

**ANNUAL REVIEW FOR 2019  
OF THE CAPE MAY POINT, NJ MUNICIPAL BEACHES**



*The photo above taken on May 2, 2019 from the instrument set-up location on the dune crest near Brainard Avenue looking west shows an entire vegetated foredune slope created by west wind transport of sand. The sand supply was significantly enhanced by tide currents moving it around the point where the northwest winds could move it into the dunes. The scale is provided by two early pioneers this beach bathing season.*

PREPARED FOR: THE BOROUGH OF CAPE MAY POINT  
215 LIGHTHOUSE AVENUE  
CAPE MAY POINT, NJ 08212

PREPARED BY: STOCKTON UNIVERSITY COASTAL RESEARCH CENTER  
30 WILSON AVENUE  
PORT REPUBLIC, NJ 08241

May 30, 2019

## Table of Contents

Introduction	1
Beach Monitoring Program	1
Table 1: Summary of Shoreline and Volume Changes April 2018 to May 2019	2
Table 2: Summary of Shoreline and Volume Changes April 2016 to May 2019	3
Review of Each of the Beach Cells in Cape May Point	3
Individual Oceanfront Site Reviews—CMP-0 to CMP-8 Photos	3-21
Figures 1 to 9 Annual Cross Sections - 9 Municipal Profile Sites	6-22
Summary of Cape May Point's Oceanfront Beaches	23
Observations & Recommendations	23

**Introduction:**

The annual survey of the nine cross section stations on the municipal beach was completed by the Stockton University Coastal Research Center (CRC) on May 1 & 2, 2019. These were compared to previous surveys that were conducted April 2017 and April 2018. The findings included in this report complete the annual review of the municipal beaches just prior to the 2019 beach bathing season.

Dwight Pakan provided the CRC with the US Army Corps of Engineers (USACE) data on sand volumes placed within the Cape May City to Cape May Point region by the start of 2017. Those numbers are again provided below. No subsequent USACE work has been done since early 2017. According to Mr. Pakan, project manager for this USACE project the final effort was:

<i>Area 1 - USCG Training Center</i>	<i>611,729 CY</i>	<i>Cape May Inlet west jetty to STA 30.</i>
<i>Area 2 - Wilmington Ave</i>	<i>36,070 CY</i>	<i>STA 65 to STA 85 (centered on Wilmington Ave).</i>
<i>Area 3 - Cove</i>	<i>183,610 CY</i>	<i>3rd Ave groin to STA 25.</i>
<i>Area 4 - Lehigh Beach</i>	<i>78,184 CY</i>	<i>STA 75 in CMP State Park to Lehigh Ave groin (Lehigh Beach groin compartment plus an area east to Lighthouse Ave.).</i>
<i>Area 5 - St Pete's Beach</i>	<i>42,300 CY</i>	<i>STA 96 to STA 103 (St Pete's Beach groin compartment).</i>

The 2018 hurricane season was fortuitously limited along the mid-Atlantic shoreline. The winter season saw seven mild to moderate northeasters with a final punch this past Mother’s Day as a carbon copy to last year. The worst of these storms occurred October 28, 2018 with three events concentrated in December.

A quick walking review May 26<sup>th</sup> of the access pathways shows that each is open and trafficable with the most arduous access still at Pearl Avenue where the dune crest elevation exceeds 30 feet along with a substantial walking distance.

**Beach Monitoring Program:**

The CRC established the Borough’s beach monitoring program in 1991 to address the changes observed along the shoreline. Nine permanent monitoring survey lines were established at the following sites along the Borough’s ocean and bay shorelines. Each profile starts at a fixed reference position behind the dunes, crosses the dunes, beach and extends over 600 feet into the water, ending at a depth of 12-16 feet. Each cross section is located midway between the rock groins that define each of the beach cells. Below is a list of the monitoring site locations and the survey number and dates included in this report:

CMP-0: Lighthouse Avenue	Surveys 45, 46 & 47 ending May 1, 2019
CMP-1: Lehigh Ave	Surveys 45, 46 & 47 ending May 1, 2019
CMP-2: Whilden Ave	Surveys 45, 46 & 47 ending May 1, 2019
CMP-3: Coral Ave	Surveys 45, 46 & 47 ending May 1, 2019
CMP-4: Lake Drive	Surveys 45, 46 & 47 ending May 1, 2019
CMP-5: Cape Avenue	Surveys 45, 46 & 47 ending May 1, 2019
CMP-6: Pearl Avenue	Surveys 45, 46 & 47 ending May 1, 2019
CMP-7: Stites Avenue	Surveys 45, 46 & 47 ending May 1, 2019
CMP-8: Alexander Avenue	Surveys 45, 46 & 47 ending May 1, 2019

The summary table below compiles the annual shoreline and beach volume change information between 2018 and 2019. The shoreline changes are based on the advance (seaward) or the retreat (landward) of

the zero elevation datum position on each cross section. This elevation represents the “shoreline” position; it approximates the proper change horizontally for any shoreline point selected on the beachface subject to daily wave run-up. The unit sand volume computed for the cross section in cubic yards of sand per foot of shoreline is multiplied by the distance between the groins in Cape May Point to arrive at the net volume in the right column for each cell.

**Table 1.**  
**Profile Shoreline & Sand Volume Changes**  
**April 2018 to May 2019**

Profile Number	Shoreline Change (feet)	Volume Change (yds <sup>3</sup> /ft)	Cell Distance (feet)	Net Volume Change (yds <sup>3</sup> )
CMP-0	4.4	3.94	420	1,655
CMP-1	23.2	15.66	445	6,969
CMP-2	24.3	18.35	460	8,443
CMP-3	11.6	11.33	450	5,096
CMP-4	-41.7	-5.17	675	-3,486
CMP-5	-13.7	1.74	690	1,198
CMP-6	22.3	13.56	710	9,625
CMP-7	-12.8	-1.92	680	-1,304
CMP-8	-6.3	2.50	660	1,651
<b>Total Volume Change for Cape May Point =</b>				<b>29,848</b>

Over the past year from April 2018 to May 2019, the Borough’s beaches recorded a gain of 29,848 cubic yards of sand focused largely on the eastern ends of the Borough’s shoreline. The losses were seen at two sites (CMP 4, and 7) while two sites (CMP 5 and 8) remained relatively constant, and four sites (CMP 1, 2, 3 and 6) gained sand. The annual shoreline shifts were seaward in all but CMP 4, 5, 7, and 8, with the Lake Drive site retreating 42 feet landward and losing a modest sand volume.

The summary table below compiles the shoreline and beach volume change information from April 2017 to beach conditions in May, 2019 covering the last two years of surveying. Once again, the easternmost five sites gained sand as the material present in the Nature Conservancy migrated southwest into Cape May Point adding to these beaches. Loss was observed at CMP-5, and CMP-7 in single digits for the number of cubic yards of sand lost. However, both of these sites saw over 30 feet of shoreline retreat in the past two years.

**Table 2**  
**Profile Shoreline & Sand Volume Changes**  
**April 2017 to May 2019**

Profile Number	Shoreline Change (feet)	Volume Change (yds <sup>3</sup> /ft)	Cell Distance (feet)	Net Volume Change (yds <sup>3</sup> )
CMP-0	9.3	9.93	420	4,169
CMP-1	6.4	8.90	445	3,958
CMP-2	15.7	24.28	460	11,169
CMP-3	2.3	18.69	450	8,409
CMP-4	-9.9	6.83	675	4,608
CMP-5	-37.2	-2.83	690	-1,955
CMP-6	4.6	14.45	710	10,257
CMP-7	-30.1	-4.47	680	-3,036
CMP-8	-7.3	8.56	660	5,652
<b>Total Volume Change for Cape May Point =</b>				<b>43,232</b>

In the two year interval between April of 2017 and May of 2019 the Borough beaches gained 43,232 cubic yards of new sand likely related to the most recent efforts by the US Army Corps of Engineers. The work completed in late 2016 within the Borough directly placed 110,484 cubic yards of new sand on some Borough beaches. The material continues to move from the beaches in Cape May City and the Nature Conservancy toward the eastern Cape May Point shoreline and to a smaller degree around the point toward the Alexander Avenue groin cell.

