

Monday, September 11, 2023
Commission Workshop
Immediately Following the 1st Budget
Hearing at 7 pm



Town Hall Commission Chambers
247 Edwards Lane
Palm Beach Shores, FL 33404

Mayor Alan Fiers
Vice Mayor Scott McCrannels

Commissioner Tracy Larcher
Commissioner Brian Tyler
Commissioner Mark Ward

Town Attorney Keith Davis
Town Accountant Darlene Hopper
Town Clerk Jude M. Goudreau

PLEASE NOTE:

THIS MEETING IS ALSO CONDUCTED USING COMMUNICATION MEDIA TECHNOLOGY

Join information.

Meeting link:

<https://townofpalmbeachshores.my.webex.com/townofpalmbeachshores/my/j.php?MTID=mb46590e4f556b23b86777c6230a6a4a6> Meeting number: 2631 944 0494 Password: 0911

Join by phone: +1-408-418-9388 United States Toll Access code: 2631 944 0494

COMMISSION WORKSHOP AGENDA

1) Call to Order

a) Pledge of Allegiance & Roll Call

2) Discussion Items:

- **PBCFR Vehicle Maintenance Agreement**
- **Project Updates:**
 - Road Paving Project
 - Dredging Project
 - Vulnerability Study-Comprehensive Plan Update (Attorney Keith Davis)

3) Public Comments: 3 minutes per person, per topic, state your name for the record.

4) Adjournment:

PLEASE TAKE NOTICE AND BE ADVISED, that if any interested person desires to appeal any decision made by the Town Commission with respect to any matter considered at this meeting or hearing, such interested person will need a record of the proceedings, and for such purpose may need to insure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is based. The meeting/hearing will be continued from day to day, time to time, place to place, as may be found necessary during the aforesaid meeting. IN ACCORDANCE WITH THE PROVISIONS OF THE AMERICANS WITH DISABILITIES ACT (ADA), THIS DOCUMENT CAN BE MADE AVAILABLE IN AN ALTERNATE FORMAT (LARGE PRINT) UPON REQUEST AND SPECIAL ACCOMMODATIONS CAN BE PROVIDED UPON REQUEST WITH THREE (3) DAYS ADVANCE NOTICE. FOR HEARING ASSISTANCE: If any person wishes to use a hearing device, please contact the Town Clerk.

3S-1

Agenda Item #:

PALM BEACH COUNTY
BOARD OF COUNTY COMMISSIONERS

T/MB 7-0

AGENDA ITEM SUMMARY

R-2013-0620

Meeting Date: May 21, 2013 [X] Consent [] Regular
[] Workshop [] Public Hearing
Department
Submitted For: FIRE RESCUE

I. EXECUTIVE BRIEF

Motion and Title:

Staff recommends motion to approve: an Interlocal Agreement for Fire Vehicle Maintenance with the Town of Palm Beach Shores for a period of ten (10) years.

Summary:

This Agreement provides for the maintenance and emergency repair of the Town of Palm Beach Shores Fire-Rescue emergency response apparatus by Palm Beach County Fire Rescue Support Services personnel. Labor shall be calculated using the hourly rate listed as the Warranty Rate on the County's Rate Schedule for Warranty, Vehicle and Staff Charges in effect at the time of service. Labor, parts, commercial repair and reimbursable insurance repairs will generate approximately \$33,871 in external revenues which are expected to exceed the cost of the additional related operating expenses, estimated at \$17,004 for FY2013.
Countywide (SB)

Background and Justification:

On May 17, 2011, the Board approved an Interlocal Agreement for Fire Rescue Dispatch Services with the Town of Palm Beach Shores (R2011-0771). The parties' now mutually desire the County to provide maintenance and emergency repairs for the Town's fire-rescue emergency response apparatus. The Town currently has 2 fire-rescue apparatus. For FY 2013, it is estimated the fleet will result in 320 billable labor hours and \$2,828 in parts, commercial repair and reimbursable insurance premiums.

Attachments:

1. Interlocal Agreement

Recommended By: Thomas Joent 5/1/13
Deputy Chief Date

Approved By: Jeffrey P. Cellin 5/2/2013
Fire-Rescue Administrator Date

II. FISCAL IMPACT ANALYSIS

A. Five Year Summary of Fiscal Impact:

Fiscal Years	2013	2014	2015	2016	2017
Capital Expenditures					
Operating Costs	<u>17,004</u>	<u>17,004</u>	<u>17,429</u>	<u>17,429</u>	<u>17,429</u>
External Revenues	<u>(33,871)</u>	<u>(33,871)</u>	<u>(34,803)</u>	<u>(34,803)</u>	<u>(34,803)</u>
Program Income (County)	_____	_____	_____	_____	_____
In-Kind Match (County)	_____	_____	_____	_____	_____
NET FISCAL IMPACT	<u>(16,867)</u>	<u>(16,867)</u>	<u>(17,373)</u>	<u>(17,373)</u>	<u>(17,373)</u>
# ADDITIONAL FTE POSITIONS (Cumulative)	_____	_____	_____	_____	_____

Is Item Included in Current Budget? Yes X No _____

Budget Account No.: Expenditures: Fund 1300 Dept 440 Unit 4211 Object various
Revenues: Fund 1300 Dept 440 Unit 4211 RevSrc 4900

B. Recommended Sources of Funds/Summary of Fiscal Impact:

External revenues received from the Town will offset the cost of any additional operating supplies necessary to provide the maintenance and emergency repair of the Town's fire-rescue emergency response apparatus.

C. Departmental Fiscal Review: *signature*

III. REVIEW COMMENTS

A. OFMB Fiscal and/or Contract Dev. and Control Comments:

Signature 5/3/2013
OFMB
6/3

Dr. J. Jacobson 5/8/13
Contract Dev. and Control
5-8-13 B. Wheeler

B. Legal Sufficiency:

Shawn Burn 5-9-13
Assistant County Attorney

C. Other Department Review:

Department Director

THIS SUMMARY IS NOT TO BE USED AS A BASIS FOR PAYMENT.

R 2013-0620

**INTERLOCAL AGREEMENT FOR FIRE VEHICLE MAINTENANCE
BETWEEN PALM BEACH COUNTY AND THE
TOWN OF PALM BEACH SHORES**

THIS AGREEMENT is made and entered into this ____ day ~~MAY~~ 21 2013, 2013, by and between PALM BEACH COUNTY, FLORIDA, a political subdivision of the State of Florida (hereinafter the "County"), by and through its Board of County Commissioners and the TOWN OF PALM BEACH SHORES, a Florida municipal corporation located in Palm Beach County, Florida (hereinafter the "Town").

WHEREAS, Section 163.01, Florida Statutes, known as the "Florida Interlocal Cooperation Act of 1969," authorizes local governments to make the most efficient use of their power by enabling them to cooperate with other localities on a basis of mutual advantage and thereby to provide services and facilities that will harmonize geographic, economic, population and other factors influencing the needs and development of local communities; and

WHEREAS, the parties mutually desire the County to provide maintenance and emergency repairs for the Town's fire-rescue emergency response apparatus under the terms and conditions in this Agreement; and

WHEREAS, the Town and County desire to enter into this Agreement as the County can provide vehicle maintenance services economically and efficiently, to the benefit of both the County and Town;

NOW, THEREFORE, in consideration of the terms and conditions set forth herein and the benefits following from each to the other, the County and the Town do hereby agree as follows:

ARTICLE I: APPARATUS REPAIR AND MAINTENANCE:

Section 1. Maintenance and Repairs. The intent of this Agreement is for County to extend to Town the same usual and customary maintenance and repair services that County provides for its own fire-rescue emergency response apparatus fleet through the County Fire-Rescue Department's vehicle maintenance and repair shop (hereinafter referred to as the "Shop"). County shall be the exclusive provider for all such preventative maintenance, scheduled repairs and emergency repairs for the Town's principal fire/rescue emergency response apparatus, including Engines, Ladders, Rescues, Haz-Mat, USAR and other related apparatus, including, but not limited to the following service:

-Body Damage Repair – Roll-up Doors, Cabinetry, Compartments, Body Panels,

Fenders, etc.

- Body Damage Repair – including vehicle painting or graphics to complete repair
- Windshields/Door glass replacement when broken or cracked
- Fire Pumps, Tanks and Plumbing, apparatus-mounted and portable
- Foam/Chemical agent education and proportioning systems
- Light bulbs and fixtures replacement, including emergency warning devices
- Audible emergency warning devices
- Upholstery and interior furnishings of vehicles and apparatus

- Towing of disabled vehicles and apparatus
- Emergency Tire Repair and Replacement, including Road Service
- Tire Replacement, per manufacturer/standard schedule

- Head Set communication systems, servicing and repair
- Mobile Data Terminal, installation of hardware and wiring
- Recharge units/wiring, installation of hardware and wiring for re-chargable equipment

- Manufacturer Factory Recalls – coordination of all work
- Emergency/Unscheduled maintenance related to NFPA and/or NEVT Standards
- Preventive maintenance in accordance with NFPA and/or NEVT Standards

Computer based vehicle Maintenance Reporting System to be provided to Fire/Rescue facilities, as needed and requested by Town.

County will manage the maintenance program for Town's principal fire/rescue emergency response apparatus, and will coordinate the scheduling of preventative maintenance with the Town Fire Chief or designee. Town agrees to abide by County's daily inspection program and submit any findings of deficits immediately through the IBEM system. Additionally, those reports shall be submitted to the County on a monthly basis. Should the Town decline to proceed with any apparatus repair identified by the County, then, notwithstanding anything in this Agreement to the contrary, the Town shall be fully and solely responsible for any liability or claims, including any third party claims and County's cost of defense, arising from the use or operation of said apparatus, subject however, to the limitations set forth in Florida Statute 768.28. Should the Town disagree with the extent or cost of a repair directly relating to the safe operation of said vehicle, Town agrees to notify the County of such disagreement prior to the repair being made. Town shall take the affected unit out of service until such time as funds become available or the unit is permanently replaced. Any disagreement regarding the extent or cost of a repair arising under this provision shall be addressed in accordance with the conflict resolution provisions in Article III, Section 25, of this Agreement.

Section 2. Standards. All inspections and maintenance shall be in accordance with the following standards and specifications, as they may be amended:

NFPA 1071 – Standard on Emergency Vehicle Technician (EVT)

NFPA 1911 - Standard on Fire Apparatus Maintenance

NFPA 1915 Fire Apparatus Preventative Maintenance Program

Manufacturers' Specifications

Good principals and industry practices

Section 3. Repairs. If emergency repairs are required, Town shall immediately advise County and arrange for repair. County agrees to give priority to Town emergency repairs over preventive maintenance for County and Town vehicles. Town shall contact County in advance to schedule any non-emergency repairs.

Section 4. Preventive Maintenance. Town agrees to contact County in advance to schedule preventive maintenance of its fire-rescue apparatus in accordance with any preventive maintenance schedules identified by the County, or otherwise in accordance with any applicable maintenance schedules recommended by manufacturer specifications and NFPA standards, if any.

Section 5. Turn Around Time. County will make every reasonable effort to complete repairs and maintenance of vehicles within a reasonable period of time from delivery of vehicle to County, dependent upon availability of parts and the extent of repairs necessary.

Section 6. Warranty of Workmanship. County agrees to warranty its workmanship on services and repairs for a period of forty-five (45) days from completion of work; provided however, that the sole remedy for a defect in County's workmanship on services and repairs shall be limited, at the County's option, to either the County correcting the faulty service or repair to the extent necessary and reasonably practical, or the County reimbursing Town for the amount paid by Town to County for the faulty service or repair.

The County will process claims for manufacturers' parts warranties on parts it installs on Town vehicles, provided that the Town has taken all necessary action to register such warranties with the applicable manufacturers. Should such a claim be denied, for any reason or no reason, the County's sole obligation shall be limited to providing the Town with the appropriate claim and denial information. The Town shall be solely responsible for pursuing any further manufacturer warranty action it deems appropriate.

The Town shall inform County in writing of the details of any warranty claim for workmanship or parts. In addition, as manager of the Town's maintenance program, County will also monitor repair requests and advise the Town if such repairs or parts may be covered under warranty, provided that the Town has taken all necessary action to register such warranties with

the applicable manufacturers.

Section 7. Reporting. On a monthly basis, County shall provide to Town's Fire Chief, or designee, a report identifying each vehicle on which maintenance or repair service was performed during the course of the prior month, and containing a detailed listing of all parts installed, all services rendered, all labor hours and noting any technician observations and recommendations or warranty matters. This report is in addition to information provided on any invoice.

ARTICLE II: COMPENSATION

Section 1. Labor Rates. The County shall invoice the Town for vehicle maintenance and repair labor, inclusive of all administrative and overhead costs with no additional charge for overhead or labor (except as provided in Section 2), at the hourly labor rate listed as the Warranty Rate on the County's Rate Schedule for Warranty, Vehicle and Staff Charges in effect at the time of service. No other billing rates included on the County's Rate Schedule for Warranty Vehicle and Staff Charges shall apply. The Rate Schedule and Warranty Rate may be annually updated and amended by the County in its sole discretion (as referenced in Palm Beach County Fire Rescue Operational Procedure #VIII-1). The fiscal year 2013 hourly warranty labor rate is \$97.18, as set forth in the Rate Schedule for Fiscal Year 2013 attached hereto as Exhibit A.

Section 2. After Hours Call-Out Emergency Repairs. A three-hour minimum labor charge, at applicable Labor Rates established in Section 1 above, will apply to all emergency after hours call-out repairs. "After hours" shall mean any time before or after the usual and customary business hours and days of the Shop, and shall include, but not be limited to, Saturdays, Sundays, and County holidays. Upon request, the County will provide the Town with the Shop's current business hours and days, which may be revised by the County from time to time.

Section 3. Parts and supplies. The Town will be charged the County's actual cost for all parts and supplies plus 5%.

Section 4. Insurance Premium. Each month the Town shall pay to the County a proportionate share of the County's annual premiums for garage-keepers insurance and garage liability insurance relating to fire-rescue vehicle maintenance and repair services. The monthly amount due from the Town shall be equal to the County's annual premiums divided by the

number of contracted entities receiving fire rescue vehicle maintenance and repair services from the County, which may change from time to time, divided by twelve (12). This amount shall be adjusted by the County from time to time to reflect any change in the number of contracted entities receiving such services from the County and to reflect any actual increase or decrease in the County's premiums. It is anticipated that the monthly charge will be \$69.02 for fiscal year 2013. Any and all decisions regarding such insurance policies shall remain within the sole discretion of the County.

