NATIONAL TRUST FOR HISTORIC PRESERVATION®

Holland Island, MD

Historic Preservation in a Changing Climate

NATIONAL TRUST FOR HISTORIC PRESERVATION®


DSK and the Sex Crime Cops
The Mind of a Serbian Madman
Angela Merkel's World Clout
Is Lady Gaga the New Oprah?
Building the Perfect Republican
JUNE 6, 2011 THEDAILYBEAST.COM
Newsweek
WEATHER PANIC
THIS IS THE NEW NORMAL
(AND WE'RE HOPELESSLY UNPREPARED)
BY SHARON BEGLEY


CLOSING ARGUMENTS
IT'S RISING DUE TO GLOBAL WARMING!
IT'S RISING DUE TO NATURAL CAUSES!
Welcome TO HAMPTON ROADS
Virginian Pilot Dec 5, 2010

PRESERVATION:

Reusing America's Energy

Preservation Week May 11-17, 1980

It takes energy to construct a new building.
It saves energy to preserve an old one.

It takes the energy equivalent of one gallon of gasoline to make, deliver and install eight bricks. Preserving eight old bricks instead of throwing them away and making new ones means that the energy of a gallon of gasoline can be used to meet other needs. Reusing old buildings saves the energy required to demolish and replace them with new buildings. And properly rehabilitated old buildings use no more energy, on the average, than brand new buildings for operation.

Save energy—save a building! Join the National Trust for Historic Preservation and the U.S. Department of Energy in observing Preservation Week 1980. For details, write to Preservation Week, National Trust, 17th Massachusetts Ave., N.W., Washington, D.C. 20036. Or contact your local preservation organization.

NATIONAL TRUST FOR HISTORIC PRESERVATION

Climate Change Mitigation:

Any action taken to permanently eliminate or reduce the long-term risk and hazards of climate change.

Climate Change Adaptation:

Any action taken to address potential or experienced impacts of climate change that reduce harm.

Mitigation:

Avoiding the Unmanageable

Adaptation:

Managing the Unavoidable.

-California Climate Change Center

Heritage & Climate Change

- Why is climate change of particular concern to preservationists?
- What can we do to protect our cultural heritage from the worst effects of climate change?

