

November 9, 2016 Croatan Civic League Meeting at the Virginia Aquarium, in the McClesky Promenade

6:33pm President of CCL, Bill Garvey opens meeting, Quorum is Met

Approximately 40 people present, Including CCL Board Members: Bill & Cheryl Garvey, Mike Kelly, Bob Lougen, Larry & Deb Kurtz, Katie Ripberger, and Amanda Robinson

6:34 Mike Kelly Introduces Dan Adams, City of Virginia Beach Coastal Manager

6:36pm Dan Adams - Reviews purpose of Engineering Study completed by Moffett and Nichols
Study results will be at: vbgov.com/pw-Croatan-beach

Dan can be contacted at dadams@vbgov.com and 385-4131

6:40pm Brian Joiner, lead coastal engineer at Moffett and Nichols begins presentation

Sand movement South to North

Sand gets trapped in Inlet, dredging 174-250 thousand cy

Sand has been added:

Resort Beach 1.3 million cy 2013

Sandbridge 2.2million cy

Dam Neck 700,000 cy 2013

Croatan 85,000cy cumulatively between 2008-2015

Review of Definitions of Typical Chesapeake Bay Dune Profile

Review of Croatan Beach Structures

Rudee Inlet History

1927 opened, closed by hurricane early 1930a, reopened 1950s

late 1960s jetties extended, sand trap excavated

late 80s Federal funding to deepen channel

late 90s current dredging practices begin, weir pushed seaward, jetty infrastructure lowered

This slide exhibited the increasing frequency of intense storms in the last 20 years

Permits for each of the 2 sand trap dredging areas for the State and for the Army Corp of Engineers allows 175-250 thousand cy t cumulatively o be removed and placed North

7:18pm Historical Shoreline Positions from VIMS and M & N digitized georeferenced aerial photos

1937, no inlet, the beach is wider, especially south

City has data for 2003, 2006, 2015, 2016

2015-16 dune cut back, steeper elevation on dune face

Twilight area of beach erodes most and recovers slowest

South end near Maryland & Lockheed more stable

Steady shoreline retreat from 2009

Beach width decreasing in north beach since 2006/2011

*Data analysis concludes the only change in the dune/beach environment causing the changes are more storms, causing more wave action and resultant loss of dune and shoreline

Modelling shown for 2015 beach at 8 different points with a 100 year storm, based on Hurricane Isabelle.

Beach berm goals: 15ft for vehicles, 10ft for lifeguards, 25ft of recreational space
Plan: Create 50ft beach berm at dune toe at 8 ft MLW with 40 ft of berm adjacent to weir

Requires approximately 130 cy for initial construction, and approximately 20,000 annually

Federal Permitting Section 408, Section 14 Explained

Conclusions

No correlation with dredging and shoreline changes

No indication City has negatively impacted beach (added sand 2008, 2013 and 2015)

8:12pm Dan Adams outlined current 10k and 20k Sand haul that is approved to be placed on the Public Beach at Croatan

Questions & Answers (paraphrased/summarized):

Sam Robinson: Have the bulkheads at Sandbridge impacted sand drift to Croatan?

Answer: no

Jim Periello: Cost and time frame for recommended beach changes

Answer: approximately \$11 cy sand x 130 thousand cy = around \$1.2 million

Question about Dune Grass, who would be responsible?

Answer: the oceanfront homeowners

Wes Laine and other neighbors posed questions/discussions about weir/jetty and causal relationship

Answer: No causal relationship per Engineers

Question about Weir deterioration and plans to fix/improve it

Answer: City will do repairs when weather allows. City is aware it will have to renovate Weir and jetty to address sea level rise, no time frame given

Martha Franklin: Sand outside the channel, does more get dredged in that area, causing more than 245, 000 cy to be dredged?

Answer: sometimes

Jim Periello: What is the hurricane protection distance necessary for Big Beach? And what is the current width of Big Beach?

Answer: Hurricane protection distance is 300ft. Current beach width is between 300-500 ft.

Amanda Robinson: The models that were shown exhibit one storm. Could the successive storms hitting the beach compound to have the same result of the 100 year storm?

Answer: They could add up, but that modeling wasn't done. What is important is that improvements are recommended

Amanda Robinson: Are the recommended changes going to be sufficient to protect the beach and dunes with sea level rise?

Answer: Sea level rise is slow going, but the engineer did not have an absolute answer.

Barry Knight, City Council Representative offered to help

Motion to end Meeting at 9:15 by Debbie Kurtz

Motion seconded by Cheryl Garvey

Minutes respectfully submitted by Amanda Robinson