

**MINUTES OF THE SHORE PROTECTION BOARD
HELD ON THURSDAY, JANUARY 21, 2016**

I. CALL TO ORDER

The meeting of the Shore Protection Board was called to order on Thursday, January 21, 2016, at 9:00 a.m. in Town Council Chambers.

II. ROLL CALL

The following members were present: Chairman E. Llwyd Ecclestone, Vice Chair Gerald Frank, Mr. Lee David Goldstein, Mr. Reuben B. Johnson, Mr. Lewis Katz and James C. Gavigan.

III. PLEDGE OF ALLEGIANCE

Chairman Ecclestone led the Pledge of Allegiance.

IV. APPROVAL OF AGENDA

Motion to approve the agenda was made by Vice Chair Frank and seconded by Mr. Baker. The motion carried unanimously.

V. ELECTION OF CHAIR FOR THE 2016 SHORE PROTECTION BOARD

Chairman Ecclestone welcomed the newest member, James C. Gavigan to the Shore Protection Board and congratulated Mr. Johnson on his reappointment.

Mr. Goldstein made a motion to appoint E. Llwyd Ecclestone for Chair and was seconded by Mr. Johnson. All were in favor.

VI. ELECTION OF VICE CHAIR FOR THE 2016 SHORE PROTECTION BOARD

Mr. Goldstein made a motion to appoint Gerald Frank for Vice Chair and was seconded by Mr. Johnson. All were in favor.

VII. APPROVAL OF THE MINUTES OF THE DECEMBER 4, 2015 MEETING

Motion to approve the minutes of the December 4, 2015, meeting was made by Vice Chair Frank and seconded by Mr. Goldstein. The motion was unanimously approved.

VIII. COMMUNICATIONS FROM SHORE PROTECTION BOARD MEMBERS

Mr. Katz is pleased with the progress being made on the design, execution and monitoring of the various beach re-nourishment projects.

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35 Mr. Frank thanked Mr. Katz for bringing dune planting to the Shore Protection Board's attention.

36 Mr. Johnson thanked the staff for providing a historical timeline of the Reach 7 projects that have
37 taken place over the years in the meeting back-up and commented on how helpful this information
38 is to residents and the members of the board.

39 Mr. Goldstein told Mr. Weber that he plans to use his historical report in the next Citizens'
40 Association News and Views newsletter.

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42 Mr. Gavigan thanked Coastal Manager Weber and Public Works Director Brazil for the literature
43 and information they have provided to him in order to help him prepare for his term on the
44 Board.

45 Mr. Baker congratulated Mr. Ecclestone on his reappointment as Chair and commented on how
46 glad he is about the groin rehabilitation workshops that will be taking place in the future. Mr.
47 Baker also added that he is in favor of using sargassum seaweed on the dunes.

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49 **IX. COMMUNICATIONS FROM CITIZENS - 3 MINUTE LIMIT PLEASE**

50 Diane Buhler, Founder of the non-profit group "Friends of Palm Beach," informed the Shore
51 Protection Board about her organization's monthly beach clean-up efforts that are coordinated
52 with the Town's Public Works and Police Departments. Ms. Buhler hopes that by getting the
53 word out about the organization that the residents will cooperate by offering to volunteer and/or
54 increase beach access points.

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56 Mr. Johnson asked Ms. Buhler if she is able to access the beach on Sandpiper and Garden (near
57 Reach 2). Ms. Buhler answered that she is only able to access Reach 2 from Mediterranean to
58 Inlet and Mr. Johnson replied that he will help give her access to the area that's north of the
59 Beach Club.

60 Mr. Frank mentioned that in addition to the need for volunteers, there is a cost involved so her
61 fund raising efforts should be emphasized. A discussion ensued about how well Ms. Buhler's
62 organization is set-up, the work they do and the benefit it provides to the Town.

63
64 **X. CURRENT SHORELINE CONDITIONS [Robert Weber, Coastal Program Manager]**

65 Robert Weber, Coastal Program Manager gave a power point presentation on the current shoreline
66 conditions for each reach. The presentation included photographs of the current conditions and
67 how they compared to last season's shoreline fluctuations.

