



TOWN OF PALM BEACH

Town Manager's Office

**TENTATIVE-
SUBJECT TO
REVISION**

SHORE PROTECTION BOARD MEETING HELD VIRTUALLY VIA ZOOM WEBINAR

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<https://zoom.us/j/94604192638>

AGENDA

THURSDAY, MAY 27, 2021

9:00 AM

**TOWN COUNCIL CHAMBERS
360 SOUTH COUNTY ROAD**

WELCOME!

The progress of this meeting may be monitored by visiting the Town's website (www.townofpalmbeach.com) and selecting "Live Meeting Audio" under the "Your Government" tab. If you have questions regarding that feature, please contact the Office of Information Systems (561) 227-6315. The audio recording of the meeting will appear within 24 hours after the conclusion of the meeting under "Agendas, Minutes, and Audio."

I. CALL TO ORDER

II. ROLL CALL

Kane Baker, Chair
Reuben B. Johnson, III, Vice-Chair
Warren Belmar, Shore Protection Board Member
Melissa Cerialle, Shore Protection Board Member
James C. Gavigan, Shore Protection Board Member
Vladimir Rapoport, Shore Protection Board Member
Erick Reickert, Shore Protection Board Member

III. PLEDGE OF ALLEGIANCE

IV. APPROVAL OF AGENDA

V. APPROVAL OF THE MINUTES OF THE JANUARY 21, 2021 MEETING AND APPROVAL OF THE MINUTES OF THE FEBRUARY 11, 2021 WORKSHOP

- VI. COMMUNICATIONS FROM CITIZENS - 3 MINUTE LIMIT PLEASE
- VII. CURRENT SHORELINE CONDITIONS
[Robert Weber, Coastal Program Manager]
- VIII. COASTAL RESILIENCY IMPLEMENTATION PLAN
[Robert Weber, Coastal Program Manager, Bob Hamilton, President, Woods Hole Group, and Nasser Brahim, Senior Climate Resiliency Specialist, Woods Hole Group]
- IX. COASTAL PROJECTS UPDATE
[Robert Weber, Coastal Program Manager]
- 2021 Lake Worth Inlet
 - o Maintenance Dredging
 - o Sand Transfer Plant
 - 2021 Phipps Ocean Park Beach Nourishment
 - 2021 Dune Restoration in Reaches 3, 4, 7, 8, and 9
- X. RECOMMENDATION TO TOWN COUNCIL REGARDING THE PROPOSED FY 2022 COASTAL MANAGEMENT PROGRAM BUDGET
[Robert Weber, Coastal Program Manager]
- XI. RESPONSIBILITY AND METHODS FOR BEACH CLEANING AND DISPOSAL
[Patricia Strayer, P.E., Town Engineer]
- XII. POLICY ON DUNE VEGETATION
[Robert Weber, Coastal Program Manager]
- XIII. SHORE PROTECTION BOARD MEMBER TASKS
[Robert Weber, Coastal Program Manager]
- XIV. SCHEDULING OF FUTURE MEETINGS
[Patricia Strayer, P.E., Town Engineer]
- Regular SPB Meeting, November 18, 2021
- XV. COMMUNICATIONS FROM SHORE PROTECTION BOARD MEMBERS
- XVI. ANY OTHER MATTERS
- XVII. ADJOURNMENT

Note: Disabled persons who need an accommodation in order to participate in the Town Council Meeting are requested to contact the Town Manager's Office at 838-5410 or through the Florida Relay Service by dialing 1-800-955-8770 for voice callers or 1-800-955-8771 for TDD callers, at least two (2) working days before this meeting.



TOWN OF PALM BEACH

Town Manager's Office

MINUTES OF THE SHORE PROTECTION BOARD MEETING HELD ON THURSDAY, JANUARY 21, 2021

I. CALL TO ORDER

The Shore Protection Board meeting was called to order on Thursday, January 21, 2021, at 8:59 a.m. This meeting was held virtually via Zoom Webinar.

II. ROLL CALL

All of the Board Members and alternate Board Members were present.

III. PLEDGE OF ALLEGIANCE

Chair Kane Baker led the Pledge of Allegiance.

Robert Weber, Coastal Program Manager, reviewed guidelines for Zoom meeting while meeting is in session.

IV. APPROVAL OF AGENDA

Motion was made by Board Member Warren Belmar to approve agenda. Seconded by Board Member James Gavigan. Motion carried unanimously.

V. SWEARING IN OF APPOINTED MEMBERS

This item was eliminated from the agenda as there are no new members to the Board, no need to swear anyone in as there was no change of status. Alternate members will become permanent members after the second reading of the Ordinance at the February Town Council meeting.

VI. ELECTION OF CHAIR FOR 2021 SHORE PROTECTION BOARD

Board Member James Gavigan nominated Board Member Kane Baker for position of Chair. Board Member Warren Belmar nominated Board Member Melissa Ceriale. Board Member Reuben Johnson nominated himself. Ms. Ceriale withdrew her name for nomination.

Voting took place by show of hands to nominate. Voting resulted as Board Member Baker elected as Chair of the Shore Protection Board per the majority vote.