**Review of Each of the Beach Cells in Cape May Point:**

This section describes the changes documented at each profile location. Individual site descriptions are included for each profile.

**Lighthouse Avenue**



*Figure 1. This panoramic view from April 12, 2018 was taken from the dunes to provide an extended view of the entire beach cell. This expanse remains a substantially wider beach as a result of the USACE work.*

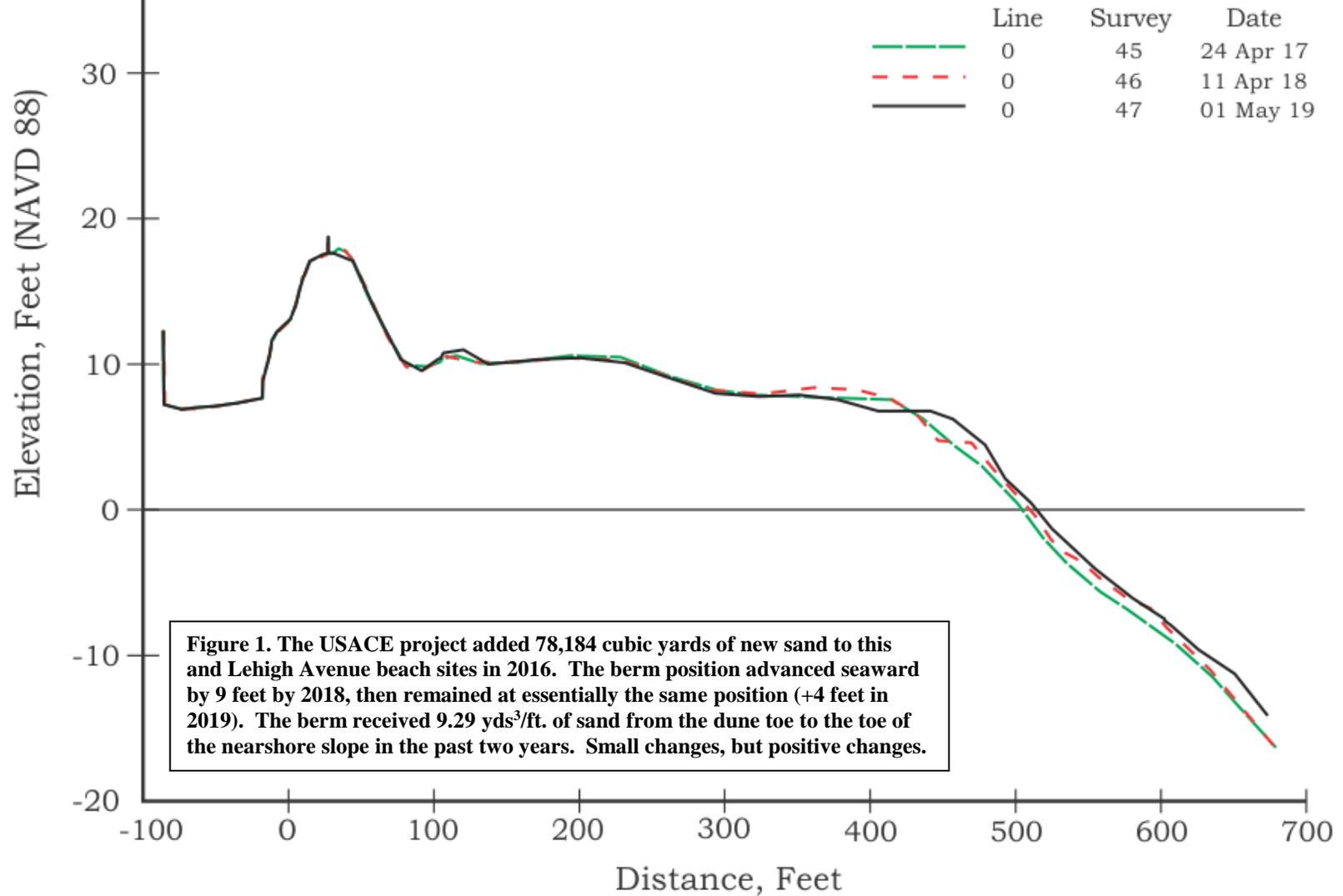
CMP-0 is the northeastern-most cell that borders the State Park and is bounded to the southwest by a rock groin. This location has benefited tremendously from the USACE Lower Cape May Meadows – Cape May Point restoration project, where initial construction was completed June 2007. The project added over 250 feet of recreational beach berm and established a stable dune system 100 feet wide at the toe with a crest elevation of 18 feet NAVD88. Prior to the initial project the beach was narrow; a small dune armored with tensor mats on the seaward slope protecting the exposed dune system from severe erosion. There is no public access from Lighthouse Avenue to the beach.

The USACE authorized a second maintenance project with construction from November 2012 to January 2013. The project restored the design beach width and elevation. The beach width increased by 58 feet with 63.13yds<sup>3</sup>/ft. of sand added per foot of shoreline seaward of the dune toe. Following the project the beach elevation ranged from 10-11 feet NAVD 88 and extended 275 feet seaward of the dune toe.

In 2016, USACE activity added 78,184 cubic yards of new material to this site and the Lehigh Avenue beach immediately to the southwest. The cross sections show that the beach grew wider following the 2016 survey and remained stable since adding additional sand volumes in 2018 and 2019, totaling 43,232 cubic yards.

