GAME OF FLOODS: PRESERVATION EDITION

ALEX WESTHOFF, AICP
MARIN COUNTY PLANNING

ADRIENNE BURKE
RIVERSIDE AVONDALE PRESERVATION
AGENDA

10:30  Introductions / Presentation
10:50  Play Game (small group)
11:35  Report Back (large group)
11:45  Game Experiences
11:50  Toolkit (Individual)
HIGH SCHOOLS
Advisory assistance provided by:

National Trust for Historic Preservation
Save the past. Enrich the future.

Changes:
• More urban look and feel
• Increased assets of historical/cultural significance
• Integrity impacts
• Documentation

Developed for:

KEEPING HISTORY ABOVE WATER
APRIL 10-13, 2016 | NEWPORT, RI

CALIFORNIA PRESERVATION FOUNDATION
Elevate Buildings

(Accommodate)

Costs: Medium
Environmental Impacts: Neutral to Positive
Integrity Impacts: High
Effectiveness: Medium Term

Mississippi Development Authority
Floodproof Buildings

(Accommodate)

Costs: Medium
Environmental Impacts: Neutral
Integrity Impacts: Low
Effectiveness: Medium Term
Elevate/New Road
(Accommodate /Retreat)

Costs: High
Environmental Impacts: High
Effectiveness: Long Term
Coastal Armoring  
(Protect-Engineered)

Costs: High  
Environmental Impacts: High  
Effectiveness: Medium to Long Term
Tidal gate
(Protect/Engineered)

Costs: Extreme
Environmental Impacts: High
Effectiveness: Long Term
Living Shorelines
(Protect - Natural)

Costs: Medium to High
Environmental Impacts: Positive
Effectiveness: Medium to Long Term
Offshore structures

Protect/Natural

Costs: Medium to High
Environmental Impacts: Positive
Effectiveness: Medium Term
Beach Maintenance

Costs: High
Environmental Impacts: Positive
Effectiveness: Medium Term
Relocation

Costs: High
Environmental Impacts: Positive
Integrity Impacts: High
Effectiveness: Long Term

Cape Hatteras Lighthouse, North Carolina
Abandonment

Costs: Low
Environmental Impacts: Positive
Integrity Impacts: Extreme
Effectiveness: Long Term
## Inventory

<table>
<thead>
<tr>
<th>Name and Address of Asset Subject to Hazard (same as previous page)</th>
<th>Level of Property Vulnerability (High, Medium, Low)</th>
<th>Loss to Structure ($)</th>
<th>Loss to Contents ($)</th>
<th>Loss of Function or Use ($)</th>
<th>Displacement Cost</th>
<th>Total Loss for Hazard Event</th>
<th>Level of Community Value for Ranking Purposes (High, Medium, Low)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NASHVILLE OPERA HOUSE 50 MAIN STREET</td>
<td>MEDIUM</td>
<td>$300 K</td>
<td>$150 K</td>
<td>$30 K</td>
<td>$190 K</td>
<td>$670 K</td>
<td>MEDIUM</td>
</tr>
<tr>
<td>LEXINGTON GARDENS CORNER OF MAIN AND NORTH</td>
<td>HIGH</td>
<td>N/A</td>
<td>$20 K</td>
<td>N/A</td>
<td>N/A</td>
<td>$20 K</td>
<td>HIGH</td>
</tr>
</tbody>
</table>
Historic American Building Survey

Loggerhead Key Light Station

Boathouse

The boathouse at Loggerhead Key Light Station was constructed in 1924 by the U.S. Army Corps of Engineers. It was designed to be a simple, rectangular building with a gable roof. The boathouse served as a storage area for supplies and equipment used in maintaining the light station. It is constructed of concrete and features simple architectural details. The boathouse is an example of early 20th-century design and is an important part of the history of Loggerhead Key Light Station.
Public Interpretation
## COSTS $$$

**Real World** – costs are messy and depend on many factors
+ planning & engineering
+ permitting
+ maintenance & repair

**Game World** – costs are simpler one-time costs and given to you per unit (i.e. mile or # of buildings)
OBJECTIVE

Collaboratively develop a vision for 2050 to adapt to rising seas with minimal economic, environmental, and integrity impacts.
ROLES

- Preservationist
- FEMA Officer
- Sustainability Coordinator
- Park Service Staff
- Entrepreneur
- Ecologist
- Elected Official
GAME ON!
THANK YOU!

Sea Level Rise

marinslr.org