

## Values Card Sort Responses

Categories in **bold**:

### **Cultural:**

- Cultural landscapes
- Cultural: songs, dances, arts, food
- Relation to Indigenous cultures (sacred sites, oral tradition)
- Same beautiful features viewed by my grandparents and my grandchildren
- Indigenous mapping with the “real Places” and sites of historical events or traditions?
- Native American view

### **Scientific:**

- Geology in action, geologic processes, glaciers, earth flows, flooding, geysers, coastal
- Scientific research
- Geologic event impacting (human history in Mt. St. Helens)
- Feeling deep time
- New discoveries
- Visualize past climate change
- Preserving the memory of geologic disasters
- Scientific value
- Promoting the need for advancing scientific research and understanding
- Preservation of access to scientific landmark geologic discoveries
- Research
- Truly remarkable geoscience
- Source of samples for scientific research
- Scientific understanding

### **Education:**

- Formal educations  
education – the relevance of sites to the public
- Education help build the STEM pipeline
- Educational opportunities -x3
- Hands on teaching
- Educational value –x3
- Independent discovery
- Educating kids about nature/ outdoors
- Informal education
- Educate and engage the public in history, cultures, science
- Sites available to train future geoscientists in traditional field methods
- Source of life
- Children’s ed

- Gaining appreciation for earth and earth's processes
- Educational GH places are by their nature well suited for the teaching and learning in the field (by formal groups or informal visitors)
- History, stories
- Landscape understanding, Why is this hill here?
- Education and inspiring future generations
- Education about dynamic geologic processes and hazards

### **Aesthetic**

- Beauty shots (video production)
- Art
- Color
- Scenic beauty
- Back to nature / Commune with nature
- Drawing painting photographing
- Basis of all scenery
- Natural beauty
- Geologic aesthetic – what a geologist sees as beauty
- Texture
- Geologic art (artist unknown)
- Respected and preserved to be shared with the world

### **Religious / Spiritual**

- Inspiration
- Spiritual enrichment
- Spiritual and cultural icons
- Tranquility
- Connect to nature
- Excitement about nature
- Wilderness solitude
- Nostalgia – revisit old memories
- Solitude
- Stress reduction / emotional release
- Development of man's technology

### **Sense of Place and Time**

- Connect people to time
- Connect people to place
- Awareness of geologic time
- Sense of the magnitude of time and earth evolution
- Relating beauty to geoscience – a new kind of perception for most
- Time
- Motivation to understand the earth for all
- Record of major events of earth's history

- Record/discovery of our past planet
- Understanding the reality of our planet and its landscapes, seascapes, and life on earth
- Integrity, valuing what we have enough to care for it
- A way to learn about landscape scale processes
- Inspiring a sense of awe and wonder about earth to general public
- Cultural valuing scientific history in US
- Search of our origins as humans
- Touch time
- Place names
- Looking on nature
- Appreciation for natural substrate
- Long time continuum
- Geologic site which influenced scientific understanding of earth

### **Stuff Happens – geohazard awareness**

- Hazard
- Challenge
- Energy required for civilization
- Human history impacting a geologic event, mud volcanoes Indonesia
- Fragility – preservation of threatened geology

### **Historic**

- History
- Appreciation for geological/earth history
- Connecting with the deeper history of earth's past
- Pride in American Heritage
- Geodiversity – preserving all types of geology and the ecosystems they support
- Preservation for the human time scale
- Historical value (linked to culture)

### **Tying together geology and ecology**

- Sense of ecosystem fragility
- Civilization exists by geological consent, subject to change without notice – Will Durant. Geology is the underpinning for ecosystems and society, geoheritage is the recognition of those linkages
- Ecosystem foundation
- Bedrock of ecosystem
- biodiversity

### **Preservation:**

- Preservation of geologic context
- Conservation of lands
- Preserved forever

- Captures the public interest in science
- Landscape/resource conservation
- conservation, saving the places so that others can appreciate it in the future
- some sites are one of a kind, must be preserved for future generations, we need an ethic that restrains collecting and sampling
- focus on geodiversity as a reason for preservation
- geologically unique occurrences

### **Commercial**

- Materials for 'stuff'
- Benefit local, state, national economies
- If it can't be grown, it has to be mined or drilled
- Tourism importance
- Financial (tourism)
- Public interest
- Tourist value

### **Recreation**

- Bonding of family and friends on visits
- Recreation (hiking, biking, photography)
- Camping
- Accessibility for recreation
- Mountain biking
- Birding
- Geography literacy – why is butte or St. Paul where it is...interplay of geoscience and economics
- Hiking
- Get your butt off the couch and get outdoors
- Smart phone stories
- Get outdoors to see, smell and touch landscape
- Adaptation of life, what worked and why
- getting outside in beautiful interesting places
- mental exercise

### **Legacy**

- Geoheritage is an element of the landscape we wish to see survive for future generations
- Opportunity for future generations

### **Type Locality**

- Awareness of nature and the natural world
- Integrating people from disadvantaged urban environment with nature
- Special pathways for people with disabilities

- Nature appreciation of natural things
- Connecting people to the outdoors

### **Reaching Out**

- Listening
- Encouragement of citizens to get out in nature, addresses nature deficit disorder. Their experience is enhanced if they know what to look for and how to interpret the features.