# Cape May Point - Annual Comparisons

## CMP - Line 0 - Lighthouse Avenue



## Lehigh Avenue



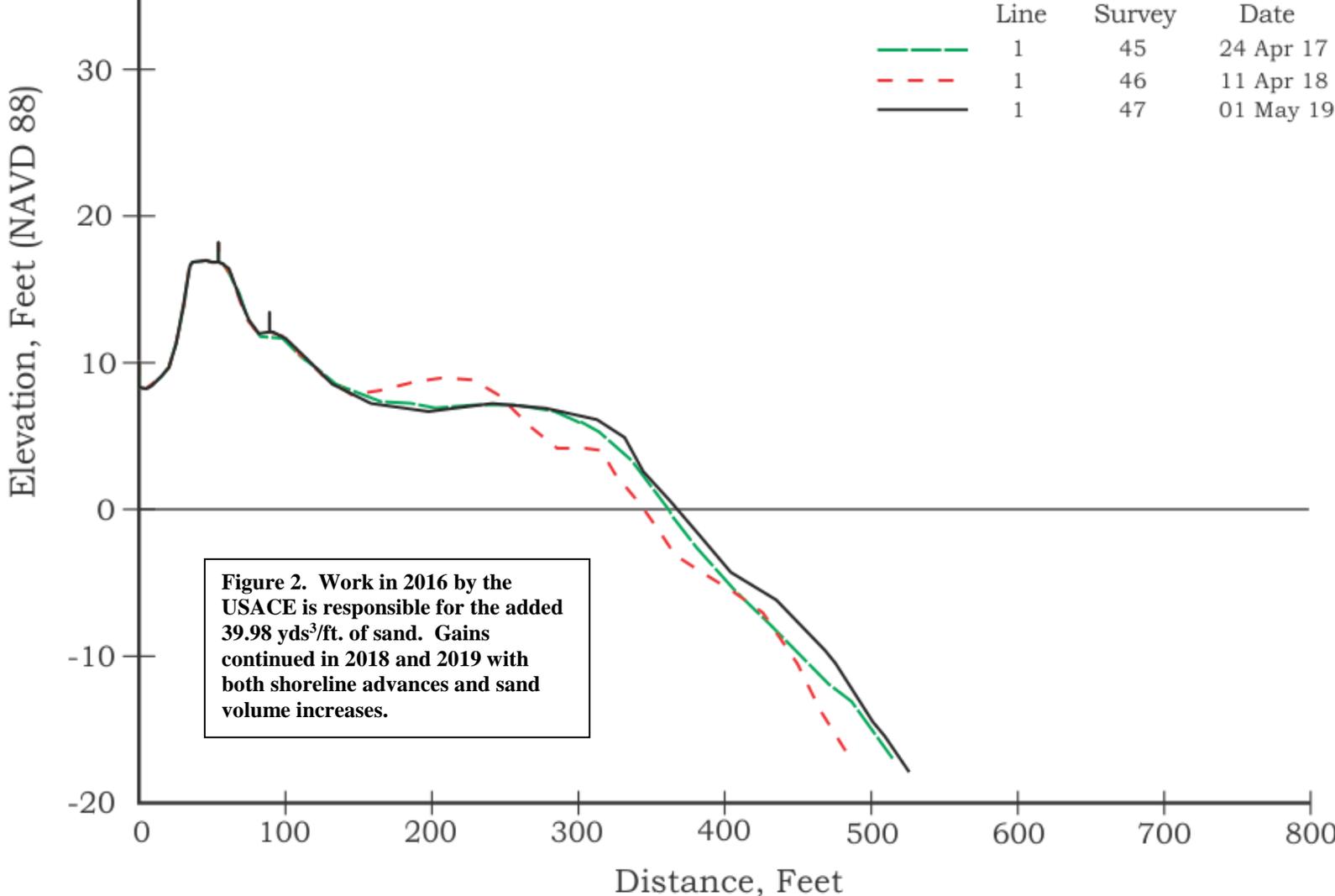
*Figure 2. Taken on April 12, 2018, the photo shows the dunes and a stable to slightly accretive beach. Dune vegetation is sparse directly seaward of the reference location, but improves to the sides. This remains the best view of this site.*

CMP-1 stretches from the Lighthouse Avenue groin to Lehigh Avenue. Prior to the initial USACE project no dry beach was present between the rock groins. Shore protection was provided by a rock seawall that armored the seaward dune slope. Beyond the groins the seafloor steeply dropped into the adjacent tidal channel. The initial USACE project re-established a dry recreational berm and covered the seawall with sand to restore the dune.

This site also received sand during the USACE authorized second maintenance project conducted between November 2012 and January 2013. The project restored the design beach width and elevation. The beach width increased by 60 feet with 56.39yds<sup>3</sup>/ft. of sand added to each foot of shoreline seaward from the dune toe. Following the project the beach elevation was 10 feet NAVD 88 and extended about 170 feet seaward of the seaward dune toe. The most recent project counted both Lighthouse and Lehigh sites as one placement volume at 78,174 cubic yards. The visual impact is like that seen at Lighthouse Avenue with both sites seeing similar shoreline advances. Sand continued to move into this groin cell in both 2018 and 2019. The addition was modest, but 8.9 and 15.7 yds<sup>3</sup>/ft. in each of the two years means that material is still arriving faster than it leaves.

# Cape May Point - Annual Comparisons

## CMP - Line 1 - Lehigh Avenue



**Figure 2. Work in 2016 by the USACE is responsible for the added 39.98 yds<sup>3</sup>/ft. of sand. Gains continued in 2018 and 2019 with both shoreline advances and sand volume increases.**

## Lehigh to Whilden Avenues



*Figure 3. This view from the beach entrance shot April 12, 2018 shows the beach from groin to groin along with the dunes. This view remains unchanged in 2019.*

The CMP-2 beach is the southeastern-most of the groin cells with an early installation of the “Beachsaver” units from 1993, which still are functioning and show on the profile cross-section at the 520-foot distance from the reference point and remain stable. Sand added to the system during the initial USACE project has resulted in the near burial of a rock seawall that served as property protection prior to the project. No additional sand was placed here during the 2013 2<sup>nd</sup> maintenance cycle.

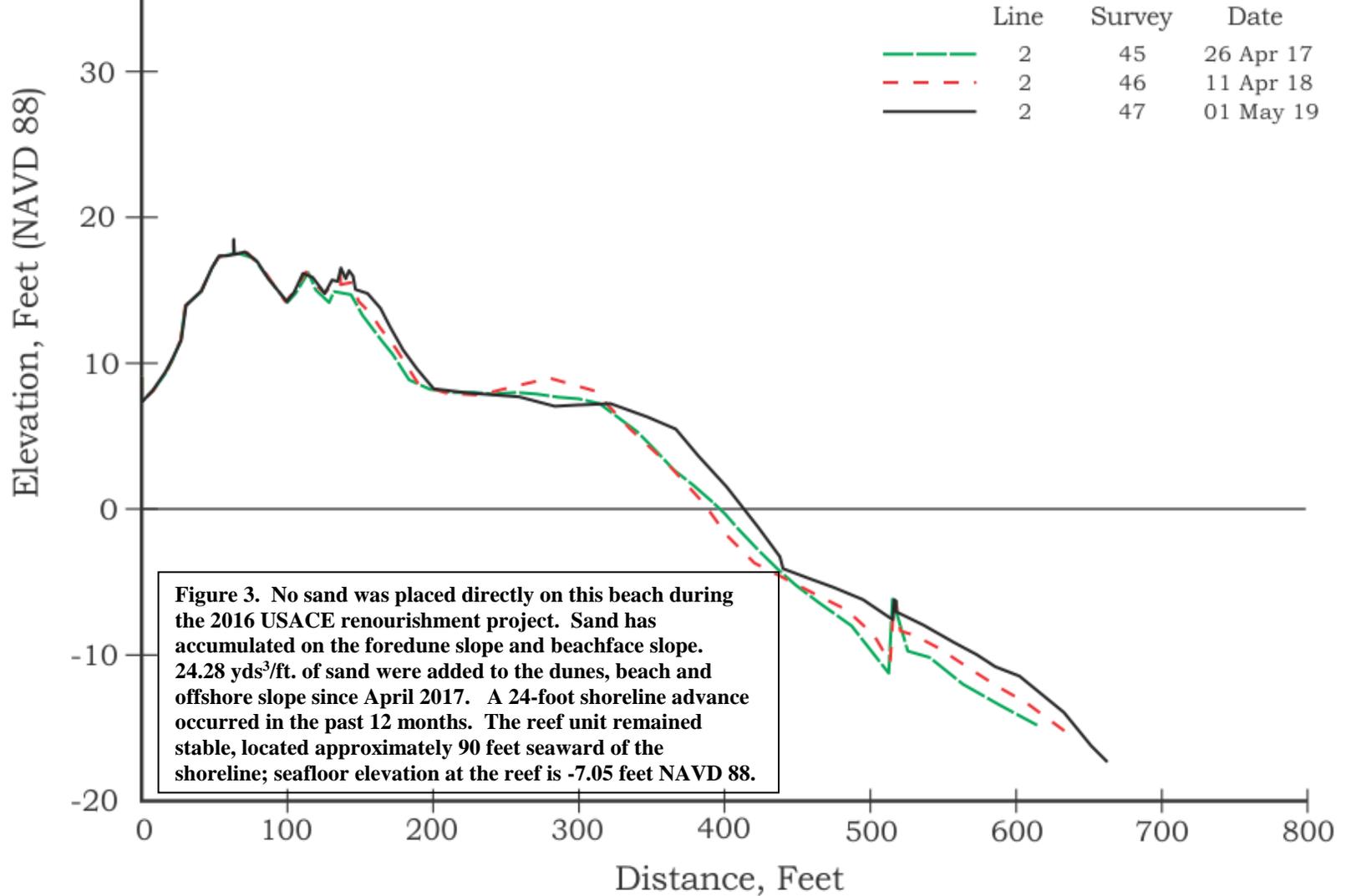
The recent cycle of USACE sand placement also did not directly put sand into this cell. However, the natural transfer of material created a 16-foot shoreline advance and an net gain of 27.64 yds<sup>3</sup>/ft. in sand volume. This gain occurred in the first year following the 2016 project with minor changes since.

