



# National Preservation Institute

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## Risk Assessment and Resiliency Planning for Cultural Resources

### Seminar Overview

Examine the increasing threats and challenges that cultural resources face from environmental changes. Learn how to use the risk assessment process to evaluate, prioritize, and plan for continued sustainability. Discuss management goals, redundancy systems, and mitigation strategies. Consider ways to build strategic partnerships to help integrate cultural resources into local and regional planning. Explore the resiliency-planning process through case studies and during group exercises.

### Agenda

#### Understanding the Challenges

By understanding the potential frequency and type of environmental hazard of an area, cultural resource managers can determine effective strategies for assessing, evaluating, and planning for vulnerable resources.

- Where does compliance fit in?  
Section 106/Section 110
- Policies – legal and economic
- Economics – tourism, business, residential
- Liability issues
- Regulations – codes/guidelines
- *Pocantico Call to Action on Climate Impacts and Cultural Heritage*
- Stewardship and preparedness

#### Threats and Risks

Review the spectrum of threats and risks to a site – from large-scale events to small-scale environmental changes. The largest environmental hazards may not be the most destructive; small, but continuous, changes in environmental conditions may be more damaging to resources.

- Water – sea-level rise, coastal erosion, storm surges, ice melt
- Disasters/extreme weather – hurricanes, earthquakes, floods, fire patterns/wildfires
- Gradual changes – increases/decreases in precipitation and humidity, greater fluctuations in temperature, sea-level rise
- Maintenance backlog
- Managing change between nature and culture
- Land use planning and development pressures

#### Best available data and science

Determining the scale of effects on cultural resources is a process of understanding and knowing where to find the information.

- Who holds the information? Federal agencies, state agencies, local agencies, other
- Environmental history/archives
- Climate vulnerability
- Vulnerability index
- Identification of hazards
- Inventory/survey/National Register – contributing/non-contributing
- Mapping

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## Risk Assessment and Resiliency Planning for Cultural Resources *continued*

### Assessment and Evaluation

Given the unknown long-term impacts of climate change, maintaining a baseline of recorded data for cultural resources serves as a reference point for rehabilitation or restoration standards.

- Recording baseline data – capturing conditions of the resource and its environment
- Surveys – Section 106/Section 110 requirements, HABS/HAER/HALS-type documentation, 3D scanning
- Impacts of threats/risks – large-scale event vs. small-scale environmental changes
- Evaluation – what to invest in, prioritizing resources

#### *Case Study*

*Group Exercises:* Spanning the range of potential effects to resources from small scale, long-term effects (increased/decreased atmospheric moisture, for example) to large-scale catastrophic events (flooding hurricanes, wildfires)

### Resiliency Planning:

#### Building Strategic Partnerships

Integrating cultural resources into local and regional risk planning demands that CRMs work with as many other stakeholders as possible to develop resiliency plans.

- Partners – government/private sector/public and interdisciplinary
- Short term – up to 10 years
- Long term – up to 30 years
- Redundancy systems
- Integrating changes into planning
- Plans related to capital improvement projects (CIP)
- Energy conservation/sustainability

#### *Case Study*

#### *Group Exercise*

### Resiliency Planning: Working Documents

Review examples of working documents and plans.

- Adaptation strategies
- Resiliency planning
- Hazard mitigation plan
- State climate action plan
- Preservation plan
- Climate-change mitigation plan
- Initial response and recovery plans

#### *Case Study*

#### *Group Exercise*

### Management Goals and Mitigation Strategies

Discuss management goals, redundancy systems, and mitigation strategies.

- Creativity in problem solving
- Tools – emerging technologies, laws and regulations, design (architectural/engineering)
- SOIS/guidelines – need for more flexibility?
- Pilot programs/templates
- Public education
- Documentation in lieu of preservation
- Embracing change and uncertainty

#### *Case Study*

#### *Group Exercise*