and game preservation. On or around February 27, 1995, the real property was sold to the

Florida Inland Navigational District ("FIND") for the purpose of disposal of dredge spoils from the adjacent intracoastal canal. This real property will hereinafter be referred to as the Property.

4. A Notice of Violation (NOV) was issued against D.D.I., Inc., Estuary Corporation and Spanish Grant Estates on March 5, 2001. After an Informal Conference held on April 6, 2001 between representatives of the Department and Respondent, the NOV was re-issued on April 16, 2001 against the Estuary Corporation (Respondent). Contamination purportedly resulting from disposal of industrial wastes on the property from the former Duval Septic Tank Company (DST) (now defunct) is alleged in the NOV attached as **EXHIBIT II**.

5. Since the Informal Conference, Respondent's environmental consulting company has undertaken a contamination assessment of the Property. Respondent completed a contamination assessment that confirmed the presence of elevated concentrations of metals and organic constituents in both sludge and soil on the Property. Halogenated volatile organic contamination has been confirmed in groundwater at concentrations above State groundwater standards or maximum contaminant levels ("MCLs"). The Department received a Contamination Assessment Report ("CAR") dated August 31, 2001 from Respondent's environmental consultant outlining these findings. That CAR was reviewed by the Department and the Department provided comments regarding the CAR to Respondent by letter dated September 10, 2001.

6. On April 9, 2002, CAR Revision 1.0 was submitted to the Department by Respondent's environmental consultant in response to written and oral comments of Department staff. On that same date, Respondent submitted to the Department an Interim Remedial Action Plan ("IRAP") to address impacted shallow groundwater and soil, as well as a Natural Attenuation Monitoring Plan ("NAMP") to address identified intermediate depth groundwater impacts on the Property. The Department responded with comments to the CAR Revision 1.0 on May 9, 2002, and to the IRAP and NAMP on May 14, 2002.

7. The parties have met and discussed this matter and, as a result of these discussions, the signing of this Consent Order resolves any and all the issues addressed in the NOV, and formally and officially resolves any and all allegations raised therein.

Having reached resolution of the matter the Department and the Respondent mutually agree and it is,

ORDERED:

8. Respondent has initiated a contamination assessment that has confirmed both soil and groundwater contamination on the Property above State MCLs. A substantial portion of the lateral and vertical extent of the contamination has been determined for the Property. Continued assessment and remediation of the Property will be conducted in accordance with "Corrective Actions for Contamination Site Cases" incorporated as **EXHIBIT III**. In accordance with Exhibit III, Respondent shall respond to those portions of the Department's letters dated May 9 and May 14, 2002 requesting additional information regarding CAR Revision 1.0 and the IRAP within forty-five (45) days of the execution of this Consent Order. Additionally, Respondent agrees to modify and resubmit a CAR Revision 2.0 to include additional field investigations and information requested in the Department's letter dated May 9, 2002 within sixty (60) days of the execution of this Consent Order. However, Respondent may postpone the development of the Feasibility Study requested in the May 9, 2002 Department letter. Respondent also agrees to modify and resubmit an IRAP Revision 1.0 to include additional information requested in the Department's letter dated May 14, 2002 within sixty (60) days of the execution of this Consent Order.

9. The IRAP Revision 1.0 shall provide for 1) excavation and offsite disposal of impacted sludge and soil, 2) active remediation of impacted shallow groundwater, and 3) active remediation of intermediate depth groundwater at the "hot spot" locations identified in the CAR and its Revisions. The Department shall review and either approve or comment on the revised IRAP. The Respondent shall respond to Department comments on the IRAP, if any, in accordance with the provisions of Corrective Actions for Contamination Site Cases, Exhibit III. Respondent shall implement active remedial measures as provided for in the IRAP upon approval by the Department. Respondent shall modify the IRAP to implement similar interim

remedial measures at any other “hot spots” that may be subsequently identified. Respondent shall provide documentation of the completion of the IRAP activities in a final report submitted to the Department for review and approval in accordance with Exhibit III. Respondent may discontinue these active remedial measures for the sludges and shallow groundwater upon demonstration to the Department’s satisfaction that the impacted soils and sludges have been removed and properly disposed and shallow groundwater has been remediated to G-II groundwater standards and criteria in accordance with Chapter 62-520 F.A.C. If contaminant concentrations in the shallow groundwater remain above applicable standards and criteria, Respondent may propose to the Department alternative remedial approaches for the shallow groundwater, including monitored natural attenuation as approved by the Department.

10. Respondent may discontinue active interim remedial measures for the intermediate groundwater at the identified locations at such time that intermediate depth groundwater quality reflects natural attenuation concentrations of 100 ug/l for vinyl chloride, 700 ug/l for cis-1, 2 dichloroethene, and 500 ug/l for methylene chloride. Prior to discontinuation of these active interim remedial measures, Respondent must provide groundwater quality data demonstrating to the Department’s satisfaction that intermediate depth groundwater quality at the identified locations meet these natural attenuation concentrations. If achieved, the Department agrees that these concentrations support implementation of the Interim Natural Attenuation Monitoring Plan (“INAMP”) further described in Paragraphs 11 and 12 below. The current property owner, FIND, has agreed to the implementation of remedial measures, including the interim actions and the INAMP as reflected in an agreement between FIND, Respondent, and the Department which is attached as **EXHIBIT IV**.

11. The **INAMP** must provide that after two years of monitoring of natural attenuation, concentrations of vinyl chloride, methylene chloride, and cis-1, 2 dichloroethene in ground water monitor wells designated by the Department have decreased by at least 33 percent from the natural attenuation concentrations achieved following the active Interim Remedial Actions. In order for natural attenuation to continue to be utilized as the remedial measure,

decreases in contaminant concentrations for each subsequent two year period shall be at least 33 percent from the concentrations reviewed and approved by the Department at the start of each two year period.

12. If after two years of monitored natural attenuation, intermediate depth Groundwater monitoring results in monitor wells designated by the Department reflect that concentrations of vinyl chloride, methylene chloride, and cis-1, 2 dichloroethene have not decreased by 33 percent from the initial source concentrations achieved following active interim remedial measures, as identified in Paragraph 9, Respondent must develop and submit to the Department a remedial action plan and a feasibility study (if requested by the Department) to address remaining intermediate depth groundwater impacts on the Property or request additional time from the Department for continued implementation of the INAMP. Any request for continued implementation of the INAMP must be justified by a demonstration that site conditions will result in achievement of the identified percentage reductions in Paragraph 11 of concentrations of vinyl chloride, methylene chloride, and cis-1,2 dichloroethene in shallow and intermediate depth groundwater within a time period acceptable to the Department. If a remedial action plan is to be developed pursuant to this paragraph and/or the Department determines that a feasibility study is necessary, Respondent shall develop and implement a feasibility study and remedial action plan in accordance with "Corrective Actions for Contamination Site Cases," Exhibit III.

13. Upon Estuary's implementation of the specific remediation activities outlined in Paragraphs 9 through 12, if four successive groundwater monitoring results over a two year period demonstrate that concentrations of vinyl chloride, methylene chloride, and cis-1,2 dichloroethene in ground water monitor wells designated by the Department are below applicable maximum contaminant levels in Chapter 62-520, Florida Administrative Code or groundwater guidance concentrations for those constituents in G-II groundwater, Estuary shall submit for Department review and approval a Site Rehabilitation Completion Report in accordance with Part 5 of "Corrective Actions for Contamination Site Cases," Exhibit III.

14. Within 30 days of the effective date of this Consent Order, Respondent shall pay the Department \$5,000 in settlement of the matters addressed in this Consent Order, for costs and expenses incurred by the Department during the investigation of this matter and the preparation and tracking of this Consent Order. Payment shall be made by cashier's check or money order. The instrument shall be made payable to the "Department of Environmental Protection" and shall include thereon the OGC number assigned to this Consent Order and the notation "Ecosystem Management and Restoration Trust Fund."

15. The Department, for and in consideration of the complete and timely performance by Respondent of the obligations agreed to in this Consent Order, hereby waives its right to seek judicial imposition of damages or civil penalties for alleged violations outlined in this Consent Order; provided, however, should the Department conclude that clean up of the contaminated area to site rehabilitation levels is not feasible; or should the Respondent not completely implement a remedial or corrective action plan (however denominated) as approved by the Department; the Department expressly reserves its right to seek restitution from Respondent for environmental damages. Within 20 days of receipt of Department's written notification of its intent to seek said restitution, Respondent may pay the amount of the damages or may, if it so chooses, initiate negotiations with the Department regarding the monetary terms of restitution to the State. Respondent is aware that should a negotiated sum or other compensation or environmental damages not be agreed to by the Department and Respondent within 20 days of receipt of Department written notification of its intent to seek restitution, the Department may institute appropriate action, either administrative through a Notice of Violation, or judicial, in a court of competent jurisdiction through a civil complaint, to recover Department assessed environmental damages as provided by law.

16. Respondent acknowledges and waives its right to an administrative hearing pursuant to Sections 120.569 and 120.57, Florida Statutes, concerning the terms of this Consent Order. Respondent withdraws its Petition for Formal Administrative Hearing dated May 30,

2002. Respondent acknowledges its right to appeal the terms of this Consent Order pursuant to Section 120.68, Florida Statutes, and waives that right upon signing this Consent Order.

17. Respondent shall publish the following notice in a newspaper of daily circulation in St. Johns County, Florida. The notice shall be published one time only within 14 days after the effective date of this Consent Order.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
NOTICE OF CONSENT ORDER

The Department of Environmental Protection gives notice of agency action of entering into a Consent Order with Respondent Corporation pursuant to Section 120.57(4), Florida Statutes. The Consent Order addresses the contamination assessment and remediation at the Dee Dot Ranch in St. Johns County, south of J. Turner Butler Boulevard and west of the intracoastal canal, at Latitude 30° 12' 30" and Longitude 81° 26' 15". The Consent Order is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at the Department of Environmental Protection, Northeast District, 7825 Baymeadows Way, Suite B200, Jacksonville, Florida 32256-7590.

Persons whose substantial interests are affected by this Consent Order have a right to petition for an administrative hearing on the Consent Order. The Petition must contain the information set forth below and must be filed (received) in the Department's Office of General Counsel, 3900 Commonwealth Boulevard, MS-35, Tallahassee, Florida 32399-3000, within 21 days of receipt of this notice. A copy of the Petition must also be mailed at the time of filing to the District Office named above at the address indicated. Failure to file a petition within the 21 days constitutes a waiver of any right such person has to an administrative hearing pursuant to Sections 120.569 and 120.57, Florida Statutes.

The petition shall contain the following information:

(a) The name, address, and telephone number of each petitioner; the Department's identification number for the Consent Order and the county in which the subject matter or activity is located;

- (b) A statement of how and when each petitioner received notice of the Consent Order;
- (c) A statement of how each petitioner's substantial interests are affected by the Consent Order;
- (d) A statement of the material facts disputed by petitioner, if any;
- (e) A statement of facts which petitioner contends warrants reversal or modification of the Consent Order;
- (f) A statement of which rules or statutes petitioner contends requires reversal or modification of the Consent Order;
- (g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Consent Order.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this Notice. Persons whose substantial interests will be affected by any decision of the Department with regard to the subject Consent Order have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 21 days of receipt of this notice in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Sections 120.569 and 120.57, Florida Statutes, and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-106.205, Florida Administrative Code.

