

Geoheritage in the United States



U.S. Geoheritage
& Geoparks

ADVISORY GROUP

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U.S. Geoheritage and Geoparks Advisory Group

***America's Geoheritage II: Identifying, Developing,
and Preserving America's Natural Legacy***

Distinguished Speaker Webinar Series

September 15, 2020

Geoheritage

- ... the connection between people, landscape, and earth history forms the foundation of the concept of geological heritage, or geoheritage.
- ... embodied in geological features with significant scientific, cultural, educational or historical value.

Terri Cook and Lon Abbott, EARTH Magazine, July 2015

Geoheritage in the United States

- Historically largely linked to our **National Park system** and other Federal Public Lands agencies.
- Preservation of geological features were the reasons for establishing many national parks
- Conservation of our geological heritage through our Parks, Monuments, and other protected landscape designations

Benefits of geoheritage efforts

1. **Economic** – jobs, visitor support, sustainable development
2. **Scientific** - improved science literacy
3. **Health and well-being**
4. **Educational** - enhancement of earth science concepts and ideas

Yellowstone National Park, 1872



Yellowstone National Park was established by Congress as the nation's (and the world's) first national park on March 1, 1872 and the first U.S. World Heritage listing.

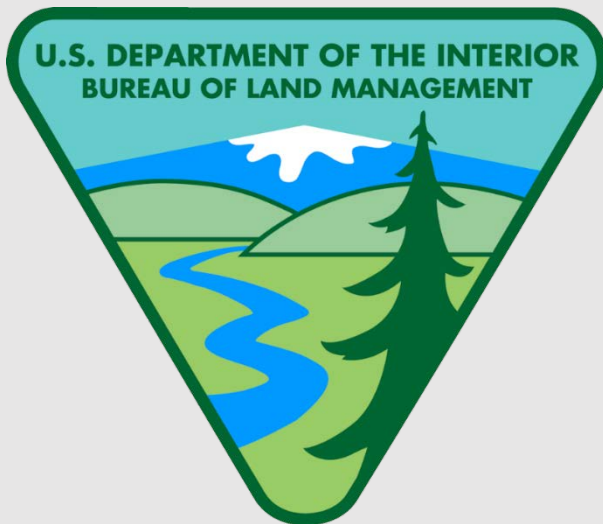
Managing Geologic Landscapes in the U. S.

- Native American Tribes
- Federal Agencies
 - NPS, BLM, FWS, USFS, DOD
- State and Local Agencies
- Private Partnerships

Shiprock Peak, Navajo Nation, New Mexico



Public Lands Agencies and Geological Heritage



U.S. Geoheritage Efforts

- 2000s ... **International Union of Geological Sciences (IUGS)** establishes geoheritage / geoparks as a Union priority
- 2008 ... U.S. National Committee adopts geoheritage as a National priority
- 2013 ... USNC sponsors first *America's Geoheritage Workshop* (Denver)
- 2011-2018 ... focus on working with U.S. communities aiming to establish a U.S. Global Geopark.

U.S. Geoheritage and Geoparks Advisory Group

- Established in February 2016
- ... operates with oversight from the **USNC/IUGS** and the **US National Academy of Sciences (NAS)**
- ... sponsor *America's Geoheritage II: Identifying, Developing, and Preserving America's Natural Legacy*

Goals of the U.S. Advisory Group

1. Work with States and communities to promote and develop geoheritage projects and products.
2. Advise the **USNC/IUGS** and the **NAS** on matters related to “geologic heritage”
3. Represent U.S. interests on the global geoheritage stage

What is a Global Geopark?

Global Geoparks are single, unified geographical areas where sites and landscapes of ***international geological significance*** are managed with a holistic concept of protection, education, research and sustainable development.