Section 5. Invoices. The County shall invoice the Town on a monthly basis for all service(s) provided during the month. Each invoice shall identify the vehicle serviced, the labor hours spent, the labor rate, charges for parts and supplies, and the monthly charge for insurance premiums. Payment by the Town shall be due forty-five (45) days after the Town's receipt of a proper invoice from the County. County shall direct invoices to the Town's Accounts Payable Division at:

Town of Palm Beach Shores
Accounts Payable
247 Edwards Lane
Palm Beach Shores, FL 33404

ARTICLE III: GENERAL CONTRACT TERMS

Section 1. Preambles: The facts set forth in the preambles to this Agreement are true and correct and are hereby reaffirmed by the parties.

Section 2. Representative and Contract Monitor: The County representative and contract monitor during the performance of this Agreement shall be the Deputy Fire Chief of Support Services, whose telephone number is (561) 616-7003. The Town representative and contract monitor during the performance of this Agreement shall be the Fire Chief, whose telephone number is (561) 844-4804.

Section 3. Employee Functions: No employee of either party to this Agreement shall perform any function, or service which is not within the employee's scope of duties as defined or determined by the employee's employer.

Section 4. Employee Claims, Benefits, etc.: No employee, officer, or agent of either party shall, in connection with this Agreement or the performance of services and functions hereunder, have a right to or claim any pension, workers' compensation, unemployment compensation, civil service, or other employee rights, privileges, or benefits

granted by operation of law or otherwise except through and against the entity by whom they are employed. No employee of either party shall be deemed the employee of the other, for any purpose, during the performance of services hereunder.

Section 5. No Assumption of Liability: Neither party to this Agreement nor their respective officers or employees shall be deemed to have assumed any liability for the negligent or wrongful acts or omissions of the other. Further, nothing herein shall be construed as a waiver of sovereign immunity.

Section 6. Insurance: Without waiving the right to sovereign immunity as provided by Section 768.28 Florida Statutes, the Town acknowledges to be self-insured for General Liability with coverage limits of \$200,000 per person and \$300,000 per occurrence and Automobile Liability coverage limits of \$200,000 Per Person and \$300,000 Per Occurrence under Florida sovereign immunity statutes; or such monetary waiver limits that may change and be set forth by the legislature.

In the event the Town maintains third-party Commercial General Liability and Business Auto Liability in lieu of exclusive reliance of self-insurance under Section 768.28 Florida Statutes, the Town shall agree to maintain said insurance policies at limits not less than \$500,000 combined single limit for bodily injury or property damage.

The Town agrees to maintain or to be self-insured for Worker's Compensation & Employer's Liability insurance in accordance with Chapter 440, Florida Statutes.

For the duration of this Agreement, the Town agrees to maintain automobile physical damage insurance covering those vehicles to be serviced by the County under this Agreement. The Town's coverage shall be primary for any damage that occurs to the Town's vehicles, including any damage while in the possession or custody of the County.

The Town hereby waives any and all rights of Subrogation against the County, its officers, employees and agents for each required policy, except in the event the County, its officers, employees or agents are negligent, in which case subrogation against the County shall apply. When required by the insurer, or should a policy condition not permit the Town to enter into a pre-loss agreement to waive subrogation without an endorsement, then the Town agrees to notify the insurer and request the policy be endorsed with a Waiver of Transfer of Rights of Recovery Against Others, or its equivalent. This Waiver of Subrogation requirement shall not apply to any policy which a condition to the policy specifically prohibits such an endorsement, or voids coverage should the Town enter into such an agreement on a pre-loss basis.

When requested, the Town shall agree to provide an affidavit or Certificate of Insurance

evidencing insurance, self-insurance and/or sovereign immunity status, which County agrees to recognize as acceptable for the above mentioned coverages.

Compliance with the foregoing requirements shall not relieve the Town of its liability and obligations under this Interlocal Agreement.

Section 7. Effective Date and Term: This Agreement shall take effect upon approval by all parties and continue for a term of ten (10) years, unless sooner terminated as provided herein.

Section 8. Notice of Termination: This Agreement may be terminated for any reason or for no reason by: (i) written mutual consent of both parties; or, (ii) by either party without cause upon ninety (90) days advance written notice to the other party of desire to terminate, and without any recourse or recovery against the terminating party due to such termination; or (iii) by either party with cause upon 30 days written notice to the other party. Notwithstanding the foregoing, this Agreement shall not be terminated, except by mutual consent, prior to September 30, 2013.

Section 9. Assignment of Rights: Neither party shall assign, transfer or convey, in whole or in part, its rights, duties, or obligations without the prior written consent of the other.

Section 10. Modification and Amendment: No modification, amendment, or alteration in the terms or conditions of this Agreement shall be effective unless contained in a written document executed with the same formality and equality of dignity herewith.

Section 11. Equal Opportunity: The County and Town each warrants and represents that all of its employees are treated equally during employment without regard to race, color, religion, disability, sex, age, national origin, ancestry, marital status, familial status, sexual orientation, or gender identity or expression; and that no person shall, based on any of said grounds, be excluded from the benefits of, or be subject to any form of discrimination under, any activity carried out in the performance of this Agreement.

Section 12. Annual Appropriations: Each party's performance and obligations under this Agreement are contingent upon an annual budgetary appropriation by its respective governing body for the purposes hereunder.

Section 13. Records:

a. The County shall maintain all records relating to the services performed under this Agreement in accordance with Florida's public records law and until at least three year after the expiration or termination of this Agreement; provided however that upon the expiration or termination of this Agreement, the County shall turn over to the Town all the

County's technical records directly relating to the County's maintenance and repair of the Town vehicles. The Town shall become the official custodian of these records. As custodian of these records, the Town shall maintain the records in accordance with Florida's public records law and until at least three years after expiration or termination of this Agreement or three years after the life of the vehicle, whichever is later. The County shall be entitled to keep a copy of all such records.

b. For each Town fire-rescue vehicle serviced under this Agreement, the Town shall maintain all its records relating to the operation, maintenance and repair of said vehicle in accordance with Florida's public records laws and until at least three years after expiration or termination of this Agreement or three years after the life of the vehicle, whichever is later.

c. The records to be maintained under this Agreement shall include, but not be limited to, all financial and technical records and reports directly relating to the servicing of Town vehicles under this Agreement or otherwise to the operation, maintenance and repair of said vehicles. All records maintained under this Agreement shall be made available to the other party upon request and within a reasonable period of time.

d. Notwithstanding anything herein to the contrary, records meeting the legal requirements for destruction and the records retention requirements set forth herein may be destroyed by the custodian party provided that said party (i) gives the other party 30 days written notice identifying all records to be destroyed, and (ii) makes copies of said records available upon request of the other party, which request must be received at least 15 days prior to the scheduled destruction date.

e. In the event that the parties become involved in a legal dispute arising from performance under this Agreement, the parties shall extend the period of maintenance for all records relating to the Agreement until the final disposition of the legal dispute, and all such records shall be made readily available to the parties.

Section 14. Right to Audit. Each party, at its own expense, shall have the right to examine the other party's books, data, records and invoices directly or indirectly related to this Agreement upon reasonable notice, time and place. Such examination may be made during the life of a subject vehicle or equipment. Any disagreement between the parties arising under this provision shall be addressed in accordance with the conflict resolution provisions in Article III, Section 25, of this Agreement.

Section 15. Joint Preparation: The preparation of this Agreement has been a joint

effort of the parties, and the resulting document shall not, solely or as a matter of judicial constraint, be construed more severely against one of the parties than the other.

Section 16. Remedies: This Agreement shall be construed by and governed by the laws of the State of Florida. Any and all legal action necessary to enforce the Agreement shall be held in Palm Beach County. TO ENCOURAGE PROMPT AND EQUITABLE RESOLUTION OF ANY LITIGATION, EACH PARTY HEREBY WAIVES ITS RIGHTS TO A TRIAL BY JURY IN ANY LITIGATION RELATED TO THIS AGREEMENT. No remedy herein conferred upon any party is intended to be exclusive of any other remedy and each and every remedy shall be cumulative and shall be in addition to every other remedy given hereunder or now or hereafter existing at law or in equity or by statute or otherwise. No single or partial exercise by any party of any right, power, or remedy hereunder shall preclude any other or further exercise thereof.

Section 17. Notice of Suits: Each party agrees to notify the other of any claim, or the initiation of any legal proceeding against it, which relates in any manner to the servicing of Town vehicles under this Agreement or otherwise to the operation, maintenance and repair of said vehicles. Each party will cooperate with the other in the defense of any suit or action arising out of, or related to, the services rendered under this Agreement.

Section 18. Notices: All written notices required under this Agreement shall be sent by certified mail, return receipt requested, and if sent to the County shall be mailed to:

Palm Beach County Fire Rescue
Fire Rescue Administrator
405 Pike Road
West Palm Beach, FL 33411

and if sent to the Town shall be mailed to:

Town of Palm Beach Shores Fire Rescue Department
Fire Chief
247 Edwards Road
Palm Beach Shores, FL 33404

Each party may change its address upon notice to the other.

Section 19. Captions: The captions and section designations herein set forth are for convenience only and shall have no substantive meaning.

Section 20. Filing: A copy of this Agreement shall be filed with the Clerk of the Circuit Court in and for Palm Beach County.

Section 21. Enforcement Costs: Any costs or expenses (including reasonable attorney's fees) associated with the enforcement of the terms and conditions of this Agreement shall be borne by the respective parties; provided, however, that this clause pertains only to the parties to this Agreement.

Section 22. Delegation of Duty: Nothing contained herein shall be deemed to authorize the delegation of the constitutional or statutory duties of state, county, or Town officers.

Section 23. Severability: In the event that any section, paragraph, sentence, clause, or provision hereof is held invalid by a court of competent jurisdiction, such holding shall not affect the remaining portions of this Agreement and the same shall remain in full force and effect.

Section 24. Survivability: Any provision of this Agreement that is of a continuing nature, or which by its language or nature imposes an obligation or right that extends beyond the term of this Agreement, shall survive the expiration or earlier termination of this Agreement.

Section 25. Conflict Resolution: Any dispute or conflict between the parties that arises from the provision of services under this Agreement shall be presented in writing to the respective Fire Chiefs or their designees. The Fire Chiefs, or designees, shall then meet to discuss the disputed issues and attempt in good faith to resolve the dispute or conflict prior to either party initiating the intergovernmental conflict resolution process provided for by Chapter 164, Florida Statutes.

Section 26. No provision of this Agreement is intended to, or shall be construed to, create any third party beneficiary or to provide any rights to any person or entity not a party to this Agreement, including but not limited to any citizens or employees of the County and/or Town.

Section 27. The parties agree that time is of the essence in the performance of each and every obligation under this Agreement.

Section 28. Force Majeure: County shall not be deemed in default or breach of this Agreement to the extent it is unable to perform, or to timely perform, due to an event of *Force Majeure*. For the purpose of this Agreement, *Force Majeure* shall mean and include any act of God, including severe weather conditions or impending severe weather conditions, accident, fire, lockout, strike or other labor dispute, riot or civil commotion, act of a public enemy, failure of transportation facilities, enactment, rule order or act of government or governmental

instrumentality (whether domestic or international and whether federal, state or local, or the international equivalent thereof), failure of technical facilities, or any other cause of any nature whatsoever beyond the control of the County which was not avoidable in the exercise of reasonable care and foresight. Further, the Town specifically acknowledges that the County shall have no liability whatsoever for any damages or injuries due to a *Force Majeure*.

Section 29. Failure(s) to insist on strict performance of any covenant, condition, or provision of this Agreement by a party, its successors and assigns, shall not be deemed a waiver of any of its rights or remedies, nor shall it relieve the other party from performing any subsequent obligations strictly in accordance with the terms of this Agreement. No waiver shall be effective unless in writing and signed by the party against whom enforcement is sought. Such waiver shall be limited to provisions of this Agreement specifically referred to therein and shall not be deemed a waiver of any other provision. No waiver shall constitute a continuing waiver unless the writing states otherwise.

Section 30. Entirety of Agreement: This Agreement represents the entire understanding of the parties and supersedes all other negotiations, representations, or agreements, either written or oral, relating to this Agreement.

Section 31. Office of the Inspector General: Palm Beach County has established the Office of the Inspector General in Palm Beach County Code, Section 2-421 - 2-440, as may be amended. To the extent permitted by law, the Inspector General's authority includes but is not limited to the power to review past, present and proposed County contracts, transactions, accounts and records, to require the production of records, and to audit, investigate, monitor, and inspect the activities of the Town, its officers, agents, employees, and lobbyists in order to ensure compliance with contract requirements and detect corruption and fraud.

Failure to cooperate with the Inspector General or interfering with or impeding any investigation shall be in violation of Palm Beach County Code, Section 2-421 - 2-440, and punished pursuant to Section 125.69, Florida Statutes, in the same manner as a second degree misdemeanor.

IN WITNESS WHEREOF, the undersigned parties have caused these presents to be signed by their duly authorized officers on the day and year first written above.

R2013 0620 MAY 21 2013
PALM BEACH COUNTY, FLORIDA BY ITS
BOARD OF COUNTY COMMISSIONERS

ATTEST:
SHARON R. BOCK,
Clerk & Comptroller


By: 
Deputy Clerk

By: 
Steven L. Abrams, Mayor

APPROVED AS TO FORM AND
LEGAL SUFFICIENCY

APPROVED AS TO TERMS AND
CONDITIONS

By: 
County Attorney

By: 
Fire-Rescue

ATTEST:

TOWN OF PALM BEACH SHORES

By: 
Town Clerk

By: 
Mayor

APPROVED AS TO FORM AND
LEGAL SUFFICIENCY

By: 
Town Attorney

Date: April 15, 2013

**Palm Beach County Fire Rescue
Rate Schedule
Warranty, Vehicle and Staff Charges
Fiscal Year 2013**

<u>Type of Charge</u>	Hourly Rate
Warranty Rate	\$97.18
Vehicle Charges	
Engine	\$119
Haz Mat	\$173
Quint	\$216
Brush Truck	\$404
Tender	\$362
Rescue	\$29
Rescue/Pumper	\$64
Light & Air Truck	\$314
Staff Charges	
Firefighter (FF,PM,DO)	\$47
Company Officer	\$58
Chief Officer/District Chief	\$72
Investigator	\$55
Standard Staffing	
Engine	= one (1) Company Officer and two (2) Firefighters
Haz Mat	= two (2) Firefighters
Quint	= one (1) Company Officer and two (2) Firefighters
Brush Truck	= no additional personnel
Tender	= one (1) Firefighter
Rescue	= one (1) Company Officer and one (1) or two (2) Firefighters-depends on unit
Rescue/Pumper	= one (1) Company Officer and two (2) Firefighters

Additional charges may be required based on equipment damage/loss and personnel overtime and/or injuries.

All invoices will be based on half-hour increments. For example, a seventy-five minute call will be billed for one and one-half hours.

Details of calculations are available upon request.

