#### **Protected Volcanic Landscapes**

#### - involving IAVCEI

IAVCEI Panel Discussion

Prague, Czech Republic 29 June, 2015

#### **Protected Area**

"A protected area is a clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long term conservation of nature with associated ecosystem services and cultural values."

-Dudley, N. (ed.) (2008) Guidelines for Appling Protected Areas Management Categories. IUCN: Gland, Switzerland. p.8-9.



### Protected Landscapes in the USA

 Yosemite, California – first US "protected area" as a State Park, 1864; made a National Park in 1890

 Yellowstone, Wyoming – first US National Park, 1872

 Today – more than 10,000 "protected lands" in the US



# US World Heritage Parks with Volcanoes

Yellowstone National Park – 1978

Grand Canyon National Park – 1979

Wrangell - St. Elias, NP, Alaska - 1979

Hawai'i Volcanoes National Park - 1987



### World Heritage Sites

~1,011 sites

- ~900 Cultural sites
  - ~several volcanoes included (e.g. Fuji)

- ~200 Natural sites
  - 17 "Volcano" sites



### 1972 World Heritage Convention

- http://whc.unesco.org/archive/conventionen.pdf
- http://whc.unesco.org/documents/publi\_ basictexts\_en.pdf

 Understand concept of "Outstanding Universal Value" (OUV)



#### World Heritage Site Evaluation

 Operational Guidelines – in-depth discussion of OUV

http://whc.unesco.org/archive/opguide1
1-en.pdf



#### **IUCN**

#### International Union for Conservation of Nature

- Agency responsible for evaluating nominated properties
- Sponsors a Geoheritage Specialist Group
- 13 Geology "Thematic areas"

 https://www.iucn.org/about/work/programm es/wcpa\_worldheritage/publications/pub\_n ominations/?uPubsID=3991



#### **IUCN Volcano Thematic Study**



- Published in 2009 based on data through 2008
- Requested revision by Member States
- https://www.iucn.org/about/w ork/programmes/wcpa\_world heritage/publications/pub\_no minations/?uPubsID=3991

#### IUCN Volcano Thematic Study Revision

 An "effort" by this new IAVCEI Working Group?

"Pro-bono" / volunteer effort



#### Volcano Thematic Study – first step

- Update data tables with newly inscribed WH properties (e.g. Etna, Fuji, Pinacate, etc)
- Update data from Tentative Lists
- Include Global Geopark Network sites
- Include UNESCO Biosphere reserve (MAB)

Review World Heritage Panel decisions



#### Volcano Thematic Study – second step

- Review classification framework of 2009 study
  - Is it adequate ?
  - What is missing?
- What's missing?
  - Regional "balance"
  - "Scientific" representation of sites and areas?
  - Submarine volcanism ?
  - Hydrothermal vents ?



#### Volcano Thematic Study – third step

 Consultations with regional volcano scientists to ensure regional "balance"

Revise report as appropriate

Recommendations



#### Getting Involved

- Engage in the review process for new property evaluation or property revaluation
- Study currently listed properties (see UNESCO web sites)
- Include not only WH Natural sites but also cultural, biosphere reserves and Geoparks.
- Attend a meeting or workshop (VolcandPark II)
- Read IUCN studies and reports
- Visit a WH site, a Geopark, a biosphere reserve



## Thank You



### Volcanic Landscapes



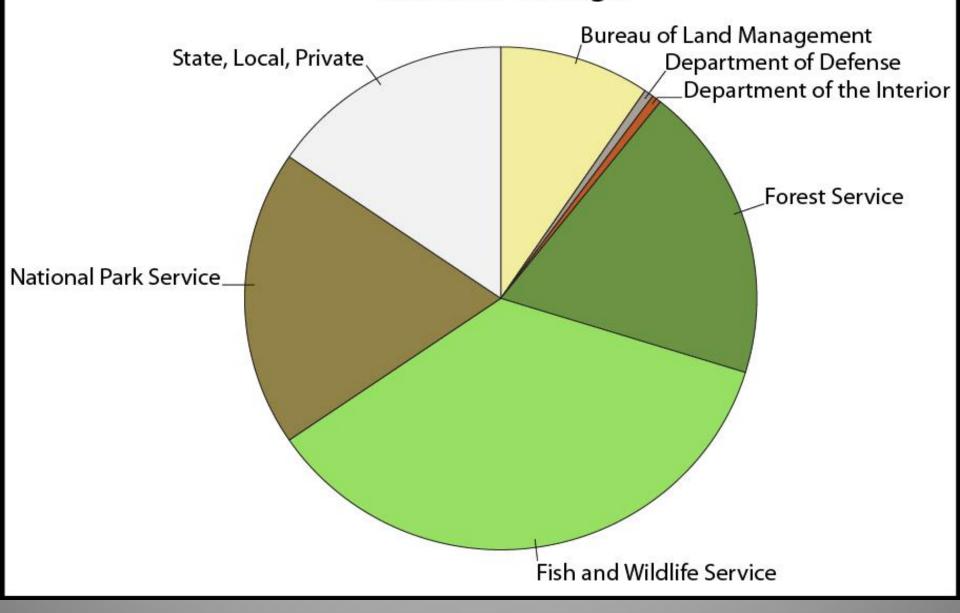








#### **U.S. Land Manager**





## Managing Volcanic Landscapes in the United States

**Federal Agencies** 

NPS, BLM, FWS, USFS, DOD

State and Local Agencies

**Native American Tribes** 

Private Partnerships



#### Volcanic Landscapes in the United States

Active volcanoes make many of the most recognizable volcanic landscapes with about 170 "active" volcanoes in the USA.

Volcanic landscapes also include older rock formations and geological features from Pre-Cambrian to the Modern in age.



#### Conclusions / Observations

- United States has approximately 200 "protected volcanic landscapes"
- Ages range from Modern, "active" volcanic systems to ancient, volcanic landscapes
- variety of management agencies and models used
- geologists seldom involved with management decisions (e.g. bioscience emphasis in NPS parks and USFWS staffing)
- Scientific studies underpin management decisions in these volcanic landscapes; geology needed!



#### Getting Involved

- Engage in the review process for new property evaluation or property revaluation
- Study currently listed properties (see UNESCO web sites)
- Include not only WH Natural sites but also cultural, biosphere reserves and Geoparks.
- Participate in a meeting or workshop and discuss the heritage value(s) of your field site(s)
- Read IUCN studies and reports
- Visit a WH site, a Geopark, a biosphere reserve,



# World Heritage Sites, Geoparks, and Protected Areas

- Why get involved?
- What does it matter?
- How to get involved?
- What type of management protection is appropriate for a site?