Global Geoparks Network

U.S. Geopark Communities

- 1) Gold Belt Byway, Colorado (2008)
 - Florissant Fossil Beds Natl. Mon.
- 2) Denver Basin, Colorado (2010)
- 3) Keweenaw peninsula, Michigan (2012)
 - Isle Royale National Park
 - Keweenaw National Historic Area
- 4) Appalachian Geopark, West Virginia (2015)
 - New River Gorge National River
 - Gauley River NRA
 - Bluestone National Scenic River

Gold Belt Byway, Colorado

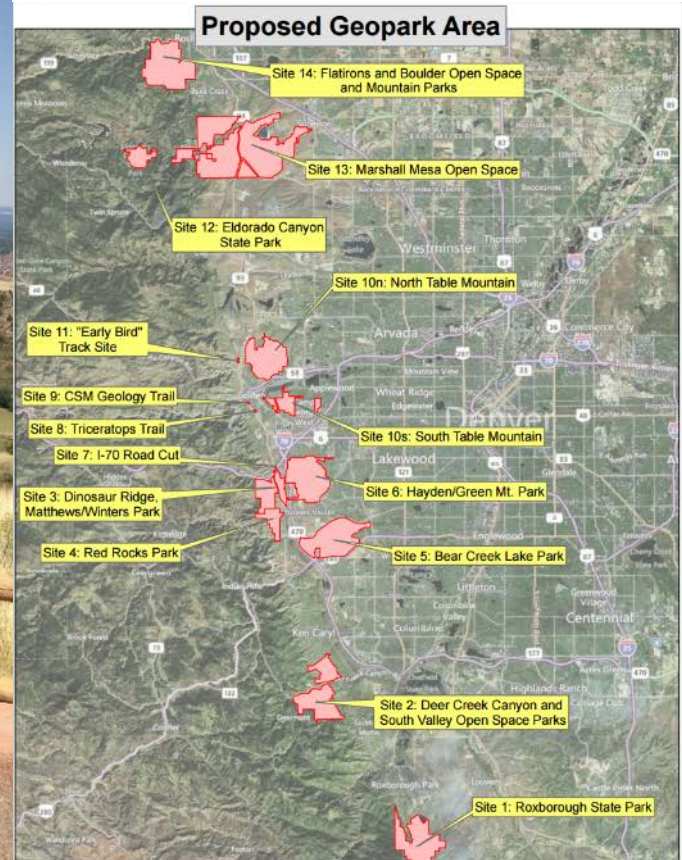


Geologic Guidebook to the **GOLD BELT BYWAY COLORADO**

Thomas W. Henry
Emmett Evanoff
Daniel A. Grenard
Herbert W. Meyer
David M. Vardiman



Denver Basin, Colorado

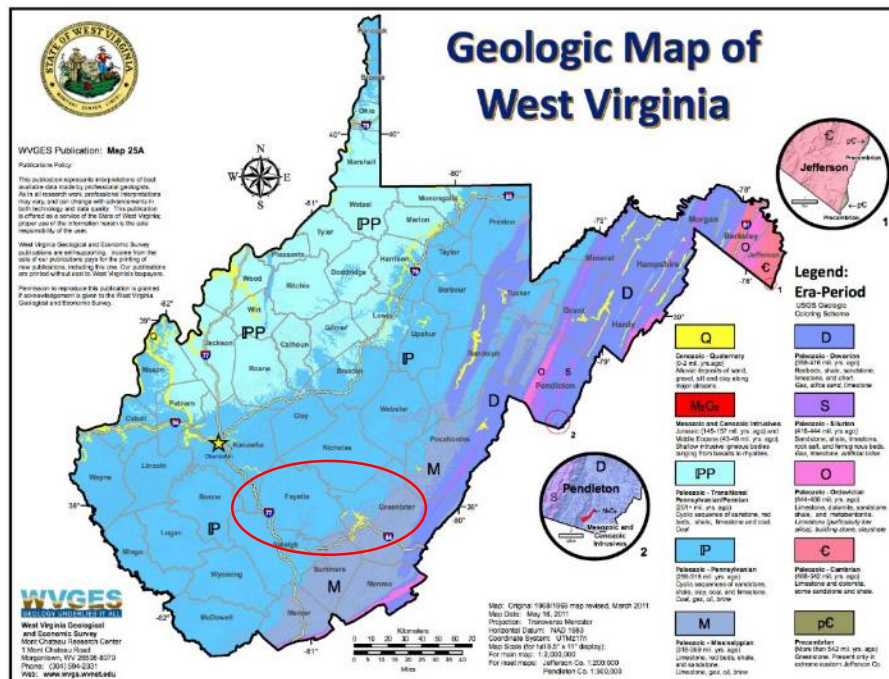


A satellite map of Michigan showing the Keweenaw Peninsula in the Upper Peninsula. The peninsula is highlighted with a yellow circle. The map shows the surrounding water bodies and the landmass of the Lower Peninsula.

