Increasing Resilience along Rhode Island’s Coast

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Metro Bay SAMP

Revitalizing Northern Narragansett Bay
Increase preparedness and reduce the impact of natural hazards

Achilles’ Heel of the Northeast (FEMA)

Surge Height 4.5 m (MLLW)

In a Cat 3 Hurricane – nothing is left!

Pawtuxet Cove, Cranston, RI - 1938
Point Street Bridge – 1938 Hurricane

Fox Point Hurricane Barrier
### Direct Economic Losses

**Capitol Stock Losses**
- Providence: $1.3 million
- Washington: $1.0 million
- Kent: $657,911
- Newport: $189,108
- Bristol: $97,008

**Business Interruption**
- Providence: $1.5 million
- Washington: $1.2 million
- Kent: $764,000
- Newport: $219,000
- Bristol: $110,000

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### Hazards Issue Paper Draft

- History
- Current Risks, Knowledge, Planning
- Changes in the floodplain
- Floodplain issues
- Best Practices
- Proposed Actions
1. *Expansion of the floodplain* due to fill, infill, sea level rise, runoff & shoreline change

![Map Image]

2. *Increased flooding impacts from additional infrastructure and populations in the floodplain*

- 175 businesses are in the existing floodplain
- $400 million to $1.6 billion assessed land and property assessed in the floodplain
3. Increased *impacts to recreational marine facilities and people*

Raging Blackstone River ravages boat landings

4. Impact of existing and potential *shoreline debris* during a storm event

**Debris Tonnage Amounts**

<table>
<thead>
<tr>
<th>Location</th>
<th>Tonnage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Washington Cty</td>
<td>2.2 million tons</td>
</tr>
<tr>
<td>Providence</td>
<td>1 million tons</td>
</tr>
<tr>
<td>Kent</td>
<td>600,000 tons</td>
</tr>
<tr>
<td>Newport</td>
<td>548,000 tons</td>
</tr>
<tr>
<td>Bristol</td>
<td>111,000 tons</td>
</tr>
</tbody>
</table>

RIEMA, 2005
5. Lack of a regional *hydrodynamic model* to predict the extent of flooding and potential impacts
6. Capacity of local/state government to implement mitigation plans and respond to flood events

Fields Point Redevelopment “Providence”
Tropical Cyclones Impacting New England

Bahamas is the point at which Rhode Island needs to take action!

Proposed Actions in Metro Bay

- Adopt more stringent building standards, flood ordinances beyond the minimum standards
- Develop scenarios for coastal hazards based on accurate models to guide decision-makers and the public in siting and design of development.
- Enhance public education targeted to developers, engineers, small businesses, banks, home owners
- Coordinate all aspects of floodplain management across the Metro Bay region.
For More information
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