INTERLOCAL AGREEMENT
FOR FIRE VEHICLE MAINTENANCE AND REPAIR SERVICES
BETWEEN PALM BEACH COUNTY AND THE TOWN OF PALM BEACH SHORES

THIS AGREEMENT is made and entered into on _____, by and between PALM BEACH COUNTY, FLORIDA, a political subdivision of the State of Florida (hereinafter the “County”), by and through its Board of County Commissioners and the TOWN OF PALM BEACH SHORES, a Florida municipal corporation located in Palm Beach County, Florida (hereinafter the “Town”).

WHEREAS, Section 163.01, Florida Statutes, permits public agencies to enter into agreements to make the most efficient use of their powers by enabling them to cooperate on a basis of mutual advantage and thereby to provide services and facilities in a manner that will accord best with geographic, economic, population and other factors influencing the needs and development of local communities; and

WHEREAS, the County has been providing certain maintenance and emergency repair services for the Town’s fire-rescue emergency response apparatus since 2013, and the parties mutually desire for the County to continue to provide those services under the terms and conditions in this Agreement;

NOW, THEREFORE, in consideration of the terms and conditions set forth herein and the benefits following from each to the other, the County and the Town do hereby agree as follows:

ARTICLE I: APPARATUS REPAIR AND MAINTENANCE

Section 1. Maintenance and Repairs. The intent of this Agreement is for County to extend to the Town the same usual and customary maintenance and repair services that the County provides for its own fire-rescue emergency response apparatus fleet through the County Fire-Rescue Department’s vehicle maintenance and repair shop (hereinafter referred to as the “Shop”). The County shall be the exclusive provider for all such preventative maintenance, scheduled repairs and emergency repairs for the Town’s principal fire/rescue emergency response apparatus, including Engines, Ladders, Rescues, Haz-Mat, USAR and other related apparatus, specifically excluding maintenance and repair services for:

- Body Damage Repair – Roll-up Doors, Cabinetry, Compartments, Body Panels, Fenders, etc.
- Body Damage Repair – including vehicle painting or graphics to complete repair
- Windshields/Door glass replacement when broken or cracked

Services shall include, but not be limited to the following:

- Fire Pumps, Tanks and Plumbing, apparatus-mounted and portable
- Foam/Chemical agent education and proportioning systems
- Light bulbs and fixtures replacement, including emergency warning devices
- Audible emergency warning devices
- Upholstery and interior furnishings

- Towing of disabled emergency response apparatus
- Emergency Tire Repair and Replacement, including Road Service
- Tire Replacement, per manufacturer/standard schedule

- Head Set communication systems, servicing and repair
- Mobile Data Terminal, installation of hardware and wiring
- Recharge units/wiring, installation of hardware and wiring for re-chargeable equipment

- Manufacturer Factory Recalls – coordination of all work
- Emergency/Unscheduled maintenance related to NFPA and/or NEVT Standards
- Preventive maintenance in accordance with NFPA and/or NEVT Standards

Computer-based Vehicle Maintenance Reporting System will be provided to Town Fire/Rescue personnel for reporting vehicle maintenance and repair issues, as needed and requested by Town.

County will manage the maintenance program for Town's principal fire/rescue emergency response apparatus, and will coordinate the scheduling of preventative maintenance with the Town Fire Chief or designee. Town agrees to abide by County's daily inspection program and submit any findings of deficits immediately through the computer-based Vehicle Maintenance Reporting System. Additionally, those reports shall be submitted to the County on a monthly basis. Should the Town decline to proceed with any apparatus repair identified by the County, then, notwithstanding anything in this Agreement to the contrary, the Town shall be fully and solely responsible for, and shall indemnify, defend and hold harmless the County against, any liability or claims, including any third party claims and County's cost of defense, arising from the use or operation of said apparatus, subject however, to the limitations set forth in Florida Statute 768.28. Should the Town disagree with the extent or cost of a repair directly relating to the safe operation of said vehicle, Town agrees to notify the County of such disagreement prior to the repair being made. Town shall take the affected unit out of service until such time as funds become available or the unit is permanently replaced. Any disagreement regarding the extent or cost of a repair arising under this provision shall be addressed in accordance with the conflict resolution provisions in Article III, Section 26, of this Agreement.

Section 2. Standards. All inspections and maintenance shall be in accordance with the

following standards and specifications, as they may be amended:

NFPA 1071 – Standard on Emergency Vehicle Technician (EVT)

NFPA 1911 - Standard on Fire Apparatus Maintenance

Manufacturers' Specifications

Good principals and industry practices

Section 3. Repairs. When emergency repairs are required, Town shall immediately advise County and arrange for repair. County agrees to give priority to Town emergency repairs over preventive maintenance for County and Town vehicles. Town shall contact County in advance to schedule any non-emergency repairs.

Section 4. Preventative Maintenance. Town agrees to contact County in advance to schedule preventive maintenance of its fire-rescue apparatus in accordance with any preventive maintenance schedules identified by the County, or otherwise in accordance with any applicable maintenance schedules recommended by manufacturer specifications and NFPA standards, if any.

Section 5. Turn Around Time. County will make every reasonable effort to complete repairs and maintenance of vehicles within a reasonable period of time from delivery of vehicle to County, dependent upon availability of parts and the extent of repairs necessary.

Section 6. Warranty of Workmanship. County agrees to warranty its workmanship on services and repairs for a period of forty-five (45) days from completion of work; provided however, that the sole remedy for a defect in County's workmanship on services and repairs shall be limited, at the County's option, to either the County correcting the faulty service or repair to the extent necessary and reasonably practical, or the County reimbursing Town for the amount paid by Town to County for the faulty service or repair.

The County will process claims for manufacturers' parts warranties on parts it installs on Town vehicles, provided that the Town has taken all necessary action to register such warranties with the applicable manufacturers. Should such a claim be denied, for any reason or no reason, the County's sole obligation shall be limited to providing the Town with the appropriate claim and denial information. The Town shall be solely responsible for pursuing any further manufacturer warranty action it deems appropriate.

The Town shall inform County in writing of the details of any warranty claim for workmanship or parts. In addition, as manager of the Town's maintenance program, County will also monitor repair requests and advise the Town if such repairs or parts may be covered under warranty, provided that the Town has taken all necessary action to register such warranties with the applicable manufacturers.

Section 7. Reporting. Upon request, County shall provide to Town's Fire Chief, or designee, a report identifying each vehicle on which maintenance or repair service was performed during the course of the prior month, and containing a detailed listing of all parts installed, all services rendered, all labor hours and noting any technician observations and recommendations or warranty matters. This report is in addition to information provided on any invoice.

Section 8. Fleet Connectivity Modules: The County is authorized, at its option and sole discretion, to install fleet connectivity modules on County maintained Town vehicles and/or apparatus. The Town shall reimburse the County, within 30 days of being invoiced, for the associated monthly service charges of \$25.00 per vehicle and/or apparatus. All such equipment shall remain the property of the County, and shall be returned to the County by the Town within 10 days of the expiration or termination of the Agreement or any sooner time that a Town vehicle and/or apparatus is no longer maintained by the County; provided, however, that the County shall have the right and option to remove the equipment sooner at any time for any reason. The Town hereby authorizes and approves the download of information automatically, and on-demand by the County, via the modules and into the County's Fire Rescue Fleet computer based Vehicle Maintenance Reporting System.

Section 9. Vehicle Transportation: The Town agrees to be responsible for transportation of Town vehicles to and from the Shop as well as transportation of Town vehicles to and from offsite commercial vendor locations when required.

ARTICLE II: FUNDING:

Section 1. Labor Rates. The County shall invoice the Town for vehicle maintenance and repair labor, inclusive of all administrative and overhead costs with no additional charge for overhead or labor (except as provided in Section 2), at the hourly labor rate listed in the Warranty Rate on the County's Rate Schedule for Warranty, Vehicle and Staff Charges in effect at the time of service. No other billing rates included on the County's Rate Schedule for Warranty Vehicle and Staff Charges shall apply. The Rate Schedule and Warranty Rate may be annually updated and amended by the County in its sole discretion (as referenced in Palm Beach County Fire Rescue PPM FR-F-307).

Section 2. After Hours Call-Out Emergency Repairs. A three-hour minimum labor charge, at applicable Labor Rates established in Section 1 above, will apply to all emergency after hours call-out repairs. "After hours" shall mean any time before or after the usual and customary business hours and days of the Shop, and shall include, but not be limited to, Saturdays, Sundays, and County holidays. Upon request, the County will provide the Town with the Shop's current business hours and

days, which may be revised by the County from time to time.

Section 3. Parts and supplies. The Town will be charged the County's actual cost for all parts and supplies plus 5%.

Section 4. Insurance Premium. Each month the Town shall pay to the County a proportionate share of the County's annual premiums for garage-keepers insurance and garage liability insurance relating to fire-rescue vehicle maintenance and repair services. The monthly amount due from the Town shall be equal to the County's annual premiums divided by the number of contracted entities receiving fire rescue vehicle maintenance and repair services from the County, which may change from time to time, divided by twelve (12). This amount shall be adjusted by the County from time to time to reflect any change in the number of contracted entities receiving such services from the County and to reflect any actual increase or decrease in the County's premiums. Any and all decisions regarding such insurance policies shall remain within the sole discretion of the County.

Section 5. Invoices. The County shall invoice the Town on a monthly basis for all service(s) provided during the month. Each invoice shall identify the vehicle serviced, the labor hours spent, the labor rate, charges for parts and supplies, and the monthly charge for insurance premiums. Payment by the Town shall be due forty-five (45) days after the Town's receipt of a proper invoice from the County. County shall direct invoices to the Town's Accounts Payable Division at:

Town of Palm Beach Shores
Accounts Payable
247 Edwards lane
West Palm Beach, FL 33404

ARTICLE III: GENERAL CONTRACT TERMS

Section 1. Preambles: The facts set forth in the preambles to this Agreement are true and correct and are hereby reaffirmed by the parties.

Section 2. Representative and Contract Monitor: The County representative and contract monitor during the performance of this Agreement shall be the Fire Rescue Administrator, whose telephone number is (561) 616-7001. The Town representative and contract monitor during the performance of this Agreement shall be the Fire Chief, whose telephone number is (561) 844-4807.

Section 3. Employee Functions: No employee of either party to this Agreement shall perform any function, or service which is not within the employee's scope of duties as defined or determined by the employee's employer.

Section 4. Relationship of Employee.: No employee, officer, or agent of either party shall, in connection with this Agreement or the performance of services and functions hereunder, have a right

to or claim any pension, workers' compensation, unemployment compensation, civil service, or other employee rights, privileges, or benefits granted by operation of law or otherwise except through and against the entity by whom they are employed. No employee of either party shall be deemed the employee of the other, for any purpose, whatsoever. Neither party is authorized to make or enter into any contract, agreement, or warranty for or on behalf of the other, unless the parties to this Agreement have entered into a written agreement expressly authorizing such.

Section 5. No Assumption of Liability: Neither party to this Agreement nor their respective officers or employees shall be deemed to have assumed any liability for the negligent or wrongful acts or omissions of the other. Further, nothing herein shall be construed as a waiver of sovereign immunity.

All the privileges and immunities from liability, exemptions from law, ordinance and rules, and all pensions and relief, disability, workers' compensation and other benefits which apply to the activity of the officers or employees of either party when performing their respective functions, within the territorial limits for their respective agencies, shall apply to the same degree and extent to the performance of such functions and duties extraterritorially. Liability for injury to personnel, and for loss or damage of equipment, shall be borne by the party employing such personnel, and owning or possessing such equipment, except as may be otherwise provided for in this Agreement.

Section 6. Insurance: Without waiving the right to sovereign immunity as provided by Section 768.28 Florida Statutes, the Town represents to be self-insured with coverage subject to the limitations of the Statute, as may be amended.

In the event the Town maintains third-party Commercial General Liability and Business Auto Liability in lieu of exclusive reliance of self-insurance under Section 768.28 Florida Statutes, the Town shall agree to maintain said insurance policies at limits not less than \$1,000,000 combined single limit for bodily injury or property damage.

The Town agrees to maintain or to be self-insured for Worker's Compensation & Employer's Liability insurance in accordance with Chapter 440, Florida Statutes.

For the duration of this Agreement, the Town agrees to maintain automobile physical damage insurance covering those vehicles to be serviced by the County under this Agreement. The Town's coverage shall be primary for any damage that occurs to the Town's vehicles, including any damage while in the possession or custody of the County.

The Town hereby waives any and all rights of Subrogation against the County, its officers, employees and agents for each required policy, except in the event the County, its officers, employees or agents are negligent, in which case subrogation against the County shall apply. When required by the

insurer, or should a policy condition not permit the Town to enter into a pre-loss agreement to waive subrogation without an endorsement, then the Town agrees to notify the insurer and request the policy be endorsed with a Waiver of Transfer of Rights of Recovery Against Others, or its equivalent. This Waiver of Subrogation requirement shall not apply to any policy which a condition to the policy specifically prohibits such an endorsement, or voids coverage should the Town enter into such an agreement on a pre-loss basis.

When requested, the Town shall provide an affidavit or Certificate of Insurance evidencing insurance, self-insurance and/or sovereign immunity status, which County agrees to recognize as acceptable for the above mentioned coverages.

Compliance with the foregoing requirements shall not relieve the Town of its liability and obligations under this Agreement.

Section 7. Indemnification: Each party shall be liable for its own actions and negligence and, to the extent permitted by law, County shall indemnify, defend and hold harmless the Town against any actions, claims or damages arising out of County's negligence in connection with this Agreement and the Town shall indemnify, defend and hold harmless the County against any actions, claims or damages arising out of the Town's negligence in connection with this Agreement. The foregoing indemnification shall not constitute a waiver of sovereign immunity beyond the limits set forth in Florida Statutes, Section 768.28, nor shall the same be construed to constitute agreement by either party to indemnify the other party for such other party's negligent, willful or intentional acts or omissions. The provisions of this section shall survive the termination or expiration of this Agreement.

Section 8. Effective Date and Term: The term of this Agreement is for ten (10) years and shall commence, retroactively, on May 21, 2023, and continue through May 20, 2033, unless sooner terminated as provided herein.

Section 9. Notice of Termination: Either party to this Agreement may, upon ninety (90) days prior written notice to the other, terminate this Agreement for any reason or for no reason at all.

Section 10. Assignment of Rights: Neither party shall assign, transfer or convey, in whole or in part, its rights, duties, or obligations without the prior written consent of the other.

Section 11. Modification and Amendment: No modification, amendment, or alteration in the terms or conditions of this Agreement shall be effective unless contained in a written document executed with the same formality and equality of dignity herewith.

Section 12. Entirety of Agreement: This Agreement represents the entire understanding of the parties and supersedes all other negotiations, representations, or agreements, either written or oral,

relating to this Agreement. This Agreement shall inure to the benefit of, and be binding upon, the parties, and their respective assigns and successors in interest.

