

Shore Protection Manager

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**CARTERET COUNTY BEACH COMMISSION MEETING
JUNE 25, 2018; 2:00 pm
PINE KNOLL SHORES TOWN HALL**

AGENDA

(1)	Call to Order.	<i>Chairman Cooper</i>
(2)	Approval of Minutes. (Regular Beach Commission Meeting – March 26, 2018)	<i>Chairman Cooper</i>
(3)	Room Occupancy Tax (ROT) and “Beach Fund” Update.	<i>Greg “rudi” Rudolph</i>
(4)	N.C. Division of Coastal Management’s Methodology for Determining Oceanfront Shoreline Change Rates and Oceanfront Construction Setbacks.	<i>Ken Richardson NCDCM</i>
(5)	Funding Scenarios and Decision Matrix for Master Plan (Project #1) and Morehead City Harbor Delta Project.	<i>Greg “rudi” Rudolph</i>
(6)	Public Comment.	
(7)	Other Business.	
(8)	July 2018 Meeting Date. (July 23, 2018 – proposed)	<i>Chairman Cooper</i>
(9)	Adjourn.	<i>Chairman Cooper</i>

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CARTERET COUNTY BEACH COMMISSION

Agenda Topic Cover Sheet

Approval of Minutes

Regular Beach Commission Meeting – March 26, 2018

Meeting Date: **6/25/18**

Topic No. **2**

Suggested Action: A motion should be entertained to approve the March 26, 2018 meeting minutes with any recommended changes from the Beach Commission.

Attached for the Beach Commission's review, comments, and subsequent approval are the minutes for the Commission's March 26, 2018 regular meeting.

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CARTERET COUNTY BEACH COMMISSION MEETING

Minutes
Pine Knoll Shores Town Hall
March 26, 2018, 2 pm

Attendance.

Commission Members A.B. "Trace" Cooper (chair), Ken Jones (vice-chair), Harry Archer, Larry Baldwin, Larry Corsello, Jimmy Farrington, Joel Fortune, John Wooten, secretary Greg Rudolph, and the general public. Members Douglas Guthrie and Jim Normile were absent.

- (1) **Call to Order.** - Chairman Cooper welcomed everyone and called the meeting to order.
- (2) **Approval of Minutes - Regular Beach Commission Meeting (February 5, 2018).** – Chairman Cooper asked the Commission if there were any corrections, additions, or comments regarding the February 5th regular session minutes presented in the agenda packet. Member Archer subsequently made a motion to adopt the minutes as presented, which was seconded by member Corsello and unanimously approved.
- (3) **Room Occupancy Tax (ROT) and "Beach Fund" Update.** – Chairman Cooper introduced the topic by noting we're going to review the January 2018 collection report, which is traditionally our lowest revenue-producing month on the calendar, but there are good trends to report. Secretary Rudolph followed with a one-page [Powerpoint slide](#) highlighting the fact the January collection was up by over +20% compared to January 2017. And again, although January is a low revenue-producing month overall, it is up by 100% compared to just four years ago (i.e., January 2014). In the past few Beach Commission meetings, we have also discussed some other "off season" months that have experienced big revenue jumps; including April and November, which are up by +73% and 108%, respectively since 2014 – and that's only within a three year timeframe. And as we also discussed, hopefully this is a result of the increased marketing the Tourism Development Authority has been advancing for the shoulder months or "secret season". To this end as well, it is important to point out the new on-line collection revenue source has bolstered the collection. The secretary concluded by noting we are up by +6.2% seven months into the 2017-18 fiscal year, which has yielded \$143,025 of additional dollars attributed to the "Beach Fund". The estimate for the "Beach Fund" Reserve at the end of January 2018 is/was \$17.9 million. Commissioner Wooten closed the topic by asking what types of dollars are the municipalities saving each year for beach nourishment? The secretary replied each municipality kept a very small part of the property tax on the books that was used to pay off the bonds associated with the early 2000s nourishment projects (i.e., sand tax). This collectively equates to roughly \$800,000 to \$1,000,000 per year across the municipalities of Pine Knoll Shores, Indian Beach, County reach of Salter Path, and Emerald Isle.

- (4) **Summary - Royalties, Revenue Sharing, and the 2019-2024 Draft Proposed Outer Continental Shelf (OCS) Oil & Gas Leasing Program.** – Secretary Rudolph outlined the purpose of this presentation is to demystify how money from the oil & gas industry is statutory provided to the federal government, and in some instances; to the States and local governments as well. There is a lot terminology that can be confusing, and importantly; there are some occasions when the revenue-sharing to the States and local governments is dictated by law to be used for “shore protection.” Thus regardless of one’s position on the subject of oil & gas exploration of if exploration/production will ever occur along the eastern seaboard; it is important we educate ourselves to this process in case it does becomes applicable along the Atlantic States because our job is to “put sand on the beach”. To this end, this presentation will; (1) review the rules of engagement with respect to the OCS leasing program and what has transpired since 2015 (Obama Administration) to now (Trump Administration), (2) briefly look at the oil & gas plays closest to the Carolinas, and (3) discuss how money is provided to the federal government from the industry, and how it can be “revenue shared” with States and local governments ([Slides 2 – 30](#)).

As it stands today, there is no revenue-sharing mechanism in place for the United States OCS except for GOMESA (the Gulf of Mexico Energy Security Act) once oil & gas exploration/production is seaward beyond the “8(g) zone” in the OCS (or past 6 nautical miles specifically in North Carolina). GOMESA was passed in 2006 and provides 37.5% of all qualified OCS revenues; including bonus bids, rentals, and production royalties to Alabama, Louisiana, Mississippi, Texas, and forty-two Coastal Political Subdivisions (CPS) - i.e., local governments. The secretary continued by applying a GOMESA model to North Carolina and the twenty CAMA Counties using two different lease examples based on the Carolina OCS plays in the Atlantic. Several bills were introduced in the U.S. Senate Committee on Energy and Natural Resources in 2015 and 2016 that had a GOMESA template for the Atlantic States; and therefore it is reasonable to conclude we could see similar verbiage emanating from Congress in the future.