A person whose substantial interests are affected by the Consent Order may file a timely petition for an administrative hearing under Sections 120.569 and 120.57, Florida Statutes, or may choose to pursue mediation as an alternative remedy under Section 120.573, Florida Statutes, before the deadline for filing a petition. Choosing mediation will not adversely affect the right to a hearing if mediation does not result in a settlement. The procedures for pursuing mediation are set forth below.

Mediation may only take place if the Department and all the parties to the proceeding agree that mediation is appropriate. A person may pursue mediation by reaching a mediation agreement with all parties to the proceeding (which include the Respondent, the Department, and any person who has filed a timely and sufficient petition for a hearing) and by showing how the substantial interests of each mediating party are affected by the Consent Order. The agreement must be filed in (received by) the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, within 10 days after the deadline as set forth above for the filing of a petition.

The agreement to mediate must include the following:

- (a) The names, addresses, and telephone numbers of any persons who may attend the mediation;
- (b) The name, address, and telephone number of the mediator selected by the parties, or a provision for selecting a mediator within a specified time;
- (c) The agreed allocation of the costs and fees associated with the mediation;
- (d) The agreement of the parties on the confidentiality of discussions and documents introduced during mediation;
- (e) The date, time, and place of the first mediation session, or a deadline for holding the first session, if no mediator has yet been chosen;
- (f) The name of each party's representative who shall have authority to settle or recommend settlement; and
- (g) Either an explanation of how the substantial interests of each mediating party will be affected by the action or proposed action addressed in this notice of intent or a statement clearly identifying the petition for hearing that each party has already filed, and incorporating it by reference.
- (h) The signatures of all parties or their authorized representatives.

As provided in Section 120.573, Florida Statutes, the timely agreement of all parties to mediate will toll the time limitations imposed by Sections 120.569 and 120.57, Florida Statutes,

for requesting and holding an administrative hearing. Unless otherwise agreed by the parties, the mediation must be concluded within sixty days of the execution of the agreement. If mediation results in settlement of the administrative dispute, the Department must enter a final order incorporating the agreement of the parties. Persons whose substantial interests will be affected by such a modified final decision of the Department have a right to petition for a hearing only in accordance with the requirements for such petitions set forth above, and must therefore file their petitions within 21 days of receipt of this notice. If mediation terminates without settlement of the dispute, the Department shall notify all parties in writing that the administrative hearing processes under Sections 120.569 and 120.57, Florida Statutes, remain available for disposition of the dispute, and the notice will specify the deadlines that then will apply for challenging the agency action and electing remedies under those two statutes.

18. With regard to any agency action taken by the Department concerning Respondent's proposals submitted to the Department as required by the "Corrective Actions for Contamination Site Cases," Respondent may file a Petition for Formal or Informal Administrative Hearing. The petition must contain the information in Paragraph 17 above and must be filed (received) at the Department's Office of General Counsel, 3900 Commonwealth Boulevard, MS-35, Tallahassee, Florida 32399-3000, within 21 days of receipt of the Department's agency action the Respondent intends to challenge and must conform with the requirements of Florida Administrative Code Rule 28-106.201 or Rule 28-106.301. Failure to file a petition within this time period shall constitute a waiver by Respondent of its right to request an administrative proceeding under Sections 120.569 and 120.57, Florida Statutes. The Department's determination, upon expiration of the 21 day time period if no petition is filed, or the Department's Final Order as a result of the filing of a petition, shall be incorporated by reference into this Consent Order and made a part of it. All other aspects of this Consent Order shall remain in full force and effect at all times. If both parties agree, the Department and Respondent may mediate the dispute as provided in Section 120.573, Florida Statutes. If the parties agree to mediation, the time for filing a petition pursuant to this paragraph is tolled until

such time as the mediation is unsuccessful. Upon notice from the Department that the mediation is unsuccessful, the Respondent shall have 21 days to file its petition as provided herein. If Respondent seeks an administrative proceeding pursuant to this paragraph, the Department may file suit against Respondent in lieu of or in addition to holding the administrative proceeding to obtain judicial resolution of all the issues unresolved at the time of the request for administrative proceeding. In the event that the Department files such a suit pursuant to this paragraph, Respondent reserves all of its rights and defenses to challenge or respond to such suit as is appropriate.

19. If any event occurs which causes delay or the reasonable likelihood of delay, in complying with the requirements of this Consent Order, Respondent shall have the burden of proving the delay was or will be caused by circumstances beyond the reasonable control of the Respondent and could not have been or cannot be overcome by Respondent's due diligence. Economic circumstances shall not be considered circumstances beyond the control of Respondent, nor shall the failure of a contractor, subcontractor, material person or other agent (collectively referred to as "contractor") to whom responsibility for performance is delegated to meet contractually imposed deadlines be a cause beyond the control of Respondent, unless the cause of the contractor's late performance was also beyond the contractor's control. Upon occurrence of an event causing delay, or upon becoming aware of a potential for delay, Respondent shall notify the Department orally within 24 hours or by the next working day and shall, within seven calendar days of oral notification to the Department, notify the Department in writing of the anticipated length and cause of the delay, the measures taken or to be taken to prevent or minimize the delay and the timetable by which Respondent intends to implement these measures. If the parties can agree that the delay or anticipated delay has been or will be caused by circumstances beyond the reasonable control of Respondent, the time for performance hereunder shall be extended for a period equal to the agreed delay resulting from such circumstances. Such agreement shall adopt all reasonable measures necessary to avoid or minimize delay. Failure of Respondent to comply with the notice requirements of this paragraph

in a timely manner shall constitute a waiver of Respondent's right to request an extension of time for compliance with the requirements of this Consent Order.

20. Nothing herein shall be construed to limit the authority of the Department to undertake any action against any Respondent in response to or to recover the costs of responding to conditions at or from the site that require Department action to abate an imminent hazard to the public health, welfare or the environment. In any such action initiated by the Department, Respondent reserves all of its legal rights and defenses authorized by law.

21. Entry of this Consent Order does not relieve Respondent of the need to comply with applicable federal, State or local laws, regulations or ordinances.

22. The terms and conditions set forth in this Consent Order may be enforced in a court of competent jurisdiction pursuant to Sections 120.69 and 403.121, Florida Statutes. Failure to comply with the terms of this Consent Order shall constitute a violation of Section 403.161(1)(b), Florida Statutes.

23. Respondent is fully aware that a violation of the terms of this Consent Order may subject Respondent to judicial imposition of damages, civil penalties up to \$50,000 per day per violation, and criminal penalties.

24. Respondent shall allow all authorized representatives of the Department and FIND access to the property and facility at reasonable times for the purpose of determining compliance with the terms of this Consent Order and the rules and statutes enforced by the Department.

25. The Department hereby expressly reserves the right to initiate appropriate legal action to prevent or prohibit any violations of applicable statutes or the rules promulgated there under that are not specifically addressed by the terms of this Consent Order. Correspondingly, Respondent hereby reserves all of its legal rights and defenses authorized by law against any such action that may be initiated by the Department.

26. No modifications of the terms of this Consent Order shall be effective until reduced to writing and executed by both the Respondent and the Department.

27. All submittals and payments required by this Consent Order to be submitted to the Department shall be sent to Dr. Brian S. Cheary, Manager of Waste Cleanup, Florida Department of Environmental Protection, 7825 Baymeadows Way, Suite B200, Jacksonville, Florida 32256-7590.

28. Within 30 days of the effective date of this Consent Order, Respondent shall comply with the signage requirements of Section 403.7255, Florida Statutes.

29. This Consent Order is a settlement of the Department's civil and administrative authority arising under Florida law to resolve the matters addressed herein. This Consent Order is not a settlement of any criminal liabilities that may arise under Florida law, nor is it a settlement of any violation that may be prosecuted criminally or civilly under federal law.

30. Respondent shall use all reasonable efforts to obtain any necessary access for work to be performed in the implementation of this Consent Order. If necessary access cannot be obtained, or if obtained, is revoked by owners or entities controlling access to the properties to which access is necessary, Respondent shall notify the Department within (5) business days of such refusal or revocation. The Department may at any time seek to obtain access as is necessary to implement the terms of this Consent Order. The Respondent shall reimburse the Department for any damages, costs, or expenses, including reasonable expert and attorneys' fees, that the Department is ordered to pay, or that the Department incurs in connection with its efforts to obtain access as is necessary to implement the terms of this Consent Order. Respondent shall pay these sums to the Department or arrange a payment schedule with the Department within 30 days of written demand by the Department.


31. This Consent Order is a final order of the Department pursuant to Section 120.52(7), Florida Statutes, and it is final and effective on the date filed with the Clerk of the Department unless a Petition for Administrative Hearing is filed in accordance with Chapter 120, Florida Statutes. Upon the timely filing of a petition, this Consent Order will not be effective until further order of the Department.

32. Upon Estuary's receipt of the Department's written approval of the SRCR

referenced in Paragraph 13, the Department shall confirm completion of the Respondent's obligations under this Consent Order by letter. Such Department letter shall indicate that the Department's enforcement file opened in this proceeding is closed and that further obligations or responsibilities under the Consent Order terminate, consistent with the provisions of Exhibit III.

FOR THE RESPONDENT:

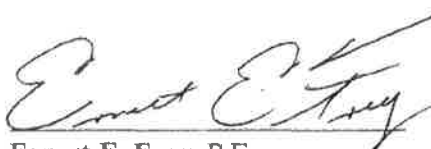
11/14/02
DATE


H.J. Skelton
Vice President,
Estuary Corporation,
4310 Pablo Oaks Court,
Jacksonville, FL 32224.

DONE AND ORDERED this 15 day of November, 2002, in Jacksonville, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

FILING AND ACKNOWLEDGEMENT
FILED, on this date, pursuant to §120.52, Florida
Statutes, with the designated Department Clerk,
receipt of which is hereby acknowledged.
[Signature] Clerk 11/18/02 Date


Ernest E. Frey, P.E.
Director of District Management

cc: David J. Tarbert, Esq., DEP, OGC
Michael P. Petrovich, Esq., Attorney for Respondent
David Roach, FIND
Norm Hatch, P.E.