Section 13. Nondiscrimination: In Resolution 2017-1770, the County expressed its commitment to assuring equal opportunity by not conducting business with nor appropriating funds to entities that discriminate as set forth in said Resolution. Pursuant to Palm Beach County Resolution R2017-1770, as may be amended, the Town warrants and represents that throughout the term of the Agreement, including any renewals thereof, if applicable, all of its employees are treated equally during employment without regard to race, color, religion, disability, sex, age, national origin, ancestry, marital status, familial status, sexual orientation, gender identity or expression, or genetic information. Failure to meet this requirement shall be considered default of the Agreement.

Section 14. Annual Appropriations: Each party's performance and obligation under this Agreement is contingent upon an annual budgetary appropriation by its respective governing body for the purposes hereunder.

Section 15. Remedies: This Agreement shall be governed by the laws of the State of Florida. Any and all legal action necessary to enforce the Agreement will be held in a court of competent jurisdiction located in Palm Beach County, Florida. No remedy herein conferred upon any party is intended to be exclusive of any other remedy, and each and every remedy shall be cumulative and shall be in addition to every other remedy given hereunder or now or hereafter existing at law or in equity, by statute or otherwise. No single or partial exercise by any party of any right, power, or remedy hereunder shall preclude any other or further exercise thereof.

Section 16. Records: Each party shall maintain all records pertaining to the services delivered under this Agreement for a period of at least five (5) years, or, if applicable, for five (5) years after the life of a subject vehicle or equipment, whichever period of time is longer. Each party shall maintain, and make available to the other party at no cost, upon request, and within a reasonable period of time all records associated with this Agreement, including, but not limited to, all accounts, financial and technical records, research or reports, in accordance with Florida law.

Notwithstanding anything herein to the contrary and to extent permitted by law, upon the expiration or termination of this Agreement, the County shall turn over to the Town all the County's technical records directly relating to the County's maintenance and repair of the Town vehicles. The Town shall become the official custodian of these records. As custodian of these records, the Town shall maintain the records in accordance with Florida's public records law and until at least five (5) years after expiration or termination of this Agreement or five (5) years after the life of the vehicle,

whichever is later. The County shall be entitled to keep a copy of all such records.

To the extent allowed by Chapter 119, Florida Statutes, all written and oral information not in the public domain or not previously known, and all information and data obtained, developed, or supplied by the County or at its expense will be kept confidential by the Town and will not be disclosed to any other party, directly or indirectly, without the County's prior written consent unless required by a lawful court order. All drawings, maps, sketches, programs, data base, reports and other data developed, or purchased, under this Agreement for or at the County's expense shall be and remain the County's property and may be reproduced and reused at the discretion of the County.

All covenants, agreements, representations and warranties made herein, or otherwise made in writing by any party pursuant hereto, including but not limited to any representations made herein relating to disclosure or ownership of documents, shall survive the execution and delivery of this Agreement and the consummation of the transactions contemplated hereby.

Section 17. Palm Beach County Office of the Inspector General Audit Requirements:

Palm Beach County has established the Office of the Inspector General in Palm Beach County Code, Section 2-421 - 2-440, as may be amended. The Inspector General is authorized with the power to review past, present and proposed County contracts, transactions, accounts and records. The Inspector General's authority includes, but is not limited to, the power to audit, investigate, monitor, and inspect the activities of entities contracting with the County, or anyone acting on their behalf, in order to ensure compliance with contract requirements and to detect corruption and fraud. Failure to cooperate with the Inspector General or interfering with or impeding any investigation shall be a violation of Palm Beach County Code, Section 2-421 - 2-440, and punished pursuant to Section 125.69, Florida Statutes, in the same manner as a second degree misdemeanor.

Section 18. Joint Preparation: The preparation of this Agreement has been a joint effort of the parties, and the resulting document shall not, solely or as a matter of judicial constraint, be construed more severely against one of the parties than the other.

Section 19. Notice of Suits: Each party agrees to notify the other of any claim, or the initiation of any legal proceeding against it, which relates in any manner to the services provided by the other party. Each party will cooperate with the other in the defense of any suit or action arising out of, or related to, the services rendered under this Agreement.

Section 20. Notices: All notices, consents, approvals, and elections (collectively, "notices") to be given or delivered by or to any party hereunder shall be in writing and shall be (as elected by the party giving such notice) hand delivered by messenger, courier service, or national

overnight delivery service, telecopied or faxed, or alternatively shall be sent by United States Certified Mail, with Return-Receipt Requested. The effective date of any notice shall be the date of delivery of the notice if by messenger, courier services, or national overnight delivery service (provided in each case a receipt is obtained), or on the date of transmission with confirmed answer back if telecopier or fax if transmitted before 5 P.M. on a business day and on the next business day if transmitted after 5 P.M. or on a non-business day, or if mailed, upon the date which the return receipt is signed or delivery is refused or the notice designated by the postal authorities as non-deliverable, as the case may be. The parties hereby designate the following addresses as the addresses to which notices may be delivered, and delivery to such addresses shall constitute binding notice given to such party:

(a) If to the County at:

Palm Beach County Fire Rescue
Attn: Fire Rescue Administrator
405 Pike Road
West Palm Beach, FL 33411

with a copy to:

Palm Beach County Attorney's Office
Attn: Fire Rescue Attorney
301 North Olive Avenue, Suite 601
West Palm Beach, FL 33401
Telephone 561-355-2225
Fax 561-355-4398

(b) If to the Town at:

Town of Palm Beach Shores Fire Rescue
Attn: Fire Chief
247 Edwards Lane
West Palm Beach, FL 33404

Any party may from time to time change the address to which notice under this Agreement shall be given such party, upon three (3) days prior written notice to the other parties.

Section 21. Captions: The captions and section appearing in this Agreement are for convenience only, are not part of this Agreement, and are not to be considered in interpreting this Agreement.

Section 22. Filing: A copy of this Agreement shall be filed with the Clerk of the Circuit Court in and for Palm Beach County.

Section 23. Delegation of Duty: This Agreement is an Interlocal agreement for the provision of services, as authorized by Section 163.01, Florida Statutes, and shall not in any way or manner whatsoever be deemed to constitute a transfer of powers or functions. Nothing contained herein shall be deemed to authorize the delegation of the constitutional or statutory duties of state, county, or municipal officers.

Section 24. Severability: If any term of this Agreement or the application thereof to any person or circumstances shall be determined by a court of competent jurisdiction to be invalid or unenforceable, the remainder of this Agreement, or the application of such term to persons or circumstances other than those as to which it is invalid or unenforceable, shall not be affected thereby, and each term of this Agreement shall be valid and enforceable to the fullest extent permitted by law.

Section 25. Survivability: Any provision of this Agreement that is of a continuing nature, or which by its language or nature imposes an obligation or right that extends beyond the term of this Agreement, shall survive the expiration or earlier termination of this Agreement.

Section 26. Conflict Resolution: Any dispute or conflict between the parties that arises from the provision of services under this Agreement shall be presented in writing to the respective Contract Monitors. The Contract Monitors shall then meet to discuss the disputed issues and attempt in good faith to resolve the dispute or conflict prior to either party initiating the intergovernmental conflict resolution process provided for by Chapter 164, Florida Statutes.

Section 27. No Third Party Beneficiary: No provision of this Agreement is intended to, or shall be construed to, create any third party beneficiary or to provide any rights to any person or entity not a party to this Agreement, including but not limited to any citizen or employees of the County and/or Town.

Section 28. E-VERIFY - Employment Eligibility: Each party warrants and represents that it is in compliance with Section 448.095, Florida Statutes, as may be amended. Each party has registered with and uses, and shall continue to use, the E-Verify System (E-Verify.gov), to electronically verify the employment eligibility of all newly hired employees. If either party has a good faith belief that the other party has knowingly violated Section 448.09(1), Florida Statutes, as may be amended, said party shall terminate this Agreement with the violating party.

Section 29. Force Majeure: County shall not be deemed in default or in breach of this Agreement to the extent it is unable to perform due to an event of Force Majeure. For the purpose of this Agreement, Force Majeure shall mean and include any strike, lockout, civil commotion, war-like operation, natural disaster, invasion, rebellion, pandemic, military power, sabotage, government

regulations or controls over which County has no amendatory powers, inability to obtain any material, utilities, service or financing, through Acts of God or other cause beyond the reasonable control of the County. Furthermore, the Town specifically acknowledges that the County shall have no liability whatsoever for any damages or injuries due to a Force Majeure.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the undersigned parties have caused these presents to be signed by their duly authorized officers on the day and year first written above.

ATTEST:

**JOSEPH ABRUZZO
CLERK OF THE CIRCUIT
COURT & COMPTROLLER**

**PALM BEACH COUNTY, a political
subdivision of the State of Florida**

By: _____
Deputy Clerk

By: _____
Gregg K. Weiss, Mayor

**APPROVED AS TO FORM AND
LEGAL SUFFICIENCY**

**APPROVED AS TO TERMS AND
CONDITIONS**

By: _____
County Attorney

By: _____
Fire Rescue

ATTEST:

TOWN OF PALM BEACH SHORES, FLORIDA

By: _____
Jude Goudreau, Town Clerk

By: _____
Alan Fiers, Mayor

**APPROVED AS TO FORM AND
LEGAL SUFFICIENCY**

**APPROVED AS TO TERMS AND
CONDITIONS**

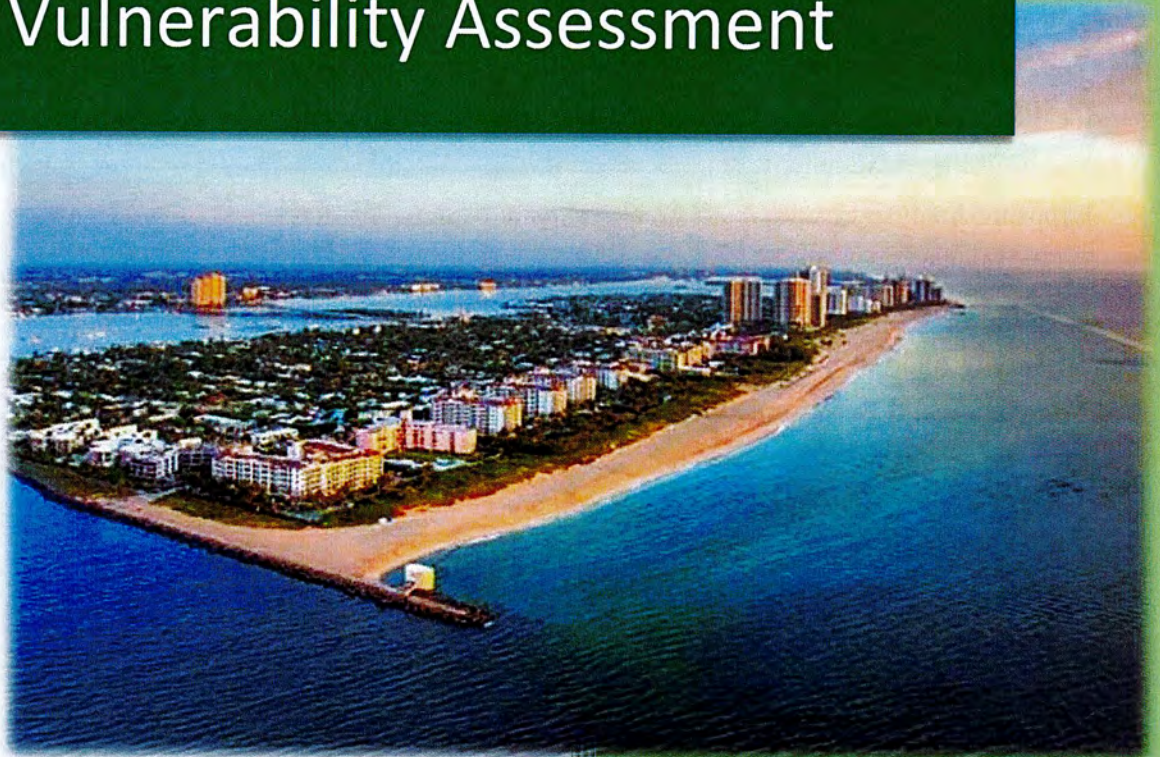
By: _____
Town Attorney

By: _____



2022

Vulnerability Assessment



Florida Technical Consultants

Florida Technical Consultants, LLC

For: Town of Palm Beach Shores

10/14/2022



Florida Technical Consultants, LLC
533 East Ocean Avenue, Suite 02
Boynton Beach, Florida 33436
Tel (954) 914 – 8488
www.fltechinc.com

Vulnerability Assessment

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1. Objectives

The Town of Palm Beach Shores has commissioned Florida Technical Consultants LLC (FTC), to perform a Vulnerability Assessment study with the intent of satisfying Florida Statute 380.93. The objective of this study is to analyze the projected flooding impacts to the Town's Critical Infrastructure.

This study essentially provides a broad understanding of the probability of risk associated with different flooding scenarios. The flooding scenarios are then mapped with a detailed inventory of all critical assets to determine the risk to each asset for each scenario. The result is a prioritization schedule of each asset based on risk and criticality, along with recommendations for stormwater, storm surge, and tidal flooding mitigation for high priority areas.





2. Process Development

The Vulnerability Assessment included the following process steps:

Data Collection

1. FTC performed the initial tabletop Data Collection for all geographic data, including Critical Infrastructure, Planning and Zoning Information, FEMA Flood Zone Data, Utility Data, and Topographic Data
2. FTC graphically presented the data through an ArcGIS Map and performed a Gap Analysis.
3. FTC met with the Town of Palm Beach Shores to present the collected data and request the missing information.

Site Visit

4. FTC performed a site visit during a storm event to:
 - a. Visually analyze the Town's flood risks to Critical Assets
 - b. Interview the Town's Public Works Director for historical information, storm water program management and Capital Planning

Risk Analysis

5. FTC collected and analyzed the following regional flood data:
 - a. Tidal gauge data
 - b. Regional flooding sensitivity reports
 - c. Local sea level rise scenarios
 - i. 2040 Intermediate Low & Intermediate High
 - ii. 2070 Intermediate Low & Intermediate High
6. FTC Performed a detailed Critical Infrastructure inventory including elevation and capacity information
7. FTC commissioned Brizaga, Inc. to provide the local tidal flood days analysis

Exposure Analysis

8. FTC overlaid the FEMA Flood elevation maps on the Critical Infrastructure Map
9. FTC created tidal flood maps for each of the future sea level rise scenarios and overlaid these on the Critical Infrastructure Map

Sensitivity Analysis

10. FTC developed a table with all of the Critical Infrastructure that would be affected by a storm water or tidal flooding event and prioritized each of these facilities based on risk and criticality.