- (5) **Contract Extension (2018 – 2022) Bogue Banks Beach & Nearshore Mapping Program.** – Chairman Cooper introduced Johnny Martin and Chris Freeman with Moffatt & Nichol (contractor) and Geodynamics (subcontractor), respectively who were in attendance to answer any questions that might surface when discussing the proposed contract extension. Secretary Rudolph continued utilizing Power Point Slides ([31 – 37](#)), and briefly reviewed the history of the beach monitoring program that was initiated in 1999 subsequent to the passage of hurricane *Floyd*. The number of profiles along Bogue Banks has increased through time and the program has also incorporated the islands of Shackleford Banks and Bear Island beginning in the mid part of the last decade. Our contractors have changed during the formative years of the monitoring program, but we have utilized the services of Moffatt & Nichol/Geodynamics since 2008 for a 5-year period followed by a 5-year contract extension, which expired in 2017. Therefore a new 5-year contract extension is proposed today as attached to the Commission’s agenda packet.

Besides routine annual monitoring of all the beach profiles and the optional, on-demand post-hurricane survey scopes of work; the contract extension also includes the cost for a hot-spot analysis in East Emerald Isle and Pine Knoll Shores that incorporates a mobile laser scanner. The laser scanner collects millions of data points in between the 1,000 feet spaced profiles, and therefore provides a higher resolution of insight to this area of the beach. This in turn is aimed to help us; (1) constrain the precise area of the erosion hotspots, (2) attempt to relate what physical processes might be influencing the hot-spots, and perhaps most importantly, (3) design more

effective nourishment templates to increase the longevity of the storm protection attributes of the beachfill. The proposal includes the incorporation of the mobile laser scanner twice a year (bi-annual) and the results would be included in the annual report. The secretary concluded by providing a cost differential of the old and proposed contract extensions segregated by contractor and subcontractor costs, and by task ([last slide](#)). Also it should be kept in mind the post-storm report has become more of a storm assessment report that documents not just sand volumes, but structural damages as well; and has become our major justification vehicle when seeking FEMA reimbursement.

Member Wootten inquired if there was a way to perhaps scale back or eliminate the hot-spot analysis after a couple of years if it was not providing the results we thought it would. The secretary replied there is a clause in the contract extension that allows us to do this but it is a little vague, and we could tighten the language more. Member Corsello stated he was a little surprised on the range of the hot spot analysis – i.e., 14 miles of the ~25-miles of Bogue Banks. The secretary responded that this does indeed “jump off the page”, but the proposal maximizes the mobilization cost and it is not much more costly to run the mobile laser scanner through Indian Beach and Salter Path rather than leaving a 2.5 mile hole in the data. Mr. Freeman (audience) added that we also need some “ambient” areas of the beach to compare the hotspot to.

Member Wootten added that he’s a little concerned the hotspot analysis does not include the bathymetry, which is important but costly of course. Thus is this topography only approach worth it? Chairman Cooper agreed we need to think about this in the larger context of usefulness. Mr. Freeman mentioned the Corps of Engineers will be conducting offshore surveys associated with the Bogue Banks Coastal Storm Damage Reduction Project and this can be incorporated with the laser scanner data. Member Baldwin mentioned that even a slight savings in nourishment design that could be gleaned from the hotspot analysis would be worth the cost of the effort (i.e., good benefit/cost). The chairman and member Wootten added that because the hotspot analysis is very much in the Research & Development category; it would behoove us to have the option to drop the hotspot analysis perhaps after two years of the five year contract. Member Farrington and Corsello agreed, and Mr. Martin responded that we can amend the contract before it is presented to your County Board for final approval to reflect this desire. Accordingly and as suggested by member Corsello and chairman Cooper, member Baldwin made a motion to restructure the 5-year contract extension to include a two-year clause to terminate the hotspot analysis if desired and to include the cost differential annually in the contract document as task 3 (i.e., year 1 costs “x” with the analysis and “y” without the analysis). This motion was seconded by member Fortune and unanimously approved. Secretary Rudolph concluded that he would provide the modified contract extension to the Beach Commission electronically before it is submitted to the County Board.

(6) **Public Comment.** – None.

(7) **April 2018 Meeting Date (April 23, 2018).** – The secretary mentioned the 2-day N.C. Beach, Inlet, & Waterway Association’s Local Government meeting is scheduled for April 23rd and 24th, which obviously conflicts with the proposed Beach Commission meeting date. Chairman Cooper subsequently recommended that we look at what topics might surface between now and then and determine a meeting date for either late April or in May. The Commission agreed by consensus.

- (8) **Closed Session pursuant to G.S. 143-318.11 for the permitted purpose of discussing personnel.** – No action taken by the Beach Commission.
- (9) **Adjourn.** – Chairman Cooper asked for any additional comments and with no additional comments forthcoming, the meeting was adjourned.

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CARTERET COUNTY BEACH COMMISSION

Agenda Topic Cover Sheet

Room Occupancy Tax (ROT) and “Beach Fund” Update.

Meeting Date: **6/25/18**

Topic No. **3**

Suggested Action: None.

A copy of Carteret County’s monthly Room Occupancy Tax (ROT) collection report for the months of February, March, and April 2018 are attached to this month’s “Beach Fund” update, and the data presented therein are subsequently utilized to update four summary tables presented at the end of this coversheet including; **Table 1** - a running summary of ROT collections comparing monthly revenues from FY 2017-18 to FY 2016-17, **Table 2** - a summary of ROT revenue from a Calendar Year perspective (CY 2018 - CY 2012), **Table 3** - a more detailed FY 2017-18 to FY 2016-17 revenue comparison of the collection by sectors (hotel/motel, condo/cottage, and “other”), and **Table 4** - a year-to-date estimate of the Beach Fund.

As a group, the February, March, and April 2018 collection were up by +13% (\$87,930) compared to the same grouping of months in 2017, representing a \$43,965 increase to the Beach Fund (%50 of the collection) - Tables 1 and 2. The occupancy tax as a whole is up by +7.1% through ten months of the 2017-18 fiscal year, and even if we have the exact same revenue for May and June 2018 as last year (2017); the FY 2017-18 occupancy tax collection would be up from FY 2016-17 by over 5%.

And lastly as illustrated in Table 4 below, our estimated value for the beach nourishment reserve (“Beach Fund”) is approximately \$18.2 million by taking our opening balance, our expenditures to date, and revenue all current through April 2018 into account (Table 4). A copy of the expenditure report for the month of April is also attached to this cover sheet for the Commission’s review. The revenue to the Beach Fund from May through September 2017 was over \$2.9 million, and accordingly the nourishment reserve/Beach Fund should be hovering near \$21 million at the summer’s end (after expenses).

