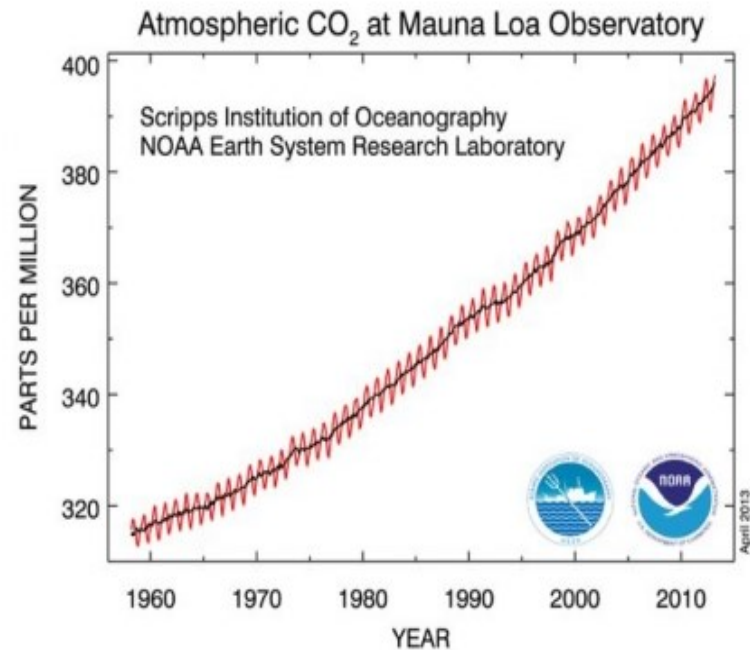


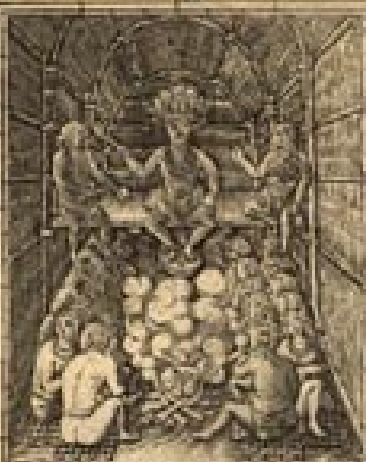
# Cultural Heritage as a Source of Creativity for Climate Change



**Marcy Rockman, Ph.D., RPA**  
**ICOMOS Climate Change Working Group, IPCC Team Lead**  
*(based in Washington, DC)*

Climate|heritage: Climate change and its relation to cultural/natural heritage  
University of Aarhus, Denmark

March 14, 2019

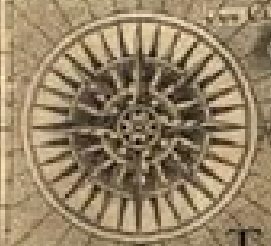


POWHATAN  
Held this place in sight when Capt. Smith  
was taken of the Indians  
place

WONNE  
WONNE  
WONNE



The River James



THE  
VIRGINIAN  
SEA






Jamestown, Virginia  
(Colonial National  
Historical Park) (37° N)

London, England (~51° N)





*“Colonists firmly believed that the climate of America, under the impact of settlement by Europeans with their agricultural technology, would become healthier, warmer, and more temperate.”*