3. Tabletop Data Collection

FTC began the development of the data collection with a desktop review that included creating and populating an ArcGIS map with the following layers. The source of data for each of these layers is shown in Table 1 on the following page:

1. Updated boundary
2. FEMA Flood Zones
3. Subdivisions
4. Parcels
5. Existing Land Use
6. Future Land Use
7. Zoning
8. Roads
9. Utility Infrastructure
10. Municipal parks
11. Bus stops & routes
12. Senior Community Center
13. Lidar Points
14. Areas of Interest/ Critical Infrastructure
 - a. Hotels
 - b. Restaurants
 - c. Marinas
 - d. Historic Landmarks
 - e. Beach Facilities
 - f. Town Hall
 - g. Fire/Police Station
15. Data that was reviewed but does not fall within the Town limits:
 - a. Schools
 - b. Library
 - c. Traffic Signals
 - d. County/ State Parks
 - e. Mobile Homes
 - f. Communication Towers
 - g. Golf Courses
 - h. Assisted Living Facilities/ Nursing Homes
 - i. PBC Critical Erosion Areas

Table 1: Asset Data Sources as Analyzed in GIS Map

Asset Theme	Dataset	Source	Data Type - GIS
Beach Facilities	Google Maps; Map Data @ 2022	https://www.google.com/maps/place/Palm+Beach+Shores,+FL+33404	Points
Government Owned Properties			
Hotels			
Historic Landmarks			
Marinas			
Restaurants			
Road Centerlines	Palm Beach County Open Data	https://opendata2-pbcgov.opendata.arcgis.com/	Line
Bus Stops			Points
Bus Routes			Line
Municipal Parks			Polygon
Seniors Community			Polygon
Stormwater Utility Infrastructure	Village of Palm Beach Shores	Engineering Department	Points & Lines
Evacuation Routes			PDF Map
Water Utility Infrastructure	City of Riviera Beach	Utility Department	Points & Lines
Wastewater Utility Infrastructure			Points & Lines

Critical/Regionally Significant Assets

The four categories of critical and regionally significant assets included in the Vulnerability Assessment are as follows:

Transportation assets and evacuation routes

Within the study limits there are bus terminals, bus routes, major roadways, marinas, and evacuation routes. The Town of Palm Beach Shores is in Palm Beach County Evacuation Zone B. The nearest risk shelter is located in the City of Riviera Beach.

Critical infrastructure

Within the study limits there are lift stations, stormwater collection facilities, drinking water and fire protection facilities, and a sand transfer station.

Critical community and emergency facilities

Within the study limits there is a community center, fire station, law enforcement facility, hotels, restaurants, and local government facilities.

Natural, cultural, and historical resources

Within the study limits there are parks, shorelines, and historical and cultural assets.

All of the catalogued assets, along with their respective elevations, capacities and Asset ID numbers (where applicable) are listed in Table 2 below. They are also shown graphically in Figure 2 on page 9.

Table 2: Palm Beach Shores Critical Asset Inventory

Asset Class	Asset Type	Entity Name	Asset Name	Asset Elevation	Asset Size/ Capacity	Asset Unique ID
<i>Transportation Assets and Evacuation Routes</i>	Bus Terminals	Palm Beach County	Ocean Avenue @ Sandal Ln	7.7	N/A	2832
			Ocean Avenue @ Edwards Ln	8.8	N/A	2833
			Inlet Way @ Parkway	6.6	N/A	2837
			Lake Drive @ Claremont Ln	4.1	N/A	2839
			Lake Drive @ Bamboo Ln	2.5	N/A	2842
	Major Roadways/ Bus & Evacuation Route	Town of Palm Beach Shores	Ocean Avenue	5.3 - 8.3	2 Lane Collector	8884
			Inlet Way	3.5 - 7.2	2 Lane Collector	6063
			Lake Drive	2.5 - 4.2	2 Lane Collector	6644
	Marinas	Private	Buccaneer Marina Resort	2.9	16 Boat Slips	N/A
			Sailfish Marina Resort	3.8	71 Boat Slips	N/A
			Cannonsport Marina	3.8	54 Boat Slips	N/A



Florida Technical Consultants, LLC
 533 East Ocean Avenue, Suite 02
 Boynton Beach, Florida 33436
 Tel (954) 914 – 8488
www.fltechinc.com

Asset Class	Asset Type	Entity Name	Asset Name	Asset Elevation	Asset Size/ Capacity	Asset Unique ID
Critical Infrastructure	Lift Stations	Town of Palm Beach Shores	Edwards Ln & Ocean Ave	8.6	Duplex	LS2
			Edwards Ln & Lake Drive	4.9	Duplex	LS1
	Sand Transfer Plant	Town of Palm Beach	Reach 1 Sand Transfer Plant	2	202,000 cy/year	N/A
	Fire Hydrants	City of Riviera Beach	Edwards Ln & Ocean Ave	7.7	5 1/4"	3-0073
			Tacoma Ln & Ocean Ave	5.9	5 1/4"	3-0074
			Linda Ln & Ocean Ave	7	5 1/4"	3-0185
			Claremont Ln & Ocean Ave	7.8	5 1/4"	3-0183
			Tacoma Ln & Ocean Ave	8.7	5 1/4"	3-0182
			101 Edwards Ln	8.1	5 1/4"	3-0181
			Blossom Ln & Ocean Blvd	7.6	5 1/4"	3-0071
			151 N Ocean Ave	7.8	5 1/4"	3-0070
			143 Bamboo Ln	9.2	5 1/4"	3-0059
			201 Blossom Ln	8.6	5 1/4"	3-0079
			201 Edwards Ln	9.1	4 1/2"	3-0078
			188 Lake Drive	3.2	4 1/2"	3-0089
			300 Cascade Ln	6.1	5 1/4"	3-0088
			Edwards Ln	6.1	5 1/4"	3-0169
			144 Lake Drive	4.4	5 1/4"	3-0081
			Park Ave & Bamboo Ln	5.9	5 1/4"	3-0116
			301 Sandal Ln	5.1	5 1/4"	3-0080
			301 Blossom Ln	5.6	5 1/4"	3-0117
			201 Inlet Way	5.4	5 1/4"	3-0075
			20 Lake Drive	3.8	4 1/2"	3-0084
			301 Linda Ln	6.6	5 1/4"	3-0085
			300 Tacoma Ln	5.8	5 1/4"	3-0087
			201 Claremont	8.7	5 1/4"	3-0077
			241 Bravado	7.5	5 1/4"	3-0086
			201 Linda Ln	6.2	4 1/2"	3-0076
			98 Lake Drive	3.5	5 1/4"	3-0082
			72 Lake Drive	4.2	4 1/2"	3-0083
			305 Claremont Ln	5.9	5 1/4"	3-0118
			301 Linda Ln	5.7	5 1/4"	3-0119
			100 Cascade Ln	7.8	5 1/4"	3-0180
			106 Blossom Ln	8.1	5 1/4"	3-0179
			100 Sandal Ln	9.3	5 1/4"	3-0178
			100 Bamboo Ln	8.2	5 1/4"	3-0177
	Stormwater Outfall	Town of Palm Beach Shores	Ocean Ave & Inlet Way	1.4	42"	Outfall#1
			Atlantic Ave & Inlet Way	1.4	24"	Outfall#2
			Lake Drive & Inlet Way	1.4	30"	Outfall#3
			Tacoma Ln & Lake Drive	1.4	30"	Outfall#4
			Blossom Ln & Lake Drive	1.4	24"	Outfall#5
			Bamboo Ln & Lake Drive	1.4	30"	Outfall#6
			Fire Station/ Police Station	6.7	0.37 acres	



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Asset Class	Asset Type	Entity Name	Asset Name	Asset Elevation	Asset Size/ Capacity	Asset Unique ID
Critical Community and Emergency Facilities	Government Facility	Town of Palm Beach Shores	Town Hall	5.7		
	Beach Facility	Town of Palm Beach Shores	Lifeguard Stand #11	8.6	N/A	
			Walkway #10	11.9	N/A	
			Walkway #11	13	N/A	
			Parking Lot	8.5	60 spaces	
	Critical Community	Private	Senior Community	11	16 units	
	Commercial - Restaurant	Private	Sailfish Marina Tiki Bar	4.3	0.5 acres	
			Islander Grill and Tiki Bar	9.6	N/A	
			Sailfish Marina Restaurant	4	N/A	
	Commercial - Hotel/ Timeshare/ Resort	Private <i>residents</i>	The Anchorage	4.7	1.24 acres	
			La Doral	6.7	0.22 acres	
			Marriott Ocean Pointe	8.8	10.9 acres	
			Pelican Motel	9.4	0.4 acres	
			Seaspray Inn and Beach Resort	8.2	0.65 acres	
			Palm Beach Shores Resort	9.9	7.8 acres	
			Sunshine Shores Resort	9	0.39 acres	
			Sand Dune Shores Resort	10.5	1.34 acres	
			Atlantic Shores Vacation Villas	9	0.22 acres	
			Buccaneer Marina Resort	3.7	1.17 acres	
			Sailfish Marina Resort	4.3	2.04 acres	
Natural, Cultural, and Historical Resources	Parks	Town of Palm Beach Shores	Inlet Park	3.8	6.02 acres	
			Palm Beach Shores Municipal Beach	9.2	4.95 acres	
			Palm Beach Shores Municipal Parkway	5.9 - 7.4	35.68 acres	
	Community Center	Town of Palm Beach Shores	Palm Beach Shores Community Center	9.3	5.06 acres	
	Historic Landmarks	Town of Palm Beach Shores	Acknowledgement Memorial	6.2	N/A	
			The Romaine <i>Not Historical</i>	6.5	0.74 acres	<i>X</i>
			Acknowledgement Stone	5.4	N/A	
			Florida Easternmost Point	2	N/A	

Palm Beach Shores Critical Infrastructure Map



Figure 2: Critical Infrastructure

Topographic Data

The Palm Beach County topographic Raster Image was overlaid on the Town of Palm Beach Shores GIS map to determine the elevations of all critical assets, and to determine the depth of each asset for the analyzed flooding events.

Palm Beach Shores Topographic Map

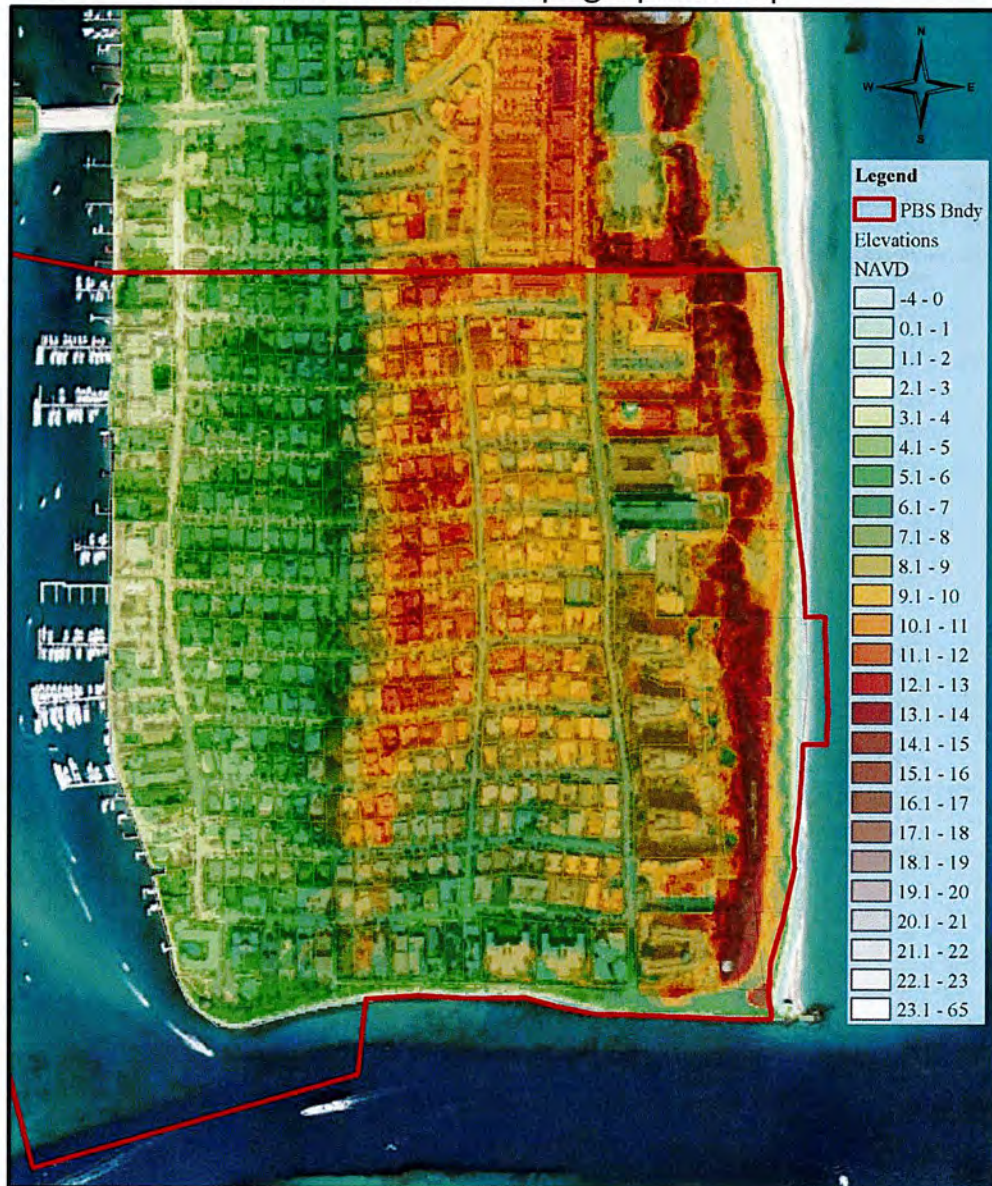


Figure 3: Palm Beach Shores Topographic Map

Flood scenario-related data

Tidal Flooding Projections

The study area falls between two tidal gauges, Lake Worth Pier and Trident Pier in Port Canaveral. The Port Canaveral Mean Tidal Level is slightly higher than the Lake Worth Pier Gauge. Therefore, the two gauge tidal levels were compared, and the interpolated tidal levels for the study area were calculated in Table 3. These interpolated values are used in the analyses of this report.