**Cumulative Analysis and Monthly Comparison
Room Occupancy Tax (ROT) and the "Beach Fund"
FY 2017-18 v. 2016-17
Carteret County**

Month	Gross Receipts TDA & Beach		Beach Fund (Monthly)*		Beach Fund (YTD)*		Occ. Tax Total Monthly Difference	Occ. Tax Total YTD Difference
	FY 16-17	FY 17-18	FY 16-17	FY 17-18	FY 16-17	FY 17-18		
Jul	\$1,945,706	\$2,022,661	\$972,853	\$1,011,331	\$972,853	\$1,011,331	3.96%	3.96%
Aug	\$1,310,899	\$1,345,057	\$655,450	\$672,528	\$1,628,303	\$1,683,859	2.61%	3.41%
Sep	\$632,513	\$651,908	\$316,256	\$325,954	\$1,944,559	\$2,009,813	3.07%	3.36%
Oct	\$354,178	\$424,176	\$177,089	\$212,088	\$2,121,648	\$2,221,901	19.76%	4.73%
Nov	\$192,591	\$260,361	\$96,296	\$130,181	\$2,217,944	\$2,352,081	35.19%	6.05%
Dec	\$98,029	\$97,436	\$49,015	\$48,718	\$2,266,958	\$2,400,800	-0.60%	5.90%
Jan	\$90,369	\$108,736	\$45,184	\$54,368	\$2,312,143	\$2,455,168	20.32%	6.19%
Feb	\$102,895	\$147,363	\$51,447	\$73,682	\$2,363,590	\$2,528,849	43.22%	6.99%
Mar	\$198,697	\$194,638	\$99,349	\$97,319	\$2,462,939	\$2,626,168	-2.04%	6.63%
Apr	\$378,586	\$426,106	\$189,293	\$213,053	\$2,652,232	\$2,839,221	12.55%	7.05%
May	\$574,112		\$287,056		\$2,939,288			
Jun	\$1,211,103		\$605,551		\$3,544,839			
Totals=	\$7,089,678	\$5,678,443	\$3,544,839	\$2,839,221	\$3,544,839	\$2,839,221	Avg. = 13.80%	7.05%

Note: 6% overall collection rate (* = 50 TDA/50 Beach Fund split).

TABLE 1 – Monthly and cumulative summary of the Carteret County room occupancy tax collection reflecting the current and previous fiscal year in terms of the gross revenue and the portion of revenue legislatively mandated for beach nourishment (i.e., the "Beach Fund").

**Cumulative Analysis and Monthly Comparison
Room Occupancy Tax (ROT) and the "Beach Fund"
Calendar Year 2018 - 2012
Carteret County (6% collection rate)**

Month	2018		2017		2016		2015		2014		2013		2012	
	6%	6%	6%	6%	6%	6%	6%	6%	6%	5%	6%	5%	6%	5%
Jan.	\$108,736	\$90,369	\$72,738	\$65,107	\$54,359	\$48,955	\$40,796	\$50,517	\$42,097					
Feb.	\$147,363	\$102,895	\$80,744	\$66,976	\$60,118	\$52,897	\$44,081	\$62,634	\$52,195					
Mar.	\$194,638	\$198,697	\$197,020	\$142,289	\$121,346	\$128,088	\$106,740	\$114,521	\$95,434					
Apr.	\$426,106	\$378,586	\$267,064	\$238,039	\$218,570	\$187,767	\$156,472	\$226,302	\$188,585					
May		\$574,112	\$495,403	\$519,427	\$530,041	\$373,921	\$311,601	\$368,024	\$306,687					
June		\$1,211,103	\$1,254,762	\$1,194,984	\$1,119,788	\$1,126,150	\$938,458	\$1,041,735	\$868,113					
July		\$2,022,661	\$1,945,706	\$1,799,562	\$1,714,309	\$1,440,439	\$1,200,365	\$1,436,356	\$1,196,963					
Aug.		\$1,345,057	\$1,310,899	\$1,310,391	\$1,327,500	\$1,270,274	\$1,058,562	\$1,140,977	\$950,814					
Sept.		\$651,908	\$632,513	\$598,281	\$514,648	\$471,580	\$392,983	\$437,265	\$364,387					
Oct.		\$424,176	\$354,178	\$357,967	\$348,348	\$296,997	\$247,497	\$219,665	\$183,054					
Nov.		\$260,361	\$192,591	\$148,172	\$125,217	\$145,665	\$121,388	\$120,973	\$100,811					
Dec.		\$97,436	\$98,029	\$89,584	\$92,698	\$72,597	\$60,498	\$51,216	\$42,680					
Totals =	\$876,843	\$7,357,361	\$6,901,648	\$6,530,780	\$6,226,944	\$5,615,329	\$4,679,441	\$5,270,185	\$4,391,821					
YTD =	13.79%													
(+/-) previous year		6.60%	5.68%	4.88%	10.89%	6.55%		-1.39%						

TABLE 2 – Monthly and cumulative summary of the Carteret County Room Occupancy Tax collection reflecting the current and previous six calendar years in terms of the gross revenue only.

HOTELS/MOTELS

Month	2016-17		2017-18		FY 2017-18 v. 2016-17	
	Monthly	Year-to-Date	Monthly	Year-to-Date	Monthly	Year-to-Date
Jul	\$386,888	\$386,888	\$370,322	\$370,322	-\$16,565	-4.28%
Aug	\$276,354	\$663,242	\$274,246	\$644,568	-\$2,108	-2.82%
Sep	\$175,505	\$838,747	\$177,382	\$821,950	\$1,877	-2.00%
Oct	\$159,004	\$997,750	\$194,831	\$1,016,781	\$35,828	1.91%
Nov	\$103,515	\$1,101,265	\$94,295	\$1,111,076	-\$9,220	0.89%
Dec	\$60,232	\$1,161,497	\$57,487	\$1,168,563	-\$2,745	0.61%
Jan	\$55,046	\$1,216,544	\$64,220	\$1,232,782	\$9,173	1.33%
Feb	\$68,130	\$1,284,674	\$75,355	\$1,308,137	\$7,225	1.83%
Mar	\$107,843	\$1,392,517	\$117,220	\$1,425,358	\$9,377	2.36%
Apr	\$179,497	\$1,572,015	\$171,013	\$1,596,371	-\$8,484	1.55%
May	\$230,974	\$1,802,988				
Jun	\$290,456	\$2,093,445				
Totals=	\$2,093,445	\$2,093,445	\$1,596,371	\$1,596,371	\$24,356	1.55%