Keweenaw Geopark

- Michigan's Upper Peninsula
- Houghton County and Keweenaw County
- Total population: 38,200
- Includes **Isle Royale National Park** and **Keweenaw Historical National Park**

Appalachian Geopark Project, West Virginia



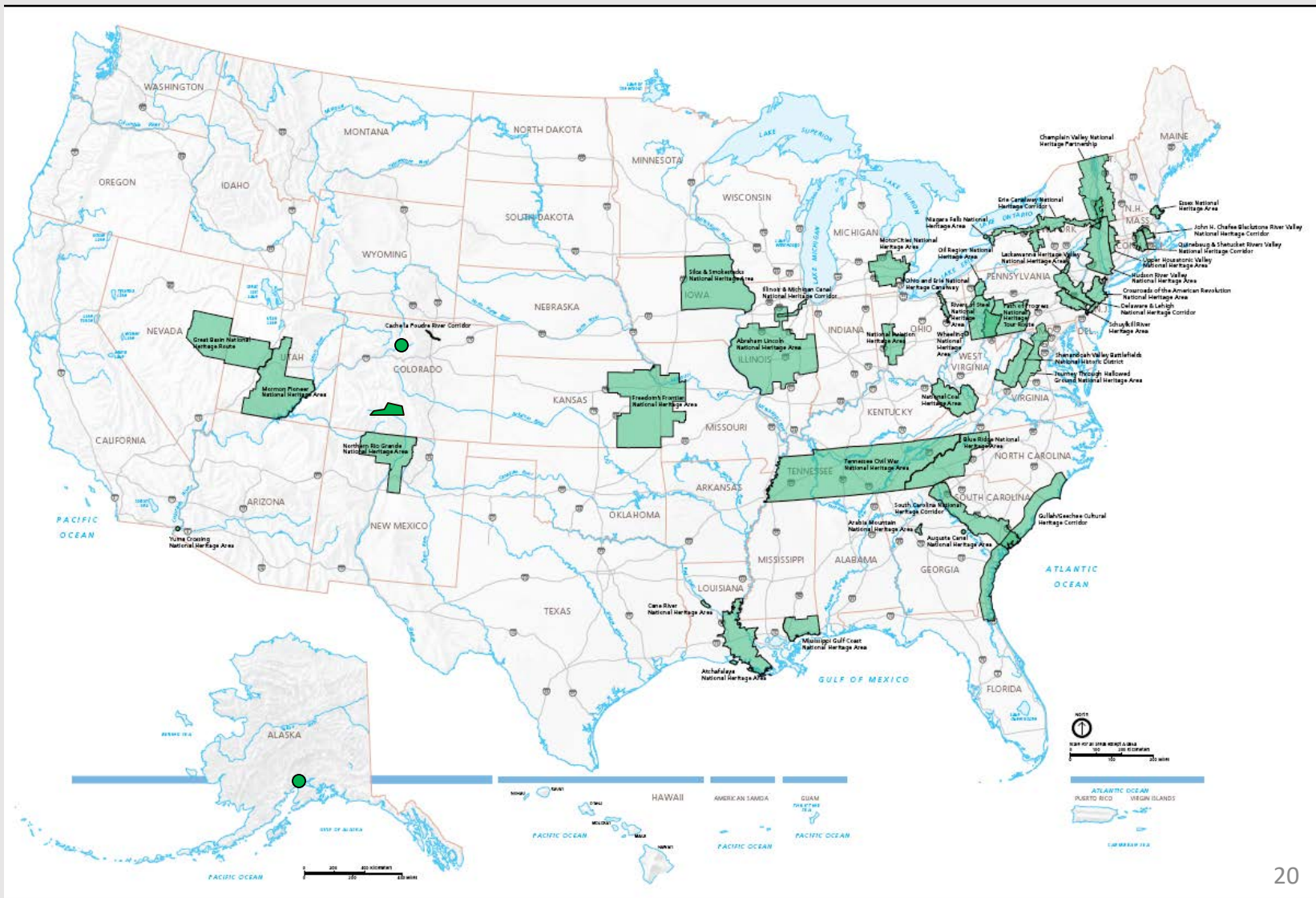
Beyond Global Geoparks

- December 31, 2018, the U.S. withdrew from UNESCO
- Withdrawal precludes U.S. participation in UNESCO programmes – including the Global Geopark Program
- Alternative U.S. *protected area* programs which highlight geological heritage include:
 - National Heritage Areas (NPS)
 - Scenic Byways (Dept. of Transportation)
 - National Natural Landmarks Program (NPS)
 - National Marine Sanctuary (NOAA)
- Since 2018 – AG focus has been with the State Geological Surveys through the Association of American State Geologists (AASG)