D.R. 1897 PG 1063

SITE (PARCEL A)

A PARCEL OF LAND LYING IN SECTIONS 19, 30, 39 & 40, TOWNSHIP 3 SOUTH, RANGE 29 EAST, ST. JOHNS COUNTY, FLORIDA; BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

FOR A POINT OF REFERENCE, COMMENCE AT A NORTHWEST CORNER OF ST. JOHNS COUNTY, SAID POINT ALSO BEING ON THE WESTERLY LINE OF SECTION 38 INTERSECTED BY THE SOUTHERLY DUVAL COUNTY AND THE NORTHERLY ST. JOHNS COUNTY LINE; THENCE SOUTH 00°37'25" EAST ALONG THE WESTERLY LINE OF SAID ST. JOHNS COUNTY LINE, RANGE 29 EAST AND THE EASTERLY LINE OF DUVAL COUNTY, RANGE 28 EAST, A DISTANCE OF 1271.86 FEET TO A SIX (6) INCH ROUND CONCRETE AND BRASS CAP MONUMENT, (DUVAL/ST. JOHNS, GHI/JED AS NOTED); THENCE SOUTH 00°37'35" EAST, A DISTANCE OF 1400.05 FEET TO A FOUR (4) BY FOUR (4) INCH CONCRETE MONUMENT, (LB# 1048 AS NOTED); THENCE SOUTH 00°37'48" EAST, A DISTANCE OF 2070.72 FEET TO A HALF(1/2) INCH IRON PIPE, (LB# 1048 AS NOTED); THENCE SOUTH 00°36'54" EAST, A DISTANCE OF 201.03 FEET TO A SIX (6) INCH ROUND CONCRETE AND BRASS DISK MONUMENT, (DUVAL/ST. JOHNS JED AS NOTED); THENCE SOUTH 00°37'38" EAST, A DISTANCE OF 227.19 FEET TO A FOUR (4) BY FOUR (4) INCH CONCRETE MONUMENT, (LB# 3624 AS NOTED); THENCE SOUTH 00°36'27" EAST, A DISTANCE OF 148.42 FEET TO A HALF (1/2) INCH IRON PIPE; THENCE SOUTH 01°00'32" EAST, A DISTANCE OF 3330.60 FEET TO A POINT ON SAID WESTERLY LINE OF, ST. JOHNS COUNTY, RANGE 29 EAST AND THE EASTERLY LINE OF DUVAL COUNTY, RANGE 28 EAST; THENCE NORTH 76°11'25" EAST DEPARTING FROM SAID COUNTY LINE, A DISTANCE OF 1409.57 FEET TO THE POINT OF BEGINNING;

THENCE CONTINUING NORTH 76°11'25" EAST, A DISTANCE OF 2376.92 FEET; THENCE SOUTH 01°11'25" WEST, A DISTANCE OF 2400.00 FEET; THENCE SOUTH 32°50'52" EAST, A DISTANCE OF 1476.83 FEET; THENCE SOUTH 70°11'25" WEST, A DISTANCE OF 2249.82 FEET; THENCE NORTH 13°48'33" WEST, A DISTANCE OF 3949.46 FEET TO THE POINT OF BEGINNING.

Commitment No. 864-137757

O. R. 1897 PG 1064

DESCRIPTION: (PARCEL A - SITE)

A PARCEL OF LAND LYING IN SECTIONS 32, 53, 57, AND 61, TOWNSHIP 4 SOUTH, RANGE 29 EAST, ST. JOHNS COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHWEST CORNER OF SAID SECTION 55, TOWNSHIP 4 SOUTH, RANGE 29 EAST, THENCE SOUTH $00^{\circ} 56' 45''$ EAST, ALONG THE WESTERLY LINE OF SAID SECTION 55, A DISTANCE OF 2155.08 FEET; THENCE NORTH $55^{\circ} 20' 24''$ EAST A DISTANCE OF 642.72 FEET TO THE POINT OF BEGINNING;

THENCE SOUTH $14^{\circ} 07' 52''$ EAST A DISTANCE OF 4848.17 FEET; THENCE SOUTH $00^{\circ} 54' 41''$ WEST, A DISTANCE OF 2021.02 FEET; THENCE NORTH $14^{\circ} 07' 52''$ WEST A DISTANCE OF 3816.31 FEET; THENCE NORTH $55^{\circ} 20' 24''$ EAST AND PARALLEL WITH THE SOUTHERLY RIGHT OF WAY OF COUNTY ROAD 210, A DISTANCE OF 2150.57 FEET TO THE POINT OF BEGINNING.

BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION,

IN THE OFFICE OF THE
NORTHEAST DISTRICT

Complainant,

v.

OGC FILE NO: 01-0219

Estuary Corporation

Respondent.

NOTICE OF VIOLATION AND
ORDERS FOR CORRECTIVE ACTION

CERTIFIED MAIL – RETURN RECEIPT

TO: H.J. Skelton,
Registered Agent,
4310 Pablo Oaks Ct.,
Jacksonville, FL 32224.

Pursuant to the authority of Section 403.121(2), Florida Statutes ("F.S.") the State of Florida Department of Environmental Protection ("Department") gives notice to Estuary Corporation ("Respondent") of the following findings of fact and conclusions of law with respect to violations of Chapters 376 and 403, F.S.

FINDINGS OF FACT
PARAGRAPHS APPLICABLE TO ALL COUNTS

1. The Department is the administrative agency of the State of Florida having the power and duty to protect Florida's air and water resources and to administer and enforce the provisions of Chapters 376 and 403, F.S., and the rules promulgated thereunder, located in Title 62 of the Florida Administrative Code ("F.A.C.").

2. Respondent is a corporation that owns and operate a tree farm/cattle ranch, known as the Dee-Dot Ranch ("the Property"), in the adjacent counties of Duval and St. Johns in Northeast Florida.

3. In 1979 Respondent, or one of its predecessors entities, such as D.D.I., Inc. and/or Spanish Grant Estates, leased several sections of the Property to the now defunct Duval Septic Tank Company, Inc., for purposes of operating a facility known as the Dee-Dot Ranch Sludge Landfarm. Permit No.S016-23054 was issued by the Department to this company on May 16, 1980, with an expiration date of June 1, 1983. This permit was for the disposal of municipal sewage sludge. The permit specifically excluded the disposal of industrial, hazardous or infectious wastes. (Permit attached as Exhibit I).

4. On February 27, 1995, several sections in the St. Johns County portion of the Property ("the Site") were deeded by Respondent to the Florida Inland Navigation District ("FIND") (Deed attached as Exhibit II) for purposes of disposal of material to be dredged from the adjacent intracoastal canal by the Army Corps of Engineers (ACOE). Several, if not all, of these sections, were the same sections previously used for sewage sludge disposal by the Duval Septic Tank Company, Inc.

COUNT I

Disposal of Pollutants/Hazardous Substances

5. In early January, 2001, FIND began preparation of cells on the Site to receive dredged materials. During excavation, visual and olfactory evidence of contamination necessitated further investigation. On January 11, 2001, FIND's environmental consultant, Taylor Engineering Inc. ("TEI") sampled soils in the impacted area. Analysis was completed and a report issued by Harbor Branch Environmental Laboratory of Fort Pierce, Florida, on

January 19, 2001 (Report attached as Exhibit III). The report documented the presence of the contaminants listed below in the soils. The levels at which these contaminants are found are also set forth:

<u>Contaminant</u>	<u>Level in ug/Kg</u>
TRPH	310,000
Naphthalene	27,000
4-Isopropyltoluene	150,000
1-Methylnaphthalene	130,000
2-Methylnaphthalene	150,000
Acetone	1,000,000
Methylene chloride	1,300,000
Tetrachloroethene	3,200,000
Trichloroethene	2,200,000
Cis-1,2-dichloroethene	700,000
Phenanthrene	27,000
Bis (2-ethylhexyl)phthalate	1,300,000

6. Each of the substances listed in paragraph 5 above are hazardous substances as defined by statute. § 376.301(20) & 403.703(29), F.S.

7. Each of the substances listed in paragraph 5 above is a pollutant as defined by statute. § 376.301(34), F.S.

8. Each of the pollutants/hazardous substances set forth above were discharged on the Site in amounts that have likely already resulted in the contamination of the groundwater and as such the disposal of these substances violates Department standards. § 376.302(1)(a), F.S. See, Chapter 62-520, F.A.C. [Ground Water Classes, Standards and Exemptions].

9. The Respondent has caused pollution. § 403.161(1)(a), F.S.

10. Respondent owns the Site on which the polluting condition resulting from the disposal of hazardous substances is present. The Respondent is therefore liable for all costs relating to the assessment and remediation of the Site. § 376.308, 403.141, & 403.727(4), F.S.

COUNT II

Failure to Obtain a Permit

11. The Duval Septic Tank Company's permit did not allow the disposal of industrial or hazardous wastes. However, industrial and hazardous wastes were disposed of on the Site.

12. The disposal of the industrial and hazardous wastes should have been reasonably expected to be a source of water pollution due to the leaching of the hazardous contaminants from the soils and sludge into the ground water. [The sludges were placed in trenches and were not capped or covered in any way.]

13. A stationary installation reasonably expected to be a source of water pollution is required to obtain a permit from the Department. §403.087, F.S.

14. The failure to obtain a permit for a stationary installation expected to be a source of water pollution is a violation of Sections 403.161(1)(b) and 376.302(1)(b), F.S.

COUNT III

15. The Department has incurred expenses to date while investigating this matter in the amount of \$5000.

16. The Respondents are liable to the Department for these costs. §403.141, F.S.

CONCLUSIONS OF LAW

The Department has evaluated the Findings of Fact with regard to the requirements of Chapters 376 and 403, F.S. and F.A.C. Title 62. Based on the foregoing facts the Department has made the following conclusions of law:

17. Respondent is a "person" within the meaning of Sections 403.031 and 376.301, F.S.

18. Respondent's previous relationship with Duval Septic Tank Company, Inc., has resulted in contamination of the environment in contravention of Florida law, as set forth in Chapters 376 and 403, F.S.

19. The Respondent is jointly and severally liable to the Department for all damages caused by the disposal of the pollutants/hazardous substances on the Site, pursuant to Section 403.141, F.S.

20. The matters related in Count I constitute a violation of Sections 376.302 and 403.161, F.S.

21. The matters set forth in Count II constitute a violation of Sections 376.302 and 403.161, F.S.

22. Pursuant to Count III, Respondent is liable to the Department in the monetary amount of \$5,000.

ORDERS FOR CORRECTIVE ACTION

The Department has alleged that the activities related in the Findings of Fact constitute violations of Florida law. The Orders for Corrective Action state what you, Respondent, must do in order to correct and redress the violations alleged in this Notice.

The Department will adopt the Orders for Corrective Action as part of its Final Order in this case unless Respondent files a timely petition for a formal hearing or informal proceeding, pursuant to Section 403.121, F.S. (See Notice of Rights.) If Respondent fails to comply with the corrective actions ordered by the Final Order, the Department is authorized to file suit seeking

judicial enforcement of the Department's Order pursuant to Sections 120.69, 403.121 and 403.131, F.S.

Pursuant to the authority of Sections 403.061(8) and 403.121, F.S., the Department proposes to adopt in its Final Order in this case the following specific corrective actions that will redress the alleged violations:

23. Respondent shall forthwith comply with all Department rules regarding the assessment and remediation of the Site, by implementing the Corrective Actions for Contamination Site Cases, a Department guidance document to be used for the cleanup of all property contaminated with hazardous substances. A copy of the Corrective Actions document is attached as Exhibit IV.