Karen Kupperman, historian, 1982

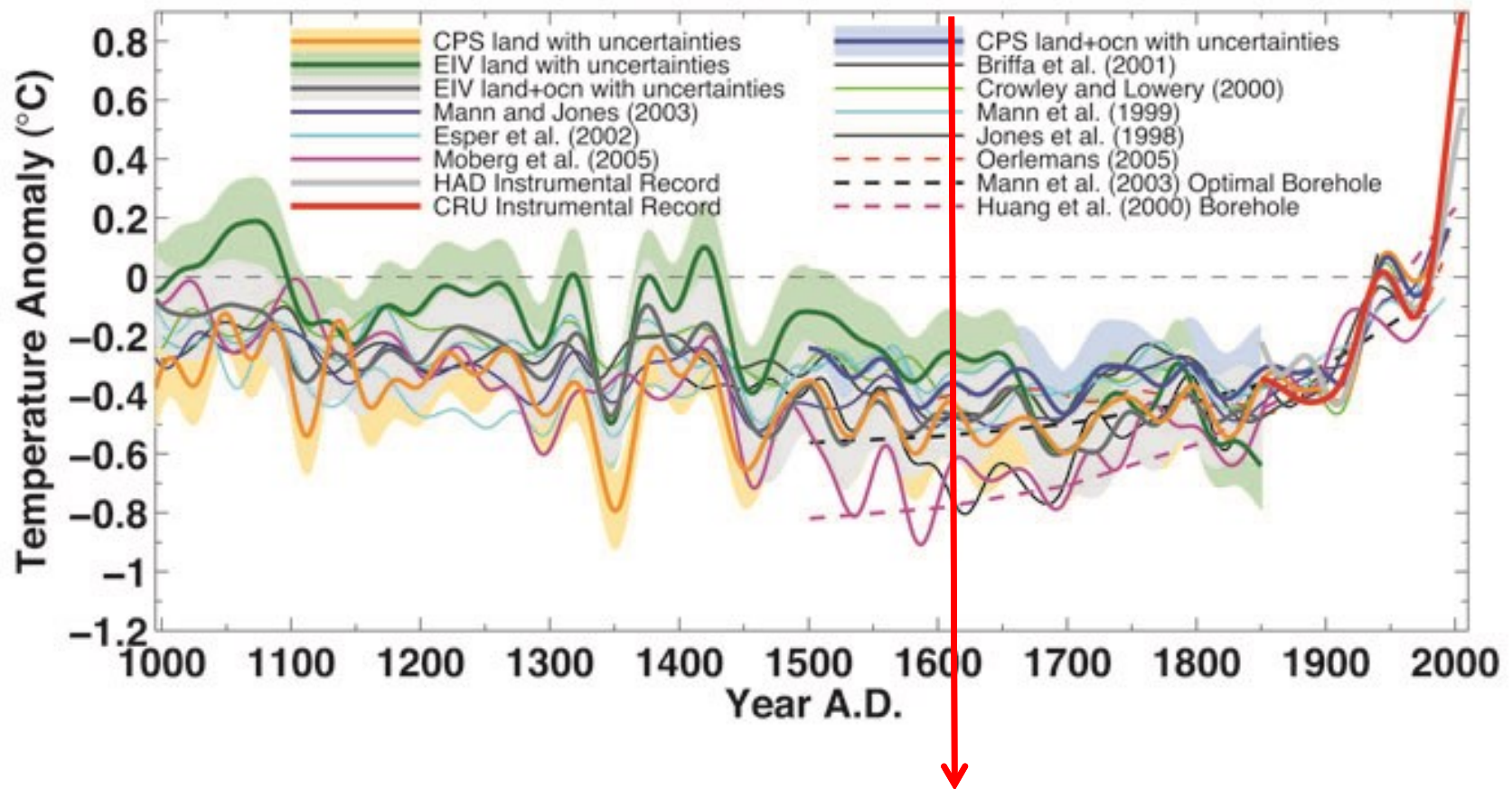


Have we changed?