**MINUTES OF THE SHORE PROTECTION BOARD MEETING
HELD ON THURSDAY, JANUARY 21, 2021**

VII. ELECTION OF VICE-CHAIR FOR 2021 SHORE PROTECTION BOARD

Nominations for election of Vice-Chair took place. Board Member Gavigan nominated Board Member Reuben Johnson, Board Member Ceriale second nomination. Mr. Johnson was elected as Vice-chair of the Shore Protection Board per unanimous vote.

VIII. APPROVAL OF THE MINUTES OF THE OCTOBER 1, 2020 AND NOVEMBER 12, 2020 MEETINGS

Motion to approve minutes of October 1, 2020 and November 12, 2020 was made by Board Member James Gavigan, seconded by Board Member Reuben Johnson. Motion carried unanimously.

IX. COMMUNICATIONS FROM CITIZENS - 3 MINUTE LIMIT PLEASE

Diane Buhler, Friends of Palm Beach, addressed the Board via call-in to the meeting. Ms. Buhler presented her findings of beach cleanup.

Chair Baker would like to see more cooperation from the Town employees to assist in cleaning and removal of debris found on the beaches. Board Member Ceriale expressed her dismay of all the work the Friends of Palm Beach does for the Town, and rarely reach out for support and asks the Town to assist to remedy assistance to help when it is needed. Paul Brazil, Director of Public Works, shared the Town does not clean private beaches, they clean public beaches when needed. This has been discussed repeatedly at Town Council and Council indicated people with private beaches are to be responsible to clean their own beaches. Board Member Ceriale asked if the Town could look into assisting Diane Buhler. Director Brazil would take any recommendations the Shore Protection Board has to the Town Council and the Town Council President decides if it will be on the agenda. Director Brazil reiterated that the conversation has been had with Council many times. Board Member Ceriale recommends something needs to be drafted to Town Council to change their policy regarding this matter. Chair Baker agrees Town Council could make an appropriation for emergency matters. There is dangerous debris and wants to avoid something possibly happening and should be remedied. Board member Reuben Johnson suggests a recommendation to assist Diane should be made to Town Council.

Motion made by Board Member Johnson to have staff recommend to Town Council to review policy for organizations that are Town serving. Motion seconded by Board Member Ceriale. Motion carried unanimously.

X. CURRENT SHORELINE CONDITIONS

[Robert Weber, Coastal Program Manager]

Robert Weber made presentation of shoreline conditions. Discussion ensued.

XI. 2020 TOWNWIDE SEDIMENT BUDGET REVIEW AND EROSION RATES DISCUSSION

[Robert Weber, Coastal Program Manager, and Michael Jenkins, Ph.D., P.E., Coastal Engineering Principal, Applied Technology & Management, Inc.]

Michael Jenkins, of Applied Technology & Management Inc. made presentation. Discussion ensued.

**MINUTES OF THE SHORE PROTECTION BOARD MEETING
HELD ON THURSDAY, JANUARY 21, 2021**

XII. COASTAL PROJECTS UPDATE

[Robert Weber, Coastal Program Manager]

- Lake Worth Inlet
 - o Maintenance Dredging – project was completed by Army Corps of Engineers
 - o Sand Transfer Plant - short and long term goals, a copy of scope of work can be provided. Town staff and county staff are working on getting it up and running as soon as possible.
- 2021 Phipps Ocean Park Beach Nourishment – Weeks Marine is the contractor, they are preparing to mobilize to our area in February and March, wrapping up in April.
- 2021 Dune Restoration in Reaches 3, 4, 7, 8, and 9 – out for bid, responsive bids should be in on January 22, 2021 and brought to Town Council in February. There will be a lot of activity in the month of April.
- The Breakers/Clarke Avenue/Mid-Town Shoreline Stabilization Project – TAC memorandum did come in from Florida Department of Environmental Protection and the Board was notified that the recommendations from DEP was not conclusive based on monitoring that has been provided. DEP will continue to monitor area over time.
- Groin Rehabilitation – staff has state permit through the beach nourishment agreement. Staff has been approached by private property owners in Reaches 2, 3, and 5 they want to take on responsibility and take on groins as quickly as they can, they have a right to this. Staff has regulatory authority in hand and staff is working with private residents in that area so they can take on the responsibility of groin rehabilitation.

XIII. OVERVIEW OF EROSION CONTROL LINES

[Robert Weber, Coastal Program Manager]

- Future Extension of Mid-Town Beach Nourishment Project Area – Mr. Weber shared ECL information from Department of Environmental Protection. Between now and the next Shore Protection Board meeting in April, an ECL hearing should take place for the southern extension of the Mid-Town project. Discussion ensued.

XIV. ESTABLISH SHORE PROTECTION BOARD GOALS FOR 2021 CALENDAR YEAR AND 10-YEAR OUTLOOK

[Patricia Strayer, P.E., Town Engineer]

Board Member Ceriale discussed how the Board goes forward and present recommendations to the Town Council. She feels big strides need to be made to open the line of communications. Ms. Ceriale offered to create an outline showing how the Board would like to move forward in the next few years.

Director Brazil shared that procedurally because of Sunshine Law Board staff is not allowed to pole Board, but it is not a violation for the Board to submit ideas, staff consolidates those ideas, and then meet having a workshop to focus on goals. Board Member Ceriale suggested a workshop for next month.

Board Member Ceriale left the meeting at 12:00pm.

