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**Science Panel Assessment of Mad Inlet  
Summary of Public Comments  
Amendments to 15A NCAC 7H .0304  
Mad Inlet IHA  
Unvegetated Beach, Hatteras Village  
February 26, 2014**

# 15A NCAC 7H .0304

## AECs Within Ocean Hazard Areas

- Ocean Erodible Area
- High Hazard Flood Area
- Inlet Hazard Area
- Unvegetated Beach Area
- Erosion Rate Report Reference

# Removal of Unvegetated Beach Designation

## 15A NCAC 7H .0304(4) – Unvegetated Beach Area

- Where no stable natural vegetation is present on either a permanent or temporary basis.
- Areas that are suddenly unvegetated as a result of a hurricane or other major storm.
- 2004 designated oceanfront areas on Hatteras Island west of the inlet breach .
- Vegetation was destroyed as a result of Hurricane Isabel on September 18, 2003.
- Remnants buried by the construction of an emergency berm.
- Established a measurement line for determining setbacks.

# Removal of Unvegetated Beach Designation

## 15A NCAC 7H .0304(4) – Unvegetated Beach Area



# Removal of Unvegetated Beach Designation

## 15A NCAC 7H .0304(4) – Unvegetated Beach Area



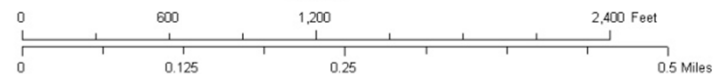
### Legend

- Vegetation Line - 2002
- - - Vegetation Line - 2003 (Measurement Line)
- Vegetation Line - 2004
- Vegetation Line - 2008
- Vegetation Line - 2012

NOTE: Vegetation lines represented on this map are considered "stable-natural" as interpreted from photography.



Datum: NAD 83  
Projection: North Carolina State Plane  
Units: Feet



2012 Photo  
Map 2 of 2

By: Peter Richardson

NC DENR - Division of Coastal Management - 2010

# Removal of Unvegetated Beach Designation

## 15A NCAC 7H .0304(4) – Unvegetated Beach Area

- Vegetation line recovery.
- On-the-ground observations - 2010, 2012, 2013.
- Natural vegetation line may be less restrictive than measurement line.
- Public hearing held November 12, 2013 at Hatteras Village.
- One comment received supportive of the action.

# Removal of Inlet Hazard Area Designation

## 15A NCAC 7H .0304(3) Inlet Hazard Areas

- Designations based on a 1978 study (minor amendments in 1981) of areas that subject to the dynamic influence of ocean inlets.
- CRC began IHA update in 2006 – requested Science Panel recommendations.
- IHA Update Report Completed May 2010.
- Recommendations included removal of Mad Inlet IHA.
- While CRC continued IHA discussions, removal of Mad Inlet was approved in a separate action.

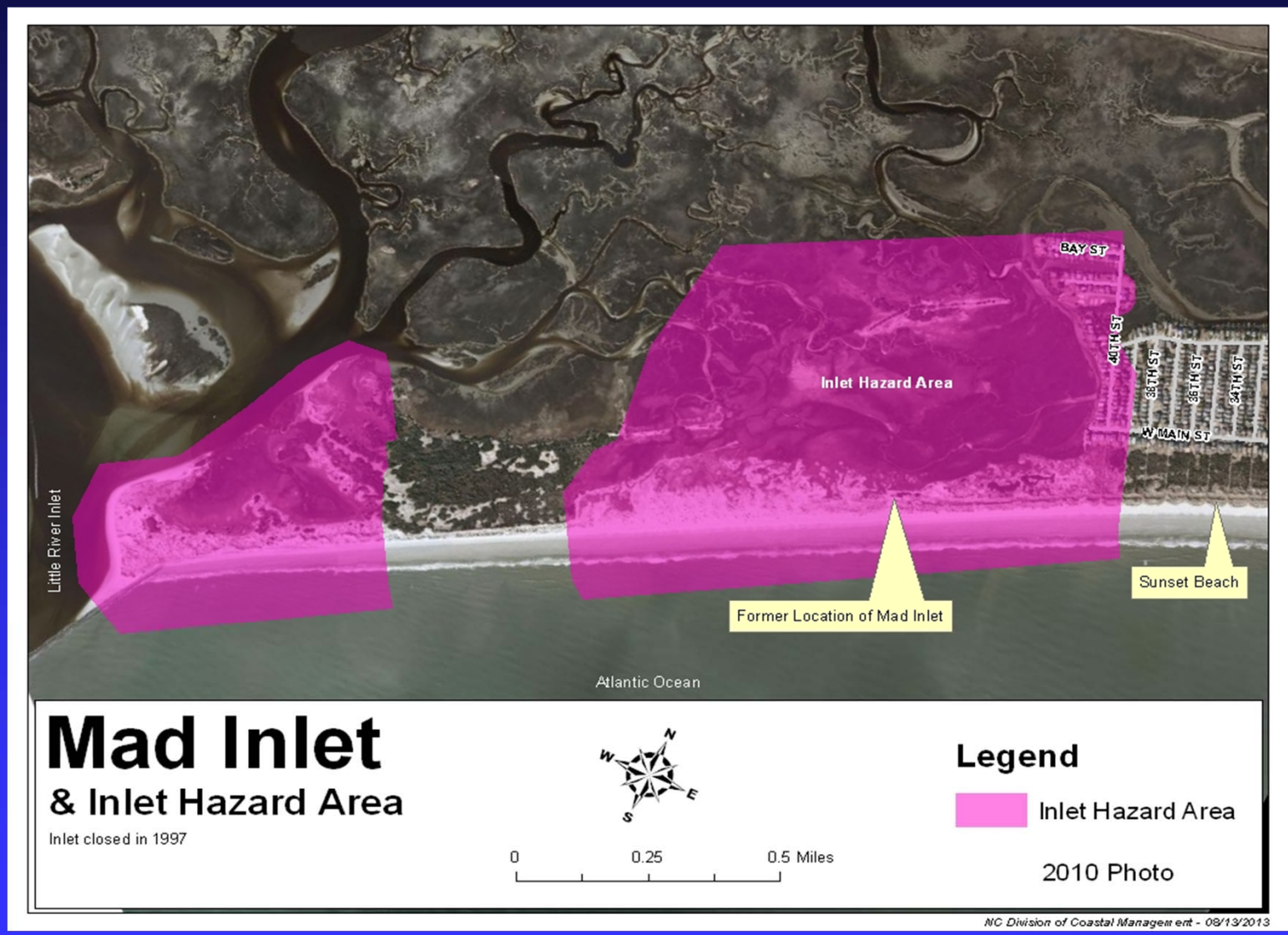
# Removal of Inlet Hazard Area Designation

