

Static Line Exception Reauthorizations

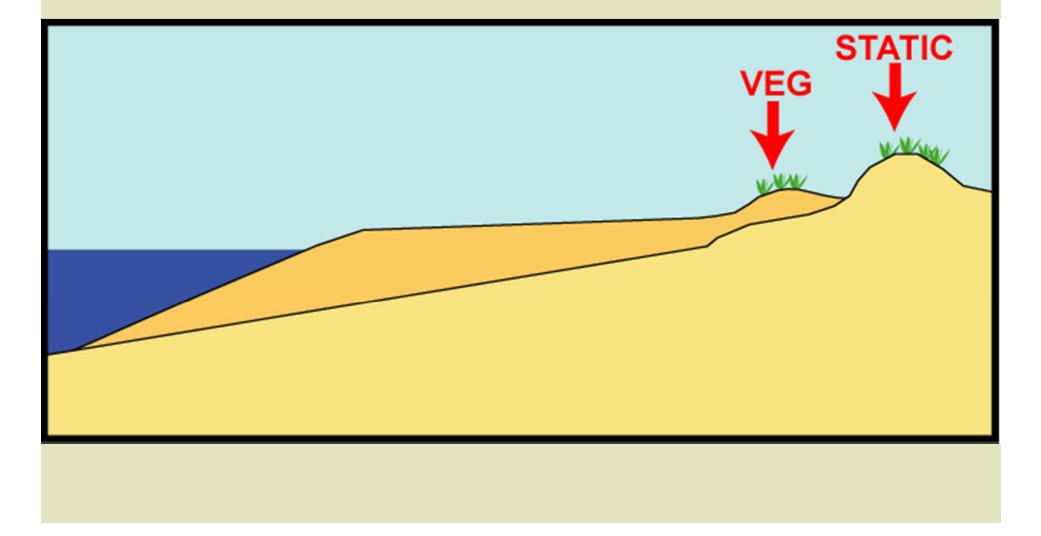
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Coastal Resources Commission – May 14, 2014 – Atlantic Beach



Defining the Static Line





Static Line Exception

- 5 year waiting period after "large-scale project"
- Minimum setback of 60 ft or 30x erosion rate, measured from vegetation line
- Total Floor Area < 2,500 sq ft
- In-line with adjacent structures
- No swimming pools oceanward of static line



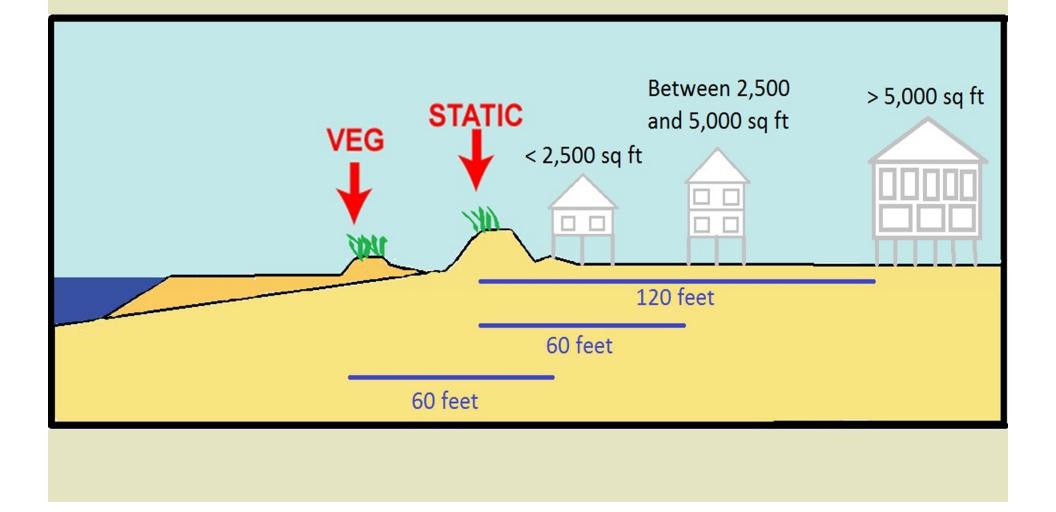
Static Line Exception

For structures > 2,500 sq ft:

- Setback is measured from the most landward line (either static line, veg. line, or measurement line)
 - If structure is > 2,500 sq ft but < 5,000 sq ft, setback is 60 feet or 30x the erosion rate, whichever is greater
 - If structure is > 5,000 sq ft, setback is 120 feet or 60x the erosion rate, whichever is greater



S.L.E. Development Scenario





Static Line Exception Request

- Large-scale (USACE or > 300,000 cubic yards)
- > 30 year design life
- Proof of compatible sediment for life of project
- Financial resources to pay for life of project
- Town petitions for exception, CRC decides
- Every five years, town submits progress report and CRC reevaluates
 - Today, Wrightsville Beach and Carolina Beach



Four Criteria, including changes in last 5 years

Summary of Fill Projects
Project Design and Performance
Compatible Sediment
Financial Resources



Town of Wrightsville Beach



Description of Area

- Static line extends for approximately 2.3 miles
- Erosion rate setback factor is 2 for the area with the static line
- 14 vacant residentially zoned oceanfront lots and 2 vacant commercially zoned oceanfront lots
- Since September 9, 2009, no permits have been issued under the static line exception



Summary of Fill Projects

- Initial construction of project in 1965
- Federal project reauthorized in 1986, with first work under new authorization beginning in 1991
- Current authorization through 2041
- Since 1986, projects have occurred approximately every four years
- <u>5-Year Progress Report</u>:
 - 2010: 450,000 cy; \$2.8 million
 - 2014: 700,000 cy; \$6.15 million

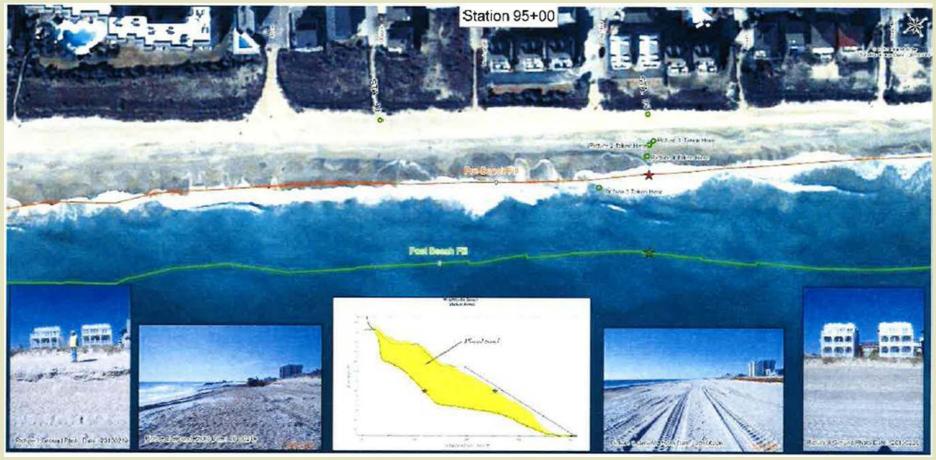


2014 Project Boundary





Project Design and Performance



5-Year Progress Report: NHC intends to apply for local permit, using the USACE design.