**MINUTES OF THE SHORE PROTECTION BOARD MEETING
HELD ON THURSDAY, JANUARY 21, 2021**

XV. SCHEDULING OF FUTURE MEETINGS

[Patricia Strayer, P.E., Town Engineer]

- Regular SPB Meeting, April 22, 2021
 - o FY 2022 Coastal Management Program Budget
 - o Easements
 - o Seawalls

XVI. COMMUNICATIONS FROM SHORE PROTECTION BOARD MEMBERS

There were no additional comments.

XVII. ANY OTHER MATTERS

No other matters to be discussed.

XVIII. ADJOURNMENT

There being no further business, the Shore Protection Board of January 21, 2021, was adjourned at 12:04pm. Motion made by Chair Kane Baker, seconded by Board Member Vladimir Rapoport. Motion carried unanimously.

APPROVED:

Kane Baker,
Chair

Meeting audio is located at:

https://zoom.us/rec/play/HF1M_CJXltQeUNGacvkN3VBting9dzxcnT4SqRBTp9i9eZ_7GD24H15lpJPiWCRWLok3dfd49tb9Lxb.tVdfbaiFqZd7Ukoc?startTime=1611237556000&xzm_rtaid=eerflm51Qr2Gv1A3dweWaw.1616072319992.e6053dfd3a457ba7a269310aec4c01e8&xzm_rhtaid=666



TOWN OF PALM BEACH

Town Manager's Office

MINUTES OF THE SHORE PROTECTION BOARD WORKSHOP HELD ON THURSDAY, FEBRUARY 11, 2021

I. CALL TO ORDER

The Shore Protection Board Workshop was called to order on Thursday, February 11, 2021, at 9:03 a.m. This workshop was held virtually via Zoom Webinar.

Robert Weber, Coastal Program Manager, reviewed guidelines for Zoom meeting while meeting is in session. Mr. Weber also shared Town Council's memo item regarding Boards and Commissions reduction of Board members.

II. ROLL CALL

All of the Board Members were present.

III. PLEDGE OF ALLEGIANCE

Chair Kane Baker led the Pledge of Allegiance.

IV. COMMUNICATIONS FROM CITIZENS – 3 MINUTE LIMIT PLEASE

There were no communications from citizens requesting to address the Board.

V. BOARD DISCUSSION – EXECUTIVE SESSION

[Patricia Strayer, P.E., Town Engineer]

- Review of Backup Material
- Establish Shore Protection Board Goals for 2021 Calendar Year and 10-Year Outlook

Outline of goals were reviewed by Board, suggestions and modifications were made to the proposed goals.

**MINUTES OF THE SHORE PROTECTION BOARD
HELD ON THURSDAY, FEBRUARY 11, 2021**

Discussion Topics for Further Consideration:

1. Establish Long-term Easements for Construction Efficiency and State and Federal Cost Sharing: Board Member Melissa Ceriale stated this is a priority for goals. Director of Public Works, Paul Brazil shared this topic should be discussed, see where the problem is, and see if it turns into a goal. Discussion ensued. Goal changed to read: *Consideration of a Policy for Securing Federal and Town Easements Needed for Construction and Implications for State and Federal Cost Sharing.*
2. Responsibility and Methods for Beach Cleaning and Disposal: Director, Brazil suggests topic should be for further consideration and should be on Shore Protection Board agenda to discuss.
3. Policy on Dune Vegetation: Director Brazil shared planting is not done automatically with every project. This topic needs to be discussed and should stay on topics for further consideration.
4. Implications for State and Federal Funding Pertaining to Public Beach Access Restrictions: Director Brazil stated it is a Town-wide issue and a decision will be made at the Town Council level. Discussion ensued.

VI. COMMUNICATIONS FROM SHORE PROTECTION BOARD MEMBERS

2021 Goals and Objectives

1. Improve communication and public relations: Board Member Ceriale is asking where can SPB help Staff with communication. Ms. Ceriale and Board Member Warren Belmar will take a personal role in assisting with this task.
2. Support and implement a coastal vulnerability and resiliency implementation plan that will consider the oceanfront and the lagoon. A plan is currently being prepared by Woods Hole Group. Vice Chair Ruben Johnson and Board Member James Gavigan offered to assist with this goal.
3. Develop and implement permitted coastal hard structure technology where appropriate: Director Brazil will work on this and will bring it to the SPB. Board Member Vladimir Rapoport offered to help.
4. Work with State and Federal agencies and governments to implement projects to protect our shoreline: Mr. Brazil shared Reach 8 needs to be first and then bring it back to Shore Protection Board.
5. Continue maximal sand bypassing and inlet dredging. This includes placement of dredged sand on or near the dry beach extending south of Reach 1, the Lake Worth Inlet Maintenance Dredging by the U.S. Army Corps of Engineers, and Operation and Maintenance of the Sand Transfer Plant. Staff at Water Resources Department is working with the U.S. Army Corps of Engineers and the Town of Palm Beach Shores. Council has approved a long term evaluation of the plan and staff will bring it back to SPB. Mr. Brazil indicated staff receives a draft from

**MINUTES OF THE SHORE PROTECTION BOARD
HELD ON THURSDAY, FEBRUARY 11, 2021**

the Consultant and staff will share with Chair Kane Baker who will provide feedback before finalizing. This will help when it is brought back to the Shore Protection Board.