The “Beachsaver” unit crest has been incrementally buried by sand reducing its exposure above the seabed from 6 to barely 2.0 feet above the nearshore seabed slope. Landward of the units, a very minor trough remains with even shallow sand slopes further seaward as material has been added offshore. There is a 90-foot area between the zero elevation position on the beach and the barriers. The top elevation has remained constant for many years, so the structure appears stable. At low tide the distance would be less than 90 feet and at high tide a bit more. The depth at the base of the beachsaver is 7.05 feet NAVD 1988.

The reef crest protrudes up to elevation -6 feet NAVD88. In this position the units are unlikely to be encountered by swimmers this season within the middle of the groin cell. Caution and restrictions should be in place closer to the groins where the shoreline sand extends outward toward the concrete reef along each groin. The lower profile exposed in the water column means less wave surge over the reef and a lower risk of swimmer injury from the surging waves. However, the concrete barriers are still exposed on the seabed and have become more of a tripping hazard and risk of cut feet on the marine growth on the structure than previous potential for wave rush or back wash of swimmers into the structures.

# Cape May Point - Annual Comparisons

## CMP - Line 2 - Wilden Avenue



## Whilden to Coral Avenues;



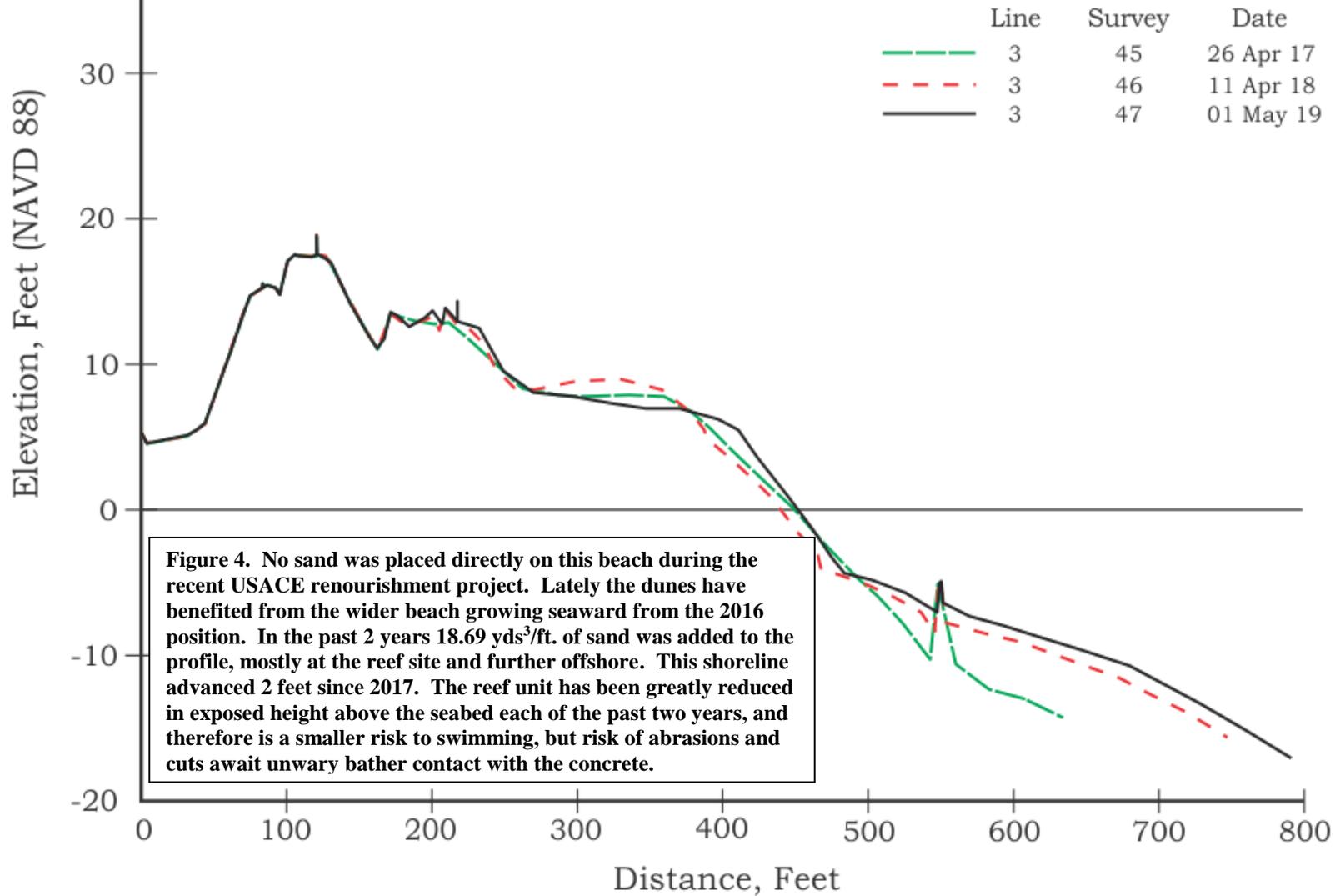
*Figure 4. This view from the profile reference position on April 12, 2018 shows the dune vegetation and the beach extent seaward of this location. As of May 1, 2019, this view remains the same with incremental grass growth seen.*

CMP-3 is bounded by rock groins at Whilden Avenue and Coral Avenue. This beach cell was the other original 1993 “Beachsaver” unit installation in Cape May Point. Sand added to the system during the initial USACE project had resulted in the near burial of the entire beach unit structure. No additional sand was placed here during the 2<sup>nd</sup> maintenance cycle (2012-2013). No new sand was added here during the 2016 USACE project either. Sand accumulated on the dunes, and minimally on the beach. The largest sand volume gain occurred at and beyond the beachsaver reef offshore creating a much flatter slope offshore.

This site has seen near burial of the “beachsaver” reefs where the elevation relief on the concrete structures has been reduced from 5.0 feet showing above the seabed in 2016 to 2.25 to 2.5 feet showing May 1, 2019. Large volumes of sand have been added further seaward of the structures. Last year’s berm has been flattened out, with material added to widen it to the beachface. Since 2017, 18.69 yds<sup>3</sup>/ft. in new sand has been added. The reef structures are presently located less than 100 feet seaward of the zero elevation position.