CONDOS/COTTAGES

Month	2016-17		2017-18		FY 2017-18 v. 2016-17	
	Monthly	Year-to-Date	Monthly	Year-to-Date	Monthly	Year-to-Date
Jul	\$1,433,393	\$1,433,393	\$1,536,111	\$1,536,111	\$102,719	7.17%
Aug	\$942,894	\$2,376,286	\$986,966	\$2,523,077	\$44,072	6.18%
Sep	\$411,402	\$2,787,688	\$432,336	\$2,955,413	\$20,934	6.02%
Oct	\$174,718	\$2,962,407	\$198,533	\$3,153,946	\$23,815	6.47%
Nov	\$69,622	\$3,032,029	\$91,458	\$3,245,403	\$21,836	7.04%
Dec	\$28,674	\$3,060,703	\$28,719	\$3,274,123	\$45	6.97%
Jan	\$20,548	\$3,081,251	\$15,587	\$3,289,710	-\$4,961	6.77%
Feb	\$16,646	\$3,097,897	\$41,210	\$3,330,920	\$24,564	7.52%
Mar	\$58,189	\$3,156,086	\$34,772	\$3,365,692	-\$23,417	6.64%
Apr	\$155,100	\$3,311,186	\$207,589	\$3,573,281	\$52,489	7.92%
May	\$285,193	\$3,596,380				
Jun	\$828,899	\$4,425,278				
Totals=	\$4,425,278	\$4,425,278	\$3,573,281	\$3,573,281	\$262,095	7.92%

OTHER, LESS THAN 5, & ON-LINE TOTAL

Month	2016-17		2017-18		FY 2017-18 v. 2016-17	
	Monthly	Year-to-Date	Monthly	Year-to-Date	Monthly	Year-to-Date
Jul	\$125,426	\$125,426	\$116,227	\$116,227	-\$9,198	-7.33%
Aug	\$91,652	\$217,078	\$83,846	\$200,073	-\$7,807	-7.83%
Sep	\$45,606	\$262,684	\$42,191	\$242,263	-\$3,415	-7.77%
Oct	\$20,456	\$283,139	\$30,811	\$273,075	\$10,356	-3.55%
Nov	\$19,454	\$302,593	\$74,609	\$347,683	\$55,155	14.90%
Dec	\$9,123	\$311,716	\$11,230	\$358,914	\$2,107	15.14%
Jan	\$14,775	\$326,491	\$28,929	\$387,843	\$14,154	18.79%
Feb	\$18,118	\$344,609	\$30,799	\$418,641	\$12,680	21.48%
Mar	\$32,665	\$377,274	\$42,645	\$461,286	\$9,981	22.27%
Apr	\$43,988	\$421,262	\$47,504	\$508,790	\$3,516	20.78%
May	\$57,945	\$479,208				
Jun	\$91,748	\$570,955				
Totals=	\$570,955	\$570,955	\$508,790	\$508,790	\$87,528	20.78%

TABLE 3 – Monthly and cumulative summary of the Carteret County occupancy tax collection segregated by each of the three collection sectors (hotel/motel, condo/cottage, and “other”) for the current and previous fiscal years in terms of the gross revenue only. Note: On-line collection was first implemented in January 2016.

**Estimated Year-to-Date "Beach Fund" Reserve Balance
FY 2017-18**

Opening Fund Balance (7/1/17)	\$15,986,798
 Revenues	
Occupancy Tax (to date)	\$2,839,221
Interest on Reserve	NA
Total Revenues	\$2,839,221
 Expenditures	
Shore Protection Office (1/31/18)	\$616,164
County Occupancy Tax Administration Fee*	\$33,392
Total Expenditures	\$649,556
(Deficit)/Surplus for Year	\$2,189,665
 Fund Balance	 \$18,176,463

*Up to 3% of first \$500,000 of gross proceeds and 1% of remaining gross receipts collected each year.

TABLE 4 – Estimated value of the “Beach Fund” utilizing the opening fund balance at the beginning of the current fiscal year, coupled with the revenues and expenditures to date.

OCCUPANCY TAX COLLECTION

Reporting period:

Feb-18

Type	Tax Received	Penalties & Interest	Total Reporting Tax	Total No Tax
CONDOS/COTTAGE	\$ 41,181.39	28.59	28	57
HOTEL / MOTEL	\$75,354.78	\$ -	24	11
OTHER	\$ 8,197.11	\$ 672.47	34	145
ONLINE	\$ 21,929.09	\$ -	5	1
TOAL ALL TYPES	\$ 146,662.37	\$ 701.06	91	214
Total Collected	\$ 147,363.43			

February-18

Reporting Location	Condos/Cottage Tax	Hotel/Motel Tax	Other Tax	On Line	Total
Atlantic Beach	\$6,527.71	\$21,408.02	\$1,281.59	\$0.00	\$29,217.32
Beaufort	\$594.88	\$3,880.74	\$502.45	\$0.00	\$4,978.07
Cape Carteret	\$0.00	\$3,748.20	\$550.45	\$0.00	\$4,298.65
Emerald Isle	\$33,162.80	\$4,068.09	\$5,308.13	\$0.00	\$42,539.02
PKS / Salter Path/ Indian Beach	\$534.21	\$13,146.92	\$111.48	\$0.00	\$13,792.61
Morehead City	\$0.00	\$26,588.71	\$338.25	\$0.00	\$26,926.96
On Line	\$0.00	\$0.00	\$0.00	\$21,929.09	\$21,929.09
Unincorporated	\$390.38	\$2,514.10	\$777.23	\$0.00	\$3,681.71
Totals	\$41,209.98	\$75,354.78	\$8,869.58	\$21,929.09	\$147,363.43

OCCUPANCY TAX COLLECTION

Reporting period:

Mar-18

Type	Tax Received	Penalties & Interest	Total Reporting Tax	Total No Tax
CONDOS/COTTAGE	\$ 34,733.74	38.65	39	48
HOTEL / MOTEL	\$117,220.28	\$ -	26	10
OTHER	\$ 10,947.91	\$ 90.64	64	116
ONLINE	\$ 31,606.59	\$ -	5	1
TOAL ALL TYPES	\$ 194,508.52	\$ 129.29	134	175
Total Collected	\$ 194,637.81			