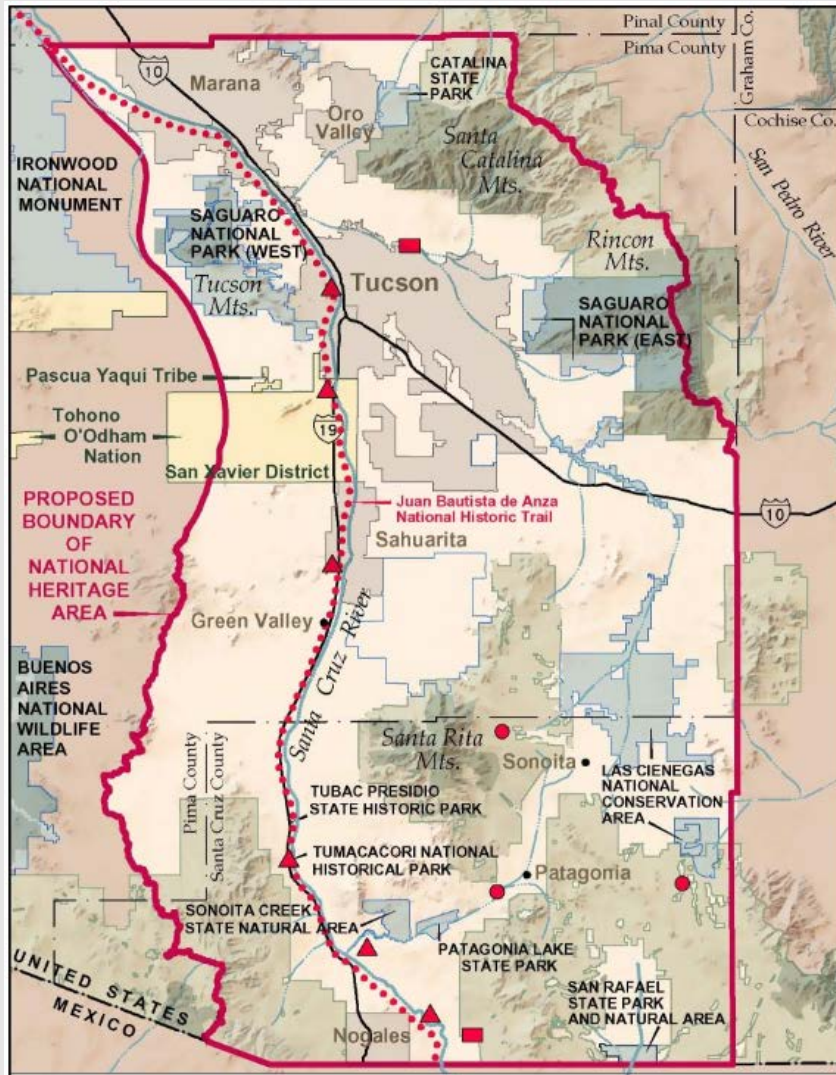
National Heritage Areas (NHAs)

- National Heritage Areas (NHAs) - places where natural, cultural, and historic resources combine to form a cohesive, nationally important landscape.
- NHAs are a grassroots, community-driven approach to heritage conservation and sustainable economic development.
- Supervision by the National Park Service.

55 NHAs across the U.S.



Santa Cruz Valley National Heritage Area



115TH CONGRESS
2D SESSION

H. R. 6522

To establish the Santa Cruz Valley National Heritage Area, and for other purposes.