## Northern Hemisphere

Now



Arrival of Jamestown colonists

Source: Proxy-Based Reconstructions of Hemispheric and Global Surface Temperature Variations over the Past Two Millennia  
(*Proceedings of the National Academy of Sciences*, 2008)



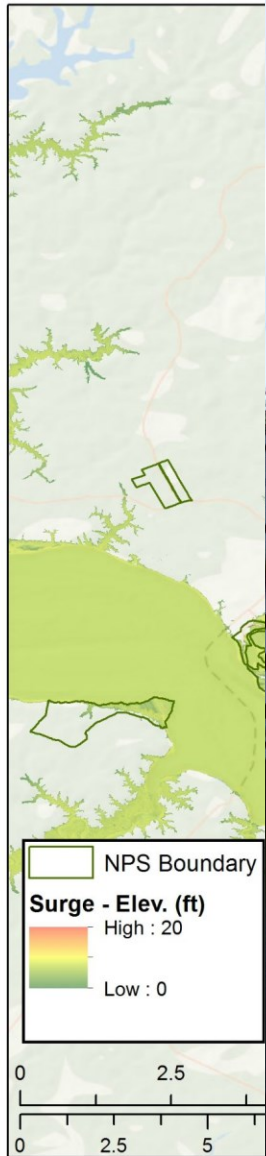


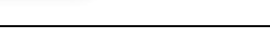
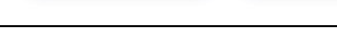
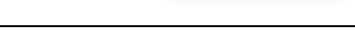
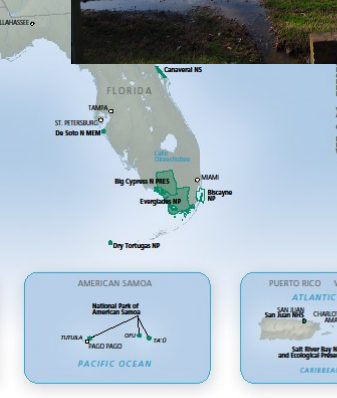
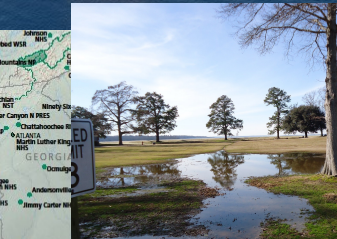
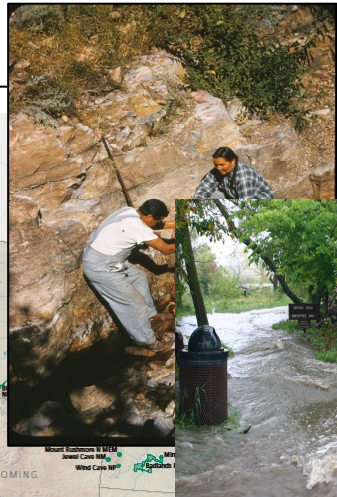




Photo credit: Roberto Fortuna, NationalMuseumet









## **National Register of Historic Places Criteria for Evaluation**

The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

➡ **A.** That are associated with events that have made a significant contribution to the broad patterns of our history; or

➡ **B.** That are associated with the lives of persons significant in our past; or

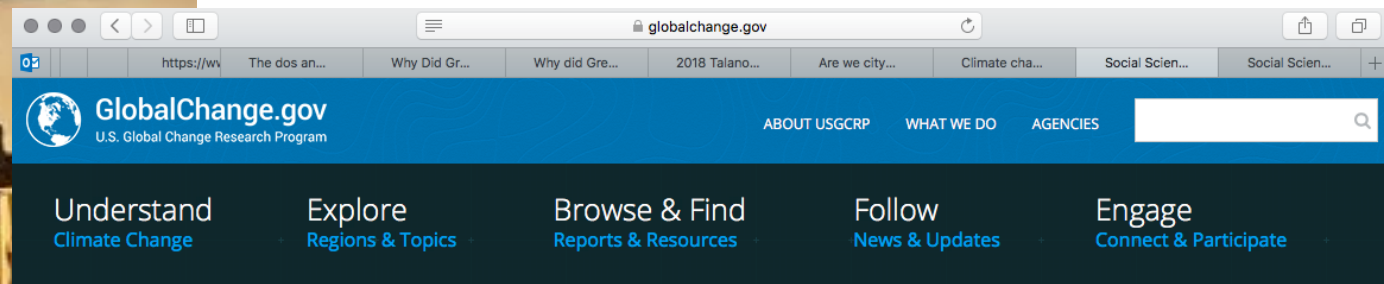
➡ **C.** That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

➡ **D.** That have yielded or may be likely to yield, information important in prehistory or history.





