



CARTERET COUNTY BEACH COMMISSION MEETING

Minutes

Emerald Isle Board Room (<10 persons with spatial distancing - COVID-19 Precaution)

Remotely via Carteret County Zoom Account (<https://carteretcountync.zoom.us/>)

September 28, 2020, 2 pm

Attendance.

Commission Members A.B. "Trace" Cooper (chair), Jim Normile (vice-chair; remotely), Larry Baldwin (remotely), John Brodman (remotely), Larry Corsello (remotely), Jimmy Farrington (remotely), Joel Fortune, Tom Rule, secretary Greg Rudolph, and the general public. Members Harry Archer, Douglas Guthrie, and Woody Warren were absent.

- (1) **Call to Order.** – Chairman Cooper called the meeting to order and thanked everyone for attending either in-person with proper spatial distancing measures employed or via conference call/Zoom. Secretary Rudolph proceeded with a roll call.
- (2) **Approval of Minutes - Regular Beach Commission Meeting (August 24, 2020).** – Chairman Cooper asked the Commission if there were any corrections, additions, or comments regarding the August 24th regular session minutes presented in the agenda packet. With no comments forthcoming, member Rule subsequently made a motion to adopt the minutes as presented, which was seconded by member Fortune and unanimously approved.
- (3) **Room Occupancy Tax (ROT) and "Beach Fund" Update.** – Chairman Cooper introduced the subject by noting the July collection total has been shared earlier in the month and was good news, and he (Chairman) subsequently asked the secretary to provide the details. Secretary Rudolph continued that the July 2020 collection was our highest ever monthly total ([Slides 1 and 2](#)), eclipsing our previous high in July 2017 by nearly +20%. In fact July 2017 was the only month that ever exceeded \$2,000,000 prior to the July 2020 collection (over \$2,400,000). The July 2020 collection was also +41% more than the July 2019 collection, but as we will discuss later; there are some cross pollination issues with other months that may have artificially suppressed the July 2019 collection. Nonetheless, the July 2020 collection has buoyed our calendar year to date collection to +9.8% compared to this time last year – we were -9% at the June 2020.

The estimated reserve balance as of the end of July is \$27.4 million – we started the fiscal year (July 1st) at roughly \$17.8 million, but received \$8.9 million of reimbursement from Pine Knoll Shores and Emerald Isle for the Phase II Post-Florence Renourishment Project. And of course that's in addition to the occupancy tax collection itself for the month of July. The secretary continued that he feels very comfortable regarding the upcoming Post-Florence Phase III Renourishment Project, which is roughly a \$33 million Project. Approximately \$20 million of which is FEMA reimbursable, and it is encouraging to see the rapid FEMA reimbursement process for Phase II playing out. We have net 60-day payment stipulation for Phase III as well, rather than a

net 30-day payment term, and again; we should be able to cash flow the entire project based on these experiences.

And lastly the secretary presented a slide depicting the collections by month to demonstrate the cross-pollination issues that tend to result in collections being reported in the month prior or after the actual month which visitation takes place. Chairman Cooper added that many of the realty agencies and other owners collect the occupancy tax on a weekly basis so issues such as five weekends in one month, Saturday check-ins vs. Sunday check-ins, etc. can cause some anomalies.

- (4) **Bogue Banks Coastal Storm Risk Management Project.** – Chairman Cooper mentioned that we have had some great discussions concerning this topic over the course of the past few months, and have solicited outside input from consultants, other municipalities, and from the U.S. Army Corps of Engineers (Corps) themselves. This is very significant decision for us and it is my (Chairmans’) belief that we would be better off holding off on making any decisions until we can get more of us together in the same room (Note: 3 of the 11 Beach Commission Members were physically at this meeting). Although Zoom is a great remote platform, it’s not the greatest for a thorough discussion to come to a decision and provide a recommendation to all the beach municipalities along Bogue Banks. However, the secretary does have some more information for us to consider at this time, which we will incorporate into our thought process at the October meeting.

The secretary continued by noting that one set of the outstanding questions that has surfaced in previous meeting are; (a) How does the Corps beach template differ from the Bogue Banks Master Plan? and related, (b) How does the nourishment trigger also differ? To these ends we have been working with the Corps and Moffatt & Nichol to superimpose the templates onto one another. Secretary Rudolph proceeded to open an excel spreadsheet with [various plots](#) to show to the Commission, and noted that in most case the Corps berm height and dune height are higher than the Master Plan. That can just be a function of what level of protection the Corps wanted to achieve compared to the Master Plan. With respect to the triggers, the Corps will always nourish back to the template dimensions. The Master Plan on the other hand has a set dune and berm geometry as well but is predicated on volumetric triggers – once the volume is lost (eroded), then the berm width is based on the cubic yardage that has eroded and the pre-nourished beach shape. Thus the templates themselves are pretty similar despite a subtle but important difference in how they are evaluated and designed for maintenance (renourishment).