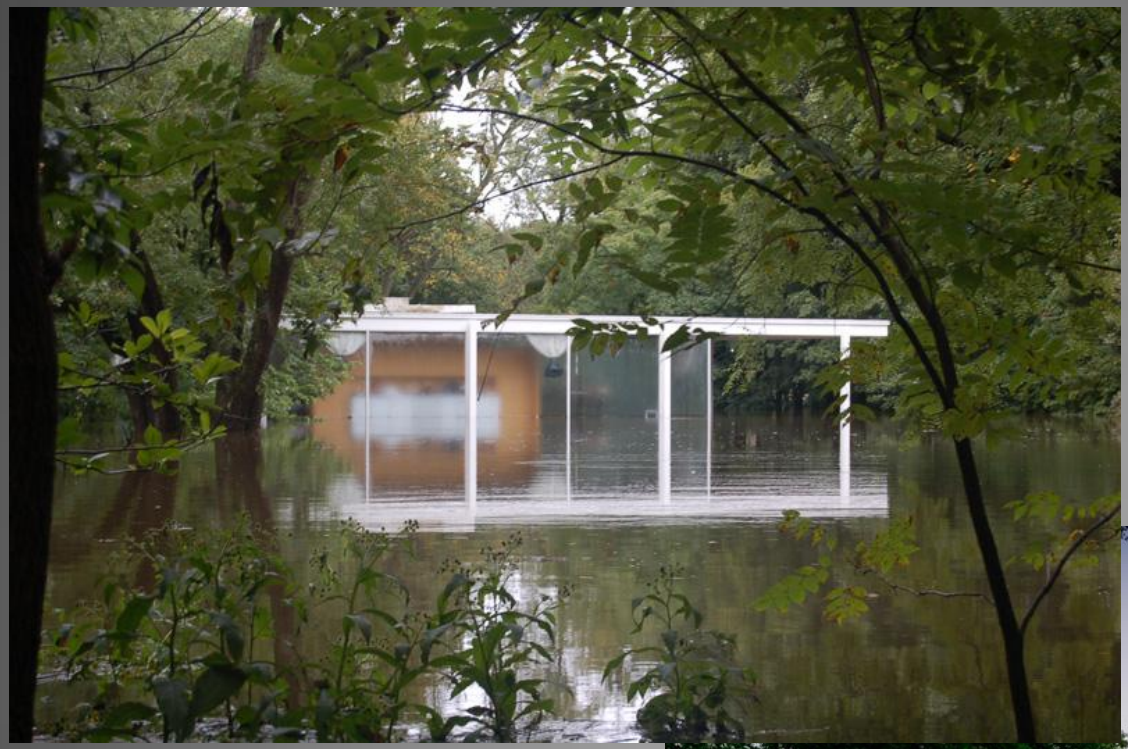
New Orleans , LA

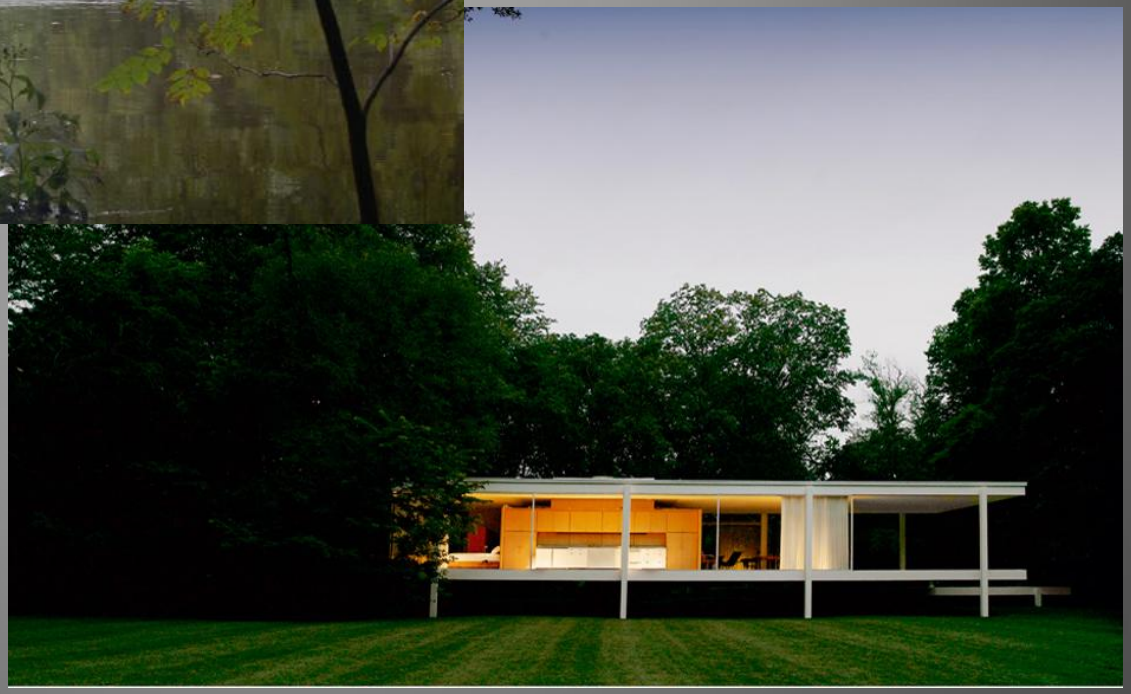
Ft Jefferson, FL

Acoma Pueblo, NM

Holland Island, MD

Santa Barbara, CA

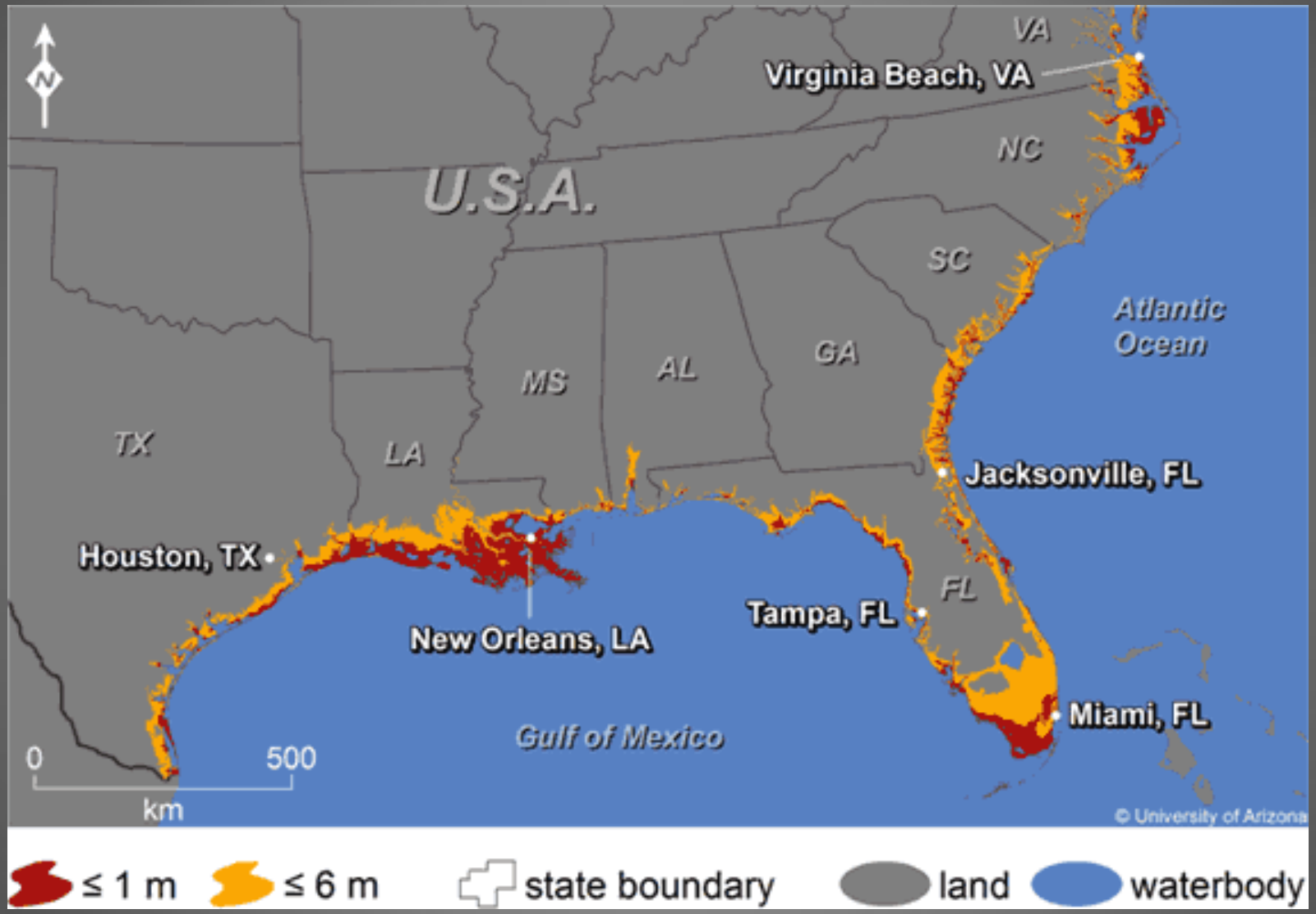




Farnsworth House, IL

Dawson City, Yukon Territory

Herschel Island, Canada Photo: WMF


N
U.S.A.
VA
Virginia Beach, VA
NC
SC
