

# Beach Sand Eligibility FEMA DR 4110 & 4214 MA

- FEMA Directives and Definitions
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  - Plantings and Snow (sand) Fence
  - Future Actions
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01/27/2016

## Goals Regarding Salisbury Beach Claims

- ▶ Discuss status of prior disaster beach claims.
  - ▶ DR-4110: Currently written as combination Cat. A and Cat. G.
  - ▶ DR-4214: Currently under formulation.
- ▶ Define actions required to complete prior disaster claims (DR-4110 & 4214).
- ▶ Define future actions for DCR to consider to maximize FEMA reimbursement:
  - ▶ Standardize the documentation required for FEMA claims (all categories).
  - ▶ Implement a revised Beach Management Plan if requesting Dune Restoration (Sand, Plantings, Fencing) for future disasters.
  - ▶ Implement periodic beach cross section documentation to establish pre- / post-storm data.

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## Definitions per 44CFR Subpart G - Public Assistance

- ▶ 206.201c. Facility means any publicly or privately owned building, works, system, or equipment, built or manufactured, or an improved and maintained natural feature. Land used for agricultural purposes is not a facility.
- ▶ 206.201g. Permanent work means that restorative work that must be performed through repairs or replacement, to restore an eligible facility on the basis of its predisaster design and current applicable standards.
- ▶ 206.221c. Immediate threat means the threat of additional damage or destruction from an event which can reasonably be expected to occur within five years.
- ▶ 206.221d. Improved property means a structure, facility, or item of equipment which was built, constructed or manufactured. Land used for agricultural purposes is not improved property.

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## Beaches 44 CFR §206.226 j. and FEMA Fact Sheet 9580.8

- ▶ Unimproved natural beaches (built by naturally drifting sands):
  - ▶ Replacement of sand on an unimproved natural beach is not eligible.
- ▶ Improved beaches defined by being:
  - ▶ Constructed by the placement of sand (of proper grain size) to a designed elevation, width, and slope; and,
  - ▶ A maintenance program involving periodic renourishment of sand must have been established and adhered to by the applicant.
- ▶ 44CFR §206.226j (Beaches) is further defined by FEMA Fact Sheet 9580.8 (Eligible Sand Replacement on Public Beaches).

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## FEMA Fact Sheet 9580.8 "Eligible Sand Replacement on Public Beaches", 2009.

- ▶ Designed and Maintain Beaches means:
  - ▶ The beach was constructed by the placement of imported sand (of proper grain size) to a designed elevation, width, and slope;
  - ▶ A maintenance program involving periodic renourishment with imported sand has been established and adhered to by the applicant; and,
  - ▶ The maintenance program preserves the original design.
- ▶ Salisbury Beach State Reservation Barrier Beach Maintenance Plan, 2008
  - ▶ Dune maintenance is supported by establishing annual snow fence, beach grass and equipment needed to accomplish the work. To-date DCR has not implemented routine dune nourishment as a standard maintenance practice. (Pg. 47)
  - ▶ Dune nourishment has only been considered and performed in response to a declared disaster. (Pg. 46)
  - ▶ Conclusion: Using FEMA's definitions, Salisbury Beach is a natural beach, not a designed and maintained beach / improved natural feature.

## FEMA Eligible Sand Replacement on Beaches (9580.8)

### Permanent Work on Designed & Maintained Beaches: (DUNES)

- ▶ Sand replacement is limited to amount lost as a result of the disaster event (as referenced by pre- and post-storm profiles).
- ▶ Sand that eroded prior to a disaster is not eligible.

### Emergency work to protect improved property from a 5- Year Event: (BERMS)

- ▶ The protection from a 5-Year event, has been established by FEMA, as a maximum of 6 CY/LF above the stillwater elevation or whatever quantity was on the beach prior to the event, whichever was less.
- ▶ Pre- and post-storm profiles are used to determine the eligible volume of sand.