# United States Global Change Research Program



## Social Science Perspectives on Climate Change workshop



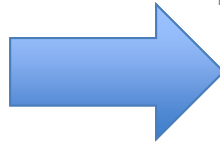
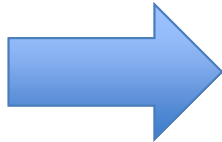
The Social Science Perspectives on Climate Change workshop was held in Washington, DC in March 2017. The workshop was organized by the U.S. Global Change Research Program's (USGCRP) [Social Science Coordinating Committee](#) (SSCC) in cooperation with the American Anthropological Association, the American Association of Geographers, the American Sociological Association, and the Society for American Archaeology. The workshop had three aims:

- Demonstrate how the social sciences can add important methods, perspectives, and data to climate change mitigation and adaptation efforts;
- Enhance collaboration between academic and federal social scientists, and between natural and social scientists; and
- Develop products that support the Fourth National Climate Assessment, USGCRP's Interagency Working Groups, and federal agencies.





“It’s a very different story from my dissertation,” says McGovern. “It’s scarier. You can do a lot of things right—you can be highly adaptive; you can be very flexible; you can be resilient—and you go extinct anyway.”



Landscape Learning Model



I see a problem in the environment,  
I want people to do something about it  
and they're not doing it, why?

There's a problem in the environment,  
we're telling people to do something  
about it and some of them are not  
doing it, why?"



Where do our ideas about  
natural resources come from?

We need better models of  
evacuation behavior.

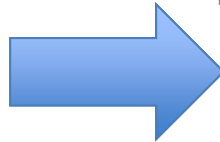
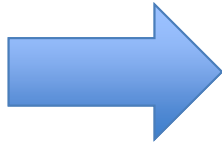