24. Within 30 days of the effective date of this Order, Respondent shall make payment to the Department for costs and expenses in the amount of \$5000. Payment shall be made by cashier's check or money order payable to the "State of Florida Department of Environmental Protection" and shall include thereon the OGC Case number assigned to this case [01-0219] and the notation "Ecosystem Management and Restoration Trust Fund." The payment shall be sent to Dr. Brian S. Cheary, Manager, Waste Cleanup Section, Florida Department of Environmental Protection, 7825 Baymeadows Way, Suite B-200, Jacksonville, Florida 32256-7590, with a copy sent to Anthony J. Ettore, Office of General Counsel, 3900 Commonwealth Blvd., MS-35, Tallahassee, Florida 32399-3000.

NOTICE OF RIGHTS

25. Respondent has the right to a formal administrative hearing pursuant to Sections 120.569 and 120.57(1), F.S., if Respondent disputes issues of material fact raised by this Notice of Violation and Orders for Corrective Action ("Notice"). At a formal hearing, Respondent will

have the opportunity to be represented by counsel, to present evidence and argument on all issues involved, to conduct cross-examination and submit rebuttal evidence, to submit proposed findings of fact and orders, and to file exceptions to any order or hearing officer's recommended order.

26. Respondent has the right to an informal administrative proceeding pursuant to Sections 120.569 and 120.57(2), F.S., if Respondent does not dispute issues of material fact raised by this Notice. If an informal proceeding is held, Respondent will have the opportunity to be represented by counsel, to present to the agency written or oral evidence in opposition to the Department's proposed action, or to present a written statement challenging the grounds upon which the Department is justifying its proposed action.

27. If Respondent desires a formal hearing or an informal proceeding, Respondent must file a written responsive pleading entitled "Petition for Administrative Proceeding" within 20 days of receipt of this Notice or within 20 days of any timely requested informal conference held pursuant to paragraph 5 below. The petition must be in the form required by F.A.C. Chapter 62-103.155 and by F.A.C. Rule 28-106.201. A petition is filed when it is received by the Department's Office of General Counsel, 3900 Commonwealth Boulevard, MS-35, Tallahassee, Florida 32399-3000.

28. Respondent may request mediation under section 120.573 before the deadline for filing a petition. Choosing mediation will not adversely affect the right to a hearing if mediation does not result in a settlement. The procedures for pursuing mediation are set forth below. If the Department agrees that mediation in this matter is appropriate, Respondent must pursue mediation by reaching a mediation agreement with the Department before the deadline for filing a petition. The agreement must be filed in (received by) the Office of General Counsel of the

Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, by the same deadline as set forth above for the filing of a petition.

The agreement to mediate must include the following:

- (a) The names, addresses, and telephone numbers of any persons who may attend the mediation;
- (b) The name, address, and telephone number of the mediator selected by the parties, or a provision for selecting a mediator within a specified time;
- (c) The agreed allocation of the costs and fees associated with the mediation;
- (d) The agreement of the parties on the confidentiality of discussions and documents introduced during mediation;
- (e) The date, time, and place of the first mediation session, or a deadline for holding the first session, if no mediator has yet been chosen;
- (f) The name of each party's representative who shall have authority to settle or recommend settlement; and
- (g) The signatures of all parties or their authorized representatives.

As provided in section 120.573 of the Florida Statutes, the timely agreement of all parties to mediate will toll the time limitations imposed by sections 120.569 and 120.57 for requesting and holding an administrative hearing. Unless otherwise agreed by the parties, the mediation must be concluded within sixty days of the execution of the agreement. If mediation results in settlement of the administrative dispute, the Department must enter a final order incorporating the agreement of the parties. Persons whose substantial interests will be affected by such a modified final decision of the Department have a right to petition for a hearing only in accordance with the requirements for such petitions set forth above, and must therefore file their

petitions within 21 days of receipt of this notice. If mediation terminates without settlement of the dispute, the Department shall notify the Respondent in writing that the administrative hearing processes under sections 120.569 and 120.57 remain available for disposition of the dispute, and the notice will specify the deadlines that then will apply for challenging the agency action and electing remedies under those two statutes.

29. Respondent may request an informal conference with the Department in order to resolve this matter promptly and amicably. Respondent's rights will not be adjudicated at an informal conference, and the right to a formal hearing or informal proceeding will not be affected by requesting or participating in an informal conference.

30. If Respondent desires an informal conference, Respondent must file a written "Request for Informal Conference" within ten days of receipt of this Notice. The request must be made to the person indicated on the last page of this Notice. The request is filed when it is received by the office of the person indicated on the last page of this Notice. A properly filed written request for Informal Conference shall toll the time for filing a petition for a formal hearing or informal proceeding as provided herein. If no resolution of this matter results from the informal conference, Respondent has the right to file a petition for a formal hearing or informal proceeding within 20 days of the date the conference is closed.

31. Respondent will waive the right to a formal hearing or an informal proceeding if a petition is not filed with the Department within 20 days of receipt of this Notice or within 20 days of the date an informal conference is closed if one is held. These time limits may be varied only by written consent of the Department.

32. The allegations of this Notice together with the Orders for Corrective Action will be adopted by the Department in a Final Order if Respondent fails to timely file a petition for a

formal hearing or informal proceeding, pursuant to Section 403.121, F.S. A Final Order will constitute a full and final adjudication of the matters alleged in this Notice.

33. If Respondent fails to comply with the Final Order, the Department is authorized to file suit in circuit court seeking a mandatory injunction to compel compliance with the Order, pursuant to Sections 120.69, 376.308, 403.121, 403.131, 403.161, and 403.727, F.S. The Department may also seek to recover damages, all costs of litigation including reasonable attorney's fees and expert witness fees, and civil penalties of not more than \$50,000 per day for each day that Respondent fails to comply with the Final Order.

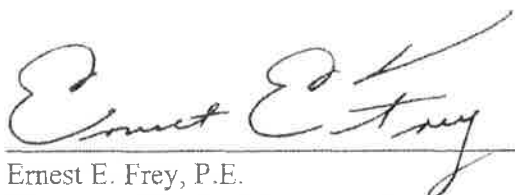
34. This matter may be resolved if the Department and Respondent enter into a Consent Order, in accordance with Section 120.57(4), F.S., upon such terms and conditions as may be mutually agreeable.

35. The Department is not barred by the issuance of this Notice from maintaining an independent action in circuit court with respect to the alleged violations. If such action is warranted, the Department may seek injunctive relief, damages, civil penalties of not more than \$50,000 per day, and all costs of litigation.

36. Copies of Department rules referenced in this Notice may be examined at any Department Office or may be obtained by written request to the person listed on the last page of this Notice.

DATED this 16 day of APRIL, 2001.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION



Ernest E. Frey, P.E.
Director of District Management

EEF:bks

Copies furnished to:

Larry Morgan, Office of General Counsel
Anthony J. Ettore, Office of General Counsel

A Petition for hearing must be filed with

Office of General Counsel
State of Florida Department of Environmental Protection
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000
(904) 488-9730

A request for informal conference must be made to:

Ernest E. Frey, P.E.
Director of District Management
State of Florida Department of Environmental Protection
Northeast District
7825 Baymeadows Way, Suite 200-B
Jacksonville, Florida 32256-7590
(904) 448-4320

FILING AND ACKNOWLEDGEMENT
FILED on this date pursuant to § 119.052, Florida
Statutes, with the designated Department Clerk,
receipt of which is hereby acknowledged
Debra Smith 4/16/01
Clerk Date

CORRECTIVE ACTIONS FOR CONTAMINATION SITE CASES

[Note: The "Corrective Actions for Contamination Site Cases" is to be used for sites where contamination of the groundwater, surface water, soils or sediments is known or documented by data or where the probability of finding such contamination is so high that implementation of the Preliminary Contamination Assessment Actions is an unnecessary action.]

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Part 1 Quality Assurance Certification

[Note: The purpose of Quality Assurance is to ensure that the data will be reliable, accurate and defensible. It includes confirmation that the selected consultant and lab are capable of doing the work, that appropriate analytical methods with appropriate detection limits are selected, and that sampling equipment/procedures do not alter the sample properties.]

1. Within 30 days of the effective date of the Order, the Respondent shall submit to the Department documents certifying that the organization(s) and laboratory(s) performing the sampling and analysis have a Department-approved Comprehensive Quality Assurance Plan (Comp QAP) in which each is approved for the sampling and analysis activities each will perform as part of the assessment and corrective actions at the site. The documentation shall, at a minimum, contain either the most recent TITLE PAGE (signed by the FDEP QA Officer) and TABLE OF CONTENTS of the Department-approved CompQAP (if the CompQAP is a 15-section document) or the most current CompQAP letter of approval signed by the FDEP QA Officer. All identified organizations and laboratories must follow the protocols outlined in their respective CompQAP(s) in order for the data to be reliable. At this time, the FDEP QA Officer will issue a letter which summarizes the activities each organization is qualified to perform. These activities must be consistent with the activities proposed in the IRAP, CAP, MOP, pilot tests/bench tests and RAP.

A. If at any time sampling and/or analysis activities are anticipated which are not in the Department-approved CompQAP, and the Respondent wishes to maintain the services of the affected organization(s), the organization(s) shall submit amendments to add the capabilities to the CompQAP(s). Such amendments shall be approved before the proposed activity(s) may be conducted. The letter approving such amendments, and signed by the FDEP QA Officer, shall be submitted to the Department.

B. If the organization(s) or laboratory(s) performing the sampling and analysis change at any time during the assessment and corrective actions, documentation of their Department-approved CompQAP (as outlined in 1. above) shall be required.

C. If the approval of the CompQAP for a specified organization expires during the course of the investigation or corrective actions, the Respondent shall discontinue using the organization until 1) the organization obtains CompQAP approval or 2) another organization with a Department approved CompQAP is selected and documentation outlined in 1. above is submitted.

D. The Department reserves the right to reject any results generated by the Respondent if any organization performs an activity that is not specifically approved in its CompQAP, if there is reasonable doubt as to the quality of the data or method used, if the sampling and analysis were not performed in accordance with the approved CompQAPs or if the CompQAP of any organization expires.

Part 2 Interim Remedial Actions

[Note: The Interim Remedial Action can include the removal of grossly contaminated soil, free product, or sources of contamination (drums, impoundments, tanks, etc.). It may also include specific well head treatment such as granulated activated carbon filters placed on affected private wells.]