Tidal Gauge Data:

Elevations on NAVD88

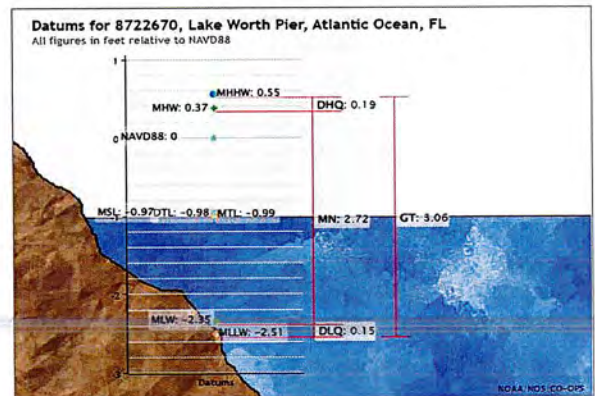
Station: 8722670, Lake Worth Pier, Atlantic Ocean, FL

Status: Accepted (Sep 7 2017)

Units: Feet

Control Station: 8721604 Trident Pier, Port Canaveral, FL

Datum	Value	Description
MHHW	0.55	Mean Higher-High Water
MHW	0.37	Mean High Water
MTL	-0.99	Mean Tide Level
MSL	-0.97	Mean Sea Level
DTL	-0.98	Mean Diurnal Tide Level
MLW	-2.35	Mean Low Water
MLLW	-2.51	Mean Lower-Low Water
NAVD88	0.00	North American Vertical Datum of 1988
STND	-32.50	Station Datum
GT	3.06	Great Diurnal Range
MN	2.72	Mean Range of Tide
DHQ	0.19	Mean Diurnal High Water Inequality
DLQ	0.15	Mean Diurnal Low Water Inequality
HWI	0.54	Greenwich High Water Interval (in hours)
LWI	6.71	Greenwich Low Water Interval (in hours)
Max Tide	2.67	Highest Observed Tide
Max Tide Date & Time	09/21/2020 20:00	Highest Observed Tide Date & Time
Min Tide	-4.24	Lowest Observed Tide
Min Tide Date & Time	03/28/1971 00:00	Lowest Observed Tide Date & Time
HAT	1.73	Highest Astronomical Tide
HAT Date & Time	10/27/2011 12:48	HAT Date and Time
LAT	-3.43	Lowest Astronomical Tide
LAT Date & Time	01/31/2014 06:42	LAT Date and Time



Showing datums for

8722670 Lake Worth Pier, Atl...

Datum

NAVD88

Data Units ☒ Feet
☐ Meters

Epoch ☒ Present (1983-2001)
☐ Superseded (1960-1978)



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Elevations on NAVD88

Station: 8721604, Trident Pier, Port Canaveral, FL
Status: Accepted (Aug 29 2018)

Units: Feet

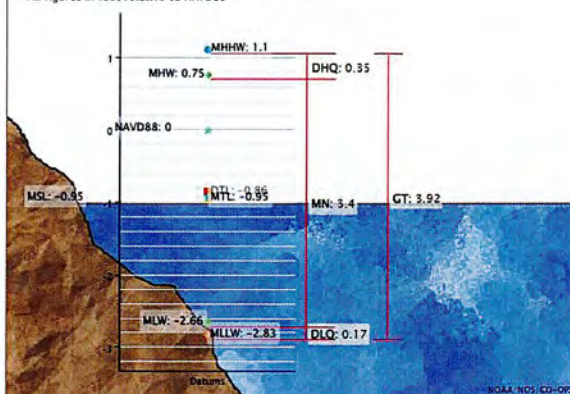
Control Station: 8720030 Fernandina Beach, FL

T.M.: 0
Epoch: 1983-2001
Datum: NAVD88

Datum	Value	Description
MHHW	1.10	Mean Higher-High Water
MHW	0.75	Mean High Water
MTL	-0.95	Mean Tide Level
MSL	-0.95	Mean Sea Level
DTL	-0.86	Mean Diurnal Tide Level
MLW	-2.66	Mean Low Water
MLLW	-2.83	Mean Lower-Low Water
NAVD88	0.00	North American Vertical Datum of 1988
STND	-20.83	Station Datum
GT	3.92	Great Diurnal Range
MN	3.40	Mean Range of Tide
DHQ	0.35	Mean Diurnal High Water Inequality
DLO	0.17	Mean Diurnal Low Water Inequality
HWI	0.19	Greenwich High Water Interval (in hours)
LWI	6.37	Greenwich Low Water Interval (in hours)
Max Tide	5.08	Highest Observed Tide
Max Tide Date & Time	09/28/2004 09:36	Highest Observed Tide Date & Time
Min Tide	-4.71	Lowest Observed Tide
Min Tide Date & Time	01/12/2009 07:06	Lowest Observed Tide Date & Time
HAT	2.67	Highest Astronomical Tide
HAT Date & Time	10/28/2011 13:24	HAT Date and Time
LAT	-3.98	Lowest Astronomical Tide
LAT Date & Time	01/31/2014 06:24	LAT Date and Time

Datums for 8721604, Trident Pier, Port Canaveral, FL

All figures in feet relative to NAVD88



Showing datums for

8721604 Trident Pier, Port C...

Datum

NAVD88

Data Units ☒ Feet

☐ Meters

Epoch ☒ Present (1983-2001)

☐ Superseded (1960-1978)

Tidal Level Interpolations:

Table 3: Tide Gauge Level Interpolations

DATUM	NAVD88	
INTERPOLATION DISTANCES		
DISTANCE FROM LW TIDE GAUGE TO PALM BEACH SHORES	15	MILES
DISTANCE FROM CANAVERAL TIDE GAUGE TO PALM BEACH SHORES	124	MILES
TOTAL DISTANCE BETWEEN TIDAL GAUGES	139	MILES
PALM BEACH SHORES % FROM LW GAUGE TO CANAVERAL GAUGE	10.79%	
HIGHEST OBSERVED TIDE INTERPOLATION (STORM SURGE ANALYSIS)		
LW MAX WATER LEVEL	2.67	Ft
CANAVERAL MAX WATER LEVEL	5.08	Ft
INTERPOLATED MAX TIDE LEVEL	2.93	Ft
HIGHEST ASTROMNOMICAL TIDE INTERPOLATION (TIDAL ANALYSIS)		
LW HIGHEST ASTRONOMICAL TIDE	1.73	Ft
CANAVERAL HIGHEST ASTRONOMICAL TIDE	2.67	Ft
INTERPOLATED MAX ASTRONOMICAL TIDE LEVEL	1.83	Ft
MEAN HIGHER HIGH WATER TIDE INTERPOLATION (TIDAL ANALYSIS)		
LW MEAN HIGHEST HIGH WATER TIDE	0.55	Ft
CANAVERAL MEAN HIGHEST HIGH WATER TIDE	1.1	Ft
INTERPOLATED MEAN HIGHEST HIGH WATER TIDE LEVEL	0.61	Ft

Sea Level Rise Scenarios:

This analysis projects future tidal flooding based on the increase of the maximum astronomical tide levels for the 2040 and 2070 projected sea level rise scenarios.

The NASA Interagency Sea Level Rise Scenario tool was used to obtain the sea level rise projections for the 2040 and 2070 Intermediate Low and Intermediate High Projections. The curves for the Virginia Key tide gauge are shown for 2040 in Figure 4, and for 2070 in Figure 5.

Sea Level Rise Scenarios to be implemented in analysis:

Intermediate Low:

2040: 0.23 m = 9 in, or 0.75ft

2070: 0.44 m = 17.3 in, or 1.44ft

Intermediate High:

2040: 0.27 m = 10.6 in, or 0.88ft

2070: 0.79 m = 31 in, or 2.58ft

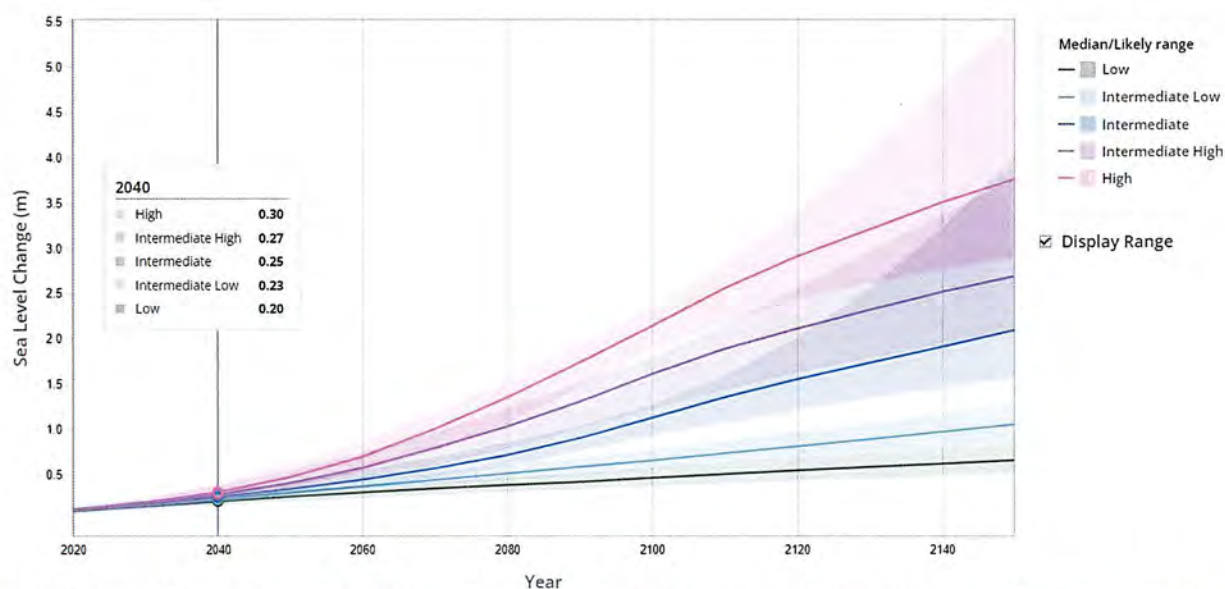


Figure 4: 2040 Sea Level Rise and Coastal Flood Hazard Scenarios and Tools Interagency Task Force 2022 technical report titled "Global and Regional Sea Level Rise Scenarios for the United States: Updated Mean Projections and Extreme Water Level Probabilities"

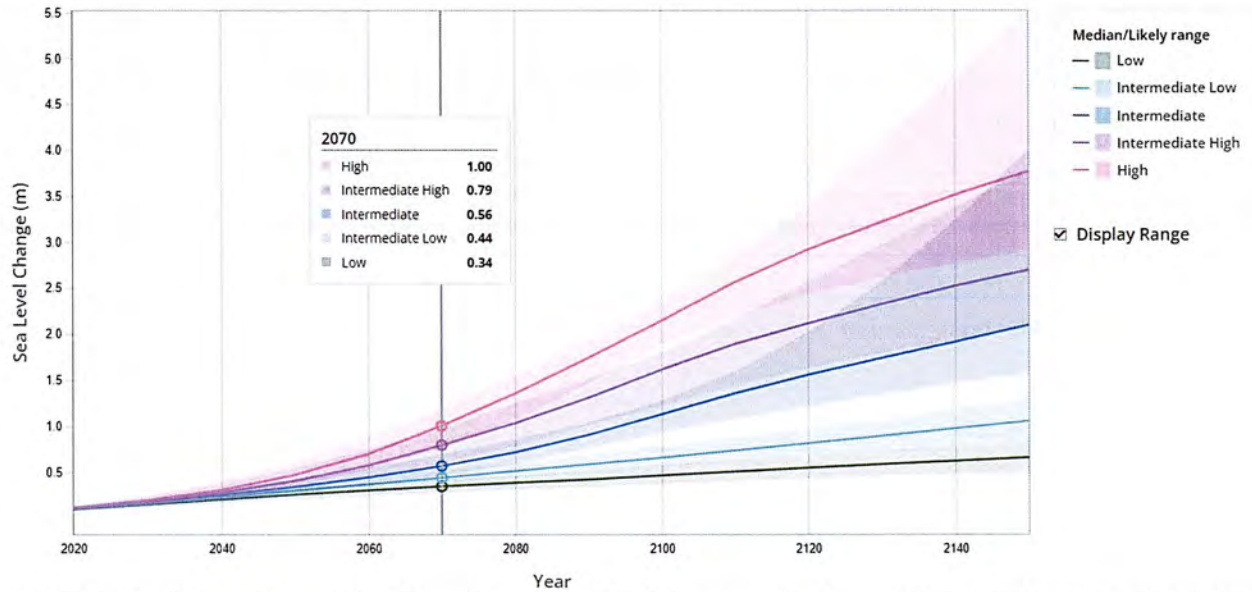


Figure 5: 2070 Sea Level Rise and Coastal Flood Hazard Scenarios and Tools Interagency Task Force 2022 technical report titled "Global and Regional Sea Level Rise Scenarios for the United States: Updated Mean Projections and Extreme Water Level Probabilities"



Field Data

A field visit was performed by FTC on 9/15/2022. During the field visit the flooding effects of an ongoing storm were observed. Mr. Alan Welch, the Palm Beach Shores Public Works Director was interviewed regarding his observations of historical flooding in the Town, and the ongoing mitigation efforts through the Town's Stormwater Capital Improvement Program.

Figure 6 shows the main areas of concern that were discussed during the field visit, along with the Town's major drainage structures and pipes. Areas with concerns for tidal flooding are shown in blue, and areas with concern for stormwater flooding are shown in red.

According to Mr. Welch, storm surge flooding at the southern shoreline of the island has had the highest impact on the Town. He has observed storm surge waves on the eastern part of the southern shoreline reach the second story of a coastal building, at an elevation of approximately 12 ft. Inlet Way, which runs parallel to the southern shoreline, varies in elevation from 3.5 to 7.2 NAVD. The 24 inch outfall that attenuates stormwater for inlet way has a tidal valve, and as such, tidal flooding is not a concern along Inlet way.

As evidenced in Figure 3, Palm Beach Shores Topographic Map, the eastern portion of the Town is located on a coastal ridge. Ocean Avenue varies in elevation from 5.3 - 8.3 NAVD, and the properties along Ocean Avenue are served by a robust stormwater collection system that terminates in a 42 inch outfall with a tidal valve. Therefore, this area has been observed to not experience extenuated flooding during storm events and is not an area of high concern for the Town.

The western shoreline of the Town has four outfalls, only one of which has a tidal gauge. Tidal flooding along Lake Drive is a critical concern for the Town. In addition, this area is much lower in elevation than the west side, and also experiences storm surge flooding. Lake Drive varies in elevation from 2.5 to 4.2 NAVD.

See Appendix for site visit photos.