**Landscape Learning Model**



New research on social  
memory of disasters





Landscape Learning Model

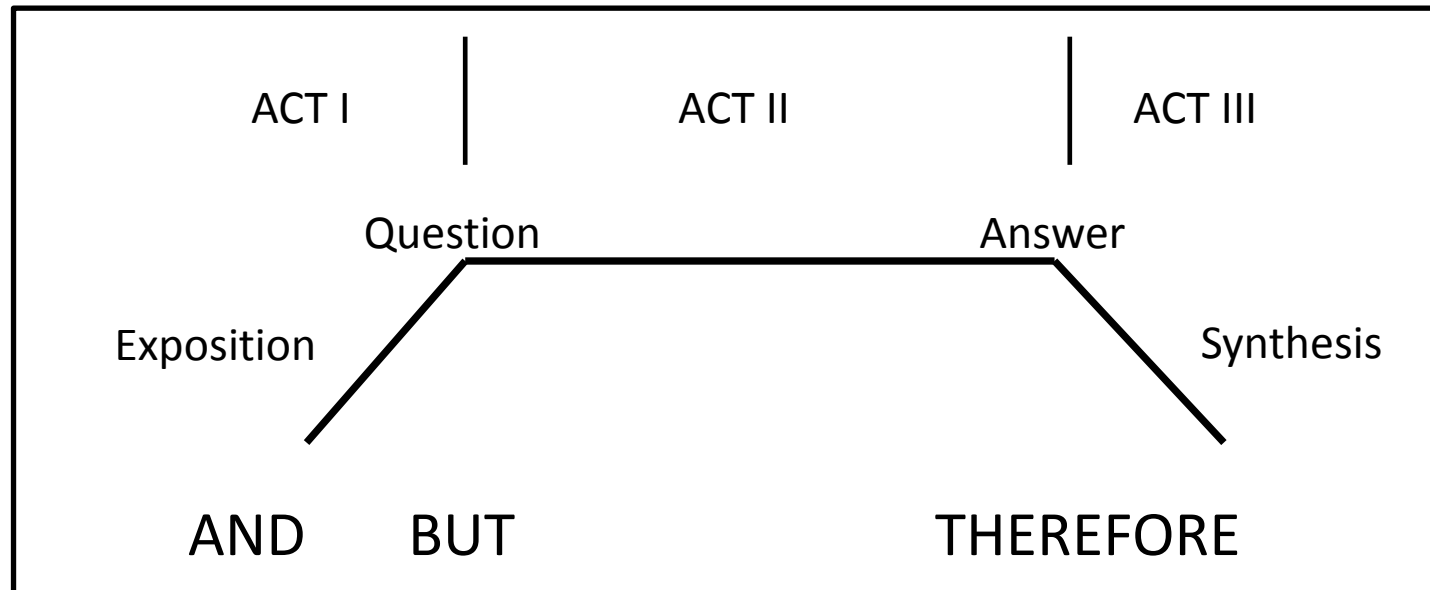




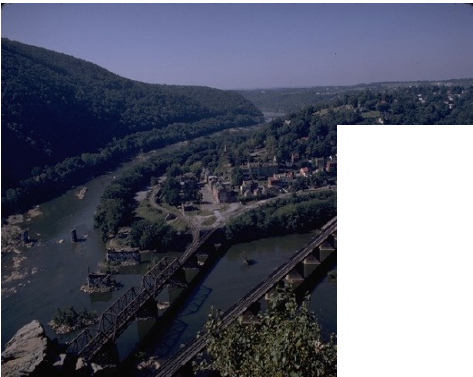
AND is where the story starts

BUT creates the tension

THEREFORE provides the resolution







## Harpers Ferry National Historical Park: Material Change

Historic armories such as Harpers Ferry used a lot of wood AND such use led to severe flooding.

*“Colonists firmly believed that the climate of America, under the impact of settlement by Europeans with their agricultural technology, would become healthier, warmer, and more temperate.”*

early  
BEFORE the



Karen Kupperman, historian, 1982

ically affected  
le for several  
developed the  
THEREFORE  
ful in the future



Have we changed?

e Change



Industrial legends Thomas Edison, Henry Ford, and Harvey Firestone camped together along the C&O Canal in 1921 AND noted to each other that if a hydropower dam had been built instead of the Canal, it would have produced more energy, BUT the nature they themselves enjoyed camping in would have been very different, THEREFORE their enjoyment of the outdoors benefited from the choices of previous generations.