# Cape May Point - Annual Comparisons

## CMP - Line 3 - Coral Avenue



## Coral Avenue to Lake Drive



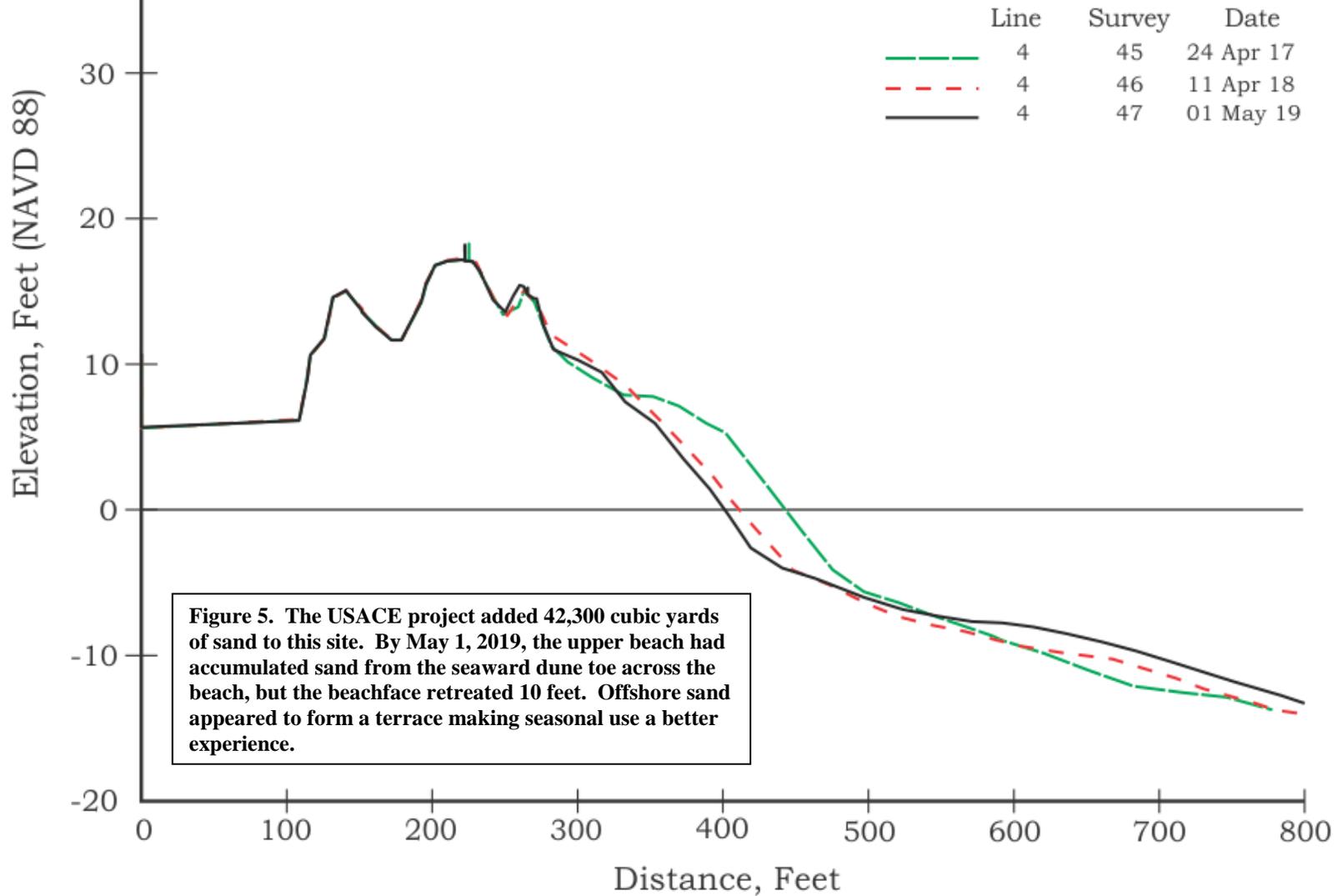
*Figure 5. This April 12, 2018 view shows the entire cell between the two groins along with the beach entrance path and the foredune vegetation. Grass growth has enhanced the dune's lower slope at this site.*

The Lake Drive (CMP-4) beach cell is bounded by the rock groins at Coral Avenue and south of Lake Drive (closer to Surf Avenue). This cell does not contain any nearshore “Beachsaver” structures but it has received sand both during the initial project and in the 2<sup>nd</sup> maintenance cycle nourishment project. Over the 2012/2013 winter, the USACE reported sand placement of 37,000 cubic yards in the Lake Drive beach cell (Dwight Pakan, USACE). This site also received modest sand placement in 2016 (42,300 cubic yards, Dwight Pakam, personal communication).

The 2016 beach berm has retreated largely between 2016 and 2017 (total of 42 feet with 10 of those feet in the past 12 months). Sand lost from the beachface has appeared in part further offshore creating a more gentle offshore slope for bathing. Sand volume decreased slightly by 5.17 yds<sup>3</sup>/ft. between 2018 and 2019, which reduced the 2017 to 2018 gain of 6.83 yds<sup>3</sup>/ft. to minimal values for the total change since the last USACE project work.

# Cape May Point - Annual Comparisons

## CMP - Line 4 - Lake Avenue



## Surf to Cape Avenues



*Figure 6. The southwest view above was taken May 2, 2019 and includes the dune vegetation, the beach extent and the western cell-defining groin.*

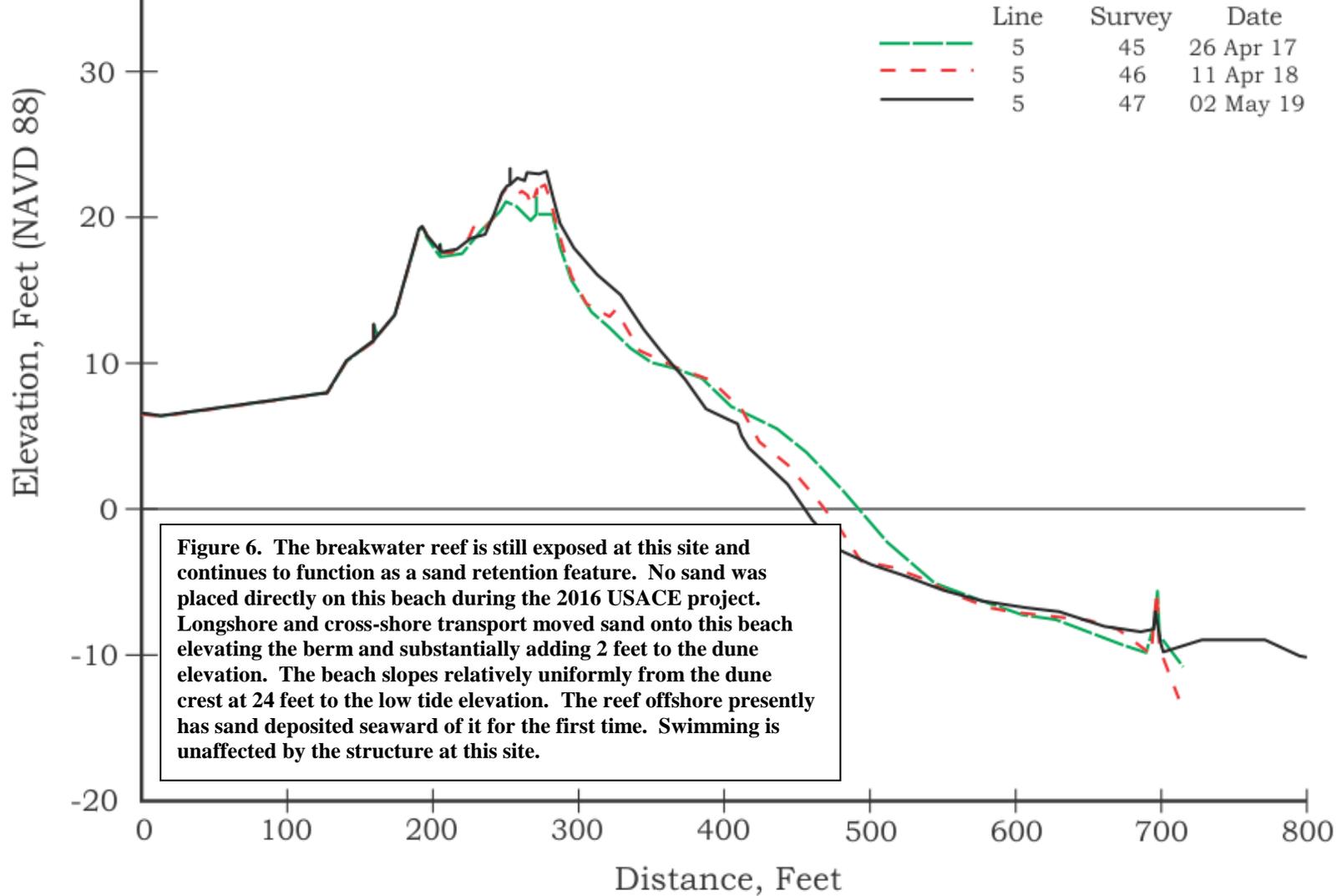
CMP-5 contains the nearshore “beachsaver” units installed in 2002 during the USACE CMP-227 experimental project. The breakwater units are still present, located just over 240-feet seaward of the zero elevation shoreline position. These units are furthest from the shoreline and lowest in elevation in the cell’s mid-section where swimming is allowed. That prevents individuals from encountering the units. In this cell the units pose little threat to recreational swimming but swimming along the rock groins should be restricted where the units are closer to shore due to sand accumulation at the rocks.