Atlantic Ocean
GA
AL
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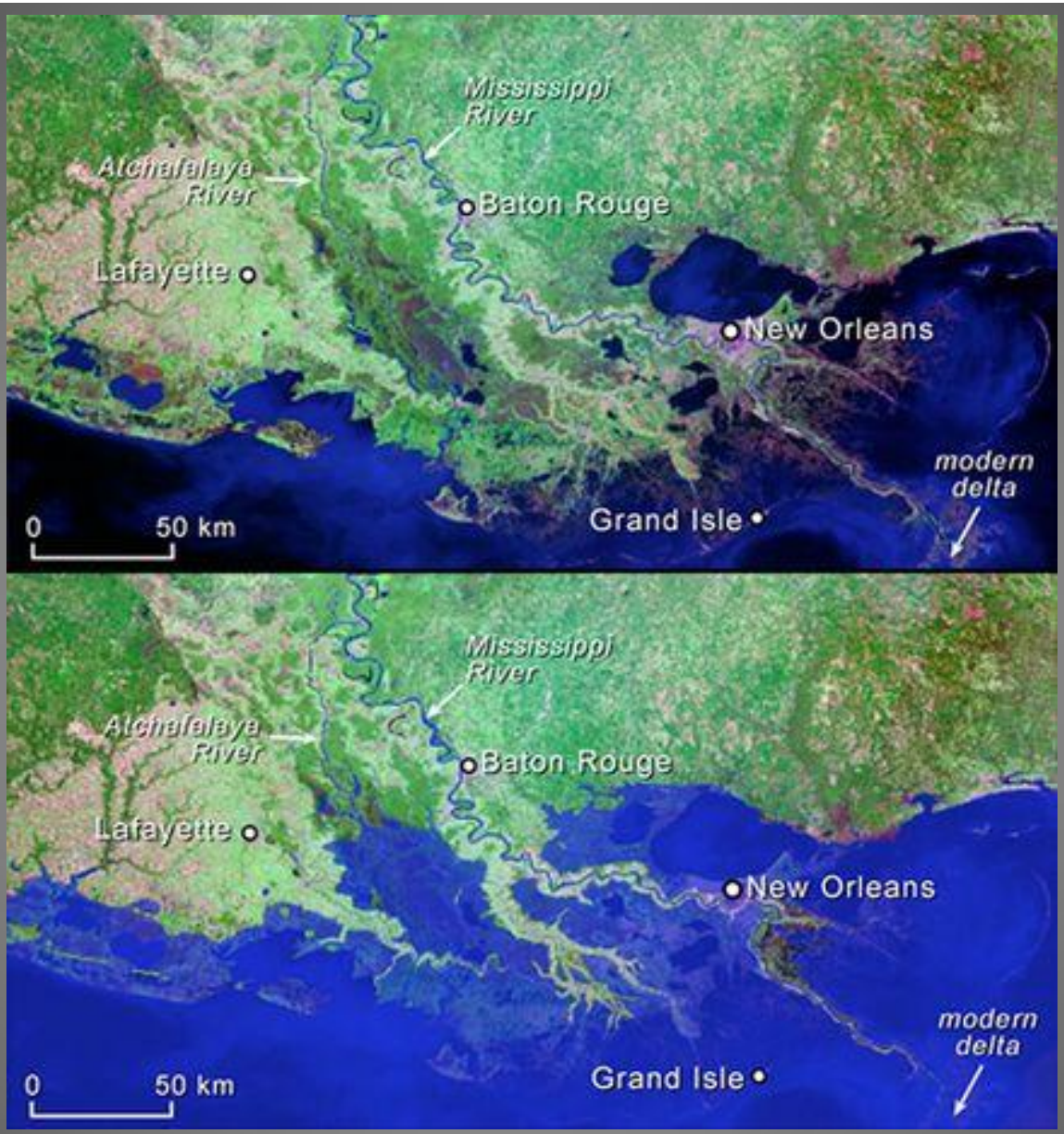
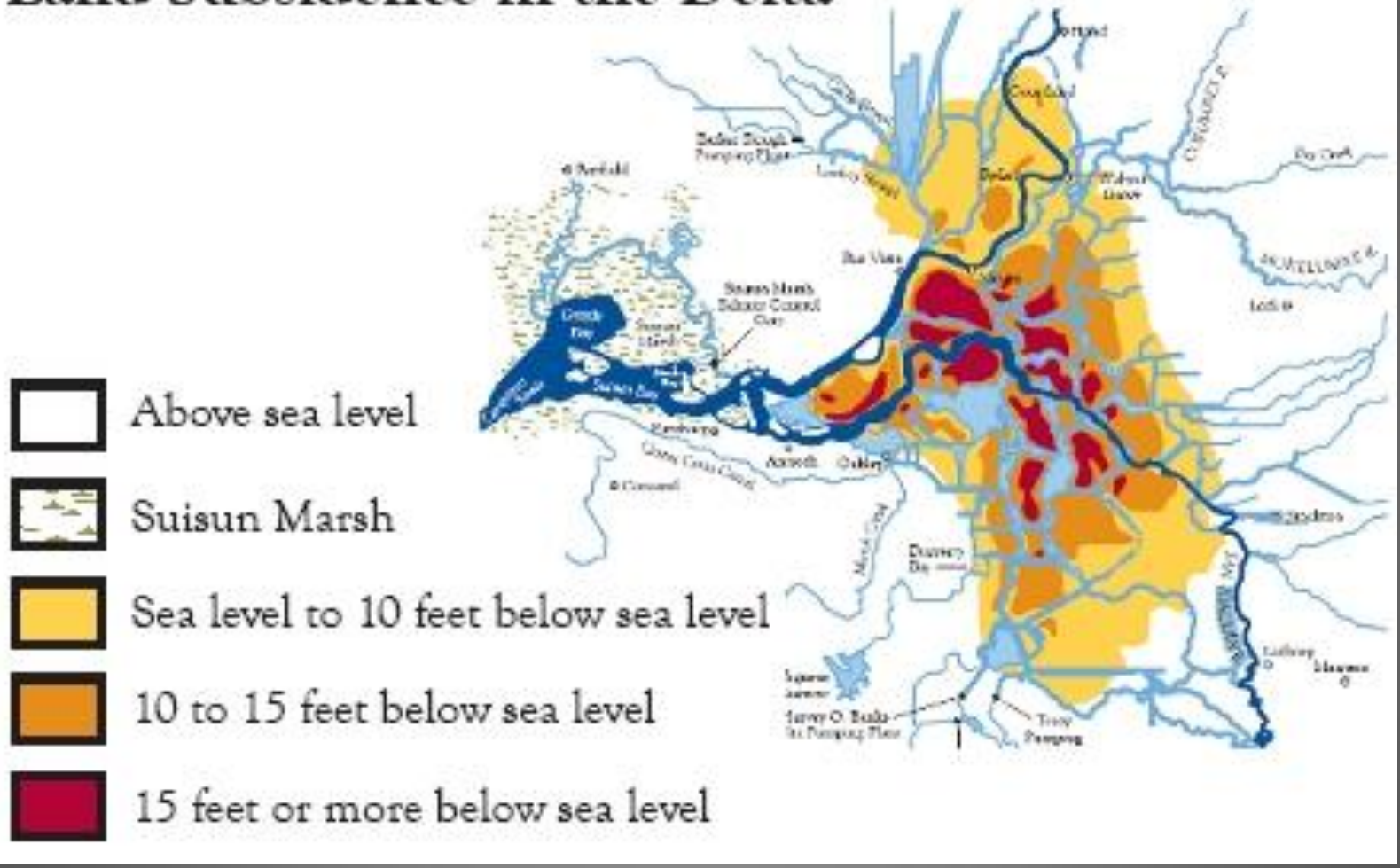
TX
Jacksonville, FL
Houston, TX
FL
Tampa, FL
New Orleans, LA
Miami, FL
Gulf of Mexico
0
500
km
© University of Arizona
≤ 1 m
≤ 6 m
state boundary
land
waterbody

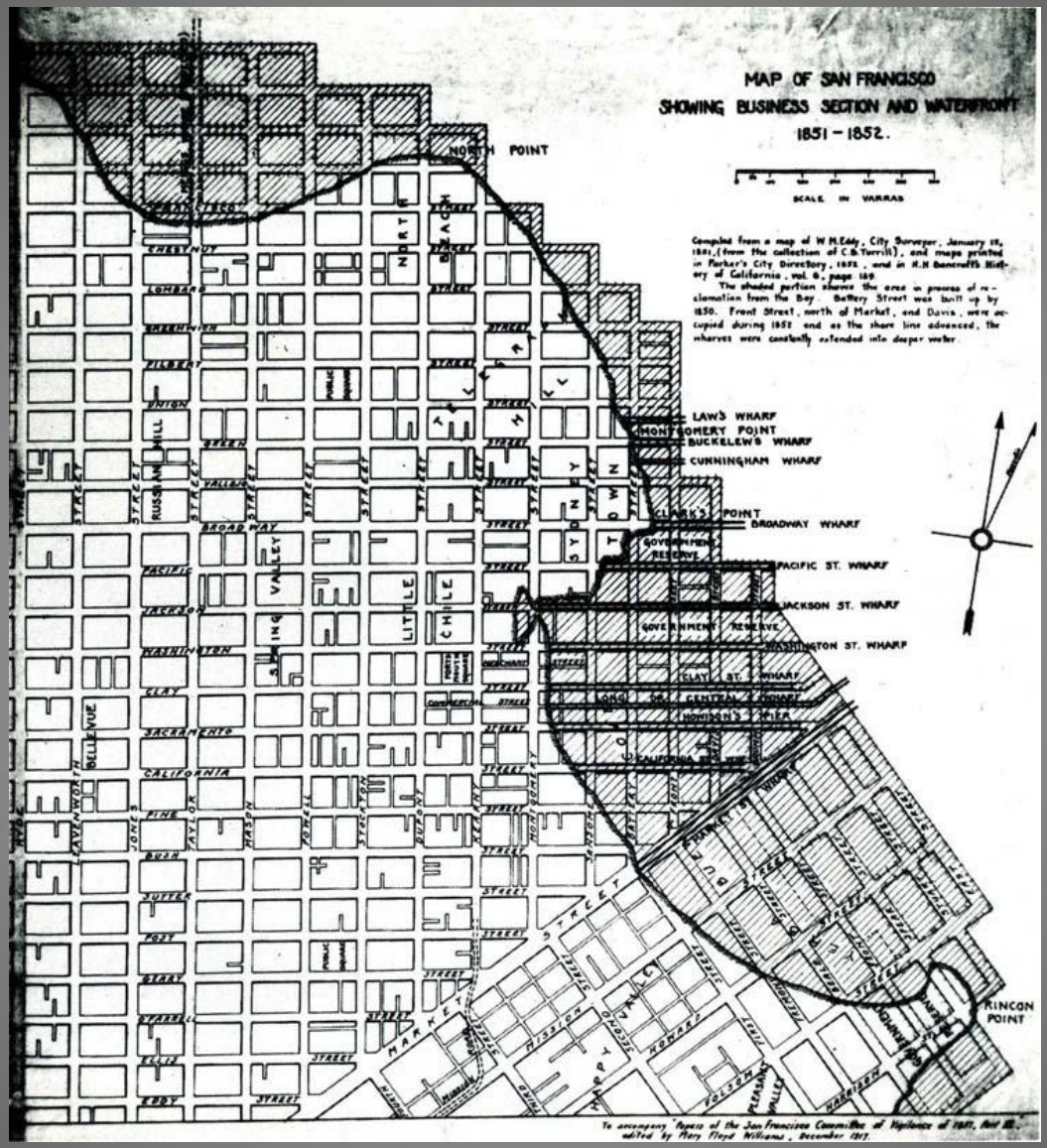


Illustrations courtesy Mike Blum, created using NASA images

Land Subsidence in the Delta




ONE WAY



Complied from a map of W.H. Eddy, City Surveyor, January 18, 1851, (from the collection of C.B. Torrill), and maps printed in Parker's City Directory, 1878, and in H.H. Bancroft's History of California, vol. 6, page 169.