SCAPE

Scottish Coastal Archaeology and the Problem of Erosion



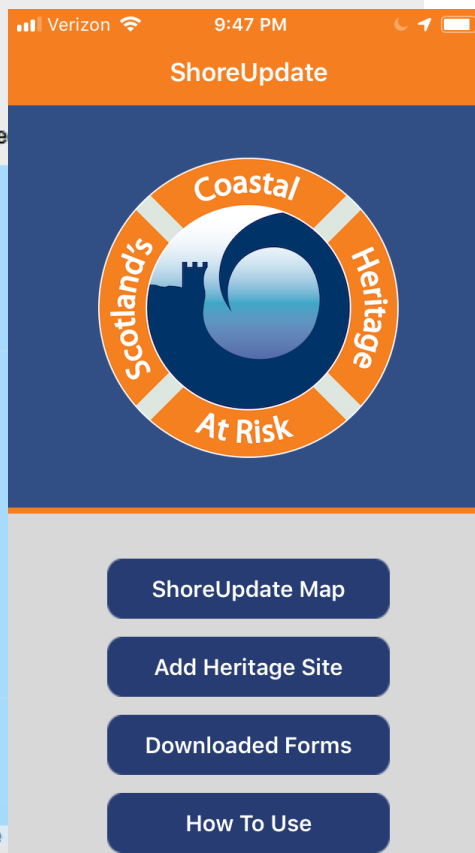
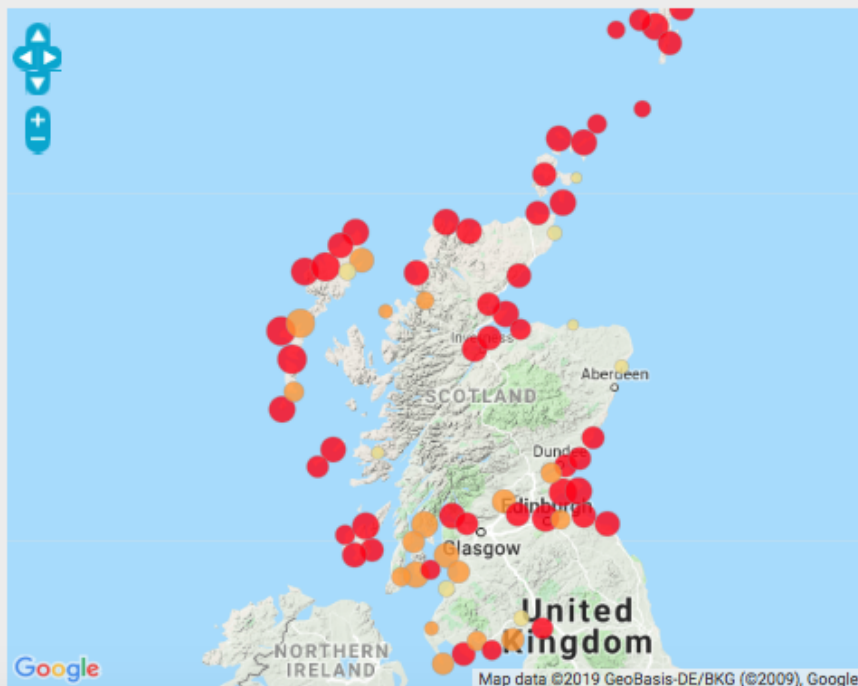
# Scotland's Coastal Heritage at Risk


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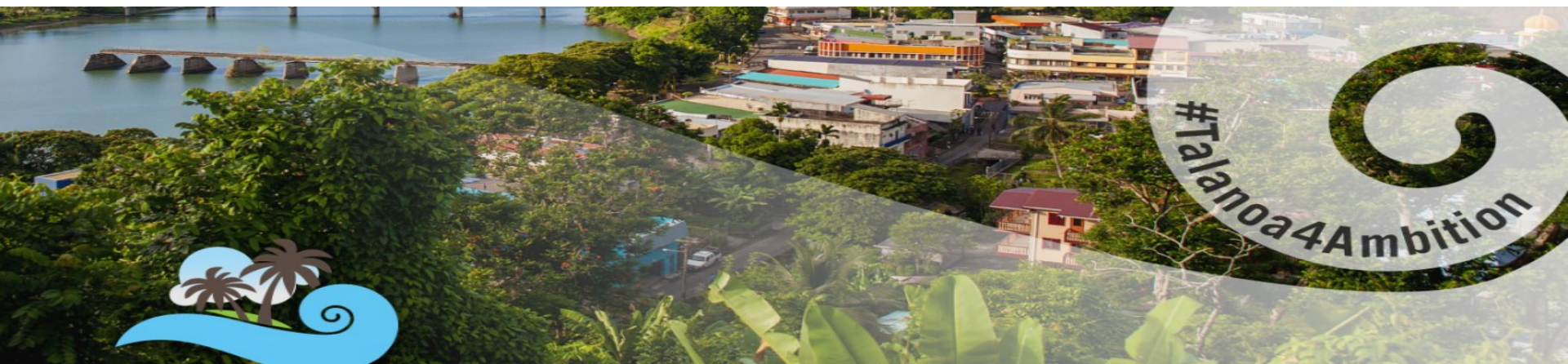
## Sites at Risk