Discussion Topics:

- Consideration of a Policy for Securing Federal and Town Easements Needed for Construction and Implications for State and Federal Cost Sharing. Board Member Warren Belmar and Vice Chair Reuben Johnson will assist with this topic.
- Responsibility and Methods for Beach Cleaning and Disposal: Director Brazil suggested staff writes the back-up history and distribute to SPB.
- Policy on Dune Vegetation: Coastal Vulnerability – Director Brazil indicated staff will give the information and background to SPB to receive direction.
- Implications for State and Federal Funding Pertaining to Public Beach Access Restrictions: Director Brazil shared that staff will come back to SPB as to how beach accesses effect state or federal funding. Vice Chair Johnson offered to assist.

VII. ANY OTHER MATTERS

VIII. ADJOURNMENT

There being no further business, the Shore Protection Board Workshop of February 11, 2021, was adjourned at 11:52pm. Motion made by Chair Baker, seconded by Vice Chair Reuben Johnson.

APPROVED:

Kane Baker,
Chair

Meeting audio is located at:

https://zoom.us/rec/play/ulLRG67CvUxUQqyLmddzqb5MKUT6_MbaveUxrbgMYkSidoUE6BTS87Z51kVRFR4mpfzgCAOqL-tRr5KO.j5Zz6GxQklo8L9mE?continueMode=true&_x_zm_rtaid=S0xuNmYMSWenVbaEvx7s2Q.1616524875164.14546d5a87eb8d8f13221ce9329de8ab&_x_zm_rhtaid=729

TOWN OF PALM BEACH

Information for Shore Protection Board Meeting on: May 27, 2021

TO: Shore Protection Board

FROM: Kirk W. Blouin, Town Manager

VIA: Robert Weber, Coastal Program Manager

RE: Coastal Resiliency Implementation Plan
Item VIII.

DATE: May 21, 2021

STAFF RECOMMENDATION

Town staff requests the Shore Protection Board (SPB) provide any additional input as deemed necessary.

GENERAL INFORMATION

In 2013, WHG completed a technical review of the proposed Coastal Management Program and provided input directly to Town Council prior to Town Council's adoption of the 10-Year plan. While their report identified recommended projects for each respective reach along the shoreline, the report also included island-wide recommendations that extended through multiple reaches.

One of the island-wide recommendations was to perform a flooding vulnerability assessment. The purpose of the assessment was to supplement the Town's Comprehensive Coastal Management Plan (CCMP) with the identification of areas presently at high risk of storm damage and flood, and areas potentially more at risk in the future.

Following a unanimous recommendation from the SPB on October 27, 2016, Town Council awarded a contract to WHG in December 2016 to perform a Coastal Vulnerability Assessment. WHG presented the results of the study at the January 24, 2019 SPB meeting. Following input from both the Shore Protection Board and Town Council, the Town's Coastal Flood Vulnerability Assessment report was published in July 2019. The report includes tables of ranked Town assets potentially at risk and maps of present and future flood risk probability. In December 2019, Town Council awarded a contract to WHG to develop this implementation plan. WHG has worked with Town staff and with both FEMA and FDEP since 2019 to ensure that the implementation plan is consistent FEMA floodplain mapping and FDEP adaptation planning guidelines.

Bob Hamilton, President, and Nasser Brahim, Senior Climate Resiliency Specialist, will present their results of the implementation plan during the May 27, 2021 SPB meeting and will solicit comments from both the public and the SPB. WHG will provide a draft report and present their

results to the Town Council in June 2021. Following input from both SPB and Town Council, WHG will finalize and submit the report to the Town.

FUNDING/FISCAL IMPACTS

The cost of executing the implementation plan to address risk of public infrastructure and the cost of a multi-year capital improvement program will be determined following receipt of the WHG final report after review and input from both the Shore Protection Board and Town Council.

cc: Jay Boodheshwar, Deputy Town Manager
H. Paul Brazil, P.E., Director of Public Works
Patricia Strayer, P.E., Town Engineer
Bob Hamilton, Woods Hole Group, Inc.

TOWN OF PALM BEACH

Information for Shore Protection Board Meeting on: May 27, 2021

TO: Shore Protection Board

FROM: Kirk W. Blouin, Town Manager

VIA: Robert Weber, Coastal Program Manager

RE: Coastal Projects Update
Item IX.

DATE: May 21, 2021

STAFF RECOMMENDATION

Town staff requests the Shore Protection Board (SPB) review the attached information and provide any additional input deemed necessary.

GENERAL INFORMATION

Listed below is a brief update of the ongoing activities for the Coastal Management Program. Town staff can provide more details of each item during the SPB meeting.

Lake Worth Inlet Maintenance Dredging

- Town staff is gathering easements from the applicable property owners along the north end beaches of Reaches 1 and 2 in preparation for the U.S. Army Corps of Engineers to perform a large-scale inlet maintenance dredging and sand placement project later this calendar year.
- The anticipated volume is on the order of 400,000 cubic yards of sand.
- The work is expected to take place between November 1, 2021 and February 28, 2022.
- Heavy equipment will be placed on the beach utilizing the beach access at Merrain Road.