The shaded portion shows the area in process of reclamation from the Bay. Battery Street was built up by 1850. Front Street, north of Market, and Davis, were occupied during 1852 and as the shore line advanced, the wharves were constantly extended into deeper water.

To accompany "Papers of the San Francisco Committee of Vigilance of 1851, Part III," edited by Mary Floyd Williams, December 1919.

1 February 2011: 16:51 -0.47 ft MLLW

1 February 2011: 16:48 -0.46 ft MLLW

20 January 2011: 11:34 7.20 ft MLLW

20 January 2011: 11:31 7.20 ft MLLW

1 February 2011: 16:47 -0.46 ft MLLW

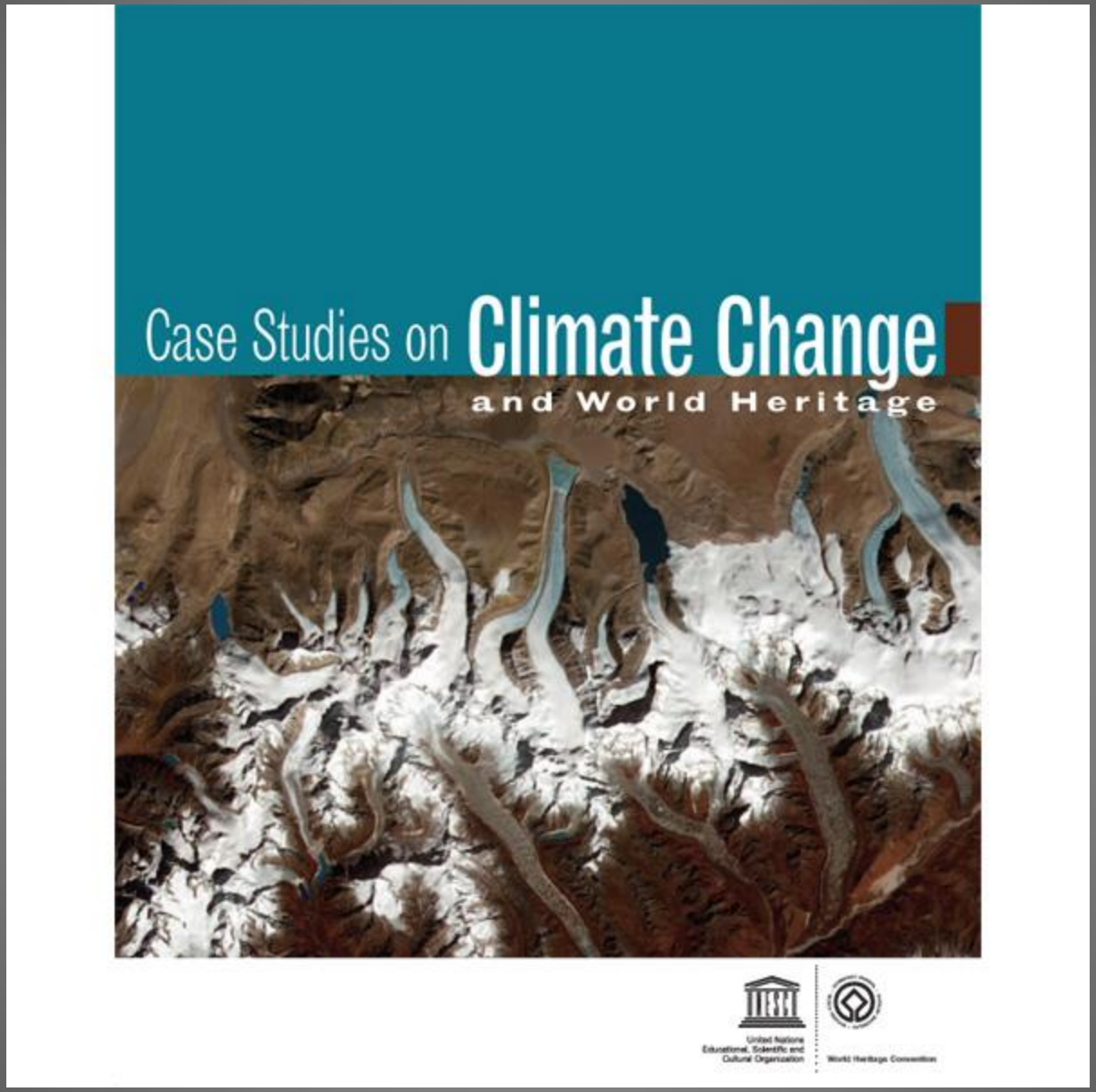
1 February 2011: 16:50 -0.47 ft MLLW

20 January 2011: 11:30 7.20 ft MLLW

20 January 2011: 11:37 7.19 ft MLLW

International Council on Monuments and Sites

Conseil International des Monuments et des Sites

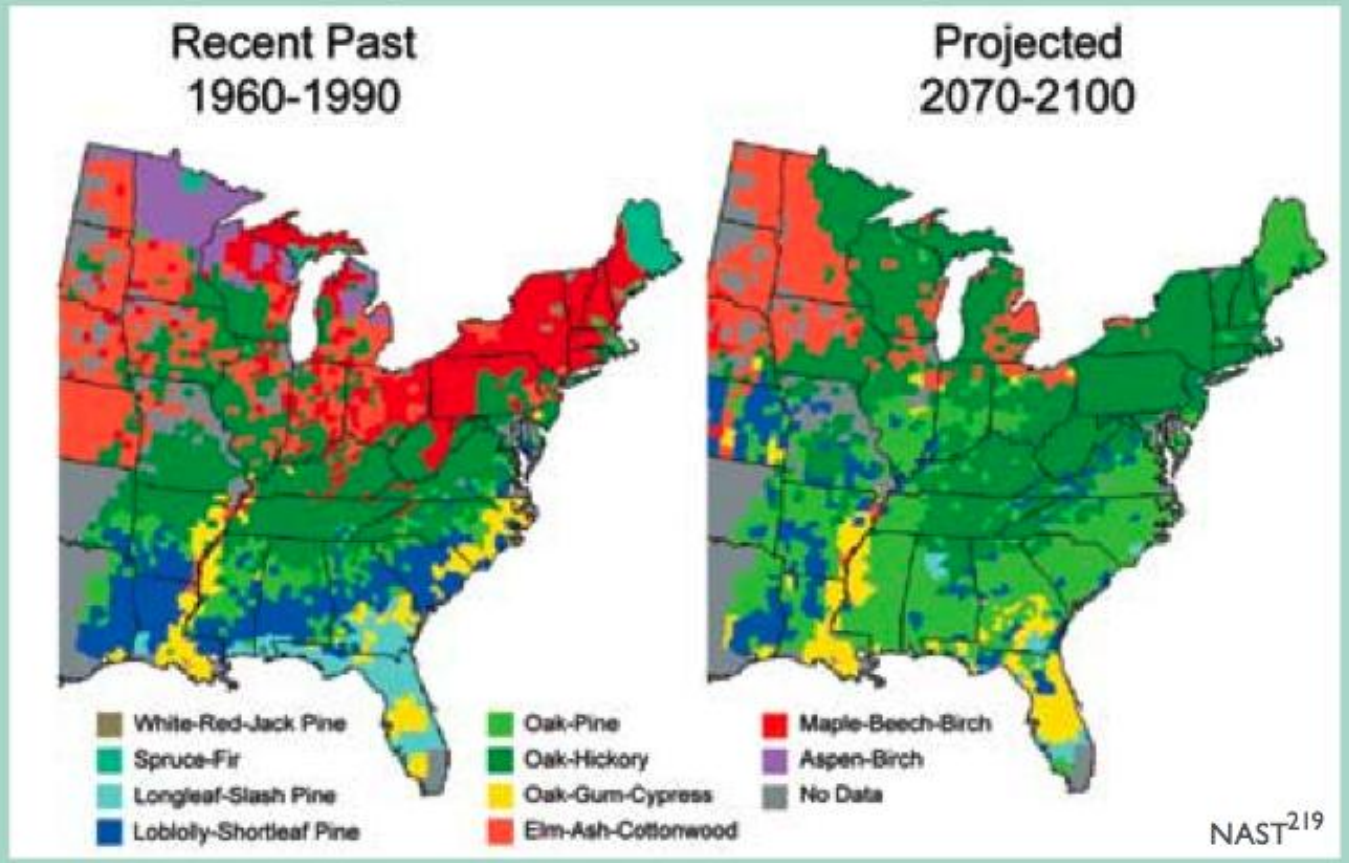

Case Studies on Climate Change
and World Heritage
United Nations
Educational, Scientific and
Cultural Organization
World Heritage Convention

Climate Change Impacts on Cultural Heritage:

- **direct** physical effects on buildings, structures, landscapes, archeology

- **indirect** effects resulting from cultural and economic impacts that could undermine efforts to maintain and preserve cultural heritage

Projected Shifts in Forest Types



The maps show current and projected forest types. Major changes are projected for many regions. For example, in the Northeast, under a mid-range warming scenario, the currently dominant maple-beech-birch forest type is projected to be completely displaced by other forest types in a warmer future.[243]

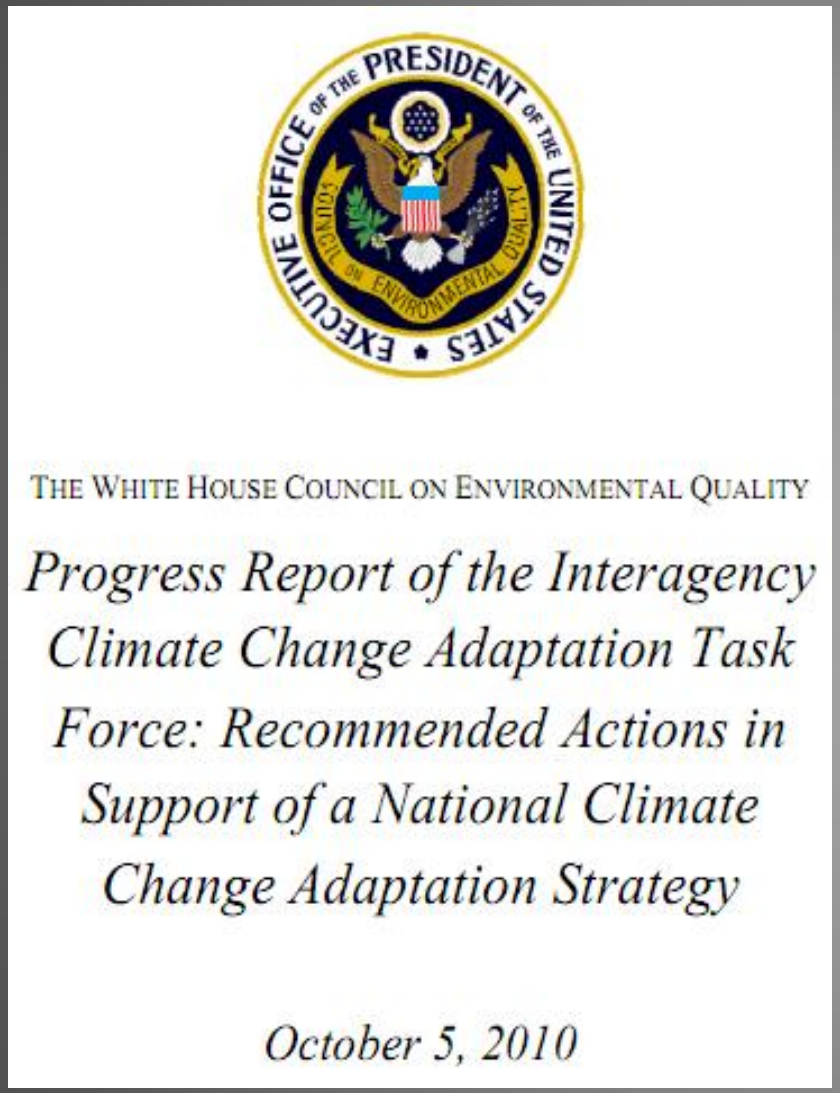

Save Our SYRUP
Stop Global Warming
cleanair-coolplanet.org

INTERNATIONAL NATIONAL TRUSTS ORGANISATION

The Dublin Declaration on Climate Change

"The National Trust recognizes that the threats posed to cultural heritage resources are real and already occurring...The loss of some historic and cultural resources is as tragic is it is inevitable, but there are numerous adaptation measures that could lessen the adverse effects on these resources."

-National Trust for Historic Preservation Statement on The Impacts of Climate Change on the Chesapeake Bay, July 2, 2009

