New Jersey Coastal Management & Planning for Delaware Bay Coastal Hazards

Delaware Estuary Science & Environmental Summit
1/14/09

John R. D’Agostino
New Jersey Coastal Management Office
The Coastal Landscape
Global Climate Change & New Jersey

Images: NJCMP; Union of Concerned Scientists
NJ & Sea Level Rise

Wetland Dynamics

- Varies by geomorphology
- Factors include:
  - Slope/erodibility
  - Sediment flux
  - Flood frequency
  - Subsidence
  - Disturbance

Image: Synthesis of U.S. Geological Survey Science for the Chesapeake Bay Ecosystem and Implications for Environmental Management; Circular 1316
SLR – Anticipated Extent & Flooding

Wetland Dynamics – SLR Uncertainty

Images: Synthesis of U.S. Geological Survey Science for the Chesapeake Bay Ecosystem and Implications for Environmental Management, Circular 1316.
Wetland Migration Impedance

Spatial Planning

Retreat Zones Created by Lathrop & Love: “Vulnerability of New Jersey’s Coastal Habitats to Sea Level Rise”
# NFIP/Community Rating

<table>
<thead>
<tr>
<th>CREDIT POINTS</th>
<th>CLASS</th>
<th>PREMIUM REDUCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>SFHA*</td>
</tr>
<tr>
<td>4,500+</td>
<td>1</td>
<td>45%</td>
</tr>
<tr>
<td>4,000 – 4,499</td>
<td>2</td>
<td>40%</td>
</tr>
<tr>
<td>3,500 – 3,999</td>
<td>3</td>
<td>35%</td>
</tr>
<tr>
<td>3,000 – 3,499</td>
<td>4</td>
<td>30%</td>
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<tr>
<td>2,500 – 2,999</td>
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<td>25%</td>
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<td>20%</td>
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<tr>
<td>1,500 – 1,000</td>
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<td>15%</td>
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<td>8</td>
<td>10%</td>
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<tr>
<td>500 – 999</td>
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<td>5%</td>
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<tr>
<td>0 – 499</td>
<td>10</td>
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</tr>
</tbody>
</table>

*Special Flood Hazard Area

**Preferred Risk Policies are available only in B, C, and X Zones for properties that are shown to have a minimal risk of flood damage. The Preferred Risk Policy does not receive premium rate credits under the CRS because it already has a lower premium than other policies. The CRS credit for AR and A99 zones are based on non-SFHAs (B, C, and X). Credits are: classes 1-6, 10% and classes 7-9, 5%. Premium reductions are subject to change.
Light Detection and Ranging (LiDAR)

Image: Kirk Waters. “Lidar Applications: Coastal and Floodplain Mapping.”
Coastal Planning Efforts
Coastal Planning Efforts

Images: John Tyrawski, NJDEP-BGIS
Thank You