2. If at any time the Department determines or the Respondent proposes that an Interim Remedial Action (IRA) is appropriate to achieve the objectives set forth below, the Respondent shall submit to the Department a detailed written Interim Remedial Action Plan (IRAP). The IRAP shall be submitted within sixty (60) days following Department determination that an IRA is appropriate. Applicable portions of the IRAP shall be signed and sealed by the appropriate professional. The objectives of the IRA shall be to remove specific known contaminant source(s), and/or provide temporary controls to prevent or minimize contaminant migration or protect human health. The IRA shall not spread contaminants into uncontaminated or less contaminated areas through untreated or undertreated discharges or improper treatment. The IRAP may include the following, as appropriate:

A. Rationale for the IRA and the cleanup criteria proposed, incorporating engineering and hydrogeological considerations including, as applicable, technical feasibility, long-term and short-term environmental effects, implementability (including any permits or approvals from federal, state, and local agencies), and reliability;

B. Design and construction details and specifications for IRA;

C. Operational details of the IRA including the disposition of any effluent, expected contaminant concentrations in the effluent, an effluent sampling schedule if treated ground water is being discharged to ground water, surface water, or to the ground; and the expected concentrations and approximate quantities of any contaminants discharged into the air as a result of remedial action;

D. Operation and maintenance plan for the IRA including, but not necessarily limited to daily, weekly, and monthly operations under routine conditions; a contingency plan for nonroutine conditions;

E. Details of the treatment or disposition of any contaminated soils or sediments;

F. Proposed methodology including post-IRA soil, sediment, surface water, and ground water monitoring, as applicable, to confirm the effectiveness of the interim remedial action; and

G. Schedule for the completion of the IRA;

3. The Department shall review the proposed IRAP and provide Respondent with a written response to the proposal. Any action taken by the Respondent with regard to the implementation of the IRAP before the IRAP has been approved shall be at Respondent's risk and Paragraph 44 applies.

4. In the event that additional information is necessary for the Department to evaluate the IRAP, or if the IRAP does not adequately address the objectives set forth in Paragraph 2, the Department will make a written request to Respondent for the information, and Respondent shall provide all requested revisions in writing to the Department within thirty (30) days from receipt of said request. If the requested information requires additional time for a response, the Respondent shall submit in writing to the Department within thirty (30) days of the Department's request, a reasonable schedule for completing the work needed to provide the requested information.

5. If the Department determines upon review of the resubmitted IRAP that the IRAP adequately addresses the objectives set forth in paragraph 2, then the Department shall approve the IRAP. If the Department determines that the IRAP still does not adequately address the objectives of the IRAP, the Department may choose one of the options listed in Paragraph 43.

6. Once an IRAP has been approved by the Department, it shall become effective and made a part of the Order and shall be initiated within thirty (30) days from receipt of the Department's notification to the Respondent that the IRAP has been approved. The approved IRAP shall incorporate all required modifications to the IRAP identified by the Department. All reporting and notification requirements spelled out in Part 6 shall be complied with during the IRAP implementation.

Part 3 Contamination Assessment and Risk Assessment

[Note: A Contamination Assessment Plan (CAP) is required for all sites where contamination of the groundwater, surface water, soils or sediments is known or documented or highly probable. The CAP proposes work to generate the information needed to clean up the contamination. This information includes establishment of the source areas, specific chemicals present, lateral and vertical extent, and contaminant migration. The details of the contamination from completed assessment must be known before cost effective and environmentally safe remediation can be performed. A meeting prior to CAP development is encouraged especially for organizations having no prior experience with Florida rules and statutes to discuss the CAP objectives and Department expectations in detail.]

7. Within sixty (60) days of the effective date of the Order incorporating these contamination assessment actions, Respondent shall submit to the Department a detailed written Contamination Assessment Plan (CAP). Applicable portions of the CAP shall be signed and sealed by an appropriate professional. If the Respondent has previously conducted a Preliminary Contamination Assessment, the Respondent shall submit to the Department a detailed written CAP within sixty (60) days of receipt of notice from the Department that a CAP is required. The purpose of the CAP shall be to propose methods for collection of information necessary to meet the objectives of the Contamination Assessment.

A. The objectives of the Contamination Assessment shall be to:

- (1) Establish the horizontal and vertical extent of soil, sediment, surface water and ground water contamination;
- (2) Determine or confirm the contaminant source(s); mechanisms of contaminant transport; rate and direction of contaminant movement in the air, soils, surface water and ground water; and rate and direction of ground water flow;
- (3) Provide a complete characterization, both onsite and offsite, of any and all contaminated media;
- (4) Determine the amount of product lost, and the time period over which it was lost (if applicable);
- (5) If **leaking** storage tanks may be the source of the contamination, determine the structural integrity of all aboveground and underground storage systems (including integral **piping**) which exist at the site (if applicable);
- (6) Establish the vertical and horizontal extent of free product (if applicable);
- (7) Describe **pertinent** geologic and hydrogeologic characteristics of **affected** and potentially **affected** hydrogeologic zones;
- (8) Describe geologic and hydrogeologic characteristics of the site which influence migration and transport of contaminants; and
- (9) Provide a site history as specified in Paragraph 7.C. (1).

B. The CAP shall specify the tasks necessary to achieve the applicable objectives described in Paragraph 7.A. above. The tasks may include, but are not limited to, the following:

- (1) Use of piezometers or wells to determine the horizontal and vertical directions of the ground water flow;
- (2) Use of Electromagnetic Conductivity (EM) and other geophysical methods or vapor analyzers to trace extent of ground water contamination;
- (3) Use of fracture trace analysis to discover linear zones in which discrete flow could take place;
- (4) Use of permanent monitoring wells to sample ground water in **affected** areas and to determine the vertical and horizontal extent of the ground water plume;
- (5) Sampling of public and private wells;
- (6) Sampling of **surface** water and sediments;
- (7) Sampling of air for airborne contaminants;
- (8) Analysis of soils, drum and tank residues, or any other media for hazardous waste determination and contaminant characterization;

(9) Use of organic vapor analyzers or geophysical equipment such as magnetometers, ground penetrating radar, or metal detectors to detect tanks, lines, etc.;

(10) Determination of the horizontal and vertical extent of soil and sediment contamination;

(11) Use of soil and well borings to determine pertinent site-specific geologic and hydrogeologic characteristics of affected and potentially affected hydrogeologic zones such as aquifers, confining beds, and unsaturated zones;

(12) Use of geophysical methods, aquifer pump tests and representative slug tests to determine geologic and hydrogeologic characteristics of affected and potentially affected hydrogeologic zones; and

(13) As a mandatory task, preparation and submittal of a written Contamination Assessment Report ("CAR") to the Department.

C. The CAP shall provide a detailed technical approach and description of proposed methodologies describing how proposed tasks are to be carried out. The CAP shall include, as applicable, the following information:

(1) A detailed site history including: a description of past and present property and/or facility owners; a description of past and present operations including those which involve the storage, use, processing or manufacture of materials which may be potential pollution sources; a description of all products used or manufactured and of all by-products and wastes (including waste constituents) generated during the life of the facility; a summary of current and past environmental permits and enforcement actions; a summary of known spills or releases of materials which may be potential pollution sources; and an inventory of potential pollution sources within 0.25 (one quarter) mile;

(2) Details of any previous site investigations including results of any preliminary ground water flow evaluation and/or stratigraphy investigation. If no reliable information exists, consider following a phased approach or conducting a limited pre-CAP investigation to determine groundwater flow direction and stratigraphy.

(3) Proposed sampling locations and rationale for their placement;

(4) A description of methods and equipment to be used to identify and quantify soil or sediment contamination, including dry bulk density, soil porosity, soil moisture and total organic carbon (for site specific leachability cleanup goals);

(5) A description of water and air sampling methods;

(6) Parameters to be analyzed for, analytical methods to be used, and detection limits of these methods with justification for their selection;

(7) Proposed piezometer and well construction details including methods and materials, well installation depths and screened intervals, well development procedures;

(8) A description of methods proposed to determine aquifer properties (e.g., aquifer pump tests, representative slug tests, permeability tests, computer modeling);

(9) A description of geophysical methods proposed for the project;

(10) Details of any other assessment methodology including innovative assessment technologies proposed for the site;

(11) A description of any survey to identify and sample public or private wells which are or may be affected by the contaminant plume; Surveys should include

Water Management District, local and county health department files, utility companies and detailed door-to-door reconnaissance for a minimum distance of a quarter mile.

(12) A description of the regional geology and hydrogeology of the area surrounding the site;

(13) A description of site features (both natural and man-made) pertinent to the assessment;

(14) A description of methods and equipment to be used to determine the site specific geology and hydrogeology; and

(15) Details of how drill cuttings, development and purge water from installation of monitoring wells will be collected, managed and disposed of.

(16) Tables which summarize the proposed samples, analyses, and method detection limits for each medium compared to state standards/criteria or generic cleanup goals. Include the appropriate number and type of quality assurance samples.

(17) Provide information regarding state listed endangered and threatened flora and fauna species within and near the site.

(18) Provide a reasonable time schedule for completing each task, preparing the CAR and submitting the CAR.

8. The Department shall review the CAP and provide the Respondent with written responses to the plan and the quality assurance certification status of Part 1. Any action taken by the Respondent with regard to the implementation of the CAP prior to the Respondent receiving written notification from the Department that the CAP has been approved shall be at Respondent's risk and Paragraph 44 applies.

9. In the event that additional information is necessary for the Department to evaluate the CAP, or if the CAP does not adequately address the CAP objectives set forth in Paragraph 7.A, the Department will make a written request to the Respondent for the information. The Respondent shall provide all requested revisions in writing to the Department within thirty (30) days from receipt of said request. If the requested information requires additional time for a response, the Respondent shall submit a written reasonable schedule for completing the work needed to provide the requested information.

10. If the Department determines upon review of the resubmitted CAP that the CAP adequately addresses the objectives set forth in paragraph 7, then the Department shall approve the CAP. If the Department determines that the CAP still does not adequately address the objectives and/or requirements in Paragraph 7.A, the Department may choose one of the options listed in Paragraph 43.

11. Once a CAP has been approved by the Department, it shall become effective and made a part of the Order and shall be initiated within thirty (30) days of the Department's written notification to the Respondent that the CAP has been approved. The approved CAP shall incorporate all required modifications to the proposed CAP identified by the Department. All reporting and notification requirements spelled out in Part 6 shall be complied with during the implementation of the CAP tasks.

[Note: The Contamination Assessment Report (CAR) compiles the results of the assessment, evaluates and draws conclusions from those results, and includes recommendations from the Respondent/Consultant regarding the next appropriate phase of work. A No Further Action (NFA) recommendation is appropriate for sites with no free product, no contaminated soil, and no groundwater contamination above standards or minimum criteria. A Monitoring Only Plan (MOP) applies to sites with minor violations of groundwater standards and criteria that do not extend offsite, will not migrate offsite, and the contaminants of concern are expected to attenuate via natural processes. A Remedial Action Plan (RAP) for contaminated soil may include a MOP for groundwater. The Department provides the target cleanup levels for most sites and requires a Risk Assessment only when toxicity data are not readily available to the Department. In most instances the Department will not approve the use of a Risk Assessment/Justification (RAJ) to develop alternative Site Rehabilitation levels (SRLs) for water if a standard exists or a numerical interpretation of the minimum criteria has been developed by the Department for the constituent for a particular class of water or in all waters. A Feasibility Study (FS) recommendation would be appropriate if detailed evaluation of cleanup technologies and remedial actions is needed. A RAP recommendation would be appropriate for sites where the remedial alternative(s) are obvious and include large volumes and/or extensive work.]