March-18

Reporting Location	Condos/Cottage Tax	Hotel/Motel Tax	Other Tax	On Line	Total
Atlantic Beach	\$11,477.28	\$38,015.01	\$2,018.75	\$0.00	\$51,511.04
Beaufort	\$1,431.58	\$6,542.05	\$1,110.45	\$0.00	\$9,084.08
Cape Carteret	\$0.00	\$4,802.41	\$916.63	\$0.00	\$5,719.04
Emerald Isle	\$20,845.29	\$9,005.45	\$5,472.50	\$0.00	\$35,323.24
PKS / Salter Path/ Indian Beach	\$820.76	\$18,168.96	\$318.48	\$0.00	\$19,308.20
Morehead City	\$0.00	\$37,524.48	\$0.00	\$0.00	\$37,524.48
On Line	\$0.00	\$0.00	\$0.00	\$31,606.59	\$31,606.59
Unincorporated	\$197.48	\$3,161.92	\$1,201.74	\$0.00	\$4,561.14
Totals	\$34,772.39	\$117,220.28	\$11,038.55	\$31,606.59	\$194,637.81

OCCUPANCY TAX COLLECTION

Reporting period:

Apr-18

Type	Tax Received	Penalties & Interest	Total Reporting Tax	Total No Tax
CONDOS/COTTAGE	\$ 207,531.26	\$ 57.79	50	42
HOTEL / MOTEL	\$ 170,426.78	\$ 586.39	31	5
OTHER	\$ 16,870.25	\$ 75.96	70	111
ONLINE	\$ 30,557.78	\$ -	5	1
TOAL ALL TYPES	\$ 425,386.07	\$ 720.14	156	159
Total Collected	\$ 426,106.21			

April-18

Reporting Location	Condos/Cottage Tax	Hotel/Motel Tax	Other Tax	On Line	Total
Atlantic Beach	\$21,736.39	\$55,344.46	\$2,957.52	\$0.00	\$80,038.37
Beaufort	\$2,018.84	\$12,169.60	\$2,493.99	\$0.00	\$16,682.43
Cape Carteret	\$0.00	\$6,148.57	\$1,422.13	\$0.00	\$7,570.70
Emerald Isle	\$181,364.68	\$12,324.70	\$5,989.35	\$0.00	\$199,678.73
PKS / Salter Path/ Indian Beach	\$1,257.72	\$33,744.56	\$656.19	\$0.00	\$35,658.47
Morehead City	\$22.68	\$46,267.56	\$36.00	\$0.00	\$46,326.24
On Line	\$0.00	\$0.00	\$0.00	\$30,557.78	\$30,557.78
Unincorporated	\$1,188.74	\$5,013.72	\$3,391.03	\$0.00	\$9,593.49
Totals	\$207,589.05	\$171,013.17	\$16,946.21	\$30,557.78	\$426,106.21

Expenditure Guideline
 FOR THE PERIOD(S) JUL 01, 2017 THROUGH APR 30, 2018

*** USER MAY NOT HAVE ACCESS ***
 *** TO ALL ACCOUNTS IN RANGE ***

	ANNUAL AMENDED BUDGET	ENCUMBERED	ACT MTD POSTED AND IN PROCESS	ACT YTD POSTED AND IN PROCESS	REMAINING BALANCE	PCT
110 GENERAL FUND						
40 ECONOMIC & PHYSICAL DEVELOP						
4901 BEACH NOURISHMENT						
12100 SALARIES	110,000.00	0.00	7,968.94	81,637.07	28,362.93	74 -----
12600 PART TIME WAGES	15,000.00	0.00	0.00	0.00	15,000.00	0
18100 FICA EXPENSE	10,415.00	0.00	599.42	6,145.86	4,269.14	59 -----
18200 RETIREMENT CONTRIBUTION	8,370.00	0.00	604.04	6,188.06	2,181.94	73 -----
18300 HOSPITALIZATION INSURANCE	7,785.00	0.00	626.41	6,230.14	1,554.86	80 -----
18500 UNEMPLOYMENT	0.00	0.00	0.00	0.00	0.00	0
18600 WORKMENS COMP	2,000.00	0.00	0.00	2,000.00	0.00	100 -----
18700 401 K PLAN	5,500.00	0.00	398.44	4,081.80	1,418.20	74 -----
20000 SUPPLIES	2,000.00	0.00	717.98	828.63	1,171.37	41 ----
28000 SMALL EQUIPMENT	2,000.00	0.00	0.00	0.00	2,000.00	0
31400 TRAVEL IN-COUNTY	0.00	0.00	0.00	0.00	0.00	0
32100 TELEPHONE & DATA SERVICES	3,120.00	0.00	556.79	3,385.92	265.92	108 -----
32500 POSTAGE	1,000.00	0.00	23.23	227.22	772.78	22 --
39500 TRAVEL	8,280.00	0.00	508.81	2,822.52	5,457.48	34 ---
44000 CONTRACTED SERVICES	563,795.00	0.00	34,847.67	198,021.90	365,773.10	35 ---
44100 FEASIBILITY AGREEMENT	300,000.00	0.00	0.00	300,000.00	0.00	100 -----
44200 SECTION 933 REIMBURSEMENT	0.00	0.00	0.00	0.00	0.00	0
49100 DUES AND SUBSCRIPTIONS	5,000.00	0.00	0.00	4,595.00	405.00	91 -----
69900 GRANT CONTRIBUTIONS EDC	0.00	0.00	0.00	0.00	0.00	0
TOTAL: BEACH NOURISHMENT	1,044,265.00	0.00	46,851.73	616,164.12	428,100.88	59 -----
TOTAL: ECONOMIC & PHYSICAL DEVELOP	1,044,265.00	0.00	46,851.73	616,164.12	428,100.88	59 -----
TOTAL: GENERAL FUND	1,044,265.00	0.00	46,851.73	616,164.12	428,100.88	59 -----

Shore Protection Manager

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CARTERET COUNTY BEACH COMMISSION

Agenda Topic Cover Sheet

N.C. Division of Coastal Management's Methodology for Determining Oceanfront Shoreline Change Rates and Oceanfront Construction Setbacks.

Meeting Date: **6/25/18**

Topic No. **4**

Suggested Action: None – Informational Purposes Only.