Sand Transfer Plant

- Town consultant GHD performed an integrity assessment of the facility's components in March 2021 and inspected the pipelines in April 2021. Reports of their findings are being finalized.
- A scheduled capital improvement program to keep the plant operational will be developed based on the assessment reports.
- The plant is currently operational and is actively bypassing sand.

2021 Phipps Ocean Park Beach Nourishment and Dune Restoration in Reaches 7, 8, and 9

- Weeks Marine completed the Phipps Ocean Park Beach Nourishment Project on April 27, 2021.
- The project included a volume of 495,000 cubic yards of sand placed between Phipps Ocean Park and the Ambassador Hotel in Reach 7 along a shoreline distance of approximately 1.25 miles.

- The nourishment project will be cost shared with FEMA at 75% due to hurricanes Matthew and Irma.
- The project included a stockpile of sand placed on the beach between Phipps Ocean Park and the Par 3 Golf Course.
- More than 62,000 cubic yards of sand was truck hauled to various dune restoration areas in Reaches 7, 8, and 9 (in the Town of South Palm Beach):
 - Approximately 19,000 cubic yards in the Sloan's Curve area (Reach 7);
 - Approximately 23,000 cubic yards in Reach 8 south of the Lake Worth Pier; and
 - Approximately 20,000 cubic yards in the Town of South Palm Beach.
- The dune restoration work was completed on May 5, 2021. This project covered a shoreline distance of 1.65 miles.
- Reach 7 and Reach 8 Dune Restoration will be cost shared with FEMA at 75% due to hurricanes Matthew and Irma.
- The Town of South Palm Beach is responsible for 100% of the Reach 9 Dune Restoration cost.
- Due to sea turtle nesting season and time constraints for construction, dune restoration in Mid-Town was not completed. The Town received a time extension from FEMA to perform a cost shared dune restoration project in Mid-Town.
- Approximately 23,000 cubic yards of sand remains in the stockpile in Reach 7. This sand can be taken to Mid-Town for dune restoration or can be utilized in other areas of need if necessary.

cc: Jay Boodheshwar, Deputy Town Manager
 H. Paul Brazil, P.E., Director of Public Works
 Patricia Strayer, P.E., Town Engineer

TOWN OF PALM BEACH

Information for Shore Protection Board Meeting on: May 27, 2021

TO: Shore Protection Board

FROM: Kirk W. Blouin, Town Manager

VIA: Robert Weber, Coastal Program Manager

RE: Recommendation to Town Council Regarding the Proposed FY 2022 Coastal Management Program Budget
Item X.

DATE: May 21, 2021

STAFF RECOMMENDATION

Town staff requests the Shore Protection Board (SPB) provide a recommendation to Town Council regarding the proposed FY 2022 Coastal Management Program Budget.

GENERAL INFORMATION

Following a year of high costs due to heavy construction with multiple sand placement projects, the proposed FY 2022 Coastal Management Program budget (as anticipated) has lower costs. Planned construction projects include Sand Forepassing in Reach 2, following sand placement by the U.S. Army Corps of Engineers, and Mid-Town mitigation. The proposed budget includes annual appropriations for upcoming seawall replacement and resiliency projects and the regulatory required physical, biological, and sea turtle nesting monitoring.

One of the most important projects anticipated to start in FY 2022 is the sand search. In support the next 10-year Coastal Management Program and beyond, suitable sand is to be located offshore. An expenditure of \$725,000 is proposed for this effort.

Town staff will provide more details in presentation of the proposed budget during the SPB meeting.

FUNDING/FISCAL IMPACTS

The overall Coastal Management Program expenditures for FY 2022 total \$8,379,304.

The cost-sharing partnership with the USACE for Mid-Town (2020), the continued state cost-sharing partnerships for both Mid-Town and Phipps, and continued county cost-sharing partnerships allow the Town to continue implementing projects within the Coastal Management Program without any annual financial shortfalls in the foreseeable future.

Attachment

cc: Jay Boodheshwar, Deputy Town Manager
H. Paul Brazil, P.E., Director of Public Works
Patricia Strayer, P.E., Town Engineer
Jane Le Chainche, Director of Finance