12. The Respondent shall submit a written Contamination Assessment Report (CAR) to the Department in accordance with the CAP schedule approved by the Department. Applicable portions of the CAR shall be signed and sealed by an appropriate professional. The CAR shall:

- A. Summarize all tasks which were implemented pursuant to the CAP;
- B. Provide the results, discussion and conclusions regarding the Contamination Assessment objectives outlined in Paragraph 7.A;
- C. Include, the following tables and figures as appropriate:
 - (1) A table with well construction details, top of casing elevation, depth to water measurements, and water elevations (The top of casing elevations should be referenced to the National Geodetic Vertical Datum (NGVD) of 1929 if at all possible.);
 - (2) A site map showing water elevations, water table contours and the groundwater flow direction for each aquifer monitored for each sampling period;
 - (3) A table with water quality information for all monitor wells and surface water sampling locations;
 - (4) Site maps showing contaminant concentrations and contours of the contaminants for all contaminated media;
 - (5) Cross sections depicting the geology of the site at least to the top of the first confining unit. In general there should be at least one north to south cross section and one east to west cross section;
 - (6) A table with soil and sediment quality information;
 - (7) A map showing the locations of all monitor wells, soil, surface water, and sediment samples; and
 - (8) If applicable, a map showing the locations of all potable wells located within a quarter mile of the site. A table with the names and addresses of private and public potable wells should be included.

D. Include copies of field notes pertaining to field procedures, particularly of data collection procedures; laboratory results to support data summary tables, and soil boring logs, well construction logs, and lithologic logs, and

E. Summarize conclusions regarding the CAP objectives and include a recommendation for either No Further Action (NFA), a Monitoring Only Plan (MOP), a Risk Assessment/Justification proposal (RAJ), a Feasibility Study (FS) or remedial actions requiring a Remedial Action Plan (RAP). If the recommendation is for a MOP (see Paragraphs 20 to 25) or a RAJ (see Paragraphs 17 to 19), the MOP or the RAJ proposal shall be attached to the CAR for review.

[Note: The following justification is optional and applies only to those sites with mitigating circumstances such as technology or engineering limitations, lithology limitations or documented natural attenuation.]

F. Justification for a "monitoring only" or "no further action" proposal if the results of the contamination assessment alone do not support a No Further Action or Monitoring Only Alternative. If the Respondent plans to develop alternative Site Rehabilitation Levels (SRLs) for the site, the proposal for a Risk Assessment/Justification (RAJ) shall be included in the CAR for review. In most instances the Department will not approve alternative SRLs for water if a standard exists or a numerical interpretation of the minimum criteria has been developed by the Department for the constituent for a particular class of water or in all waters. Factors to be evaluated shall be, at a minimum:

(1) The present and future uses of the affected aquifer and adjacent surface waters with particular consideration of the probability that the contamination is substantially affecting or will migrate to and substantially affect a public or private source of potable water or a viable wildlife habitat;

(2) Potential for further degradation of the affected aquifer or degradation of other connected aquifers;

(3) The technical feasibility of achieving the SRLs based on a review of reasonably available technology; and

(4) Individual site characteristics, including natural rehabilitative processes.

13. The Department shall review the CAR and determine whether it has adequately met the objectives specified in Paragraph 7.A. In the event that additional information is necessary for the Department to evaluate the CAR or if the CAR does not adequately address the CAP objectives set forth in Paragraph 7.A, the Department will make a written request to the Respondent for the information. The Respondent shall provide all requested revisions in writing to the Department within thirty (30) days from receipt of said request, unless the requested information requires additional time for a response, in which case the Respondent shall submit in writing to the Department, within thirty (30) days of the Department's request, a reasonable schedule for completing the work needed to provide the requested information.

14. If the Department determines upon review of the CAR or the CAR Addendum that all of the CAP objectives and tasks have been satisfactorily completed and that the recommended next action proposed is reasonable and justified by the results of the

contamination assessment, the Department will provide written approval of the CAR, MOP, or NFA as applicable to the Respondent. If the Department approves a "no further action" proposal, this approval shall terminate Respondent's actions under the Order unless previously unavailable information becomes known and connects other contamination to the site.

15. If the Department determines upon review of the CAR or the CAR Addendum that the CAR still does not adequately address the objectives in Paragraph 7.A, or that the next proposed action is not acceptable, the Department may choose one of the options listed in Paragraph 43.

[Note: The Department has the option to provide the Respondent with the cleanup target levels (SRLs) or to require the Respondent to develop the SRLs via a Risk Assessment. In most cases, the Department provides the cleanup target levels which saves time and eliminates a significant expense for the Respondent. The Department requires the Respondent to prepare a Risk Assessment only when toxicity data are not readily available to the Department.]

16. The Department, at its option, may establish from review of the CAR and other relevant information the Site Rehabilitation Levels (SRLs) to which the contamination shall be remediated or may require the Respondent to implement the risk assessment process to develop such SRLs for the site. The SRLs for ground water as determined by the Department shall be the Chapter 62-520, (which references Chapter 62-550) F.A.C. standards and the Department's numerical interpretation of the Rule 62-520.400, F.A.C. minimum criteria. The SRLs for surface waters shall be the standards specified in Chapter 62-302, F.A.C., the minimum criteria and the toxicity criteria per Rule 62-302.530(62) F.A.C. The Department, at its option, may define the SRLs for soils and sediments or may require the Respondent to complete a risk assessment to define SRLs for soils or sediments that are sufficiently contaminated to present a risk to the public health, the environment or the public welfare. The cleanup goals for soils will be risk based and if ground water contamination is present, may also be based on potential leachate generation. If the Department does choose to provide SRLs to the Respondent and does not choose to require a risk assessment and requires the Respondent to remediate the site to those SRLs, the Respondent shall implement the FS, if required by the Department as set forth in Paragraph 26, or submit the RAP as set forth in Paragraph 31. The Respondent may choose to develop site specific soil cleanup goals utilizing site specific parameters such as total organic carbon, soil porosity, soil moisture content, and dry bulk density in combination with Department acceptable exposure assumptions.

17. After Department approval of the CAR and the RAJ proposal, the Respondent shall prepare and submit a RAJ. . In most instances the Department will not approve the use of a RAJ to develop alternative SRLs for water if a standard exists or a numerical interpretation of the minimum criteria has been developed by the Department for the constituent for a particular class of water or in all waters. The RAJ which includes a risk assessment and a detailed justification of any alternative SRLs or "monitoring only" or "no further action" proposals shall be submitted within ninety (90) days of the Department's written approval of the CAR and notice that a RAJ is required, or within ninety (90) days of the Department's written approval of the CAR and the RAJ recommendation. Unless otherwise approved by the Department, the subject document shall address the following task elements, divided into the following five major headings:

A. Exposure Assessment - The purpose of the Exposure Assessment is to identify routes by which receptors may be exposed to contaminants and to determine contaminant levels to which receptors may be exposed. The Exposure Assessment should:

- (1) Identify the contaminants found at the site and their concentrations as well as their extent and locations;
- (2) Identify possible transport pathways;
- (3) Identify actual and potential exposure routes;
- (4) Identify actual and potential receptors for each exposure route; and
- (5) Calculate expected contaminant levels to which actual or potential receptors may be exposed.

B. Toxicity Assessment - The purpose of the Toxicity Assessment is to define the applicable human health and environmental criteria for contaminants found at the site. The criteria should be defined for all potential exposure routes identified in the Exposure Assessment. DEP standards shall be the criteria for constituents and exposure routes to which the standards apply. Criteria for constituents and exposure routes for which specific DEP standards are not established shall be based upon criteria such as Carcinogenic Slope Factor (SF), Reference Doses (RfDs), organoleptic threshold levels, Ambient Water Quality Criteria for Protection of Human Health and for Protection of Aquatic Life, and other relevant criteria as applicable in combination with Department approved exposure assumptions. If there are no appropriate criteria available for the contaminants and exposure routes of concern, or the criteria are in an inappropriate format, the Respondent shall develop the criteria using Department approved equations and current scientific literature acceptable to toxicological experts. Criteria for the following exposure routes shall be defined or developed as applicable:

- (1) Potable water exposure route - develop criteria for ingestion, dermal contact, and inhalation of vapors and mists, utilizing applicable health criteria such as SF, RfDs, organoleptic threshold levels, and other relevant criteria as applicable.

- (2) Non-potable ground water and surface water usage exposure route - develop criteria for incidental ingestion, dermal contact, and inhalation of vapors and mists, such as through the ingestion of food crops irrigated with such water, lawn watering, ingestion by pets and livestock, and other related exposure.

- (3) Soil exposure route - develop criteria for ingestion, dermal contact, inhalation, and ingestion by humans or animals of food crops grown in contaminated soils.

- (4) Non-potable surface water and sediment exposure - develop criteria for prevention of adverse effects on human health (e.g. incidental ingestion and dermal contact effects on humans utilizing the resource for recreational purposes and ingesting fish, shellfish, etc.) or the environment (e.g. toxic effects of the contaminants on aquatic or marine biota, bio-accumulative effects in the food chain, other adverse effects that may affect the designated use of the resource as well as the associated biota).

- (5) Air exposure route - develop criteria for exposure to the contaminants.

C. Risk Characterization - The purpose of the Risk Characterization is to utilize the results of the Exposure Assessment and the Toxicity Assessment to characterize cumulative risks to the

affected population and the environment from contaminants found at the site. Based on contaminant levels presently found at the site, a risk and impact evaluation will be performed which considers, but is not limited to:

- (1) Risks to human health and safety from the contamination including,
 - (a) carcinogenic risk (FDEP's acceptable risk level is $10E-6$), and
 - (b) non-carcinogenic risk (FDEP considers a hazard index of one as acceptable).
- (2) Effects on the public welfare of exposure to the contamination which may include but not be limited to soils and to adverse affects on actually and potentially used water resources; and
- (3) Environmental risks in areas which are or will be ultimately affected by the contamination including,
 - (a) other aquifers,
 - (b) surface waters, including wetlands,
 - (c) sediments,
 - (d) sensitive wildlife habitats, and
 - (e) sensitive areas including, but not limited to, National Parks, National Wildlife Refuges, National Forests, State Parks, State Recreation Areas, State Preserves.

[Note: The following "justification" is not applicable to a Risk Assessment prepared to develop SRLs for the site where the toxicity data are not readily available to the Department. This justification is required for a Risk Assessment prepared to develop alternative SRLs.]

D. Justification for the alternative Site Rehabilitation Levels (SRLs) - The purpose of this section is to provide justification on a case-by-case basis for alternative SRLs at which remedial action shall be deemed completed. Factors to be evaluated shall be, at a minimum:

- (1) The present and future uses of the affected aquifer and adjacent surface waters with particular consideration of the probability that the contamination is substantially affecting or will migrate to and substantially affect a public or private source of potable water;
- (2) Potential for further degradation of the affected aquifer or degradation of other connected aquifers;
- (3) The technical feasibility of achieving the SRLs based on a review of reasonably available technology;
- (4) Individual site characteristics, including natural rehabilitative processes; and
- (5) The results of the risk assessment.