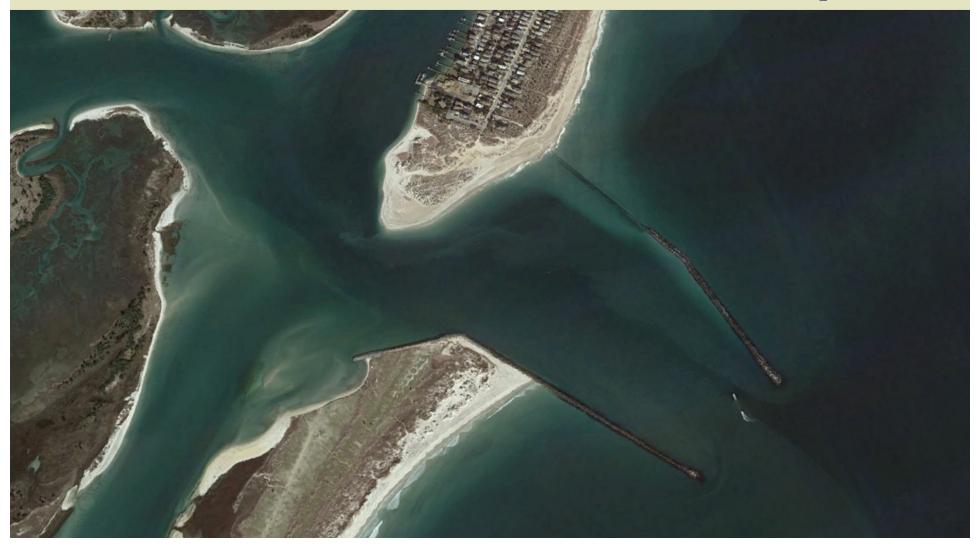


Compatible Sediment

- Since 1986, borrow area / sediment trap is in Masonboro Inlet and the south end of Banks Channel
- Sand transported over the weir of the north jetty
- <u>5-Year Progress Report</u>:
 - High quality beach sand with little silt content (< 10% fines)
 - Volumes have been large enough to satisfy past fill projects (~ 1,080,000 cy every 4 years)
 - USACE has begun looking at alternative sources offshore and on the south side of the ebb delta off Masonboro Island should the current source of sand prove to be insufficient in the future



Masonboro Inlet Sediment Trap





Financial Resources

- Federal Coastal Storm Damage Reduction Project through 2041
 - Contributing authority allows non-federal sponsor to augment federal funding shortfalls (approved in 2012)
- NHC Room Occupancy Tax: 60% of the first 3% towards beach nourishment
 - \$36 million in fund; annual collections ~\$3.8 million
- NHC interlocal agreement: if no fed or state funding
 - 17.5% town, 82.5% county
 - Sufficient funding well beyond 25 years
- Town of WB Capital Improvement Fund: \$324,000



Recommendation

Staff recommends that the Commission <u>renew</u> the Town of Wrightsville Beach's static line exception for another five years.

The Commission will have the opportunity to reevaluate the static line exception and the necessary requirements every five years, and can address major changes in future funding.





Town of Carolina Beach



Description of Area

- Static line extends for approximately 3.3 miles
- Erosion rate setback factor is 2 for most of the area with the static line, and 3 at the northern end of the Town adjacent to Freeman Park
- 13 vacant oceanfront lots
- Since September 9, 2009, 2 single-family oceanfront houses were permitted under the static line exception
 - Measured setbacks from the existing first line of stable and natural vegetation instead of the static line



Summary of Fill Projects

- Initial construction of project in 1964
- Federal project reevaluated in 1993, reauthorized for the remaining portion of 50-year project (1964-2014)
 - Water Resources Reform and Development Act (WRRDA) bill negotiations are ongoing
- Since 1982, projects have occurred approximately every three years
- <u>5-Year Progress Report</u>:
 - 2010: 440,000 cy; \$5.8 million
 - 2013: 989,000 cy; \$6.5 million

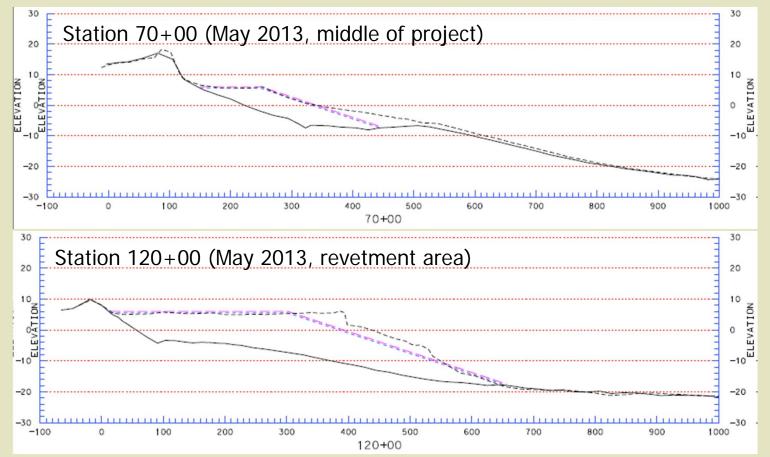


Project Boundary





Project Design and Performance



<u>5-Year Progress Report</u>: NHC received State permit No. 138-12 to move forward with the project if it is not reauthorized (same design)