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## Emergency Work to Provided 5-Year Emergency Protection Measures

- ▶ If a beach has eroded to a point where a five-year storm or flood event will damage improved property, cost effective emergency work on the beach may be eligible.
- ▶ All eligible work on beaches must be above the 5-Yr. storm elevation.
- ▶ Five-year storm elevation equals 5-Yr stillwater elevation: The maximum storm-induced water-surface elevation, primarily a combination of the normal tide and the storm surge.
- ▶ FEMA Flood Insurance Study for Salisbury Beach, 1986 establishes stillwater elevation at 8.0' NGVD29. (National Geodetic Vertical Datum 1929)
- ▶ FEMA Flood Insurance Study for Salisbury Beach, 2014 establishes stillwater elevation at 7.2' NAVD88 (North American Vertical Datum 1988) [Equates to the same elevation as 8.0' NGVD29 used in 1986 Study.]

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## Applicant Demonstration of Damages

- ▶ PA Guide Pg. 10: "Local officials are responsible for identifying damage, providing sufficient data for FEMA to develop an accurate scope and cost estimate for doing the work and approving grants, and managing the projects funded under the PA Program.
- ▶ Applicant needs to provide documentation regarding all claimed damages. Documentation must demonstrate an item of work must be required as the result of the major disaster event. (§206.223a)
- ▶ All beach profiles must clearly identify the baseline location of 7.2 NAVD88 or 8.0' NGVD29.
- ▶ Emergency work must identify the improved property being protected from a five year event along with their base elevation to demonstrate the need for this protection. (If a facility has post-storm 5-Year protection remaining, then additional protection is not eligible for FEMA funding.)
- ▶ Costs to provide post storm beach profiles and elevations may be reimbursable thru Direct Administrative Costs. (FEMA Policy 9525.9, Activity List page 1: "Activities related to visiting, surveying, and accessing sites... developing detailed site specific description component of one specific project worksheet.)

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## Planting and Snow (sand) Fence