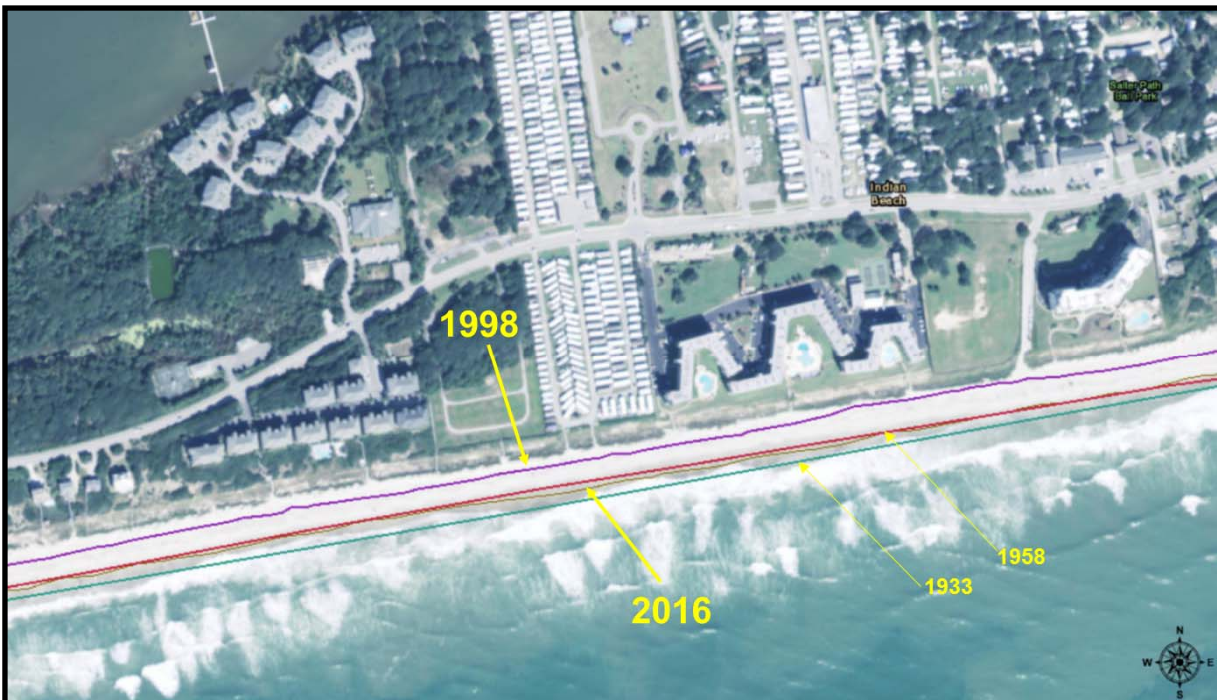
The N.C. Division of Coastal Management (NCDCM) erosion rate update publications could very well represent one of the most important services NCDCM provides for local communities. For one; **(1)** They are the backbone of the State's *oceanfront setback policy*, which helps to promote smart growth development while protecting the natural resources of the beach environment, and two **(2)** the update allows FEMA to provide communities with valuable points towards the National Flood Insurance Program's (NFIP's) *Community Rating System (CRS)*. As many of us are aware, the CRS is a voluntary incentive program recognizing and encouraging community floodplain management activities exceeding minimum NFIP requirements. As a result, flood insurance premium rates are discounted to reflect the reduced flood risk resulting from a community's actions meeting the goals of the CRS.

NCDCM has published five shoreline erosion reports to date – 1983 effective (**1979** & **1980** shoreline imagery), 1988 effective (**1986** imagery) 1997 effective (**1992** imagery), 2004 (**1998** imagery), and most recently 2013 effective (**2009** imagery). The next update is scheduled to be released in draft form later this year utilizing 2016 shoreline imagery. Ken Richardson was responsible for the most recent update 2013 (2009 imagery) and has been busy preparing the next report as well – he will be providing a presentation to the Beach Commission at our regular June 2018 meeting describing the methodology employed to determine erosion/accretion rates and how these are subsequently utilized to develop oceanfront setback factors. The results can easily be misconstrued without a firm understanding of the methodology and this will be the main tenet of Mr. Richardson's presentation and why he has been invited to speak.

Shoreline Erosion/Accretion or the “Smoothed” Rate

Unlike the **datum derived shoreline** approach the Beach Commission is accustomed for our monitoring program (i.e., “shoreline” change is determined by the movement of the mean high water elevation established at +1.5 ft. NAVD88 at each profile); NCDCM uses the **endpoint method**. The endpoint point method relies on geo-rectified aerial photography and determining the spatial position of the wet-dry line, which is considered “the shoreline”. Only the earliest and most current shoreline data points on a shore-perpendicular transect line are utilized in the analysis. The distance between the two shorelines (the earliest and most current) is divided by the time to establish the shoreline erosion or accretion rate. Adjacent transects are subsequently **smoothed** using a running mean technique, which filters or “teases out” irregularities in the shoreline attributed to features like beach cusps, bar attachments, etc. Hence shoreline change rates are sometimes referred to as the smoothed rate.

It is important to keep in mind that each shoreline update is only taking the most recent shoreline into account and comparing it to the same original (or base) shoreline. The figure below from Indian Beach is an in-house example of how one shoreline update can be dramatically different from the one prior. For instance, if the 1958 shoreline is the base shoreline and the 1998 shoreline is assessed, then there is considerable erosion (-150 feet over 40 years = -3.75 ft/yr). For a hypothetical 2016 update, NCDCM would still use the 1958 shoreline as the base and compare that to the 2016 image. But in this instance, the beach has been nourished since the last update in 1998, and now the 2016 image shows just -10 feet of retreat compared to the base 1958 shoreline. Hence the erosion rate over this 58 year period is almost 0 ft/yr (-10 feet in 58 years = -0.02 ft/yr) and the public perception is the beach would have “accreted” comparing the 1998 update to the 2016 update.



Oceanfront Setback or "Blocked" Rate

Blocking "or grouping" the smoothed data (i.e., the erosion rates) creates spatially uniform rate segments allowing for similar sections of the shoreline to possess like Oceanfront Setback Factors. For structures <5,000 square feet, NCDCM's setback policy is "30 times the setback factor" landward from the first line of stable vegetation. However, the minimum setback factor is "-2" or 60 feet landward from the first line of stable vegetation (30 times the setback factor of -2). Therefore even if a structure is located in an area that is accreting (e.g., +3 ft/yr), the setback factor is still "-2" – this makes sense because if a positive number was used, then the "setback" would be towards the ocean from the first line of stable vegetation, not landward. This can be a source of confusion at first because if one is only reviewing the setback factors (blocked rate), then it would appear all of North Carolina's beaches are eroding – that's obviously not true. One would have to review the actual erosion/accretion rate (smoothed rate) to ascertain the areas and severity of erosion or accretion.