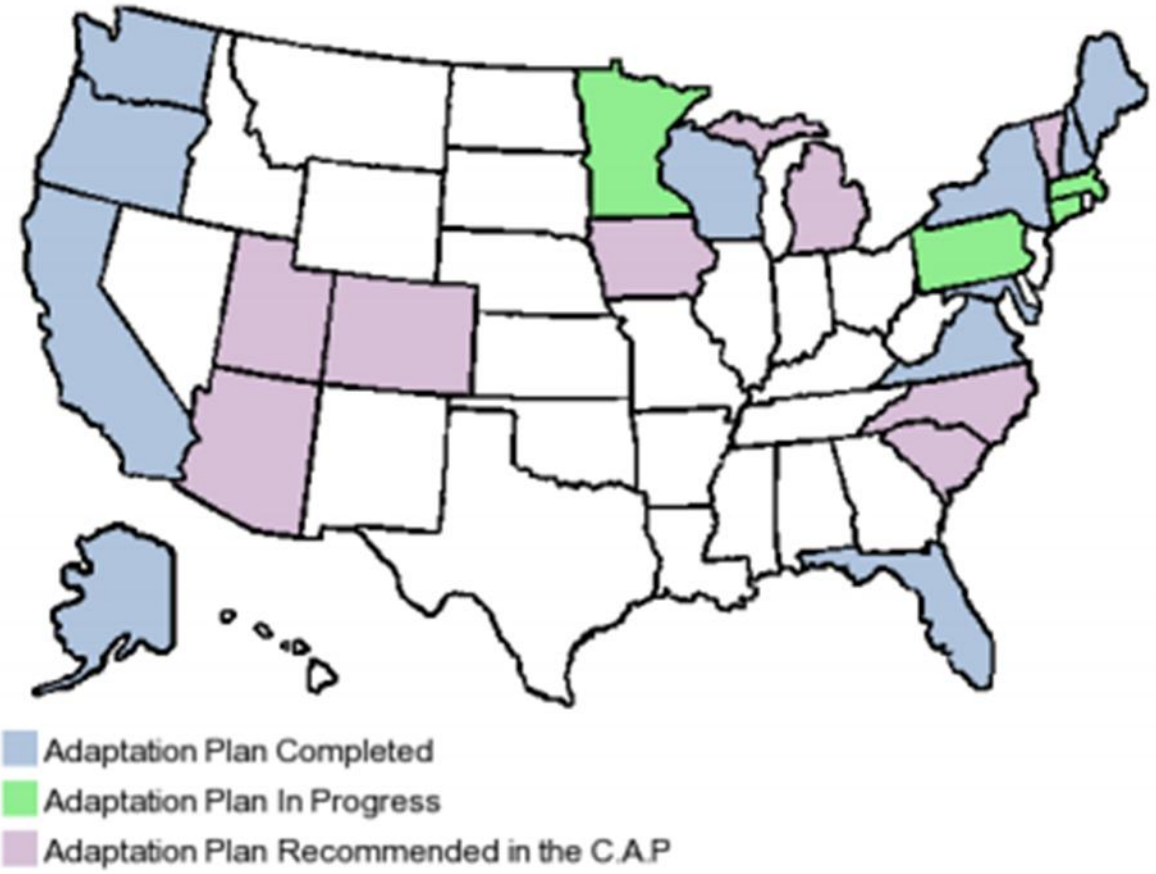


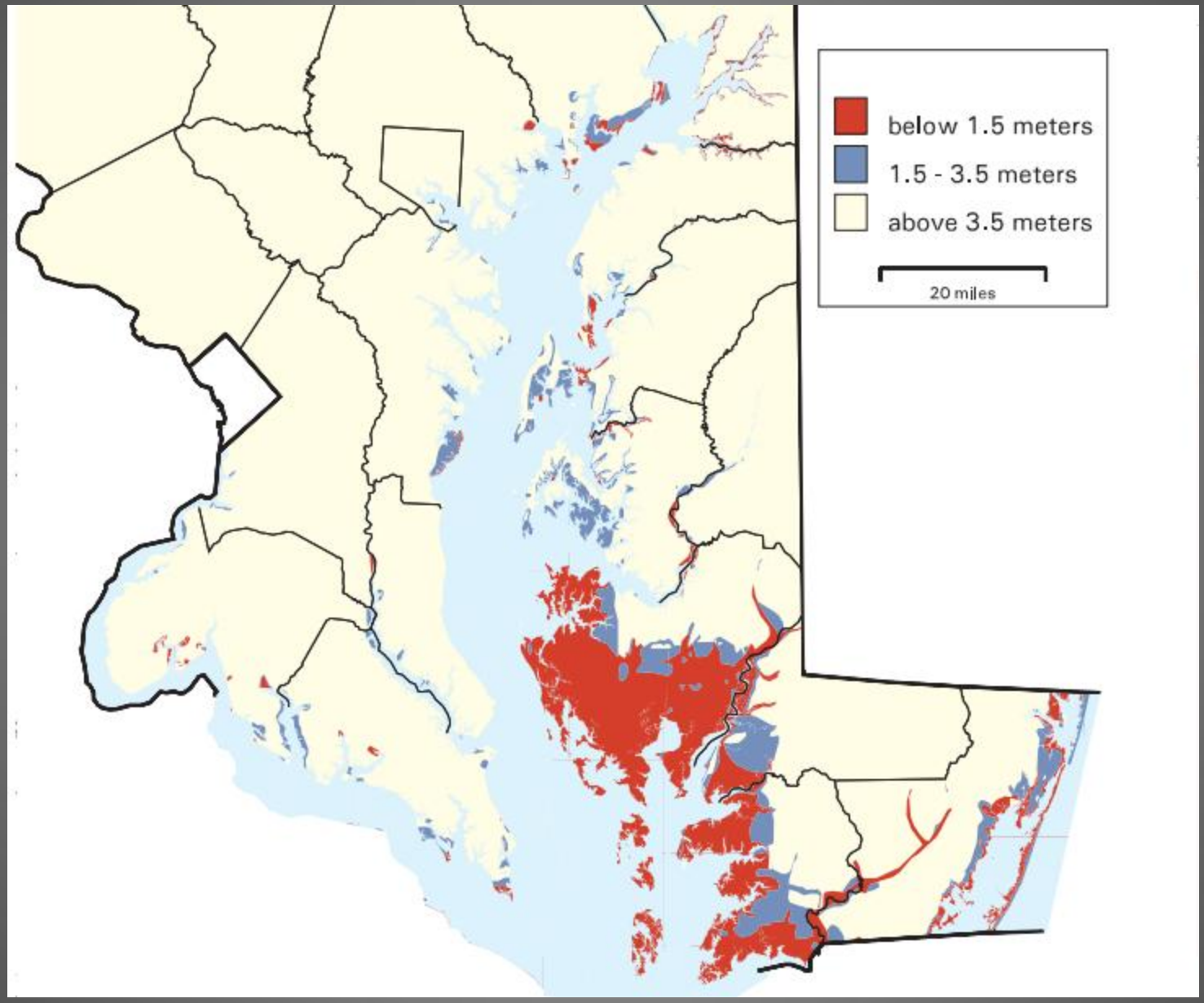
"The Government must exercise leadership in addressing climate impacts on Federal infrastructure interests and on the natural, cultural, and historic resources that it has statutory responsibilities to protect."