Sand did accumulate on the landward side of the beachsaver array making wave surge over them much lower in intensity, but offshore the very steep decline has been replaced by much shallower seafloor due to sand accumulation.

No sand was placed west of Lake Drive during the 2012-2013 USACE renourishment project or during the recent 2016 effort, but natural processes have moved sand from east to west along the Borough’s shoreline over time. The wider beaches have provided a source of sand for the wind to move sand onto the seaward slope and crest of the dune. This process added 1.74 yds<sup>3</sup>/ft. in sand volume combined with a 14-foot shoreline retreat landward. The majority of the shoreline retreat occurred in 2017 as 23 feet of landward shoreline movement cancelled most of the 2016 to 2017 advance.

# Cape May Point - Annual Comparisons

## CMP - Line 5 - Cape Avenue



## Cape to Pearl Avenues



*Figure 7. This view was taken May 2, 2019 near the dune crest looking southwest across the beach. The beach access pathway from Pearl Avenue traverses the trees before climbing up the landward dune slope. This past winter sand continued to accumulate, though not at the pace seen last year.*

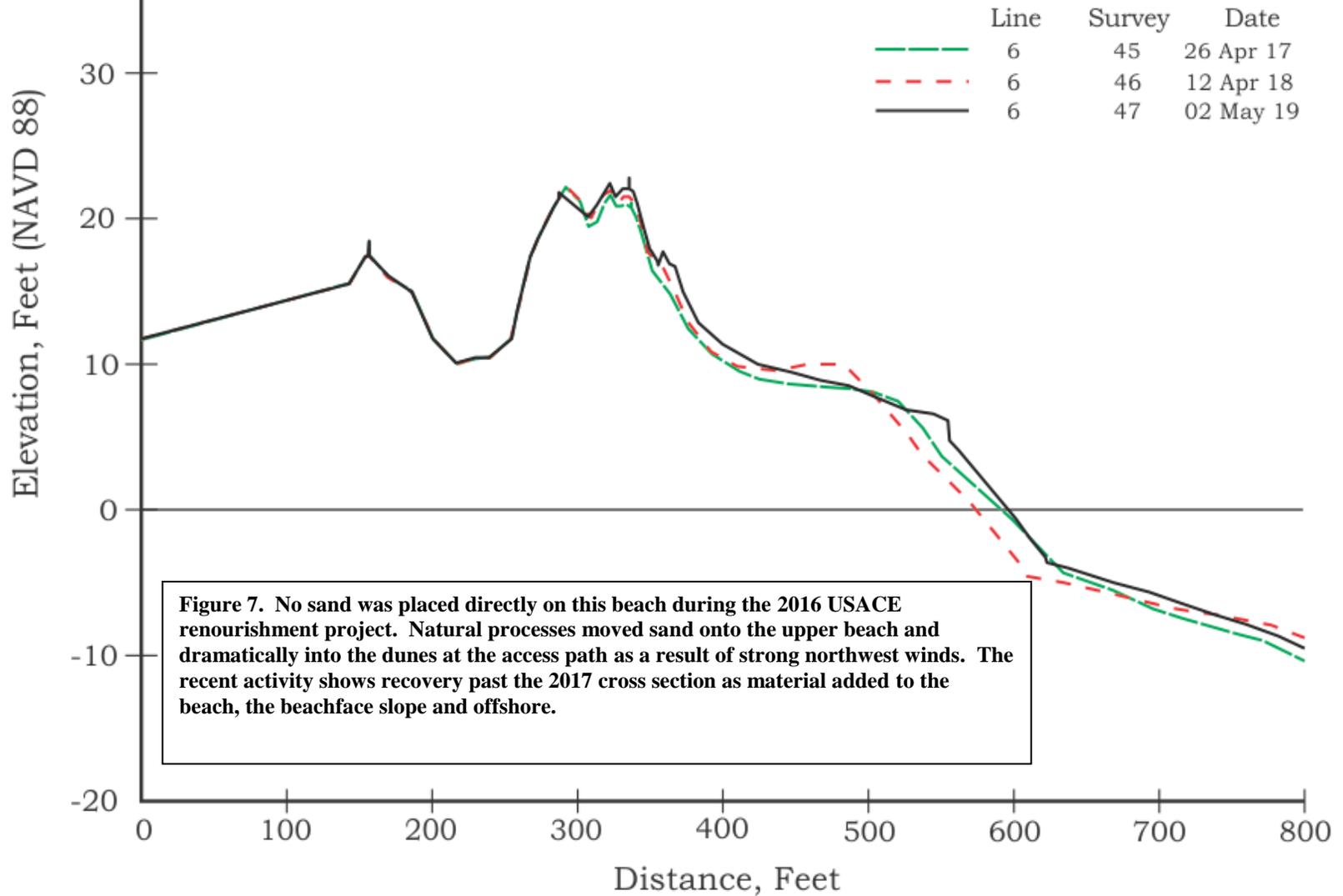
CMP-6 is bounded by the rock groins at Cape Avenue and Pearl Avenue. The nearshore bay floor contains the “Double Tee” structures that were installed as part of the USACE CMP-227 experimental project. These units were quickly buried and have remained buried by sand in the past ten annual surveys. Consequently, they have limited ability to influence additional sand retention.

Sand shed from the initial up drift federal project beaches moves into this site seasonally by predominant longshore drift. The barrier units are located on the seafloor 11 feet below the 0.0 ft. NAVD88 datum and buried by 4 feet of sand nearly 100 feet offshore. The units however might be accessible adjacent to the rock groins, and any recreational activity in the water close to the rock groins is already prohibited.

No sand was placed this far west during the USACE nourishment project, so beach building has been a result of natural processes. The entire cross section has seen sand added since 2017 from the dunes to offshore. The beachface has advanced 22 feet, mostly during 2018 adding 13.6 yds<sup>3</sup>/ft. in sand volume.