18. The Department shall review the RAJ document and determine whether it has adequately addressed the risk assessment task elements and justification. In the event that additional information is necessary to evaluate any portion of the RAJ document, the Department shall make a written request and Respondent shall provide all requested information within twenty (20) days of receipt of said request.

19. The Department shall approve or disapprove the RAJ. If the Department does not approve the alternative SRLs, the Respondent shall use the SRLs as determined by the Department. The Respondent shall implement the Feasibility Study, if required by the Department as set forth in Paragraph 26, or submit the Remedial Action Plan (RAP) as set forth in Paragraph 31.

Part 4 Remedial Planning and Remedial Actions

[Note: The Monitoring Only Plan applies to sites with minor violations of the groundwater standards and minimum criteria, where groundwater contamination does not extend offsite, will not migrate offsite, and the contaminants of concern are expected to attenuate via natural processes.]

20. If at any time following assessment or ground water remediation, it is determined that a MOP is an acceptable alternative for the site, the Respondent shall submit a MOP to the Department either with the CAR or within sixty (60) days of receipt of written Department concurrence. Applicable portions of the MOP shall be signed and sealed by an appropriate professional. The MOP shall provide a technical approach and description of proposed monitoring methodologies. The MOP shall include, but may not be limited to, the following:

- A. Environmental media for which monitoring is proposed, monitoring locations and rationale for the selection of each location, and proposed monitoring frequency;
- B. Parameters to be analyzed, analytical methods to be used, and detection limits of these methods;
- C. Methodology for evaluating contamination trends based on data obtained through the MOP and a proposed format including a time table for submittal of monitoring data and data analysis to the Department; and
- D. A detailed contingency plan describing proposed actions to be taken if trends indicate that contaminant concentrations are increasing, ground water standards or criteria are exceeded for monitoring locations at which exceedances did not occur during the previous monitoring period, or monitoring data appear questionable.

21. The Department shall review the MOP, and provide the Respondent with a written response to the proposal. Any action taken by the Respondent with regard to the implementation of the MOP before the MOP has been approved shall be at the Respondent's risk and Paragraph 44 shall apply.

22. In the event that additional information is necessary for the Department to evaluate the MOP or if the MOP does not adequately address the MOP requirements set forth in Paragraph 20, the Department will make a written request to the Respondent for the information. The Respondent shall provide all requested revisions in writing to the Department within thirty (30) days from receipt of said request, unless the requested information requires additional time for a response, in which case the Respondent shall submit in writing to the Department within 30 days of the Department's request, a reasonable schedule for completing the field work needed to provide the requested information.

23. If the Department determines upon review of the resubmitted MOP that the MOP still does not adequately address the requirements in Paragraph 20, the Department may choose one of the options listed in Paragraph 43.

24. Once a MOP has been approved by the Department, it shall become effective and made a part of the Order, and shall be initiated within thirty (30) days of the Department's written notification to the Respondent that the MOP has been approved. The approved MOP shall incorporate all required modifications to the MOP identified by the Department.

25. The Respondent shall submit the required monitoring data and data analysis products to the Department according to the time table in the approved MOP. If at any time trends are discovered by the Respondent that require any action proposed in the approved contingency plan, the Respondent shall notify the Department and initiate the Contingency Plan in a timely manner. Paragraph 43 applies to any exceptions to this paragraph.

[Note: The Department may require or the Respondent may request the option to prepare a Feasibility Study. It probably is not necessary except for very complex sites where multiple contaminant classes are present or multiple media are contaminated. It may be necessary where the Respondent recommends a cleanup technology that the Department thinks is unable to achieve an adequate remediation or it may be necessary where a previously implemented technology has failed on the site and a different technology needs to be evaluated for an alternative remedial action.]

26. The Department, at its option, shall also determine from review of the CAR and other relevant information whether the Respondent should prepare and submit a FS to the Department. The Respondent may request the option to prepare a FS. Applicable portions of the FS shall be signed and sealed by an appropriate professional. The FS may be required in complex cases to evaluate technologies and remedial alternatives, particularly if multiple contaminant classes are represented or multiple media are contaminated. The FS evaluates remedial technologies and remedial alternatives with the objective of identifying the most environmentally sound and effective remedial action to achieve clean up of the site to SRLs or alternative SRLs (if approved). The FS shall be completed and a report submitted within sixty (60) days of receipt of written notice that a FS is required or within the time frame approved by the Department, unless the Respondent has approval to submit a RAJ pursuant to Paragraphs 16 or 17. The FS shall include the following tasks:

A. Identify and review pertinent treatment, containment, removal and disposal technologies;

B. Screen technologies to determine the most appropriate technologies;

C. Review and select potential remedial alternatives using the following criteria:

(1) long and short term environmental effects;

(2) implementability;

(3) capital costs;

- (4) operation and maintenance costs;
- (5) operation and maintenance requirements;
- (6) reliability;
- (7) feasibility;
- (8) time required to achieve clean-up; and
- (9) potential legal barriers to implementation of any of the alternatives;

D. Identify the need for and conduct pilot tests or bench tests to evaluate alternatives, if necessary;

E. Select the most appropriate remedial alternative that meets the objective of the FS and the criteria under paragraph C; and

F. (If applicable and not previously addressed) Develop soil cleanup criteria such that any remaining contaminated soils will not cause groundwater contamination in excess of the SRLs or alternative SRLs referenced in paragraphs 16 or 17, 18 and 19 (if approved).

27. The FS Report shall:

A. Summarize all FS task results; and

B. Propose a conceptual remedial action plan based on the selection process carried out in the FS.

28. The Department shall review the FS Report for adequacy and shall determine whether the Department agrees with the proposed remedial action based upon the objective and the criteria specified under paragraph 26.C. In the event that additional information is necessary to evaluate the FS report, the Department shall make a written request and Respondent shall provide all requested information within thirty (30) days of receipt of said request.

29. If the Department does not approve of the proposed remedial action, the Department will notify the Respondent in writing of the determination. The Respondent shall then have forty-five (45) days from the Department's notification to resubmit a proposed alternate remedial action.

30. If the Department determines upon review of the resubmitted remedial action proposal that it does not agree with the proposal, the Department may choose one of the options listed in paragraph 43.

[Note: The Remedial Action Plan describes the activities to be performed to clean up media that are contaminated above safe levels for public health and the environment. Leachate generation from contaminated materials also needs to be evaluated to prevent continued groundwater and surface water impacts.]

31. Within sixty (60) days of receipt of written notice from the Department, Respondent shall submit to the Department a detailed RAP. Applicable portions of the RAP

shall be signed and sealed by an appropriate professional. The objective of the remedial action shall be to achieve the clean up of the contaminated media to the SRLs or the approved alternative SRLs referenced in paragraphs 16 or 17, 18, and 19. The RAP shall summarize the CAR findings and conclusions and state the approved SRLs for all media. The RAP shall include as applicable:

A. Rationale for the remedial action proposed which shall include at a minimum:

(1) Results from any pilot studies or bench tests;
 (2) Evaluation of results for the proposed remedial alternative based on the following criteria:

- a. long and short term environmental impacts;
- b. implementability, which may include, but not be limited to, ease of construction, site access, and necessity for permits;
- c. operation and maintenance requirements;
- d. estimates of reliability;
- e. feasibility; and
- f. estimates of costs.

(3) (If applicable and not previously addressed) Soil cleanup criteria such that any remaining contaminated soils will not cause groundwater contamination in excess of the SRLs or alternative SRLs referenced in paragraphs 16 or 17, 18, and 19.

B. Design and construction details and specifications for the remedial alternative selected;

C. Operational details of the remedial action including the disposition of any effluent, expected contaminant concentrations in the effluent, an effluent sampling schedule if treated ground water is being discharged to soils, to ground water or to surface waters, and the expected concentrations and approximate quantities of any contaminants which are reasonably expected to be discharged into the air as a result of remedial action;

D. Tables which summarize the proposed samples and analyses for each pertinent medium and include the appropriate number and type of quality assurance samples consistent with the requirements of Part 1;

E. Details of the treatment or disposition of any contaminated soils or sediments;

F. Proposed methodology including post remedial action soil sampling and ground water monitoring as applicable for evaluation of the site status after the remedial action is complete to verify accomplishment of the objective of the RAP; and

G. Schedule for the completion of the remedial action.

32. The Department shall review the proposed RAP and provide Respondent with a written response to the proposal. Any action taken by the Respondent with regard to the implementation of the RAP before the RAP has been approved shall be at Respondent's risk and Paragraph 44 shall apply.

33. In the event that additional information is necessary for the Department to evaluate the RAP, or if the RAP does not adequately address the objectives and requirements set forth in Paragraph 31, the Department will make a written request to the Respondent for the information. The Respondent shall provide all requested revisions in writing to the Department within forty five (45) days from receipt of said request, unless the requested information requires additional time for a response, in which case the Respondent shall submit in writing to the Department, within forty five (45) days of the Department's request, a reasonable schedule for completing the work needed to provide the requested information.

34. If the Department determines upon review of the resubmitted RAP that the RAP adequately addresses the objectives set forth in paragraph 31, then the Department shall approve the RAP. If the Department determines that the RAP still does not adequately address the requirements of the RAP, the Department may choose one of the options listed in Paragraph 43.

35. Once a RAP has been approved by the Department, it shall become effective and made a part of the Order and shall be initiated within thirty (30) days from receipt of the Department's notification to the Respondent that the RAP has been approved. The approved RAP shall incorporate all required modifications to the RAP identified by the Department. All reporting and notification requirements spelled out in Part 6 below shall be complied with during the implementation of the RAP tasks.

36. If at any time during RAP implementation, it becomes apparent that the selected remedial alternative or treatment technology will be unable to achieve the SRLs, the Respondent may conduct a FS pursuant to Paragraph 26 to evaluate other alternatives and technologies to improve site remediation.

Part 5 Termination of Remedial Actions

37. Following termination of remedial action (clean up of contaminated media to the approved SRLs), designated monitoring wells shall be sampled on a schedule approved by the Department.

38. Following completion of monitoring requirements pursuant to the approved MOP or of the remedial action and post-remedial action monitoring, the Respondent shall submit a Site Rehabilitation Completion Report (SRCR) to the Department for approval. The SRCR shall contain documentation that site cleanup objectives have been achieved. Applicable portions of the SRCR shall be signed and sealed by an appropriate professional.

39. Within sixty (60) days of receipt of the SRCR, the Department shall approve the SRCR or make a determination that the SRCR does not contain reasonable assurances that site clean-up objectives have been achieved. If the Department determines that the SRCR is not adequate based upon information provided, the Department will notify the Respondent in writing. Site rehabilitation activities shall not be deemed completed until such time as the Department provides the Respondent with written notice that the SRCR is approved.