- (5) **2019 - 2020 Annual Report: Bogue Banks Beach & Nearshore Mapping Program.** – Secretary Rudolph introduced Nicole Vanderbeke from Moffatt & Nichol (M&N) who will be summarizing the results of our annual beach survey, which is utilized to track sand, look at nourishment triggers, and ascertain the overall health of the beach – not just Bogue Banks, but Shackleford Banks, and Bear Island as well. Beforehand, the secretary mentioned that as part of our 5-year monitoring contract, we incorporated a laser-scanning scope of work that essentially “looks in between the transects” on the dry sand beach – this effort was initiated to constrain our hotspot area in Eastern Emerald Isle, monitor changes both inside and outside the hotspot, and delineate the toe of the dune/vegetation line. These data have been further used to help us design this year’s Phase III Post-Florence Renourishment Project as well. In our 5-year monitoring contract, we stipulated we would try the laser scanning scope of work for 2 years and evaluate its usefulness. And to this

end, we have Anna Atencio and Kurt Baker with Geodynamics, LLC with us today who will also provide us with a presentation after the annual survey presentation.

Ms. Vanderbeke continued by starting a presentation ([Slides 3 – 68](#)), which summarized the methodology of the surveying program, an analysis of the key events (nourishment, storms, etc.) that took place over the course of the past year, and the results focusing upon volume changes, shoreline change, and the evolving geomorphology of the oceanfront beach. Also it is important to keep in mind that we are summarizing the results of three different surveys – one taken in spring 2019 after our Phase I Post-Florence Renourishment Project, one immediately after hurricane *Dorian* (September 2019), and the spring 2020 survey obtained immediately after construction of the Phase II Post-Florence Renourishment Project. It is apparent the sand that was displaced “deep” offshore during *Florence* has begun to move back “up-slope” as evidenced via the Post-*Dorian* survey, and this trend continued through Spring 2020. In fact, Bogue Banks gained +3,034,764 cubic yards (cy) of sand in 2019-20, equating to an average gain of +23.6 cy/foot (cy/ft). The Phase II Post-Florence Renourishment emplaced +2,022,807 cy of sand along 9.5 miles of Bogue Banks, which means we had an additional +1,011,957 cy that moved “upslope” from depths below -12 feet NAVD 88 to above that demarcation during the total Spring 2019 to Spring 2020 timeframe. This recovery trend was also seen on Bear Island that experienced a gain of 149,902 cy, averaging +9.1 cy/ft. With respect to the inlets (Barden, Beaufort, and Bogue); there really was not much change (i.e., movement or shoaling). However there was some significant shoreline recession and volume loss in one zone within Ft. Macon State Park located adjacent to Beaufort Inlet. The sand doesn’t appear to be shoaling the channel itself along that profile line and therefore we can infer that the sand could be moving further northward (i.e., towards “Range B” of the Morehead City Navigation Project). With no questions from the Commission, the secretary re-introduced Ms. Atencio from Geodynamics, LLC who proceeded a presentation concerning the mobile laser scanning.

Ms. Atencio proceeded with her web-based [presentation](#) outlining the laser-scanning procedure and the data synthesis methodology. While the zone that is laser-scanned is relatively large, the hotspot zone can be constrained to an area besides “the numbered streets” in Emerald Isle and the entire area can continued to be monitored on this granular level to see how the hotspot evolves and to track the fate of nourishment over time. To this end, we are trying a different nourishment geometry for the Phase III Project at the hotspot with a large volume berm on the east end in the hotspot, with a smaller fill towards the west (last [slide](#)). A total of 5 different designs were evaluated/modeled. Member Baldwin concluded the topic by asking if the hotspot correlated to where one of the old inlets was located along Bogue Banks, to which the secretary replied no. Albeit one of the island breaches from *Hazel* (1954) and or *Donna* (1960) did occur near the Emerald Isle Eastern Regional Access, but that’s 10 streets west of the hotspot.

- (6) **Other Business.** – None.
- (7) **October 2020 Meeting Date.** – The Commission agreed that the next Beach Commission meeting would be held on October 26, 2020.
- (8) **Adjourn.** – Chairman Cooper asked for any additional comments or questions, and with none forthcoming, the meeting was adjourned.