- 68
69 • The project to place more sand on the dry beach in Reach 1 is scheduled to begin in
70 February.

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- The new seawall being constructed at Reach 2 should be complete by the end of March.
- The shoreline at Reach 3 near Wells Road is wider and in healthier condition compared to last year. Mr. Weber further described the efforts and projects that will be taking place there in the coming months.
- There is an escarpment forming at Reach 4 that starts at Clarke Ave and breaks off at Chilean Ave. The groins are also getting exposed but that is not an uncommon occurrence during this time of year.
- The conditions at Reach 5 are similar this year compared to last year however, more sand should be making its way South.
- The sargassum seaweed that washed onto Reach 6 over the summer has been buried.
- The dune material that was placed at Reach 7 near Sloan's Curve in April 2015, is in good shape and should receive more sand from the Phipps Ocean Park project. Mr. Weber reported that over 200,000 cubic yards of sand have been pumped from the off shore dredge at Reach 6. Mr. Katz mentioned that you can see the dense sea oats that were planted there and how they are helping the sand dune. Mr. Brazil mentioned how light the sand has gotten after the initial gray sand gets pumped onto the shore.
- Mr. Weber provided an update on the Phipps Ocean Beach/Reach 7 project and brought in a sample of sand. He further reported that the shoreline near the Lake Worth Beach/Kreusler Park area is in good shape.
- Reach 8 - Only 8,000 to 10,000 cubic yards of sand can be placed in Reach 8. A small one (1) foot escarpment has formed but otherwise the dunes are in great shape.

XI. PHIPPS OCEAN PARK/REACH 7 BEACH NOURISHMENT UPDATE [Robert Weber, Coastal Program Manager]

- Brief History of Coastal Protection Efforts
- Update of Current Construction
- Stockpile of Sand for Dune Restoration (possibly in Reaches 8, 3, and 4)
- Dune Vegetation

No discussions, questions or comments were made at this time as these items were covered during the Coastal Update.

XII. COASTAL PROJECTS UPDATE [Robert Weber, Coastal Program Manager]

- Sand Transfer Plant

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- Lake Worth Inlet/Palm Beach Harbor Maintenance Dredging
- North Ocean Boulevard Seawall Replacement
- Groin Rehabilitation
- Southern Palm Beach Island Comprehensive Shoreline Stabilization Project Environmental Impact Statement (EIS)

No discussions, questions or comments were made at this time as these items were covered during the Coastal Update.

**XIII. 2015 TOWNWIDE SEDIMENT BUDGET REVIEW AND EROSION RATES
DISCUSSION [Michael Jenkins, Ph. D., P.E., Coastal Engineering Principal, Applied
Technology & Management, Inc.]**

Mr. Jenkins, provided a report on the physical monitoring of sand volume, sand retention and distribution data that was collected in August 2015 for each reach and how it compares to previous reports.

Mr. Gavigan asked Mr. Jenkins where the sand is measured from. Mr. Jenkins responded that they measure from the mean high water elevation from the previous year. Mr. Jenkins also added that he measures the gains and losses of sand as well as the current trends.

Overall the general shoreline trends are good and the town-wide gain is 12.9 feet over the last year or 950,000 cubic yards of sand which came from the mid-town beach sand project.

Mr. Katz asked what the Town's mean/average amount of sand loss is per year. Mr. Jenkins answered that we lose 70,000 cubic yards of sand each year on average without any sand placement projects. Mr. Brazil added that there was a huge deficit for many years especially with the Sand Transfer Plant being offline for many years so the Town is making up for that loss.

Mr. Katz asked for further explanation of the drop that was displayed in the erosion rate chart. Mr. Jenkins explained that it's a temporary drop due to wave refraction making its way around the groins. Vice Chair Frank mentioned the when escarpments get formed right after beach projects that it looks bad to the common eye however, it's a normal occurrence and that the escarpment drops into the shore and gets back on the beach. Mr. Jenkins agreed and added that it's the sand volume and long term trends that count.