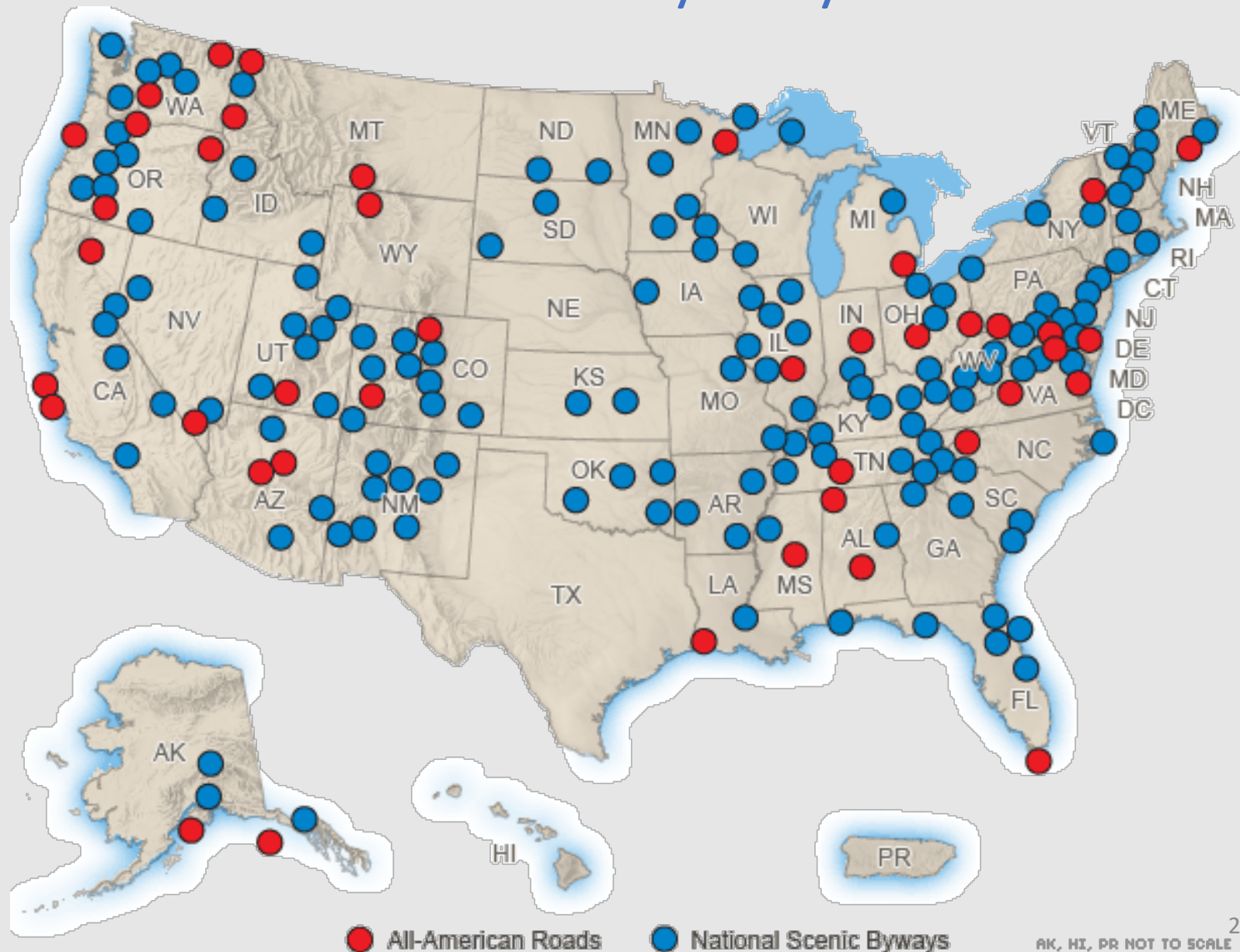
(4) include an inventory of the natural, historical, cultural, educational, scenic, and recreational resources of the National Heritage Area related to the national importance and themes of the National Heritage Area that should be protected, enhanced, interpreted, managed, funded, and developed;

Scenic Byways



A Scenic Byway is a route that connects the traveler to the unique natural, scenic, historical, recreational, archaeological, and/or cultural heritage of an area and whose intrinsic qualities are protected.