New to the Sites at Risk map? Watch our [How to... guidance videos](#) to help you get started






*"Talanoa is a traditional word used in Fiji and across the Pacific to reflect a process of inclusive, participatory and transparent dialogue. The purpose of Talanoa is to share stories, build empathy and to make wise decisions for the collective good. The process of Talanoa involves the sharing of ideas, skills and experience through storytelling."*



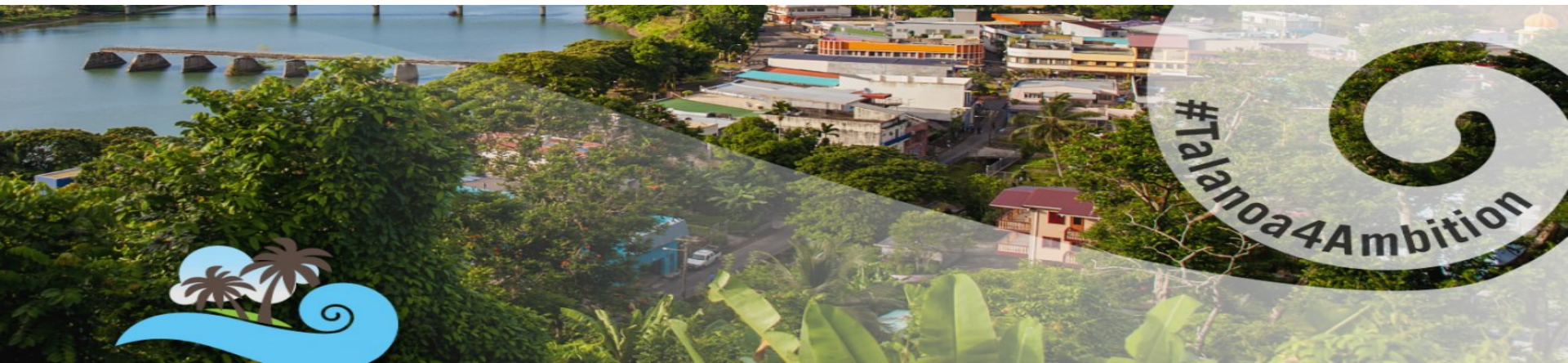




Where are we?

Where do we want to go?

How do we get there?





1. What is significant about [place]’s heritage?
2. What are the threats facing this heritage?
3. What would be the impact on [place] if this heritage is lost?
4. If we can’t take action at all sites, how should these places be prioritized?
5. What are your aspirations for [place]’s heritage by 2030? What needs to happen to get there?
6. In order to achieve these aspirations, where do roles and responsibilities lie?

Where are we?

Where do we want to go?

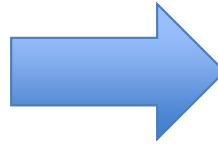
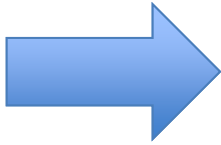
How do we get there?



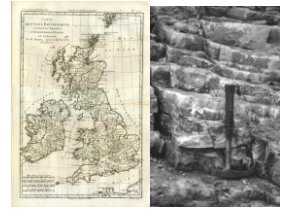
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# Cultural Heritage Creativity for Climate Change



## Landscape Learning Model



"Colonists firmly believed that the climate of America, under the impact of settlement by Europeans with their agricultural technology, would become healthier, warmer, and more temperate."

Karen Kupperman, historian, 1982

## Every Place has an *And – But – Therefore* Climate Story



Have we changed?

meets



# Thank You

Dr. Felix Riede and Dr. Uffe Krogh



Contact:

Marcy Rockman

[marcy.rockman@icomos.org](mailto:marcy.rockman@icomos.org)



Climate Heritage  
MOBILIZATION



Marcy in the field with flint, Kent, UK, 2010.