Mr. Katz mentioned the need for a healthy beach with dune and sand protection over sand volume and wider beaches. Mr. Jenkins confirmed that although sand volume is not a substitute for a healthy beach, it is paramount for shoreline restoration projects. Mr. Katz asked if there is a problem with turbidity. Mr. Jenkins answered that there is turbidity but it's only a problem due to the current construction projects.

Mr. Gavigan asked what the main problem with the sand loss is and what should be the permanent solution. Mr. Jenkins replied that the Palm Beach Inlet and the historic sand management practices are the Town's main problem.

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Town Manager Bradford asked why the positive sand gains in Reach 1 are not getting to Reach 2. Mr. Jenkins explained that the location of the inlet and the way the sand moves does not allow the sand to get to Reach 2. A discussion ensued after about possible solutions for getting more sand to Reach 2.

Mr. Johnson asked about 70,000 cubic yard shortage per year that is included in the summary. Mr. Jenkins answered that we need 70,000 cubic yards of sand each year in order to reach status quo. A discussion ensued about maintaining the equilibrium of sand each year in order to mitigate the loss.

Mr. Jenkins reiterated to the Shore Protection Board that the main focus should be how can the Town can maintain a positive long term trend of sand volume and be protected from major storms based on the current sand volume and trends.

**XIV. REVIEW OF ALTERNATIVE HARDBOTTOM MITIGATION AND AN
OVERVIEW OF NEW MITIGATION STRATEGIES OCCURRING AT MID-TOWN
[Lainie Edwards, Ph.D., Program Administrator, Beaches, Inlets, and Ports Program,
Florida Department of Environmental Protection, and Cheryl Miller, President and
Principal Scientist, Coastal Eco-Group, Inc.]**

Chairman Ecclestone introduced Lainie Edwards, Program Administrator for Beaches, Ports and Inlets for the DEP. Ms. Edwards provided an overview and presentation on alternative mitigation strategies for the impact of hardbottom.

Ms. Edwards spoke about hardbottom and its importance to the ecological system. Ms. Edwards explained that anytime there is hardbottom impact from a beach project, the state requirement is to mitigate. She further explained the Uniform Mitigation Assessment Method (UMAM) found in Chapter 373.414 of the Florida Statutes which is the required assessment method to be utilized for calculating the impacts to hardbottom during beach renourishment projects.

Ms. Edwards provided options to the Shore Protection Board for mitigating any hardbottom impact.

Mr. Goldstein asked about a proposal to produce coral nurseries in order to be proactive in a mitigation strategy and receive credit based on Uniform Mitigation Assessment Method (UMAM). Mr. Goldstein said that although there is currently no hardbottom impact, the Town should be proactive and prepare a mitigation proposal ahead of time in order to save the Town money and receive credit.

A discussion ensued about the permitting process for obtaining artificial coral reefs

Cheryl Miller, Coastal Eco-Group, discussed the specifics of the current ongoing mitigation projects going on at Mid-Town with the Shore Protection Board that were authorized using UMAM.

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Chariman Ecclestone asked if the Port has been helpful to Coastal Eco-Group during their monitoring process of the coral reefs and Ms. Miller replied that they have been helpful.

Mr. Johnson asked Mr. Weber where the mitigation funds stand in the Town's shore protection budget. Mr. Weber answered that the funds for mitigation are included in the 2013 adopted budget.

XV. SCHEDULING OF NEXT SPB MEETING [H. Paul Brazil, P.E., Director of Public Works]

The next meeting is scheduled for Thursday, February 25, 2016 at 9:00 a.m.

XVI. ANY OTHER MATTERS

Mr. Goldstein asked staff to include an update on where the Town is with the permitting process for artificial reefs.

Mr. Frank asked staff to include the vulnerability for flooding on Lake Trail.

Mr. Johnson asked about the dates for the groin rehabilitation workshops. Mr. Weber answered that the dates aren't set yet but he will keep the Shore Protection Board informed.

XV. ADJOURNMENT

Chairman Ecclestone adjourned the Shore Protection Board meeting of January 21, 2016 at 11:24 a.m.

APPROVED:



E. Llwyd Ecclestone
Chairman