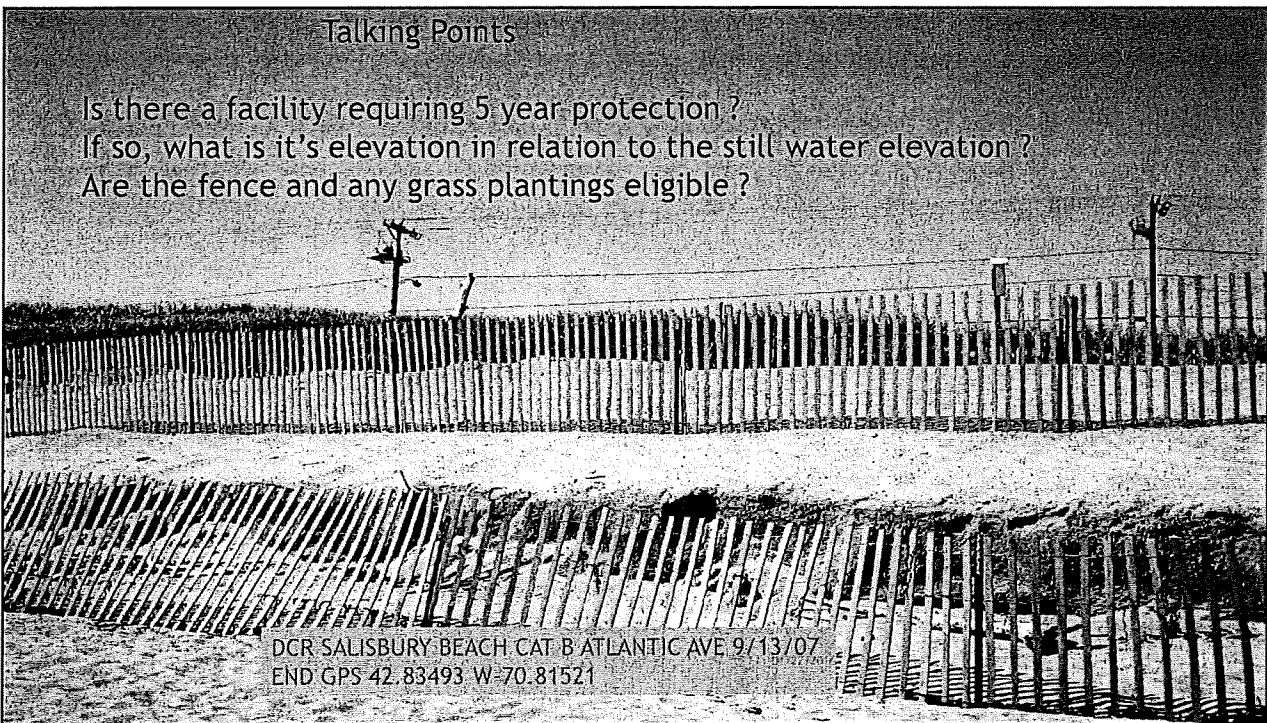
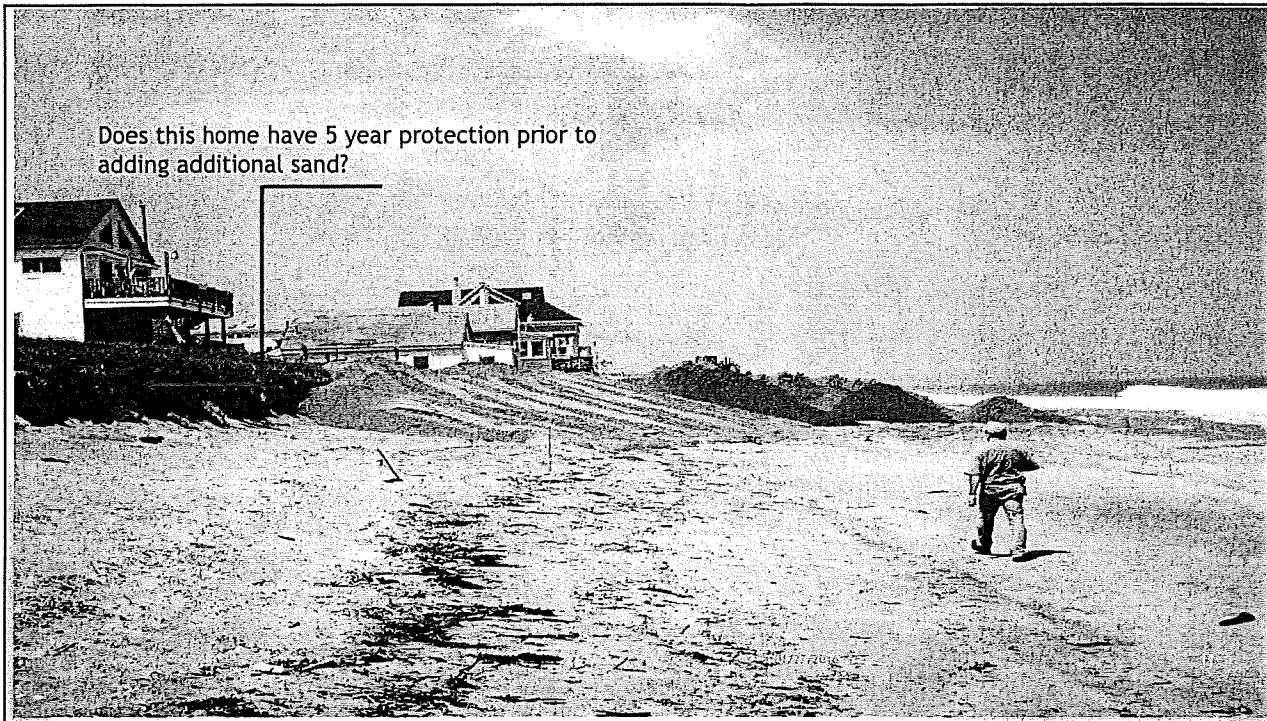
- ▶ Plantings eligibility identified by FEMA Recovery Policy 9524.5, Sep 2013
  - ▶ “Plantings when they are part of the restoration of an eligible facility for the purposes of stabilizing slopes (including dunes on eligible improved beaches), ...”
- ▶ Snow (Sand) Fence: “Snow fence on a beach is used to stabilize and re-build beach and dune areas through the use of snow fence and planting of beach grass” (Salisbury Beach State Reservation Barrier Beach Management Plan, 2008, page 46, 47 and 62).
- ▶ Since planting and sand fence serve similar stabilization functions, both may be eligible for permanent work on an eligible facility (designed and maintained dune), but not for emergency work (sacrificial berm).