COASTAL MANAGEMENT PROGRAM PROPOSED FY 2022 BUDGET AND 10 YEAR PLAN													
EXPENDITURES													
						Outlook							
Project Name		FY 2021 Approved	FY 2021 Anticipated	FY 2022 Proposed	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
1	APPLY AND UPDATE ISLANDWIDE SEDIMENT TRANSPORT ANALYSIS	\$ 24,000	\$ 24,000	\$ 24,000	\$ 25,000	\$ 26,000	\$ 27,000	\$ 28,000	\$ 29,000	\$ 30,000	\$ 30,000	\$ 31,000	\$ 32,000
2	ANNUAL SEDIMENT REPORT (BMA REQUIRED)	\$ 53,000	\$ 53,000	\$ 54,000	\$ 56,000	\$ 58,000	\$ 59,000	\$ 60,000	\$ 63,000	\$ 65,000	\$ 67,000	\$ 68,000	\$ 70,000
3	SEAWALL/RESILIENCY/NON-STRUCTURAL INVENTORY ASSESSMENT & ANALYSIS	\$ -		\$ -	\$ -	\$ -	\$ -	\$ 143,000	\$ -	\$ -	\$ -	\$ -	\$ -
4a	SEAWALL/RESILIENCY/REPLACEMENT	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000
4b	SEAWALL/BULKHEAD REPAIRS	\$ -	\$ 759,000	\$ 300,000									
5	GROIN ASSESSMENT	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 86,000	\$ -	\$ -	\$ -	\$ -	\$ -
6	GROIN REHABILITATION	\$ 500,000	\$ 500,000	\$ -	\$ 500,000								
7	FLOODING AND CLIMATE CHANGE	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
8	LOBBYING	\$ 3,000	\$ 3,000	\$ 120,000	\$ 120,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000
9	DUNE VEGETATION MAINTENANCE AT MID-TOWN MUNICIPAL BEACH	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 13,000	\$ 13,000	\$ 13,000	\$ 13,000	\$ 13,000	\$ 14,000
10	REGIONAL SAND NEEDS/SAND SEARCH	\$ -	\$ -	\$ 725,000	\$ 725,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
11	GENERAL COASTAL ENGINEERING	\$ 58,000	\$ 58,000	\$ 60,000	\$ 62,000	\$ 64,000	\$ 66,000	\$ 69,000	\$ 70,000	\$ 72,000	\$ 74,000	\$ 75,000	\$ 77,000
12	BMA PHYSICAL MONITORING	\$ 177,000	\$ 175,000	\$ 180,000	\$ 184,000	\$ 187,000	\$ 191,000	\$ 195,000	\$ 199,000	\$ 203,000	\$ 209,000	\$ 213,000	\$ 219,000
13	BMA SEA TURTLE NESTING MONITORING	\$ 220,000	\$ 242,000	\$ 242,000	\$ 242,000	\$ 242,000	\$ 242,000	\$ 280,000	\$ 280,000	\$ 280,000	\$ 280,000	\$ 280,000	\$ 280,000
14	BMA BIOLOGICAL MONITORING	\$ 232,000	\$ 232,000	\$ 239,000	\$ 246,000	\$ 254,000	\$ 261,000	\$ 269,000	\$ 277,000	\$ 285,000	\$ 291,000	\$ 297,000	\$ 306,000
15	COASTAL MANAGEMENT PROGRAM OPERATING EXPENSES	\$ 192,754	\$ 194,175	\$ 199,322	\$ 205,302	\$ 211,461	\$ 217,805	\$ 224,339	\$ 231,069	\$ 238,001	\$ 245,141	\$ 252,495	\$ 260,070
16	ANNUAL DEBT SERVICE PAYMENT	\$ 542,232	\$ 542,232	\$ 540,982	\$ 546,107	\$ 540,732	\$ 539,982	\$ 543,607	\$ 546,481	\$ 543,731	\$ 541,831	\$ 541,831	\$ 541,831
17	SAND TRANSFER PLANT MAINTENANCE	\$ 20,000	\$ 375,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000
18	MAINTENANCE DREDGING, SAND PLACEMENT EXTENSION (EIS)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
19	BMA BEACH TILLING (REACHES 1, 2, 3, 4, AND 7)	\$ 10,000	\$ 8,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000
20	BMA ESCARPMENT REMOVAL (REACHES 1, 2, 3, 4, AND 7)	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000
21	MID-TOWN SEAWALL REPLACEMENT	\$ 2,000,000	\$ 2,000,000	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000	\$ -	\$ -	\$ -	\$ -	\$ -
22	SAND FOREPASSING	\$ -	\$ -	\$ 660,000	\$ -	\$ 700,000	\$ -	\$ 742,000	\$ -	\$ 787,000	\$ -	\$ 803,000	\$ -
23	MID-TOWN BEACH RENOURISHMENT ENGINEERING/PERMITTING	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 126,000	\$ -	\$ -	\$ -	\$ -
24	MID-TOWN BEACH RENOURISHMENT CONSTRUCTION	\$ -	\$ -	\$ -	\$ -	\$ 1,000,000	\$ -	\$ -	\$ -	\$ 22,000,000	\$ -	\$ -	\$ -
	HURRICANE MATTHEW [*CARRYOVER FROM FY 19]	\$ 1,600,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	HURRICANE IRMA [*CARRYOVER FROM FY 20]	\$ 4,300,000	\$ 1,000,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
25	MID-TOWN DETAILED DESIGN AND PERMITTING (BREAKERS/CLARKE AVENUE)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
26	OBTAIN FEDERAL COST-SHARE FOR MID-TOWN	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
27	MID-TOWN MITIGATION - CORAL NURSERY/TRANSPLANTATION	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000
28	MID-TOWN MITIGATION - ARTIFICIAL REEF CONSTRUCTION [*CARRYOVER FROM FY 16]	\$ -		\$ 1,000,000	\$ 2,000,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
29	PHIPPS NOURISHMENT ENGINEERING/PERMITTING	\$ -	\$ -	\$ -	\$ -	\$ 387,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
30	PHIPPS OCEAN PARK/REACH 7 BEACH NOURISHMENT CONSTRUCTION	\$ -	\$ -	\$ -	\$ -	\$ 21,800,000	\$ -	\$ -	\$ -	\$ 1,200,000	\$ -	\$ -	\$ -
	HURRICANE MATTHEW [*CARRYOVER FROM FY 19]	\$ 1,000,000	\$ 400,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	HURRICANE IRMA [*CARRYOVER FROM FY 20]	\$ 9,000,000	\$ 7,905,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
31	REACH 8 - EIS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
32	REACH 8 - SOUTH END PALM BEACH RESTORATION PERMITTING	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
33	REACH 8 - SOUTH END PALM BEACH RESTORATION (INITIAL CONSTRUCTION)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	HURRICANE IRMA [*CARRYOVER FROM FY 20]	\$ 1,000,000	\$ 700,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	HURRICANE DORIAN	\$ 1,400,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
34	REACH 8 - CONSTRUCTION ACCESS EASEMENT AND SITE RESTORATION	\$ 80,000	\$ 80,000	\$ -	\$ -	\$ 80,000	\$ -	\$ -	\$ -	\$ 80,000	\$ -	\$ -	\$ -
35	REACH 8 - DUNE/BEACH CONSTRUCT CONCURRENTLY WITH MID-TOWN OR PHIPPS	\$ -	\$ -	\$ -	\$ -	\$ 2,750,000	\$ -	\$ -	\$ -	\$ 3,100,000	\$ -	\$ -	\$ -
36	REACH 8 - BIOLOGICAL MONITORING	\$ -	\$ -	\$ -	\$ -	\$ 64,000	\$ 66,000	\$ 68,000	\$ 70,000	\$ 72,000	\$ 74,000	\$ 75,000	\$ 77,000
37	REACH 8 - PROJECT ENGINEERING REPORT	\$ -	\$ -	\$ -	\$ -	\$ 13,000	\$ 14,000	\$ 14,000	\$ 15,000	\$ 16,000	\$ 16,000	\$ 17,000	\$ 18,000
38	BEACH TILLING (REACH 8)	\$ 2,500	\$ -	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500
39	ESCARPMENT REMOVAL (REACH 8)	\$ 2,500	\$ -	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500
40	BEACH CLEANING (PUBLIC BEACHES)	\$ 50,000	\$ 44,700	\$ 50,000	\$ 50,000	\$ 55,000	\$ 55,000	\$ 55,000	\$ 55,000	\$ 55,000	\$ 55,000	\$ 55,000	\$ 55,000
	TOTALS	\$ 23,686,986	\$ 16,515,107	\$ 8,379,304	\$ 8,946,409	\$ 32,427,193	\$ 5,733,787	\$ 6,774,946	\$ 3,459,550	\$ 30,524,732	\$ 3,380,972	\$ 4,206,326	\$ 3,434,901