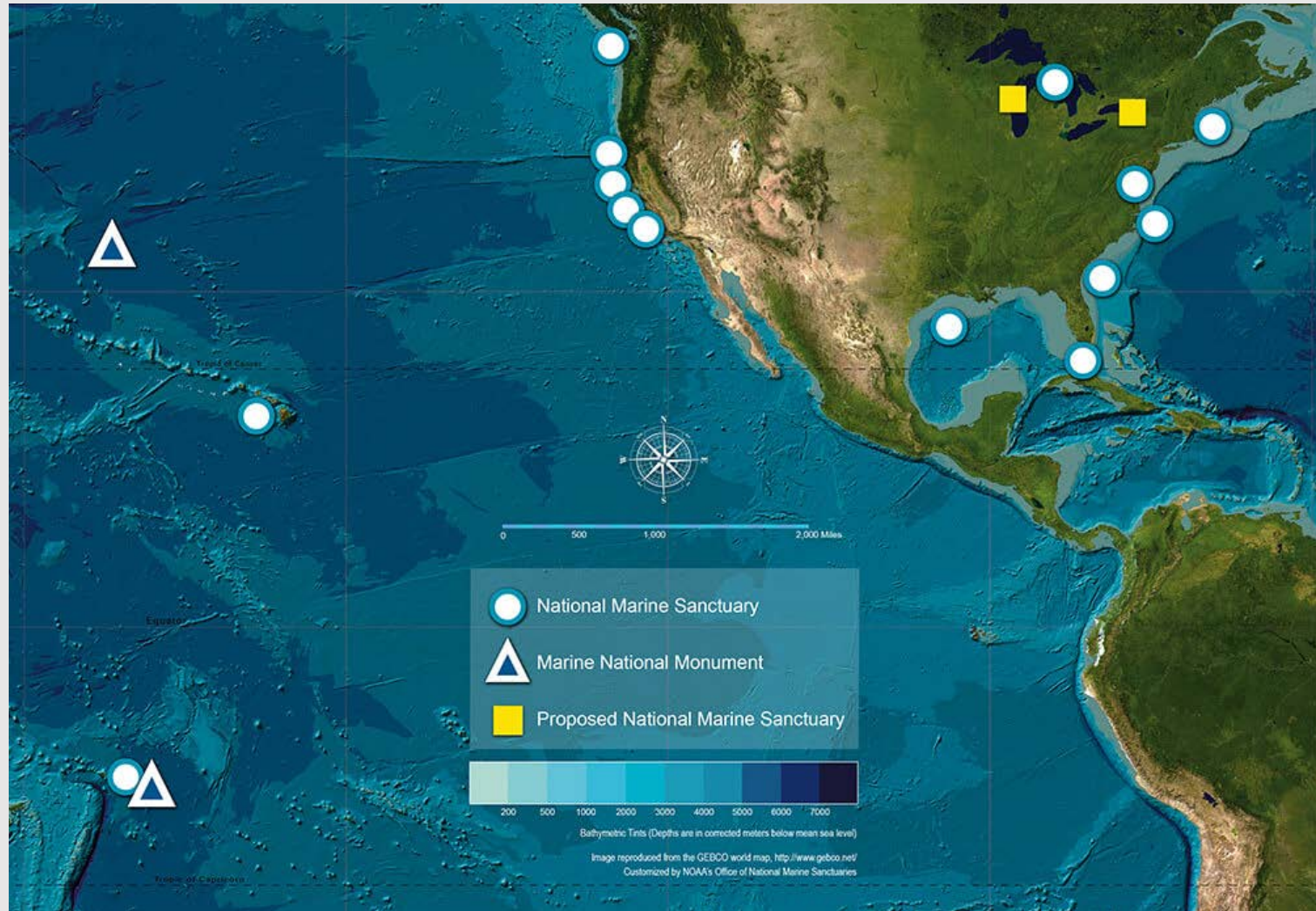
Scenic Byways



National Marine Sanctuary

- ... recognizes and protects marine resources of national significance such as valuable biodiversity, physical features, coastal habitats, and cultural features
- ... designated through the National Oceanic and Atmospheric Administration (NOAA), within the U.S. Department of Commerce
- 15 NMS designations in the United States