Palm Beach Shores Areas of Concern



Figure 6: Tidal and Stormwater Flooding Areas of Concern

Table 6: Priority Ranking of Affected Assets for Compound and Tidal Flooding Scenarios

Priority Ranking	Asset Type	Asset Name	Asset Elevation	Flood EI 100 Yr Event	Flood Depth 100 Yr	Flood EI 500 Yr Event	Flood Depth 500 Yr	Tidal Flooding 2040: EI 2.71	Tidal Flooding 2070: EI 4.41
1	Major Roadways	Lake Dr	2.5 - 4.2	6	2.65	7	3.65	0.21	1.91
2	Major Roadways	Inlet Way	3.5 - 7.2	N/A	N/A	7	1.65	N/A	0.91
3	Hotel	Buccaneer Marina	3.7	6	2.3	7	3.3	N/A	0.71
4	Hotel	Sailfish Marina Resort	4.3	6	1.7	7	2.7	N/A	0.11
5	Hotel	The Anchorage	4.7	6	1.3	7	2.3	N/A	N/A
6	Hotel	Marriott Ocean Pointe	8.8	9	0.2	9	0.2	N/A	N/A
7	Sand Trans. Plant	Reach 1 Transfer Plant	2	12	10	12	10	0.71	2.41
8	Lift Station	Edwards Lane & Lake Dr	4.9	6	1.1	7	2.1	N/A	N/A
9	Marina	Buccaneer Marina	2.9	6	3.1	7	4.1	N/A	1.51
10	Marina	Sailfish Marina	3.8	6	2.2	7	3.2	N/A	0.61
11	Marina	Cannonsport Marina	3.8	6	2.2	7	3.2	N/A	0.61
12	Government	Town Hall	5.7	6	0.3	7	1.3	N/A	N/A
13	Government	Fire / Police Station	6.7	N/A	N/A	7	0.3	N/A	N/A
14	Restaurant	Sailfish Marina	4	6	2	7	3	N/A	0.41
15	Restaurant	Sailfish Marina Tiki Bar	4.3	6	1.7	7	2.7	N/A	0.11
16	Outfall	Ocean Ave & Inlet Way	1.4	10	8.6	10	8.6	0.71	3.01
17	Outfall	Bamboo & Lake Dr	1.4	6	4.6	7	5.6	0.71	3.01
18	Outfall	Lake Dr & Inlet Way	1.4	6	4.6	7	5.6	0.71	3.01
19	Outfall	Tacoma Ln & Lake Dr	1.4	6	4.6	7	5.6	0.71	3.01
20	Outfall	Blossom In & Lake Dr	1.4	6	4.6	7	5.6	0.71	3.01
21	Outfall	Atlantic Ave & Inlet Way	1.4	10	8.6	10	8.6	0.71	3.01
22	Landmarks	The Romaine	6.5	N/A	N/A	7	0.5	N/A	N/A
23	Hotel	La Doral	6.7	N/A	N/A	7	0.3	N/A	N/A
24	Fire Hydrant	188 Lake Dr	3.2	6	2.8	7	3.8	N/A	1.21
25	Fire Hydrant	98 Lake Dr	3.5	6	2.5	7	3.5	N/A	0.91
26	Fire Hydrant	20 Lake Dr	3.8	6	2.2	7	3.2	N/A	0.61
27	Fire Hydrant	72 Lake Dr	4.2	6	1.8	7	2.8	N/A	0.21
28	Fire Hydrant	144 Lake Dr	4.4	6	1.6	7	2.6	N/A	0.01
29	Fire Hydrant	301 Sandal Ln	5.1	N/A	N/A	7	1.9	N/A	N/A
30	Fire Hydrant	201 Inlet Way	5.4	N/A	N/A	7	1.6	N/A	N/A
31	Fire Hydrant	301 Blossom	5.6	N/A	N/A	7	1.4	N/A	N/A
32	Fire Hydrant	301 Linda Ln	5.7	N/A	N/A	7	1.3	N/A	N/A
33	Fire Hydrant	300 Tacoma Ln	5.8	N/A	N/A	7	1.2	N/A	N/A
34	Fire Hydrant	Park Ave & Bamboo	5.9	N/A	N/A	7	1.1	N/A	N/A



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Priority Ranking	Asset Type	Asset Name	Asset Elevation	Flood EI 100 Yr Event	Flood Depth 100 Yr	Flood EI 500 Yr Event	Flood Depth 500 Yr	Tidal Flooding 2040: EI 2.71	Tidal Flooding 2070: EI 4.41
35	Fire Hydrant	Tacoma Ln & Ocean Ave	5.9	N/A	N/A	7	1.1	N/A	N/A
36	Fire Hydrant	305 Claremont	5.9	N/A	N/A	7	1.1	N/A	N/A
37	Fire Hydrant	300 Cascade Ln	6.1	N/A	N/A	7	0.9	N/A	N/A
38	Fire Hydrant	Edwards Ln	6.1	N/A	N/A	7	0.9	N/A	N/A
39	Fire Hydrant	201 Linda Lane	6.2	N/A	N/A	7	0.8	N/A	N/A
40	Fire Hydrant	301 Linda	6.6	N/A	N/A	7	0.4	N/A	N/A
41	Bus Terminal	Lake Dr @ Bamboo Ln	2.5	6	3.5	7	4.5	0.21	1.91
42	Bus Terminal	Lake Dr @ Claremont Ln	4.1	6	1.9	7	2.9	N/A	0.31
43	Bus Terminal	Inlet Way@ Parkway	6.6	6	N/A	7	0.4	N/A	N/A
44	Beach Facility	Lifeguard Stand #11	8.6	10	1.4	10	1.4	N/A	N/A
45	Beach Facility	Parking Lot	8.5	9	0.5	9	0.5	N/A	N/A
46	Parks	Inlet Park	3.8	10	6.2	10	6.2	N/A	N/A
47	Parks	Municipal Beach	9.2	10	0.8	10	0.8	N/A	N/A
48	Parks	Municipal Parkway	5.9 - 7.4	6	N/A	7	0.35	N/A	N/A
49	Landmarks	Acknowledgement Memorial	6.2	N/A	N/A	7	0.8	N/A	N/A
50	Landmarks	Acknowledgement Stone	5.4	6	0.6	7	1.6	N/A	N/A
51	Landmarks	Florida Easternmost Point	2	12	10	12	10	0.71	2.41



5. Conclusion and Recommendations

Based on the critical infrastructure assessment and field observations, FTC offers the following flooding mitigation recommendations to the Town of Palm Beach Shores.

1. Tidal flooding impacts can be mitigated with the addition of tidal valves on all ocean outfalls that do not currently have one.
2. The sea walls constructed along the marinas and hotels on Lake Drive can be elevated to reduce the impacts of future tidal flooding. It is recommended that these walls be set to a minimum elevation of the 40 year Intermediate High projected tidal flood elevation of approximately 3ft NAVD.
3. The Public Works Department should continue the capital plan to reduce localized flooding by grading and maintaining swales located within the public right of way for stormwater conveyance and retention. The use of pea gravel, or #57 stone, wrapped in filter fabric should continue to be installed below grade to reduce flooding impacts by increasing both storage volume and the transmissivity rate of stormwater.
4. The Lift Station located on Edwards Lane & Lake Dr should have a wet well rim elevation set to a minimum of the 100 year FEAM Flood Elevation of 6 NAVD.
5. Further analysis should be performed on the Sand Transfer station, as it is in a highly vulnerable location.
6. The Town of Palm Beach Shores Public Works Department should continue to work with the Army Corps of Engineers to reduce future storm surge on the southern and southwest side of the island. These areas are highly susceptible to any inlet dredging and impacts to the Critical Facilities located adjacent to the inlet as a result of any future dredging should be fully analyzed.

Appendix

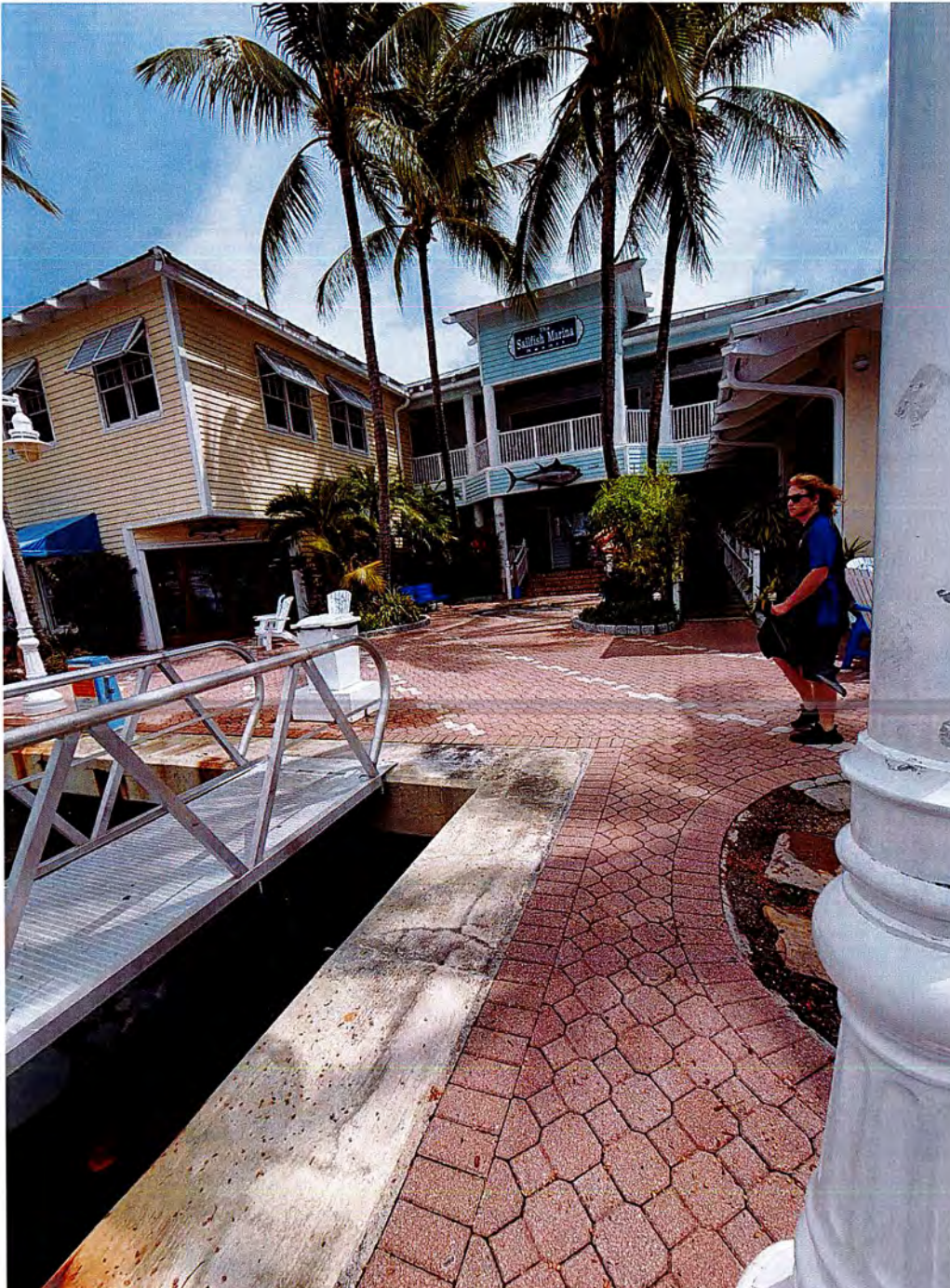
Field Visit Photos 9/15/22











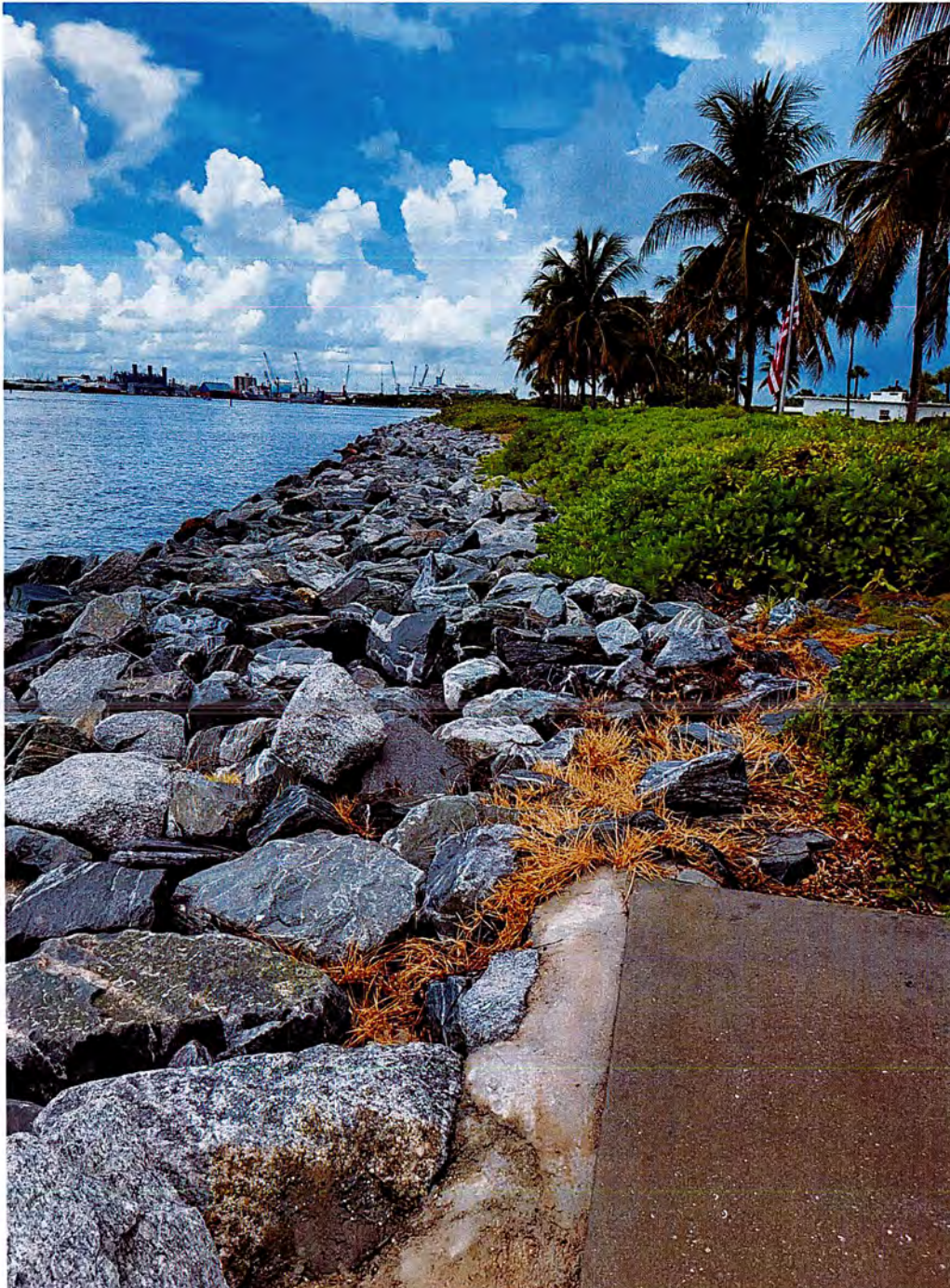












4. Vulnerability Assessment

Exposure Analysis

The elevation for each flood scenario, based on interpolated tide elevations and projected sea level rise is given in Table 4 shown below. These elevations were used to project the tidal flooding affected areas in Table 6.