Concluding Thoughts

In general, Bogue Banks has benefited from the methodology employed by NCDCM because generally the endpoint method "credits" the seaward advance of the shoreline by beach nourishment. The 2013 update (2009 shoreline) included two changes when compared to the most previous 2004 update (1998 shoreline); (1) Emerald Isle – the reach just west of the Western Regional Access (near the Ocean Oaks/Sea Dunes/Deer Horn Dunes subdivisions) possessed a -2.5 ft/yr setback factor in the 2004 update and was reduced to the minimum -2.0 ft/yr setback factor in the 2013 update. (2) Ft. Macon – There was a very small area near the bathhouse possessing -2.5 ft/yr erosion rate (and therefore setback factor) based on the 2004 update. This area shifted very slightly to the west in the 2013 update (approximately the same distance of shoreline, just shifted several feet west). Besides the Ft. Macon range mentioned immediately above, the entire island of Bogue Banks possesses the lowest setback factor (blocked rate) listed by NCDCM (-2 ft/yr). It will be interesting to see if that small area in west Ft. Macon is dropped to -2 ft/yr considering the multiple beach nourishment projects that have taken place along this reach since the 2013 update (again, 2009 shoreline).

And lastly, NCDCM and the Coastal Resources Commission's Science Panel have and will likely continue to review the effectiveness of the endpoint method currently utilized for shoreline analysis. Other analytical techniques such as linear regression, mean/standard deviation, etc. have been explored in a cursory fashion, but the outlier members of the datasets tend to skew the results in those directions. Accordingly the endpoint method will be used exclusively for this upcoming update (2016 shoreline).

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CARTERET COUNTY BEACH COMMISSION

Agenda Topic Cover Sheet

Funding Scenarios and Decision Matrix for Master Plan (Project #1) and Morehead City Harbor Delta Project.

Meeting Date: 6/25/18

Topic No. 5

Suggested Action: None – Informational Purposes Only.

The Beach Commission is well aware of our first planned beach nourishment project that will be conducted under the auspices of our 50-year Master Plan. East Emerald Isle has been identified as the area most in need of sand from a volumetric sense and one of public perception as well with respect to berm widths. Considering other needs along Bogue Banks and to leverage economies of scale while having a dredge mobilized, the project has been expanded to include Indian Beach, the unincorporated area of Salter Path, and Pine Knoll Shores (Fig. 1).

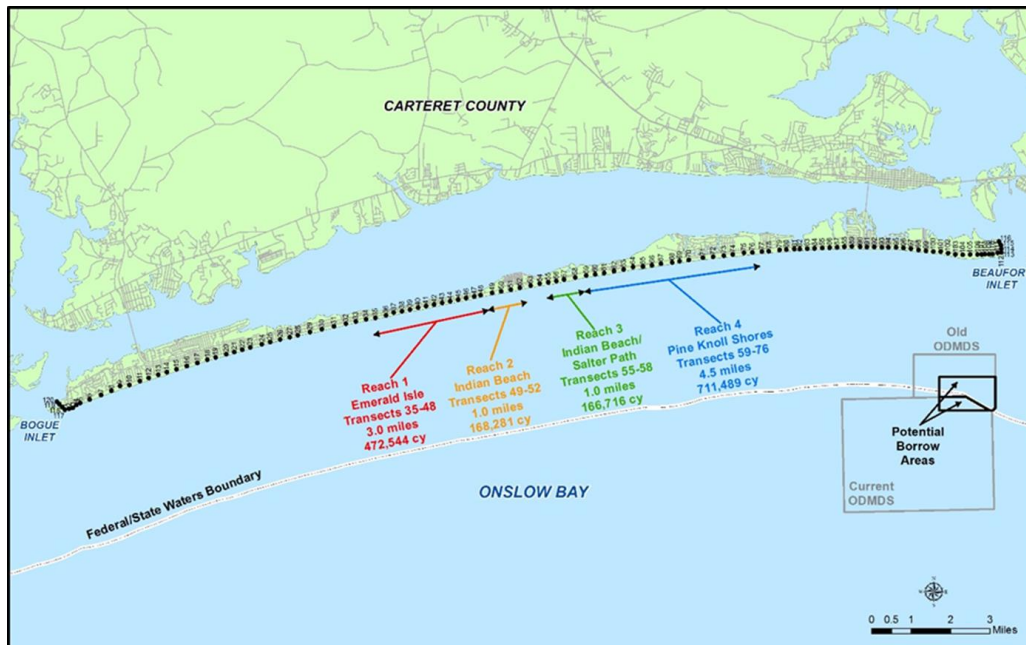


Figure 1 – Site map depicting the geographic extents of nourishment reaches and fill volumes associated with Project #1 of the Master Plan (1,519,837 total cy along 9.6 miles).

In terms of projected cost, we utilized our Post-Irene Nourishment Project unit rate (per cubic yard inclusive of mobilization/demobilization) and a 3% annual escalation factor which was subsequently applied to a uniform fill design criteria of 30 cubic yards per linear foot (cy/ft). Subsequently, a 50% State, 37.5% Nourishment Reserve, and 12.5% Town cost formula was applied resulting in a total cost of \$28.1 million - split \$14.1 million State, \$10.5 million Nourishment Reserve, and \$3.5 million Town. The State contribution was envisioned to emanate from the newly created Coastal Storm Damage Mitigation Fund and the local cost was to be pro-rated 75% Nourishment Reserve and 25% Town, hence an overall 50% State, 37.5% Nourishment Reserve, and 12.5% Town split (Table 1).

Dredging / Beachfill:	% of Beachfill	Subtotal	State (50%)	Reserve (37.5%)	Town (12.5%)
Emerald Isle	31%	\$8,720,977	\$4,360,488	\$3,270,367	\$1,090,122
Indian Beach	18%	\$5,063,793	\$2,531,897	\$1,898,922	\$632,974
Salter Path (County)	4%	\$1,125,287	\$562,643	\$421,983	\$140,661
Pine Knoll Shores	47%	\$13,222,126	\$6,611,063	\$4,958,297	\$1,652,766
Subtotal:	100%	\$28,132,183	\$14,066,091	\$10,549,569	\$3,516,523

Table 1 – Original cost estimate for Project #1 of the Master Plan.