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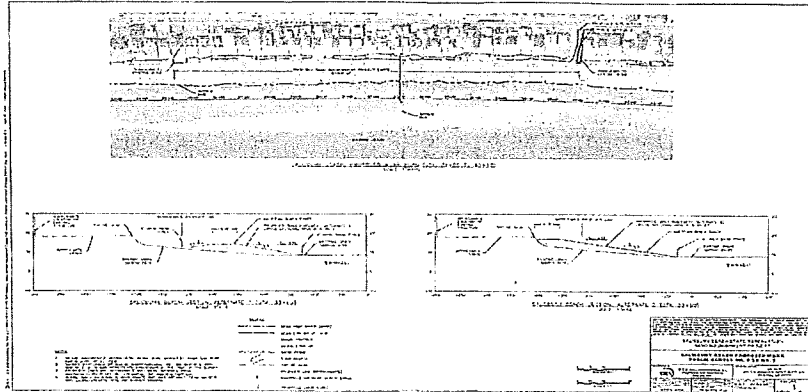
## Review Information Request for DR-4110 and DR-4214 MA

- ▶ DR-1701, PW 602 is being used for the emergency berm sand volume calculations.
- ▶ Review Information Request letters to address any questions regarding what information is being requested; and establish timeline to receive the information.
- ▶ All Category B project worksheets must have cross sectional beach profiles with either 8.0' NGVD or 7.2' NADV reference lines; and, related base elevations of all improved property requesting five-year storm protection as defined by 9580.8.

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## Profile and Plan View Data Discussion: References to Imp. Prop., Cross Sect., S.W.E.



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## Future Actions

- ▶ Timeline to provide "Information Request" items for DR-4110 and DR-4214?
- ▶ Revision and implementation of new Salisbury Beach Management Plan to meet FEMA "designed and maintained" beach eligibility, if desirous of future permanent work project worksheets for dune restoration.
- ▶ Document periodic beach profiles using stillwater datum baseline references to ensure pre- and post-storm elevations showing need for emergency protection of improved property.
- ▶ Ensure funding is not jeopardized by non-compliance with all EHP requirements.

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## Deviations from PW Eligible Scope of Work for Emergency Berm

- ▶ Scenario: Applicant receives a defined eligible quantity of sand to construct an emergency berm but elects to build 'bigger and better'.
  - ▶ Can applicant use FEMA funds towards an improved project?
  - ▶ Can the Categorical Exclusion of the emergency berm be applied to the larger scope of work?
  - ▶ Of the costs to construct the larger project, how much of the costs are eligible?
    - ▶ A. All?
    - ▶ B. A prorated portion?
    - ▶ C. Only the original estimated cost on the PW?
    - ▶ D. None of the costs?

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## Summary of Important Terms


- ▶ DUNE restoration (if designed and maintained dune) or
- ▶ Emergency Protective Measures to re-establish 5-Year protection. (BERM PLACEMENT)
- ▶ Five-Year Storm Stillwater Elevation referenced on all cross sectional diagrams and plan views showing base elevations for improved property.

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## Review Goals Regarding Salisbury Beach Claims - Past, Present, Future

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Questions / Comments  
Concerns / Discussions?

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