TOWN OF PALM BEACH

Information for Shore Protection Board Meeting on: May 27, 2021

TO: Shore Protection Board

FROM: Kirk W. Blouin, Town Manager

VIA: Robert Weber, Coastal Program Manager

RE: Responsibility and Methods for Beach Cleaning and Disposal
Item XI.

DATE: May 21, 2021

STAFF RECOMMENDATION

Town staff requests the Shore Protection Board (SPB) review the information below and provide any policy recommendations to Town Council deemed necessary.

GENERAL INFORMATION

In 2018, a comprehensive review of Town operations was initiated by Town Council in an effort to both find new revenue opportunities and reduce expenditures. 75 Town-wide areas of operations were adjusted to save the Town more than \$2.5 million annually. One of the operations effected was beach cleaning. Prior to 2018, the Town's beach cleaning efforts included private beaches. Beach cleaning by the Town was performed from the north end of the Town at the Lake Worth inlet south through the Mid-Town beaches, and then from Sloan's Curve to Kreusler Park.

With the increased volume of seaweed washed up on the Town's beaches in 2019, the Town has since contracted with Universal Beach Services to perform beach cleaning services at the public beaches at Mid-Town (Reach 4) and Phipps Ocean Park (Reach 7). These beach cleaning services include first picking up litter and then raking and burying seaweed along the wetted beach. Beach cleaning is performed on Mondays and Fridays. The work is permitted by FDEP and coordination occurs with the Town's sea turtle nesting monitor.

Private property owners along the shoreline are responsible for keeping their beaches clean (Section 74-188, Town Code). This includes debris that washes up on the private beaches. Through private contracts, Universal Beach Services and BeachKeeper performs beach cleaning services on private beaches throughout the Town. This includes the condominiums in Reaches 7 and 8. Private property owners are also responsible for the disposal of their garbage or debris. Garbage or debris removed from private beaches and placed near garbage and trash receptacles at public beach accesses is considered illegal dumping and is appropriately addressed through enforcement of the Town's Code of Ordinances.

Planned beach cleanup events by non-profit organizations occur at public beach accesses. These periodic events are scheduled with participation from Town staff so that collected garbage is appropriately picked up from the accesses during scheduled trash routes. This has been endorsed by Town Council.

When vessels wash onshore, a protocol must be adhered to as outlined by the Florida Fish and Wildlife Conservation Commission (FWC). Depending on the nature of the incident, this can also include involvement by the U.S. Coast Guard. When such an event occurs on public beaches, the Town must work within the timeframe provided by the FWC (and USCG) and cannot often take action before the vessel begins to break up. This delay is because the owner of the vessel is provided an opportunity to remove their property first before an entity such as the Town can take action. When such an event occurs on private beaches, this complicates matters even more. Permission must be granted by the private property owner for a contractor to access the vessel on a private section of beach. In only two cases in recent history has the Town Manager's Office directed Town staff to remove a vessel from a private beach. During one of those occasions involving a large vessel in 2016, the Town followed the guidelines set forth by the FWC and sought cost-sharing reimbursement through the FWC Derelict Vessel Removal Grant Program.