# Cape May Point - Annual Comparisons

## CMP - Line 6 - Pearl Avenue



## Pearl to Stites Avenues



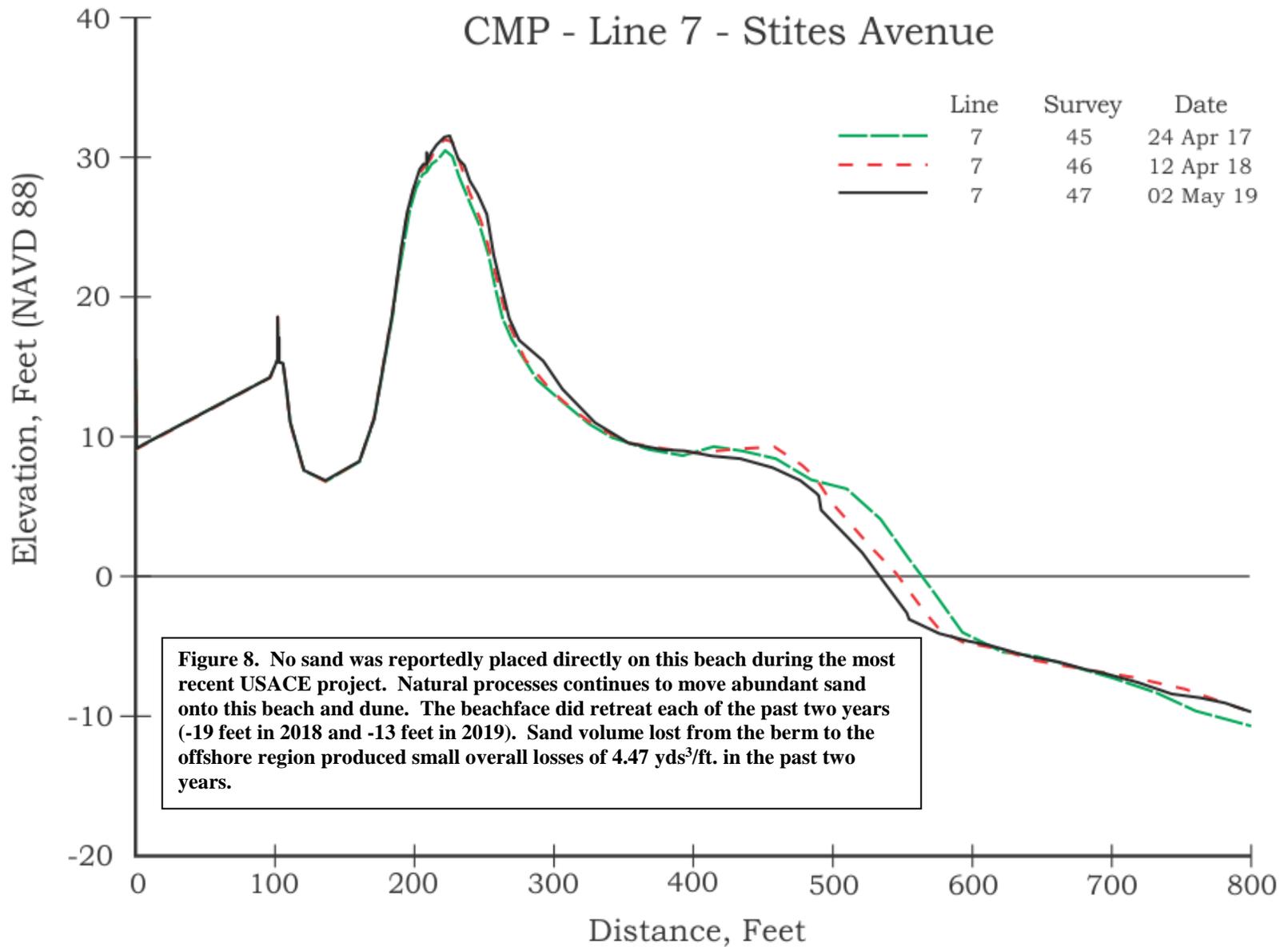
***Figure 8. The May 2, 2019 view at CMP-7 shows the scale of the dunes defending this cell's beach. The entire vegetated foredune zone behind the two early birds on the beach has been deposited since 2007 as natural wind deposition.***

Profile CMP-7, located southeast of Brainard Avenue, is bounded by the rock groins near Pearl Avenue and Stites Avenue. The cell has not received any sand directly from the past USACE beach restoration or maintenance projects. Natural processes dominated by longshore drift continue to transfer sand from east to west along the Borough's shoreline. With no submerged offshore structures present at this location the wide dry beach should provide beach patrons with abundant recreational area and good nearshore swimming conditions for the summer season.

Dune crest elevations in excess of 30 feet NAVD 1988 provide excellent storm protection, especially since the beach faces southwest where major events do not directly impact the shoreline. The 2017 to 2019 shoreline change was an advance of 5 feet combined with a gain of 14.4 yds<sup>3</sup>/ft. In the past 12 months the shoreline advanced 22 feet with 13.6 yds<sup>3</sup>/ft. in sand addition. This means that the 2018 - 2019 season was very beneficial of the past 24 months.

# Cape May Point - Annual Comparisons

## CMP - Line 7 - Stites Avenue



## Stites to Alexander Avenues



*Figure 9. This westernmost cell is defined by The Township of Lower to the west of the Alexander Avenue groin with the CMP-8 cell to the left of the groin on the beach. The figures in the distance are nearly at the Alexander Ave. groin.*

The Alexander Avenue location, CMP-8 is the western most beach cell in the Borough. Sand placement was never included for this location during the USACE projects. Natural processes have moved sand from the project beaches to this location. The beach extends seaward nearly to the tip of the western groin. Sediment loss from this cell moves onto the western Delaware Bay shoreline and shoals locally known as the “Cape May Rips”. The offset landward in the beach west of the Alexander Avenue groin means that most of the sand is transported to the nearby bay floor and does not appear on the Sunset Beach shoreline. The dominance of the tidal currents over the minimal wave transport landward for sand allows the currents to distribute sand on the shallow bay floor in the vicinity, instead of large quantities making it to the Sunset Beach shoreline.