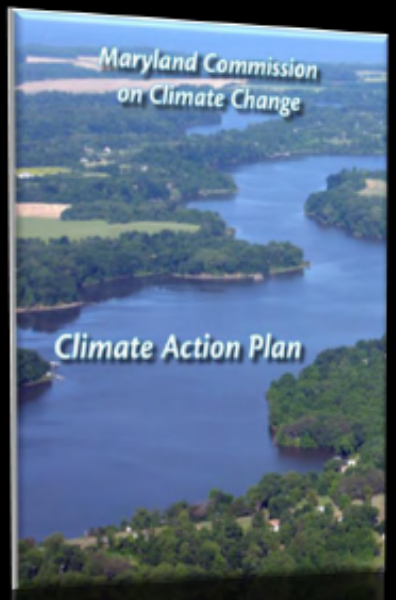
Climate Change Response Program

Explore Nature

State Adaptation Plans

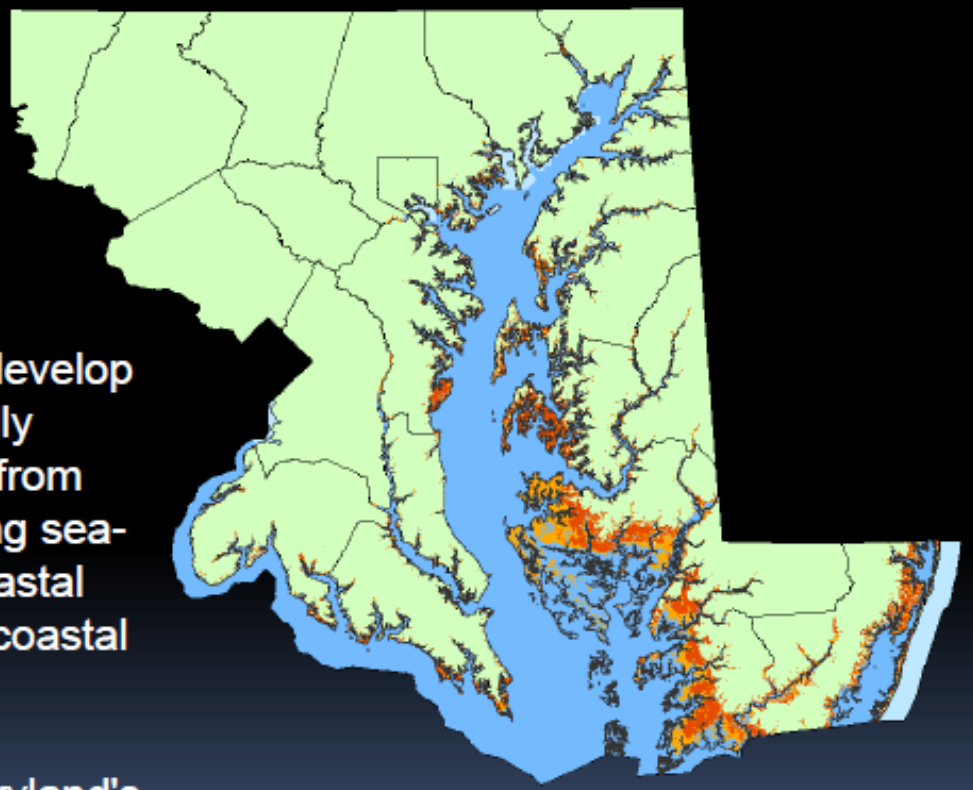


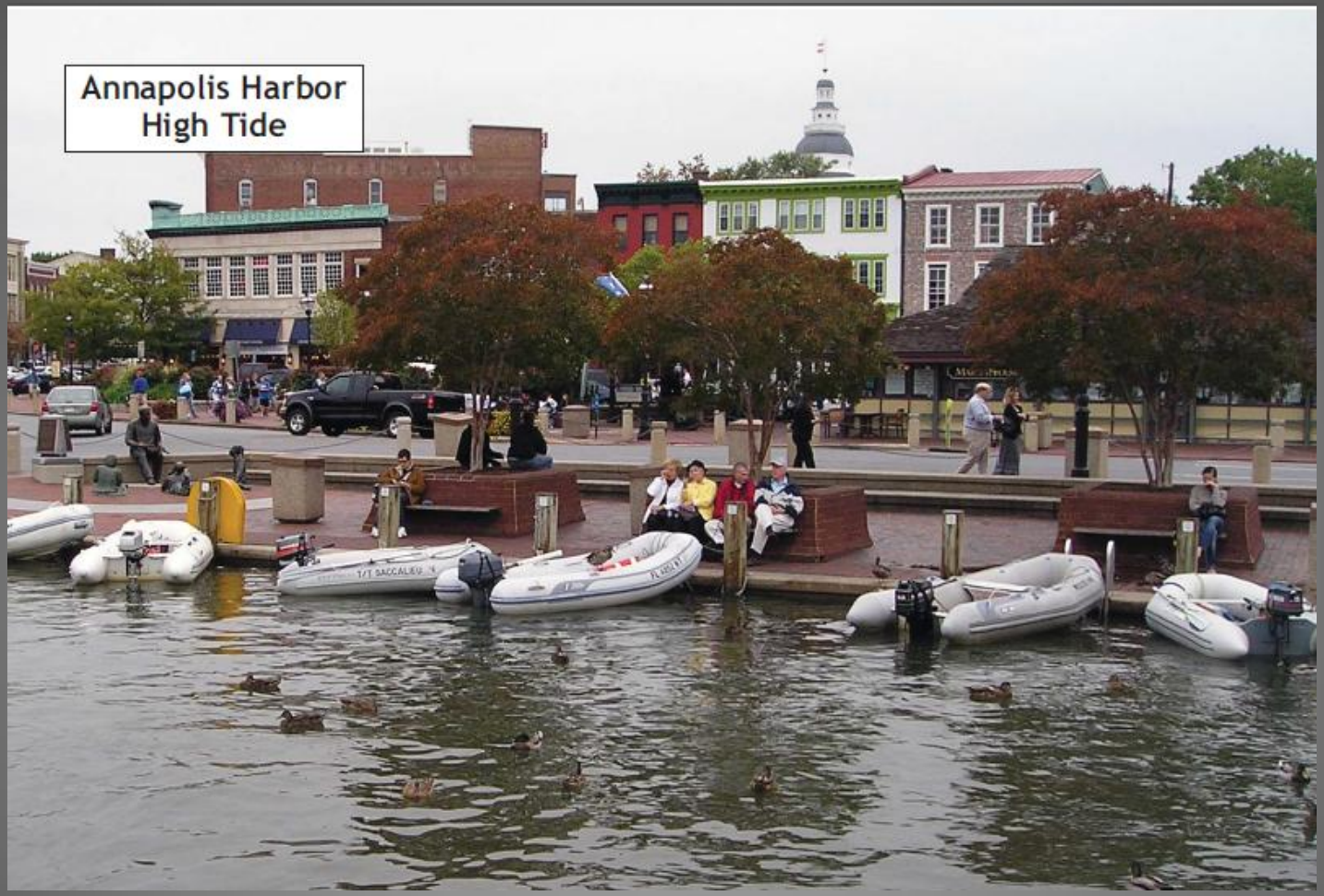

below 1.5 meters
1.5 - 3.5 meters
above 3.5 meters
20 miles



Identify resources and develop an inventory of potentially impacted infrastructure from climate change, including sea-level rise, worsening coastal storms, and worsening coastal erosion

Identify areas along Maryland's shoreline that are vulnerable to sea-level rise





Visualizing Sea Level Rise in Maryland's Chesapeake Bay
Maryland Sea Grant staff & Dr. Michael Kearney, U Md

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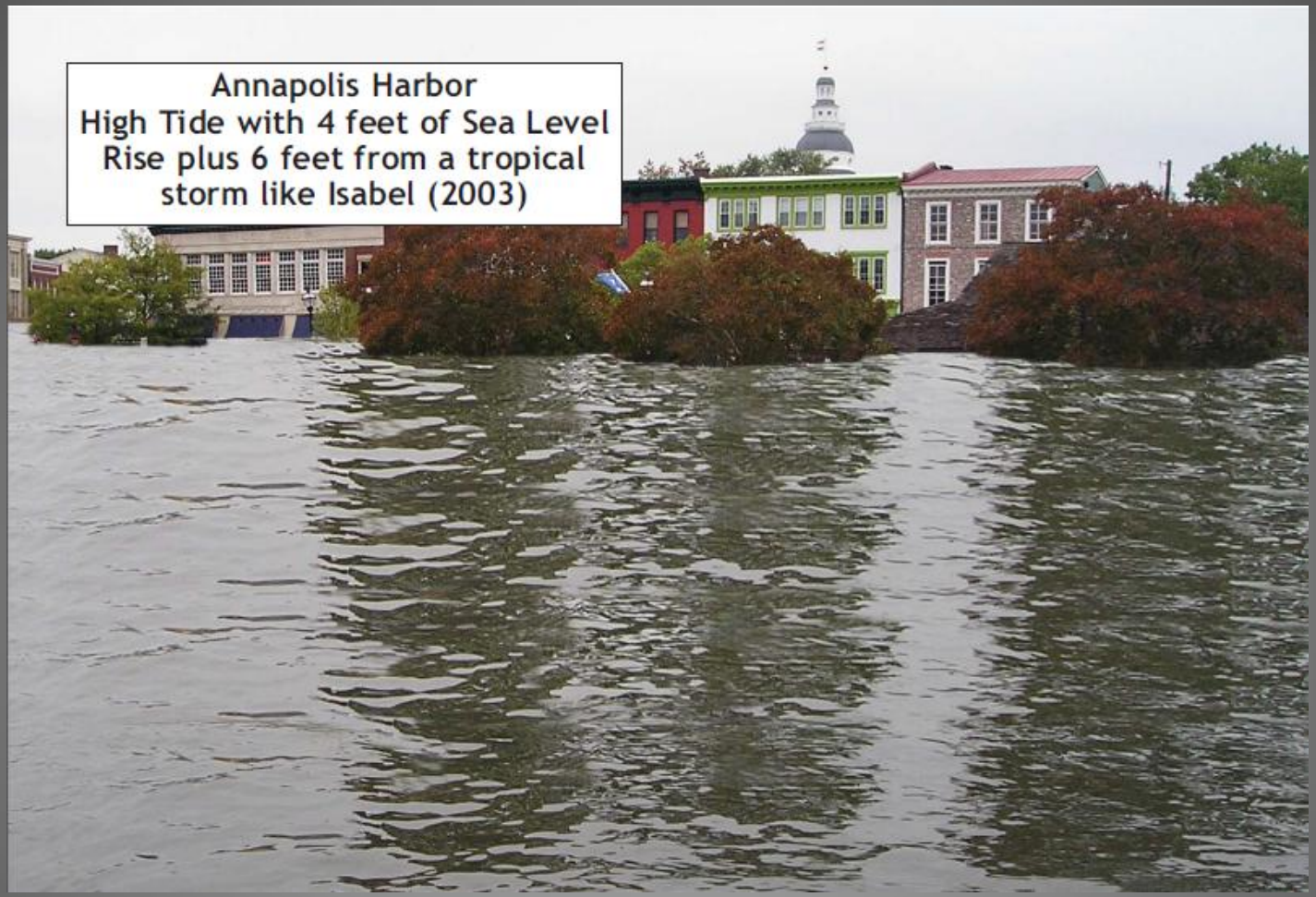