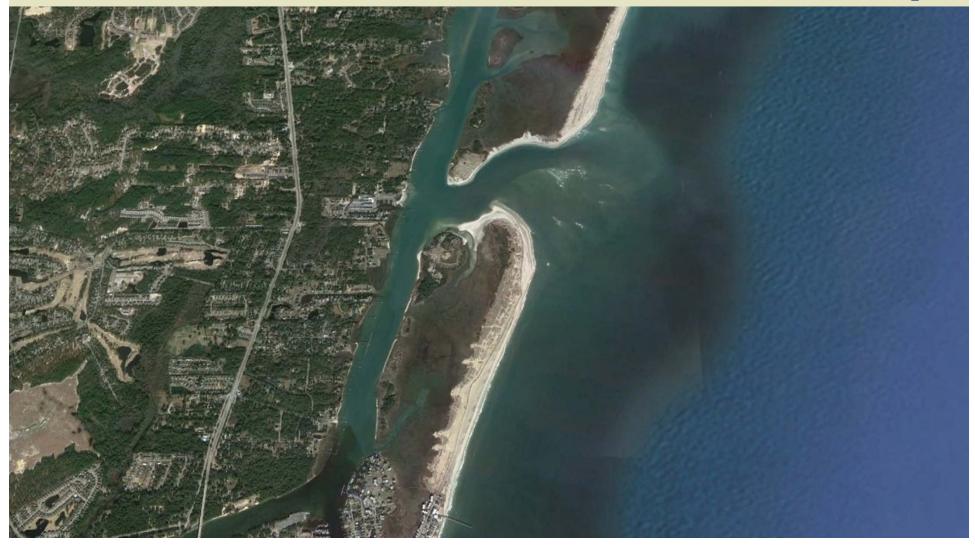


Compatible Sediment

- Carolina Beach Inlet was artificially opened in 1952
- Since 1985, borrow area / sediment trap is the throat of Carolina Beach Inlet
- <u>5-Year Progress Report</u>:
 - High quality beach sand with little silt content (< 10% fines)
 - Volumes have been large enough to satisfy fill projects over the past 30 years (~ 851,500 cy every 3 years)



Carolina Beach Inlet Sediment Trap





Financial Resources

- Federal Coastal Storm Damage Reduction Project expiring at the end of 2014
- NHC Room Occupancy Tax: 60% of the first 3% towards beach nourishment
 - \$36 million in fund; annual collections ~\$3.8 million
- NHC interlocal agreement: if no fed or state funding
 - 17.5% town, 82.5% county
 - Sufficient NHC ROT funds well beyond 25 years
- Town of Carolina Beach nourishment fund from public parking and Freeman Park revenues: \$350,000



Recommendation

Staff recommends that the Commission <u>renew</u> the Town of Carolina Beach's static line exception for another five years.

The Commission will have the opportunity to reevaluate the static line exception and the necessary requirements every five years, and can address major changes in future funding.



Static Line Exception Reports

Municipality	Date Adopted by	5-Year Progress
	CRC	Reports Due
Carolina Beach	August 27, 2009	August 27, 2014
Wrightsville Beach	August 27, 2009	August 27, 2014
Ocean Isle Beach	January 13, 2010	January 13, 2015
Atlantic Beach	March 24, 2010	March 24, 2015
Emerald Isle	March 24, 2010	March 24, 2015
Indian Beach / Salter Path	March 24, 2010	March 24, 2015
Pine Knoll Shores	March 24, 2010	March 24, 2015



Corolla

Static Lines and Static Line Exceptions

	Static Line	
Static Lines	Exceptions	No Static Line
Ocean Isle Beach	Ocean Isle Beach	Sunset Beach
Oak Island		Holden Beach
Caswell Beach		Figure Eight Island
Bald Head Island		Surf City
Kure Beach		North Topsail Beach
Carolina Beach	Carolina Beach	Hatteras
Wrightsville Beach	Wrightsville Beach	Frisco
Topsail Beach		Buxton
Emerald Isle	Emerald Isle	Avon
Indian Beach	Indian Beach	Salvo
Salter Path	Salter Path	Waves
Pine Knoll Shores	Pine Knoll Shores	Rodanthe
Atlantic Beach	Atlantic Beach	Kill Devil Hills
Nags Head		Kitty Hawk
		Southern Shores
		Duck