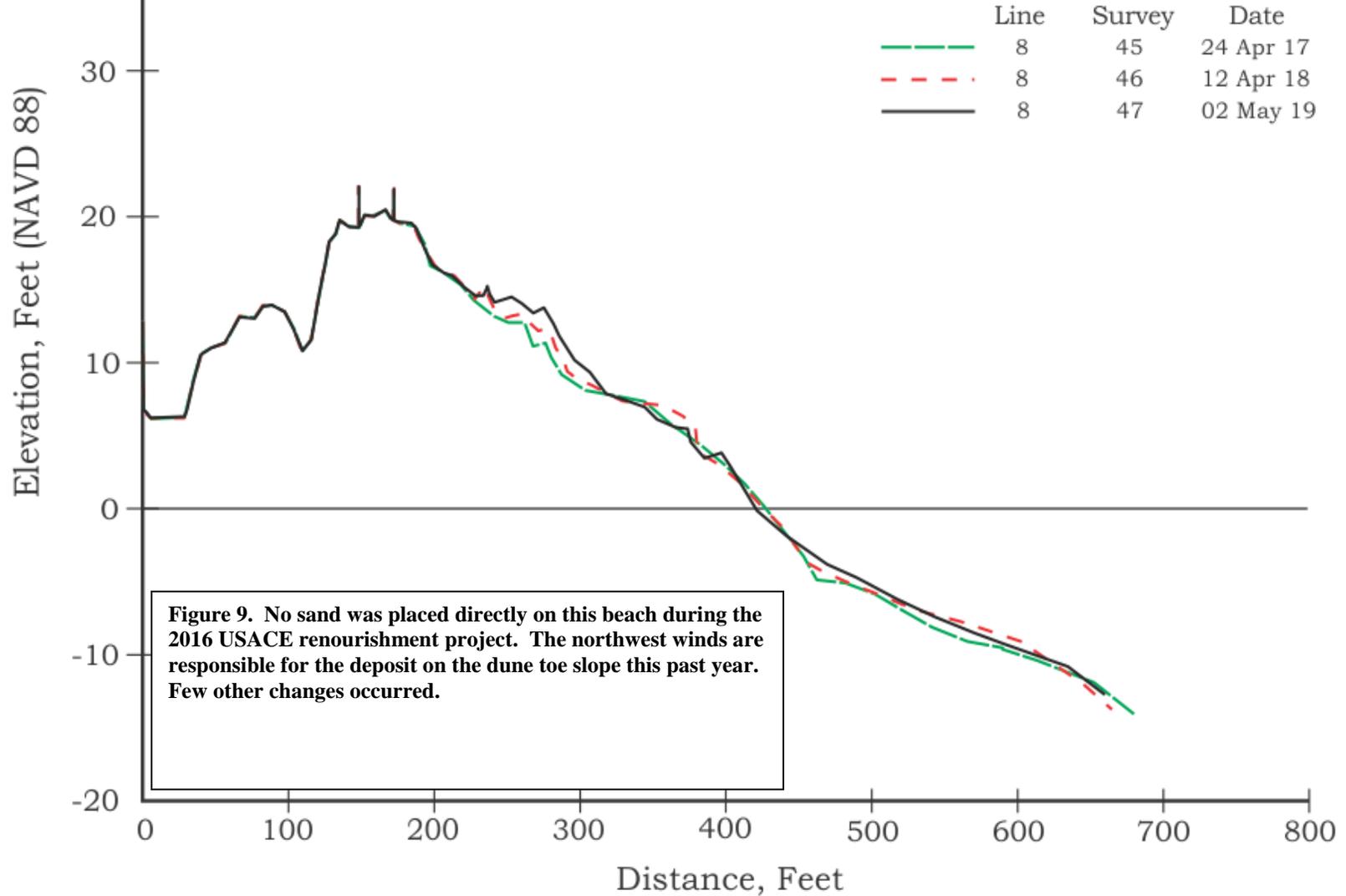
Following completion of the initial USACE project sand began to accumulate in increasing amounts, 2015 was the first year in which this accretive trend stopped. In 2016, sand accumulation resumed with a large wedge of sand appearing from the seaward dune crest seaward to the profile limits. The dune advanced seaward 20 feet as a result of sand accumulation on the seaward slope. However, by April 2017, the shoreline retreat was 39 feet as 22.33 yds<sup>3</sup>/ft. in sand volume left the cell. By April 2018, the conditions stabilized as sand added to the seaward dune slope, but changed very little elsewhere along the profile line. The 2018 annual change was a gain of 5.90 yds<sup>3</sup>/ft. as the shoreline retreated one foot. During 2018 summer and into 2019, the dune toe accumulated a large volume of wind transported sand as

northwest winds continued to influence this beach. All else remained stable to marginally accretional. The site added 2.5 yds<sup>3</sup>/ft. this past year as the shoreline retreated 6 feet. The wind deposit at the dune toe was 3.03 yds<sup>3</sup>/ft. just in the area shown in the cross section plot below.

Swimming has not been permitted at this beach, reserving it for fishing and beach sitting only.

# Cape May Point - Annual Comparisons

## CMP - Line 8 - Alexander Avenue



## Summary:

The USACE projects starting in Cape May City in 1989 have significantly increased the available sand budget from Cape May City through Cape May Point. The USACE has completed 11 Cape May City nourishment cycles including the post-Sandy effort completed January 2014. In January 2013, the USACE completed its second nourishment cycle of the Lower Cape May Meadows – Cape May Point project with placement of 345,000 cubic yards of sand. In 2016, an additional 951,893 cubic yards were placed along the entire region's shoreline. All of this sand has resulted in an influx of sand for all the Cape May Point beaches even those western beaches not directly filled. Approximately 108,697 cubic yards (cy) of sand were placed directly on the Borough's beaches during the 2013 project limited to CMP 0, CMP 1 (71,697 cy) and CMP 4 (37,000 cy) cells. Sand has accumulated in the western cells and especially along the eastern shoreline. In 2016, 110,484 cubic yards were added to Cape May Point beaches at Lighthouse, Lehigh and Lake Avenues (CMP 0, 1 and 4). Sand continues to be shed from the USACE project beaches and transferred longshore from the State Park natural area into Cape May Point, where the westerly curve of the shoreline into Delaware Bay allowed deposition on the beach. This process has continued through May 2019. Large additions appear along the eastern Borough beaches offshore, to the point of near burial of the 1993 "beachsaver" reef system installed at sites CMP-2 and CMP-3. The May 2019 cross sections at these two sites do show the most sand ever seen at the reef system with continuation of deposition further seaward, also for the first time since monitoring started. Strong northwest winds have produced dramatic additions to the western site dunes enhancing both the crest elevations and generating a wider foredune slope.

The net sand volume change for 2019 was a decent gain of 29,848 cubic yards of sand. At most sites aeolian processes have moved sand from the wider beaches to the seaward dune toe and slope. The most dramatic additions appear to have formed offshore at sites CMP-0 to CMP-3.

## Observations & Recommendations

1. Cells 0 (Lighthouse Ave.) and 1 (Lehigh Ave.) do not have reef structures; the beaches at Lighthouse and Lehigh Avenue gained substantial new sand and remain stable to accretive. Both beaches have steep slopes into deep water with strong tidal currents into and out of Delaware Bay.
2. Cell 2 at Whilden Avenues, the shoreline position (zero datum) is approximately 90 feet distance from the breakwater structure. Depth of the scour trough landward of the units has decreased to -7.05 feet NAVD88 with less than 2 feet of the reef structure now exposed above the sea floor around the units. The swimming area remains limited, especially closer to the groins but should be manageable mid-beach this year. The greatest risk is unwitting contact with the barnacle encrusted reef crest generating cuts and abrasions. Wave surge should be far less than when 6-7 feet of height existed between the reef crest and the landward seafloor. The CRC again recommends installing a line of floats indicating the maximum distance for swimming that should be about 20 feet from the breakwater reef.
3. Cell 3 at Coral Avenue, the shoreline position remained relatively constant; the breakwater units in May 2019 were approximately 100 feet from the shoreline position (zero datum). The space between the water's edge and the reefs filled in dramatically as did the offshore region beyond the reef structure. Wave turbulence over the structures should be minimal this season because about 2 feet of reef structure is exposed above the seafloor. The reduction in exposed reef structure above the sand surface reduces the wave turbulence over the reef and makes for safer swimming.
4. Cell 4 (Lake Ave.) has no structures offshore and a relatively flatter nearshore slope. This site remains overall a good option for a swimming beach in Cape May Point this season and the

recreational berm is about the same this year. The relatively shallow slope platform in the water between groins make wading and swimmer relatively safer for beach patrons.

5. Cells 5 (Cape Ave.) and 6 (Pearl Ave.) contain the newer submerged breakwater units but they pose minimal risk for swimming in 2019. Both reef structures lie in greater than -8 feet of water approximately 200 hundred feet from the shoreline at low tide. The landward trough filled in at Cell 5 as well, generating a fairly flat area between the reef and the shoreline. The “Double Tee” structure in Cell 6 is buried with additional sand. Swimming near the groins should always be avoided since the units are slightly closer to the beach adjacent to the rocks.
6. Cell 7 at Stites Avenue benefited from a stable berm area enhancing the recreational value of the beach, this paired with the shallow offshore platform will offer a relatively safe option for swimming. The beach is narrower in 2019, but only by 13 feet.
7. Cell 8 at Alexander Avenue has remained at last year’s width, but the available recreational area has been substantially improved at this beach since 2005, especially in the seaward dune slope region. The sand lost from Alexander Avenue does not accumulate on the Sunset Beach segment, but adds to the sediment layers on the nearshore Delaware Bay floor instead.

The Coastal Research Center (CRC) will continue to monitor the conditions on the Cape May Point beaches at the Borough’s request and assist officials with addressing any coastal zone management issues. Please contact the CRC with any questions or concerns.