National Marine Sanctuaries

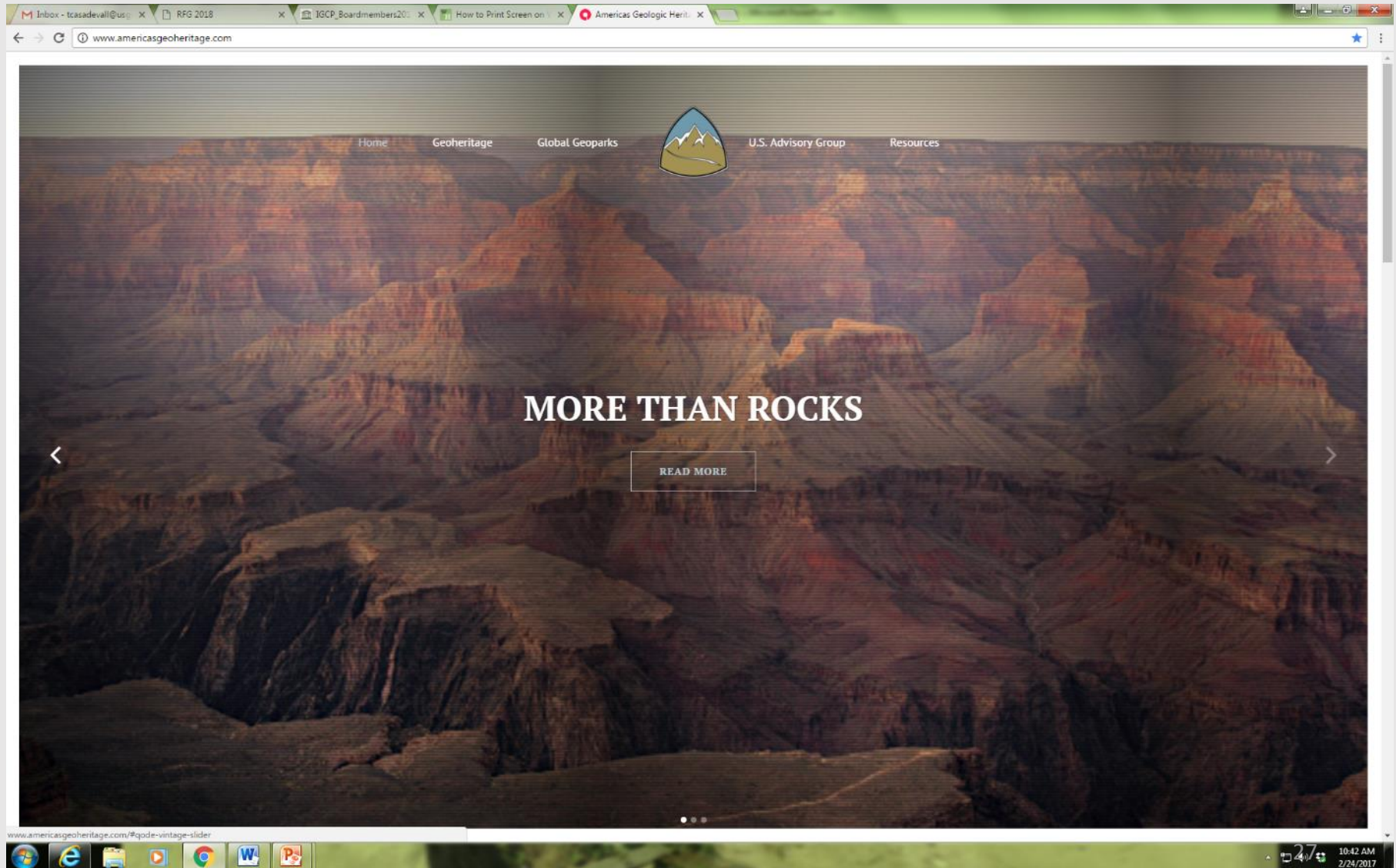


Leading by the States



- Develop common terminology to describe geological heritage features and landscapes.
- Inventory sites and landmarks of geological significance (*a geosite inventory*).
- Assist communities to organize their geoheritage into guides, trails, parks.
- Link to other State agencies (*tourism, education, parks*) to promote the benefits of celebrating your State's geological heritage.

www.americasgeoheritage.com



Thank you

U.S. geological World Heritage sites

1978 – Yellowstone National Park

1979 – Everglades National Park

1979 – Grand Canyon National Park

1979 – Kluane / Wrangell St. Elias / Glacier Bay

1981 – Mammoth Cave National Park

1982 – Great Smoky Mountains National Park

1984 – Yosemite National Park

1987 – Hawai'i Volcanoes National Park

1995 – Carlsbad Caverns National Park

2010 – Papahānaumokuākea Marine National Monument

419 National Park Service sites



Tribal parks



Kasha-Katuwe Tent Rocks National Monument, New Mexico

Shiprock Peak, Navajo Nation, New Mexico



Tribal Land Managers