The 2018 short session budget was passed through a Governor veto override by the N.C. General Assembly on June 12th which ultimately included \$5 million for Project #1 of the Master Plan in Section 13.10 of [S.L. 2018-5](#) via a transfer from the Industrial Development Fund Utility Account as stipulated in Section 15.6. While this appropriation is ~\$9 million less than requested, we knew ahead of time that \$14 million was a “big ask” and receiving any monies from the State and especially the Coastal Storm Damage Mitigation Fund should be considered as a plus. But it does present some challenges to the project budget moving forward as the \$9 million shortfall will be again be split “75% Nourishment Reserve – 25% Town” (see Table 2).

Budget Version	Subtotal	State (50% - 17.8%)	Reserve (37.5% - 61.7%)	Town (12.5% - 20.5%)
Original	\$28,132,183	\$14,066,091	\$10,549,569	\$3,516,523
New	\$28,132,183	\$5,000,000	\$17,349,139	\$5,783,044
Difference	\$0	-\$9,066,091	+\$6,799,570	+\$2,266,521

Table 2 – Potential new cost estimate with a \$5 million State appropriation for Project #1 of the Master Plan.

There are several different approaches that can be taken which the communities are actively evaluating and discussing. For example, we could apply the entire \$5 million of the State appropriation to nourish Emerald Isle this upcoming winter (2018-19) and subsequently seek another \$5 million (or more) in the N.C. General Assembly long session next year and nourish Pine Knoll Shores/Indian Beach & Salter Path next winter (2019-20). Or we could distribute the \$5 million to each municipality based on the nourishment sand volume each municipality is scheduled to receive, and move forward with the entire project at once this winter (2018-19). We have several weeks before the Record of Decision is issued for the Master Plan, the State permit is received, the federal (BOEM) sand & gravel lease is executed, etc.; and the purpose of providing this information now and the PowerPoint presentation the Commission will receive at your regular meeting is to review some of these scenarios so there is a firm understanding of the decision process well before a formal monetary request is made to the Beach Commission to release reserve funds.

Morehead City Harbor Delta Project

A complicating factor in a good sense is the infusion of federal dollars to the Morehead City Harbor Project courtesy of the appropriation omnibus bill for FY 2018 (October 1, 2017 – September 30, 2018), which provided the U.S. Army Corps of Engineers (Corps) \$6.83 billion in March of 2018 – well above the President’s budget recommendation of ~\$5 billion and even \$800 million more than the enacted FY 2017 level. The Corps in return had to develop a [Workplan](#) to spend these monies across all their projects, which was released on June 11th. Morehead City Harbor received an additional \$12.6 million, which totals over \$18 million for FY 2018 alone when the President’s budget recommendation (\$5.57 million) is included. The Corps also received roughly \$5 million additional dollars in the most recent hurricane supplemental bill, and has perhaps ~\$3 million remaining from this past winter’s effort (i.e., remaining from President’s FY 2018 budget figure). And lastly, the N.C Port Authority has provided \$10 million to possibly dredge the Harbor this summer. In total, this equates to over \$30 million for Harbor dredging. These are all dollar figures we may never see again in a single year and corresponds to perhaps millions upon millions of cubic yards of dredging.

The Corps (Wilmington District) remains in the process of reconciling a path forward with this scale of funding in hand to maximize navigation and to beneficially utilize the dredged sandy shoal material as a beach nourishment component in an upcoming scope of work - regardless if it’s a year 1, 2, or 3 of the Dredged Material Management Plan (DMMP). If we can pay for the additional (or Delta) cost of placing the sand in western Atlantic Beach and Pine Knoll Shores which has been approved via the DMMP, then we should explore that opportunity (see Fig. 2 – next page). As we all know, Ft. Macon and East Atlantic Beach are closer to the channel and therefore represent the “least cost” option; therefore west Atlantic Beach and Pine Knoll Shoes would be “Delta”. Ideally we could nourish western Atlantic Beach and Pine Knoll Shores via a Delta Project instrument, which would be cheaper than (and could supplant) the Pine Knoll Shores effort associated with Project #1 of the Master Plan.

The Delta Project option however is rife with uncertainty – developing an acceptable Memorandum of Agreement with the Corps, transferring monies in a timely manner, and even the Corps’ willingness and commitment to a Delta Project are all speculative (no disrespect to any of the parties implied). This subject and a purely in-house Delta cost estimate and fiscal implications to Project #1 of the Master Plan will also be discussed at our Beach Commission meeting.

The former Beach Preservation Task Force that pre-dates and was the catalyst for the Beach Commission/Shore Protection Office was practically founded on the notion of utilizing actively dredged material from Morehead City Harbor for beach nourishment along more western areas of Bogue Banks. Also during the formulation of the DMMP, we fought tooth and nail to ensure Pine Knoll Shores was in the area of inlet influence to leverage Delta Projects such as the one envisioned here (see quote from DMMP below). It is important we have a dialogue with this in mind as well, and I look forward to doing so with the municipalities and Beach Commission in the upcoming months.

DMMP, page OP-19 – *"As part of the MHC DMMP process, the Wilmington District identified areas along the adjacent beaches that are influenced by the ebb tide delta of Beaufort Inlet. This zone of influence is used to determine the future placement limits for material dredged from the system, with the intention of maintaining the health of the ebb tide delta and retaining material within the natural inlet sand-sharing system. Figure 7 displays the approximate limits of potential beach placement areas along Bogue Banks. These areas include the "Base Beach Placement Area," which is the least cost option, and the "Extended Beach Placement Area," which is within the Beaufort Inlet area of influence and may be used by non-federal entities for placement of beach quality sand. Quantities of material dredged that exceed the annual losses to Fort Macon or Atlantic Beach or the ebb tide delta may be available for beach placement by a local entity. Any requests by local entities to place this excess dredged material on adjacent beaches would be evaluated on a case-by-case basis and the additional costs associated with utilizing the new beach placement area would be funded by the requesting entity through an Additional Work Memorandum of Agreement (MOA)."*



Figure 7. Proposed Bogue Banks Beach Placement Areas

Figure 2 – Site map from the Morehead City Harbor DMMP depicting the Beaufort inlet zone of influence, which includes the "Base Beach Placement Area" (least cost option) and the "Extended Beach Placement Area" (eligible for Delta Projects).

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