## 15A NCAC 7H .0310 Use Standards for IHAs

- Density limit – one residential/commercial unit per 15,000 sqft
- Density limit – Residential structures four units
- Density limit – non-residential structures less than 5,000 sqft
- Access roads, maint./replacement existing bridges allowed.
- 126 properties located in Mad Inlet IHA
- Less than 10 are undeveloped
- No longer required to adhere to density and size restrictions
- Benefits to any large, previously unsubdivided properties
- Greater development potential.



# Removal of Inlet Hazard Area Designation



# Removal of Inlet Hazard Area Designation

## 15A NCAC 7H .0304(3) Use Standards for IHAs

- Public hearing held November 6, 2013 in Sunset Beach.
- ~ 48 people attended, 9 spoke against, 2 in favor

### Comments – Against Action

- Scientific basis of decision.
- Inlet will reopen.
- Insurance
- No recent storms
- Turtles & Wildlife/Bird Island
- Ocean Isle terminal groin
- Change character of Sunset Beach

### Comments – For Action

- Years of accretion in area.
- Stability of Little R. jetties.
- Asset to sunset Beach.

# Removal of Inlet Hazard Area Designation

## 15A NCAC 7H .0304(3) Use Standards for IHAs

- 40 Written Comments

### **Comments – Opposed**

- Scientific basis of decision
- Inlet will reopen
- Insurance
- No recent storms
- Turtles & Wildlife/Bird Island
- Ocean Isle terminal groin
- Only benefit to a few
- Keep area pristine
- Impact of sea-level rise
- Detrimental to Sunset Beach
- Town of Sunset Beach Resolution

### **Comments – In Favor (1)**

- Mad Inlet is closed

# Removal of Inlet Hazard Area Designation

## CRC Science Panel on Coastal Hazards Assessment

Reviewed info provided by Spencer Rogers & Dr. Cleary

- ICW impacts on hydrodynamics
- Larger inlets became more efficient/stable
- Reduced tidal volume of smaller inlets
- Little River Inlet jetties - impact on Mad Inlet creeks
- Tubbs Inlet opening increased sand supply to Sunset Beach
- Hurricane Hazel opened channel but also filling of tidal basin
- Constant washovers brings fill to the marsh
- Due to filling, breach more likely west of Bird Island

# Removal of Inlet Hazard Area Designation

## CRC Science Panel on Coastal Hazards Assessment

### **Other considerations**

- A large body of necessary to keep an inlet open
- Little River Inlet shoreline variability disappears at Mad Inlet
- Noted similar areas on Topsail and Outer Banks
- Subject to overwash or breaching but conditions don't support long-term reopening
- Similar to other low-lying areas that are not IHAs

# Removal of Inlet Hazard Area Designation

## CRC Science Panel on Coastal Hazards Assessment

### Findings

- Mad Inlet is not presently an inlet and if it were to breach, is not likely to persist as a viable inlet.
- Present IHAs are severely out of date and need to be updated.
- Other high hazard areas that should be addressed by the Commission are areas subject to overwash potential and ephemeral inlet formation or breaching.

# Removal of Inlet Hazard Area Designation

## Staff Response to Public Comments

- Comments reference physical conditions at the site
- CRC asked Science to reconsider the area.
- Support original finding in 2010 IHA Boundary Update Report
- IHA designation not intended to prevent development entirely
- IHA limits scale of development (density and size) in natural-hazard areas that are especially vulnerable to erosion, flooding and other adverse effects of sand, wind, and water because of their proximity to dynamic ocean inlets.
- Area still subject OHA (setbacks, dune protection, flood)
- Area subject to Coastal Barriers Resources Act restrictions

# Removal of Inlet Hazard Area Designation

## CAMA §113A-115 (c)

The Commission shall review the designated areas of environmental concern at least biennially. New areas may be designated and designated areas may be deleted, in accordance with the same procedures as apply to the original designations of areas under this section. Areas shall not be deleted unless it is found that the conditions upon which the original designation was based shall have been found to be substantially altered.