FUNDING/FISCAL IMPACTS

The Town continues to budget \$50,000 for beach cleaning services on the public beaches in Mid-Town and Phipps Ocean Park. This budget also includes two (2) unscheduled event pickups for debris that washes up Mid-Town, Phipps, or any of the public beach accesses managed by the Town.

cc: Jay Boodheshwar, Deputy Town Manager
H. Paul Brazil, P.E., Director of Public Works
Patricia Strayer, P.E., Town Engineer
Jane Le Chainche, Director of Finance

TOWN OF PALM BEACH

Information for Shore Protection Board Meeting on: May 27, 2021

TO: Shore Protection Board

FROM: Kirk W. Blouin, Town Manager

VIA: Robert Weber, Coastal Program Manager

RE: Policy on Dune Vegetation
Item XII.

DATE: May 21, 2021

STAFF RECOMMENDATION

Town staff requests the Shore Protection Board (SPB) review the information below and provide any policy recommendations to Town Council deemed necessary.

GENERAL INFORMATION

The current Town Council-adopted 10-Year Coastal Management Program budget includes an annual line item in the amount of \$10,000 for dune vegetation maintenance within our coastal project areas. This annual line item was included following recommendations received by Woods Hole Group in their 2013 Technical Review of Proposed Coastal Management Program.

Annual maintenance of dune vegetation best ensures a healthy and stable dune system within the Town's project areas. The locations that have received dune vegetation include Reaches 3 and 4 (Mid-Town Beach Renourishment), Reach 7 (Phipps Ocean Park Beach Nourishment), and Reach 8. Typical maintenance of these areas include the removal or trimming of exotic or invasive vegetation, and replanting with native sea oats.

Woods Hole Group has previously advised the Town not to invest heavily in dune planting along sections of the shoreline that do not have sufficient beach width to promote maturation of the plants. However, the community, including both individual SPB members and Town Council members, have expressed a desire for the Town to perform planting in dune-only areas.

One way to meet expectations from the community, while considering the recommendations from Woods Hole Group, was to consider planting more mature sea oats. The Town's plans and specifications have been modified, following previous SPB recommendations, to plant a higher density of sea oats (12 inches on center rather than 18 inches on center) and to use sea oat liners with heights of 18 inches rather than 12 inches. This ensures that when the sea oats are planted 6 inches into the sand that at least 12 inches of the plant is visible above the surface of the sand. In a best practices effort not to impact sea turtle nesting, no irrigation is done following the dune

planting. In addition, watering can promote the growth of exotic and invasive vegetation that could negatively impact native vegetation.

The recently completed Phipps Ocean Park Beach Nourishment project and the Reaches 7 and 8 Dune Restoration projects did not include dune plantings as the sand placement efforts were not completed until the first week in May. Due to the large number of sea turtle nests to avoid, plantings will not occur until nesting season has ended in November 2021. New plantings are also planned to be placed in Reach 2 within the Sand Forepassing sand placement area (between Palmo Way and Colonial Lane) when that project is constructed in late 2021 or early 2022.

FUNDING/FISCAL IMPACTS

An appropriation of \$10,000 was included within the FY 2020 Coastal Management Program budget for dune vegetation maintenance. Beach and dune project-related sea oat plantings are included within the respective project construction costs.

cc: Jay Boodheshwar, Deputy Town Manager
H. Paul Brazil, P.E., Director of Public Works
Patricia Strayer, P.E., Town Engineer
Jane Le Chainche, Director of Finance

TOWN OF PALM BEACH

Information for Shore Protection Board Meeting on: May 27, 2021

TO: Shore Protection Board

FROM: Kirk W. Blouin, Town Manager

VIA: Robert Weber, Coastal Program Manager

RE: Shore Protection Board Member Tasks
Item XIII.

DATE: May 21, 2021

STAFF RECOMMENDATION

Town staff requests the Shore Protection Board (SPB) review the information below and provide any additional input deemed necessary.

GENERAL INFORMATION

During the February 11, 2021 SPB Workshop, goals and objectives were discussed for the 2021 calendar year. Individual members expressed interest in specific topics to provide input and assistance to Town staff. Those assignments included the following:

Communication - Melissa Ceriale and Warren Belmar
Coastal Resiliency – Reuben Johnson and James Gavigan
Groins and Seawalls - Vladimir Rapoport
Easements for Cost-sharing - Warren Belmar and Reuben Johnson
Public Access for State and Federal funding - Reuben Johnson
Inlet – Kane Baker

Typically, the SPB does not meet following the April/May meeting until the October/November meeting. For this calendar year, Town staff suggests that Public Works meet and work individually with each SPB member on their assigned task during the summer. All SPB members would be updated periodically on these topics, as deemed necessary by the individual SPB member.

Should there be more topics to be assigned or if members would prefer re-assignment, this can be done during the May 27 SPB meeting.

cc: Jay Boodheshwar, Deputy Town Manager
H. Paul Brazil, P.E., Director of Public Works
Patricia Strayer, P.E., Town Engineer