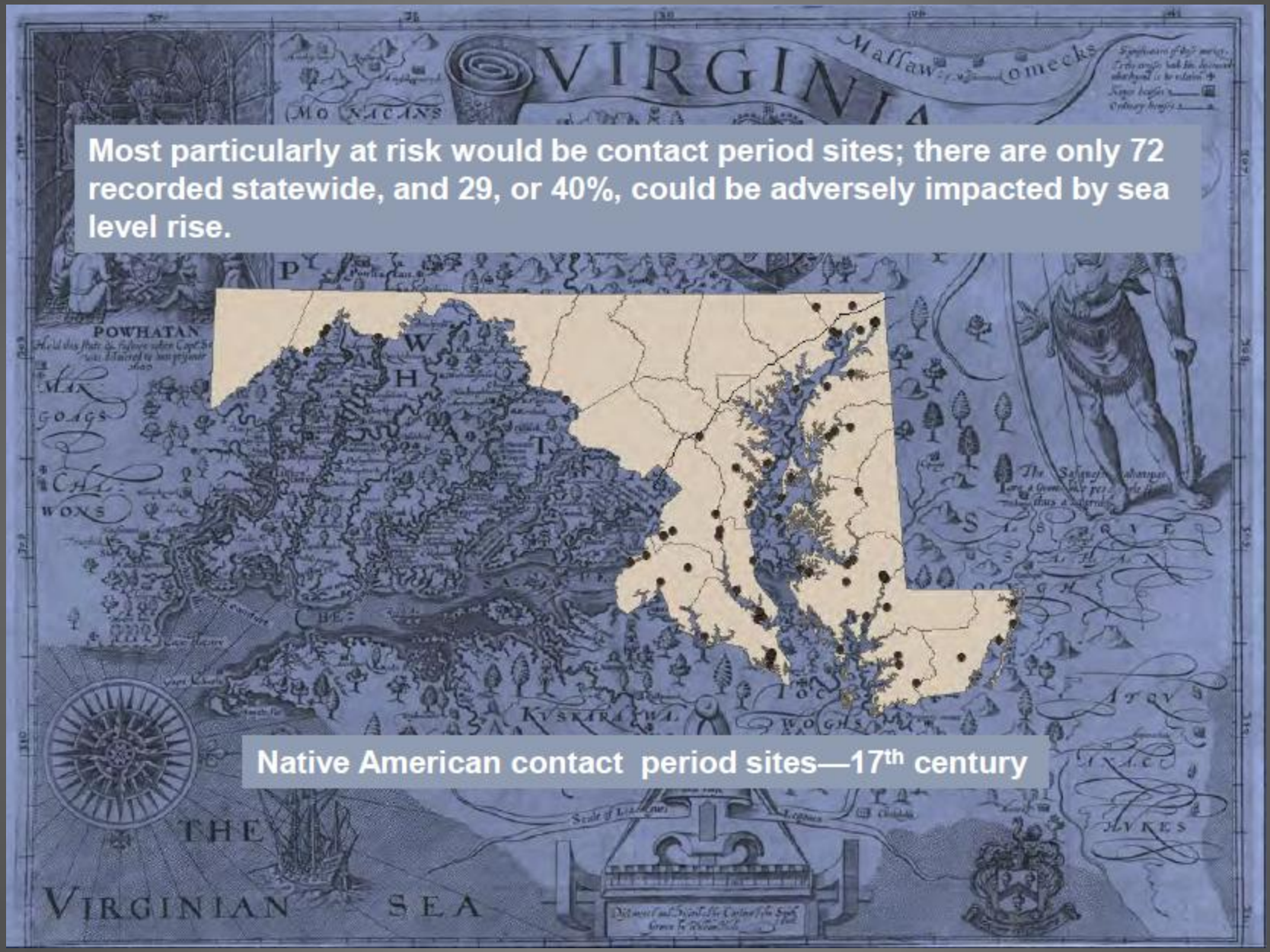
Visualizing Sea Level Rise in Maryland's Chesapeake Bay
Maryland Sea Grant staff & Dr. Michael Kearney, U Md

NHL - major impact

J. C. Lore Oyster House, Calvert County

NR - major impact

Crisfield Historic District,
Somerset County



Most particularly at risk would be contact period sites; there are only 72 recorded statewide, and 29, or 40%, could be adversely impacted by sea level rise.

Native American contact period sites—17th century

	NHL		NRHP		Easements		MIHP		Eligible MIHP		Archeo		Eligible Archeo	
County	0-2 ft	2-5 ft	0-2 ft	2-5 ft	0-2 ft	2-5 ft	0-2 ft	2-5 ft	0-2 ft	2-5 ft	0-2 ft	2-5 ft	0-2 ft	2-5 ft
Anne Arundel	5	1	18	5	10	3	64	67	10		293	57	4	1
Baltimore County			5				22	8	5	3	26	16		
Calvert	2		9		3		66	37	5		102	20	2	
Caroline			7		2		24	12	9	2	35	6		1
Cecil	1		11	2	3	1	35	14	4	4	47	17	2	
Charles			6	1			35	9	9	1	140	28	4	1
Dorcester			8	3	1		98	154	3	4	283	50	4	
Kent	2		13	2	5	2	33	29	4	2	104	18		
Queen Annes			8	4	3	1	46	30	9	3	268	92	1	3
Saint Marys	3		15	4	7		63	55	6	8	302	66	8	3
Somerset			45	10	5	6	75	181	5	4	198	34		
Talbot	5		47	4	5	2	90	98	5	3	192	30	1	
Wicomico			7		2	2	37	52	10	4	48	6	1	
Worcester			8	4			15	41	6	9	47	14	1	
	18	1	207	39	46	17	703	787	90	47	2085	454	28	9
Statewide Totals	19		246		63		1490		137		2539		37	

Inventory

- Identify areas at high risk to climate change effects
- Identify gaps in cultural resource inventories in these high risk areas
- Prioritize available inventory funding to address these gaps

Treatment Options

- Documentation
- Monitoring
- Stabilization
- Preservation
- Removal from threat
- Restoration or rehabilitation guided by treatment plans

Potential Triage Criteria

- Significance of threatened resource
- Uniqueness of threatened resource
- Severity & urgency of the threat
- The feasibility of intervention to manage threat or to treat resource
- Cost of various treatment options

Intervention Matrix

High priority resource **Low feasibility adaptation**	**High priority resource** **High feasibility for adaptation**
Low priority resource **Low feasibility adaptation**	**Low priority resource** **High feasibility adaptation**

The Commission staff revised Policy 6(i) to address the threats that climate change poses to historic and cultural resources. It now states, in part:

"The entities that formulate the regional strategy are encouraged to consider the following strategies and goals:…advance regional sustainability, encourage infill development and job creation, ~~and~~ provide diverse housing served by transit and protect historical and cultural resources."

NATIONAL TRUST FOR HISTORIC PRESERVATION®

Merci, gracias, thank you.

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