Table 4: Flood Elevations for future Sea Level Rise Scenarios

Tidal Scenarios		Sea Level Rise Scenarios			
		2040		2070	
	Tide Elevations NAVD	Intermediate Low	Intermediate High	Intermediate Low	Intermediate High
INTERPOLATED MAX TIDE LEVEL	2.93	3.68	3.81	4.37	5.51
INTERPOLATED MAX ASTRONOMICAL TIDE LEVEL	1.83	2.58	2.71	3.27	4.41
INTERPOLATED MEAN HIGHEST HIGH WATER TIDE LEVEL	0.61	1.36	1.49	2.05	3.19

For this analysis, the 2040 Intermediate High and the 2070 Intermediate High Sea Level Rise projections added to the Maximum Astronomical Tide Level will give the **2040** projected maximum tide level of **2.71 ft** and the **2070** projected maximum tide level of **4.41 ft**.

Tidal Flooding

Ten years of Higher High Water tide gauge data were statistically analyzed to estimate the probability of different flood levels. These probabilities were then converted to statistical flood days. The relative sea level rise scenarios were then added to these elevations to obtain the number of flood days for contour elevations from 2 to 5 NAVD. Table 5 below summarizes the number of tidal flood days per scenario, and Figures 7, 8 and 9 show the number of flood days graphically.

Table 5: Number of Tidal Flooding Days by elevation for future projected Sea Level Rise Scenarios

Sea Level Rise Scenario	Elevation	# Of Tidal Flood Days
2040 Intermediate Low	3	5
	2	101
2040 Intermediate High	3	8
	2	132
2070 Intermediate Low	4	2
	3	47
	2	292
2070 Intermediate High	5	4
	4	71
	3	325
	2	365

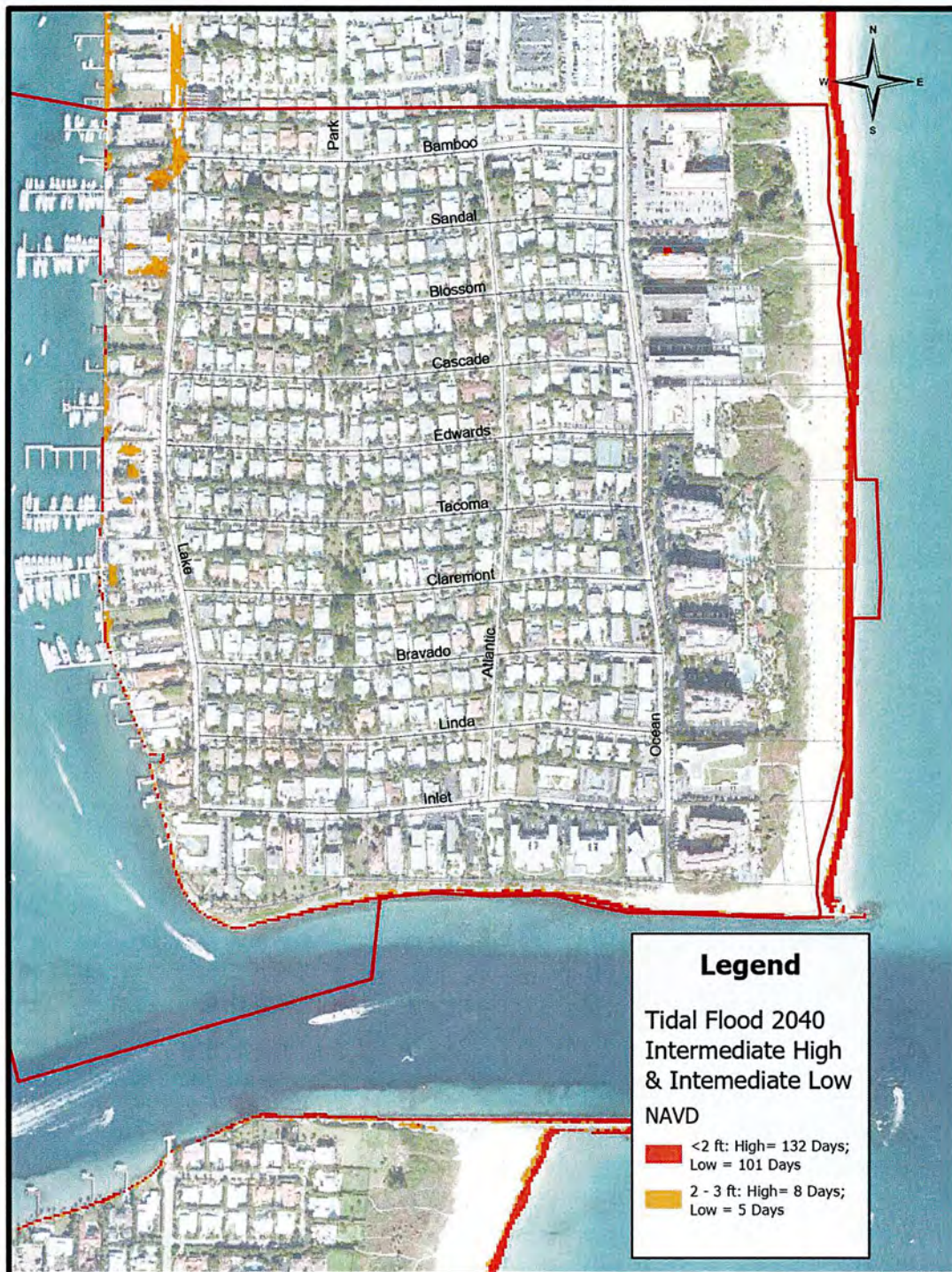


Figure 7: 2040 Intermediate Low & Intermediate High Sea Level Rise Number of Tidal Flood Days



Figure 8: 2070 Intermediate Low Sea Level Rise Number of Tidal Flood Days



Figure 9: 2070 Intermediate High Sea Level Rise Number of Tidal Flood Days



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Storm Related and Compound Flooding

The FEMA 100-year flood elevation is used for the projected compound flood scenario, and the FEMA 500-year flood elevation is used for the projected storm surge scenario. Figure 10 on the following page shows the projected 100-year FEMA flood plain elevation in blue, and the 500-year FEMA flood plain scenario in orange. The impacts of these flooding scenarios on the Town of Palm Beach Shores Critical Infrastructure are observed in the Sensitivity Analysis section of this report.

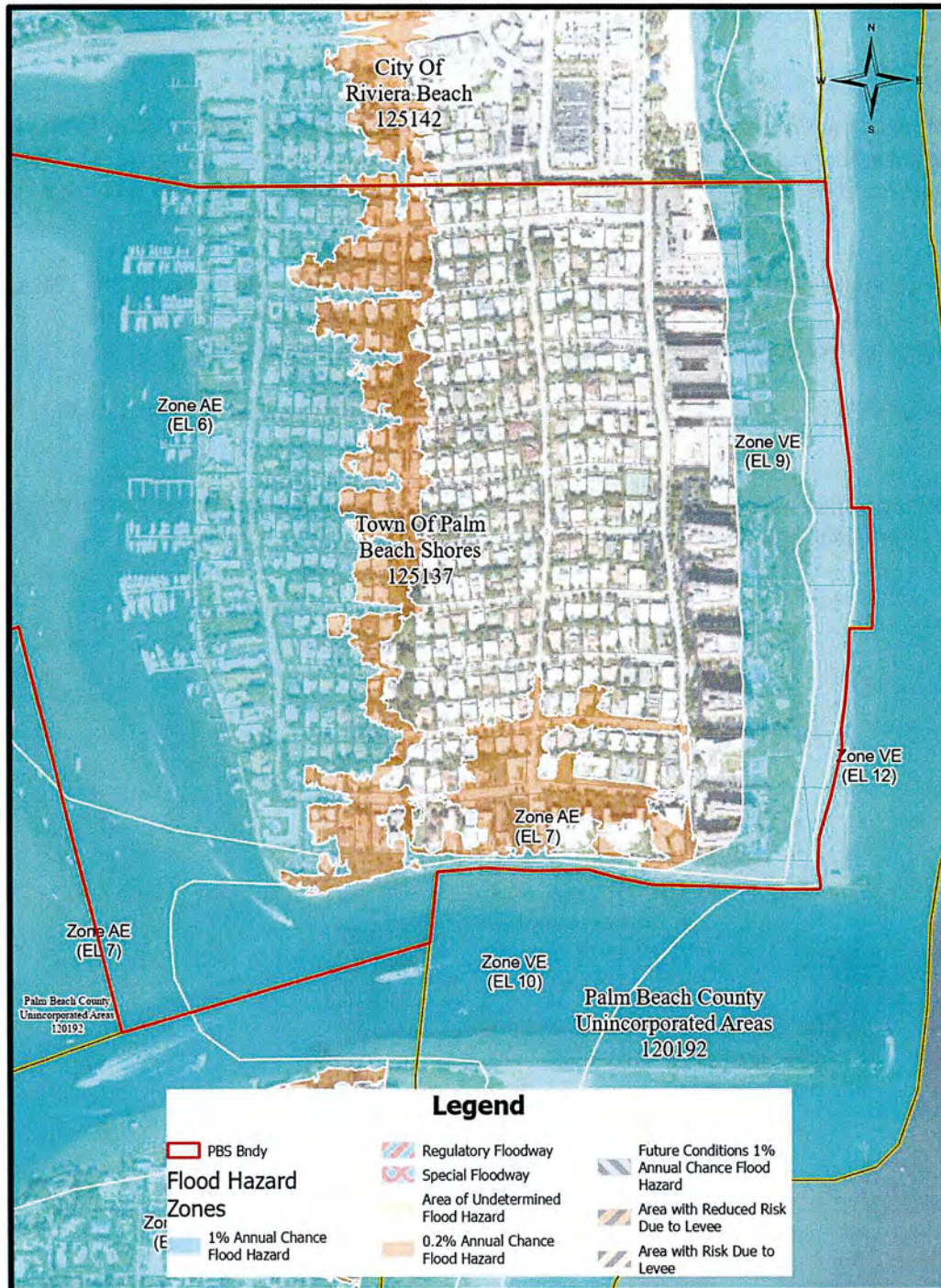


Figure 10: FEMA Flood Hazard Zone map



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Sensitivity Analysis

The following maps show the Critical Infrastructure affected by the FEMA 100-year and 500-year storm events in Figure 11. The number of tidal flooding days impacting the Critical Infrastructure is shown in Figures 12, 13, and 14 on the following pages. The Critical Infrastructure affected by the FEMA 100-year and 500-year storm events are shown in Figure 11.

The criticality of these assets have been compared to the risk of inundation of these assets for the FEMA 100-year and 500-year compound flooding scenarios, and for the future high tide elevations for 2040 and 2070. The Critical Infrastructure affected by the tidal flooding events are shown in Figures 12, 13 and 14

These assets are prioritized based on their impact from the various the flooding scenarios, and on the criticality of the asset in Table 6.

As evident in the following figures, the most significant risk to the Town of Palm Beach Shores Critical Assets are the 100-year and 500-year FEMA Flood scenario inundations.



Figure 11: FEMA Flood Zones with Critical Facilities



Figure 12: 2040 Intermediate Low & Intermediate High Sea Level Rise Number of Tidal Flood Days with Critical Infrastructure



Figure 13: 2070 Intermediate Low Sea Level Rise Number of Tidal Flood Days with Critical Facilities

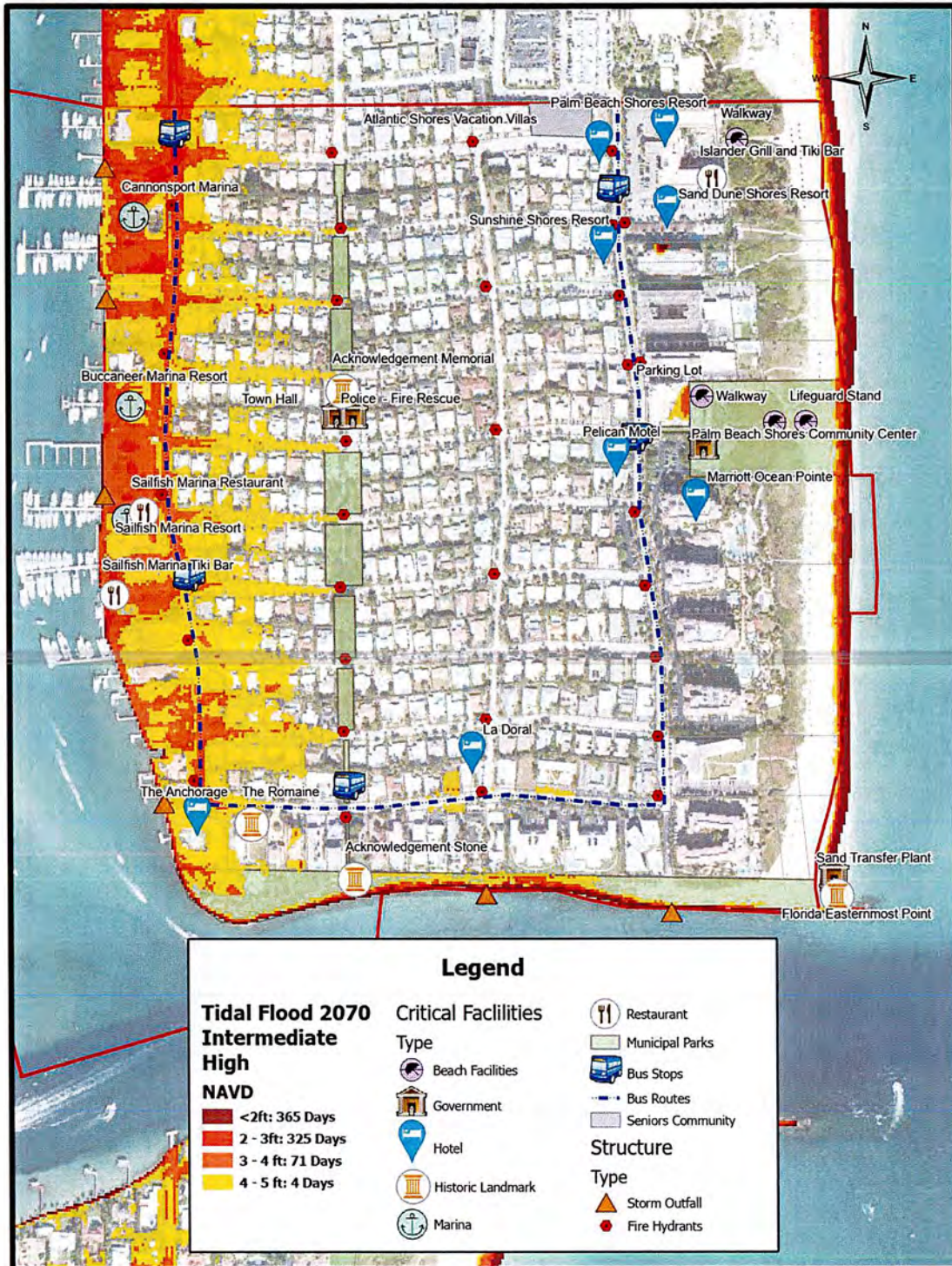


Figure 14: 2070 Intermediate High Sea Level Rise Number of Tidal Flood Days with Critical Facilities