Part 6 Progress Reporting and Notifications

40. On the first working day of each month, or on another schedule approved by the Department after initiating an IRAP, CAP or RAP, Respondent shall submit written progress reports to the Department. These progress reports shall evaluate progress, describe the status of each required IRAP, CAP and RAP task, and discuss any new data. The effectiveness of the IRAP and RAP shall be evaluated. The Progress Reports shall propose modifications and additional work as needed. The reports shall be submitted until planned tasks have been completed in accordance with the approved IRAP, CAP, or RAP. Each final report shall be signed and sealed by the appropriate professional. The final report shall include all data, manifests, and a detailed summary of the completed work.

41. The Respondent shall notify the Department at least ten days prior to installing monitoring or recovery wells, and shall allow Department personnel the opportunity to observe the location and installation of the wells. All necessary approvals must be obtained from the water management district before the Respondent installs the wells.

42. The Respondent shall notify the Department at least ten (10) days prior to any sampling, and shall allow Department personnel the opportunity to observe sampling or to take split samples. When the Department chooses to split samples, the raw data shall be exchanged between the Respondent and the Department as soon as the data are available.

Part 7 Conflict Resolution and Other Requirements

43. In the event that the Department determines a document to be inadequate or if there are disagreements, the Department, at its option, may choose to do any of the following:

A. Draft specific modifications to the document and notify the Respondent in writing that approval of the document is being granted contingent upon those modifications being incorporated into the document.

B. Resolve the issues through repeated correspondence, telephone discussions, and/or meetings.

C. Notify the Respondent that Respondent has failed to meet the stated objectives for the document, in which case the Department may do any or all of the following: take legal action to enforce compliance with the Order; file suit to recover damages and civil penalties; or complete the corrective actions outlined herein and recover the costs of completion from the Respondent.

44. The Respondent is required to comply with all applicable local, state and federal regulations and to obtain any necessary approvals/permits from local, state and federal authorities in carrying out these corrective actions.

45. The Respondent shall immediately notify the Department of any circumstances encountered by the Respondent which require modification of any task in the approved IRAP, CAP or RAP, and obtain Department approval prior to implementing any such modified tasks.

46. With regard to any agency action or determination made or taken by the Department under any of the provisions of this document "Corrective Actions for Contamination Site Cases", that portion of the Order containing dispute resolution procedures and remedies shall apply.

EXHIBIT IV

**AGREEMENT FOR ACCESS TO PROPERTY AND FOR
IMPLEMENTATION OF SITE REHABILITATION ACTIVITIES**

WHEREAS, Estuary Corporation ("Estuary") desires to have access to certain property in St. Johns County near Jacksonville, Florida, owned by the Florida Inland Navigation District ("FIND") located at Latitude 30 °12' 30" and Longitude 81° 26' 15" ("the Property"), to conduct environmental site rehabilitation activities ("Activities") as required by the State of Florida Department of Environmental Protection ("FDEP") pursuant to Consent Order No. 01-0219 incorporated herein as Exhibit I.

WHEREAS, FIND asserts that it is the fee owner of record with the sole right of ownership and possession to the Property.

NOW THEREFORE in consideration of the mutual covenants hereinafter expressed herein, the parties agree to the following:

1. Estuary, its consultants, representatives, agents, and assigns are hereby granted a right of access to the Property, at all reasonable times, to conduct the Activities required of it by FDEP pursuant to Consent Order No. 01-0219. In addition, FDEP and its consultants, representatives, agents, and assigns are hereby granted a right of access to the Property, at all reasonable times, to observe, monitor, or participate in the Activities to be performed by Estuary. Such right of access is effective immediately upon execution of this document and shall continue until such Activities are complete.

2. Estuary shall perform, or cause to be performed, all Activities authorized by this Agreement as set forth in Consent Order No. 01-0219 in accordance with all applicable environmental laws and regulations, including but not limited to laws and regulations of federal, state, and local governments.

3. FIND agrees to use all reasonable efforts to conduct any of its activities on the Property so as not to delay, impede, or otherwise interfere with Estuary's implementation of the Activities required by FDEP. FIND also agrees to provide information to FDEP concerning the proposed use of the property for dredge spoil disposal and information concerning the possible impact, if any, of such activity on the Activities required of Estuary by FDEP. Such information is to be submitted by FIND to FDEP representatives set out in Paragraph 6 prior to its construction of future dredge spoil disposal cells.

4. Estuary and FIND do not, by virtue of this Agreement, admit or assume any fact, responsibility, fault, or liability for any environmental contamination or other damage at or to the Property.

5. The provisions of the Agreement shall apply to and be binding upon FIND and upon any person to whom it may sell or transfer the property.

EXHIBIT IV

6. If any work required by FDEP to be performed by Estuary has not been completed, FIND shall, at least 14 days prior to a sale or transfer of the property:

(1) notify FDEP and Estuary in writing of such sale or transfer, and (2) provide a copy of this Agreement to the new owner. Notice to FDEP is to be provided to:

Florida Department of Environmental Protection
Attn: Dr. Brian Cheary
7825 Bay Meadows Way Suite 200B
Jacksonville, Florida 32256-7590

Notice to Estuary is to be provided to Harry Francis at the address provided in the signature block below.

7. This Agreement shall be governed by Florida law as to its validity, construction, and enforcement. In the event any one or more of the provisions of this Agreement shall for any reason be held invalid, illegal or unenforceable, this shall not affect any other provision of the Agreement, but this Agreement shall be construed as if such invalid, illegal or unenforceable provision had not been included.

8. Each party of this Agreement represents that the person signing the Agreement on its behalf possesses full and complete authority to execute the Agreement.

WHEREBY, this Agreement is entered into this 31 day of October, 2002, and shall become effective when all parties have signed it.

EXHIBIT IV

Florida Inland Navigation District

By:



David Roach
Executive Director
1314 Marcinski Road
Jupiter, FL 33477-9498

Estuary Corporation

By:



Harry D. Francis
Vice President
4310 Pablo Oaks Court
Jacksonville, FL 32224

Florida Department of Environmental Protection

By:



Ernest E. Frey, P.E.
Director of District Management
7825 Bay Meadows Court
Suite 200B
Jacksonville, FL 32256-7590

ATTACHMENT NO. 2

Copy of March 17, 2014 FDEP Letter



**FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION**

NORTHEAST DISTRICT
8800 BAYMEADOWS WAY WEST, SUITE 100
JACKSONVILLE, FLORIDA 32256

RICK SCOTT
GOVERNOR

CARLOS LÓPEZ-CANTERA
J. L. GOVERNOR

HERSCHEL P. VINYARD JR.
SECRETARY

March 17, 2014

Mr. Michael B. Dykes, P.E. Mike.Dykes@CH2M.com
CH2M Hill
9428 Baymeadows Road, Suite 200
Jacksonville, Florida 32256

Re: **Correspondence Dated March 3, 2014**
Florida Inland Navigation District (FIND) Site DU-9
Consent Order No. 01-0219
Site # COM_179673 / Project # 245268
St. Johns County - Waste Cleanup

Dear Mr. Dykes:

The Florida Department of Environmental Protection (DEP) has reviewed the Correspondence dated March 3, 2014 (received March 10, 2014), for the above-referenced site. After reviewing the correspondence, DEP concurs that conditional closure is appropriate for the site. Specifically, the site qualifies for a Risk Management Option II (RMO II) – No Further action with institutional controls in accordance with Chapter 62-780.680(2), Florida Administrative Code. In order to obtain an RMO II closure, the following is needed:

1. Written confirmation that the property owner agrees to institutional controls on the property including, but may not be limited to, restrictions that would prohibit the withdrawal and use of surficial groundwater (i.e. less than or equal to 60 feet below land surface).

Please note that placing the institutional controls on the property would not restrict the property owner from developing and operating the site as a dredge soil disposal area.

If you have any questions, please contact Merrilee Palcic, P.E. at the letterhead address, by e-mail at Merrilee.L.palcic@dep.state.fl.us or at 904.256.1544.

Sincerely,

Richard S. Rachal III, P.G.
Program Administrator
Waste & Air Resource Management

cc: Harry Francis, Estuary Corporation hfrancis@davistfamilyoffice.com
Mike Petrovich, Hopping Green and Sams - mikep@hgslaw.com
Mike Crosley, FIND, mcrosley@aicw.org

ATTACHMENT NO. 3
LIST OF "CONTAMINANTS"

TRPH

Naphthalene

4-Isopropyltoluene

1-Methylnaphthalene

2-Methylnaphthalene

Acetone

Methylene chloride

Tetrachloroethene

Trichloroethene

Cis-1,2-dichloroethene

Phenanthrene

Bis (2-ethylhexyl)phthalate

RESOLUTION NO. 2015-08

**A RESOLUTION OF THE BOARD OF COMMISSIONERS
OF FLORIDA INLAND NAVIGATION DISTRICT ALLOWING FOR THE ACCEPTANCE
OF A COMMISSIONER'S REGISTERED MAIL AT THE DISTRICT OFFICE**

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

WHEREAS, the Board recognizes the occasional need to accept registered mail from the United States Postal Service (USPS) at the District Headquarters, 1314 Marcinski Road, Jupiter Florida, 33477 or its successive location.; and,

WHEREAS, the USPS Domestic Mail Manual D042 "Conditions of Delivery" indicated that an addressee may assign an agent to accept registered mail for the addressee at a known address.

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

Section 1. Allow any full-time District employee to accept registered mail addressed to a Commissioner at the District Headquarters only.

Section 2. This Resolution shall become effective upon adoption.

Upon motion by Commissioner _____ and seconded by Commissioner _____, the Board approved the Resolution by majority.

The Chair thereupon declared the resolution duly passed and adopted this ____ day of October, 2015.

FLORIDA INLAND NAVIGATION DISTRICT: By: _____
J. Carl Blow, Chair

ATTEST:

APPROVED AS TO FORM AND LEGAL SUFFICIENCY By: _____
Peter L. Breton - Attorney for FIND



September 17, 2015

Files: 233/39/5171

FLORIDA INLAND NAVIGATION DISTRICT:

**GRADE CROSSING MATTERS
2016 GRADE CROSSING MAINTENANCE PROGRAM
NOTICE OF INTENT**

Mr. Glenn Scambler, CPA
Finance Director
Florida Inland Navigation District
1314 Marcinski Road
Jupiter, Florida 33477

Dear Mr. Scambler:

The Railway has completed our field inspection of all grade crossings on our line and compiled a list of crossings for our 2016 Grade Crossing Maintenance Program.

Listed below are crossings that fall within your jurisdictional responsibility and are scheduled to be re-worked in the upcoming year beginning January 1, 2016. With each crossing you will find an estimated cost for the F.I.N.D.'s use in budgeting for the crossing maintenance. It should be noted this is an estimate only and reflects the present cost of material and labor, all charges will be billed on an actual cost basis.

(FIND) Kennedy Groves, Inc.		
Milepost 233+5171'	Existing Agreement 8/23/99	\$83,233.43
	Total	\$83,233.43

Should you have any questions or comments concerning this matter I can be reached at (904) 279-3196.

Sincerely,

A handwritten signature in cursive script that reads 'Joseph L Schonder'.

Joseph (Leslie) Schonder
Public Projects Engineer

Engineering Department, 7150 Philips Highway, Jacksonville, FL 32256