

Examples of potential strategies and techniques for interpreting the significance and relevance of climate change

*NPS Interpretive Development Program – Interpreting Climate Change Competency
Excerpted from Module 4 Learning Companion*

The following examples identify site relevance to climate change, connect site significance to audience relevance, and list one or two suggestions for interpretive venues, strategies or techniques to engage the audience with those climate change meanings. These are offered as suggestions – there are many other possibilities for climate change stories and strategies at each of these sites. These examples are intended to help you think about the possibilities at your site.

Glacier National Park

- Significance to site resources – climate change is resulting in glacial recession and loss of alpine meadows
- Relevance to site audiences – climate change is resulting in changing visitor experiences; our children will not be able to bring their children to see a glacier; some animals and flowers we enjoy seeing will become scarce or disappear; but we can use this park as an opportunity to learn from the past in order to make a better, more sustainable future for our children. Universal concepts: loss, change, beauty, consequences, family, sustainability, learning, future, hope
- Possible strategies and techniques – Casual observation/reflection/expression-- at a stop on a nature walk, plan to point out and discuss a glacier, flower or animal that may be threatened by climate change; encourage visitors to observe and reflect, and then facilitate a casual conversation (in which there are no wrong answers) allowing them to share thoughts about how this loss, and other climate-related losses, might impact the future experience of their children/grandchildren.

Joshua Tree National Park

- Significance to site resources – climate change is resulting in the loss of habitat suitable for Joshua trees
- Relevance to site audiences – Deserts are places that teach the difficult lessons of adaptation and challenge the ability of every species to survive, including humans. What wisdom can we gain that may help us adapt and survive the changes caused by a shifting climate? What does the potential loss of the park’s namesake species mean to us as humans? Universal concepts: adaptation, survival, loss, extinction, uncertainty, challenge, wisdom, hope
- Possible strategies and techniques – Theme question – for an illustrated campfire program, develop the entire program around the theme question “What does the potential loss of the park’s namesake mean to different species of plants, wildlife and to us as humans?” Invite interested

audience members to stay around the campfire after the formal program to share and discuss each other's perspectives.

Everglades National Park

- Significance to site resources – climate change is contributing to sea level rise and its impacts on wildlife, ecosystems, and human communities
- Relevance to site audiences – There are many reasons why humans have always built communities close to the sea and why we love to visit here. How will sea level rise change our communities? How will we interact with ocean ecosystems in the future? Universal concepts: community, cherished experiences, mystery and wisdom of the sea, change, endangerment, adaptation, hope
- Possible strategies and techniques – Observation, imagination and reflection– Develop a wayside exhibit to be placed near a spot frequented by local visitors, with a vista of buildings or roads that may be threatened by sea level rise and/or heightened storm surge. Include artwork illustrating the potential for inundation over the next 20 years. Ask a question in the text of the wayside encouraging visitors to imagine/visualize how these changes will impact the lives of people living and working in these areas.

Fort Point National Historic Site

- Significance to site resources – the experience of the soldiers stationed here during the civil war can help inspire and teach us today how to effectively address our emotions around climate change
- Relevance to site audiences – The challenging environment in San Francisco for the soldiers forced them to find ways to improve morale in the face of dreary, damp, uncomfortable conditions. Additionally, upon hearing of the onset of the Civil War, these soldiers undoubtedly faced an emotional crisis as they were asked to prepare to defend against an enemy that may never come while their friends and family fought and died 3,000 miles away. Many people may struggle with feelings of hopelessness and futility around climate change. The experience of the soldiers of Fort Point can inspire us to work together to seek a common purpose and find within us the strength and hope to continue to fight the battle against climate change. Universal concepts: loss, change, despair, hopelessness, hope, family, common purpose, future.
- Possible strategies and techniques – Reflection/expression—while in the fort ask visitors to imagine how they may have responded emotionally to the news of the Civil War, or how they may have tried to overcome the uncomfortable nature of life in the fort to maintain high spirits. Facilitated dialog works quite well with audiences in this setting to explore the comparison between the feelings the soldiers struggled with as well as those we do today.

John Day Fossil Beds National Monument

- Significance to site resources – modern anthropogenic climate change can be understood by comparing rates of change between the fossil record and today

- Relevance to site audiences – The fossil record indicates that ancient species were affected by periods of changing climates, sometimes resulting in death and extinction. Does paleontology offer us glimpses of doom and gloom as we attempt to grapple with modern climate change or is there evidence for hope? Universal concepts: change, death, extinction, science, value, discovery, hope
- Possible strategies and techniques – Compare/contrast and reflect – for an article in the park newspaper, develop graphic illustrations showing the rate of climate change that research indicates is reflected in the fossil record vs. the rate of climate change that research indicates has been happening since the beginning of the Industrial Revolution. Ask readers to reflect on the question, “Does paleontology offer us glimpses of doom and gloom as we attempt to grapple with modern climate change or is there evidence for hope?” Don’t provide an answer – leave it hanging.

Montezuma Castle National Monument

- Significance to site resources – changing climates have had consequences for cultures and civilizations of the past
- Relevance to site audiences – Archaeologists have postulated that ancient cultures may have abandoned this place because of an increasingly harsh climate and competition for scarce water and food. Do we view the fate of past cultures as simply “ancient history” or does their experience link to our own? Universal concepts: survival, mystery, consequences, scarcity, competition, adaptation, hope
- Possible strategies and techniques – Compare/contrast with modern day examples of people needing to change where/how they live due to changing conditions (flooding, hurricanes, etc). Integrate reflection activities about changes people have made in their own lives, and discussion about how it might feel to be forced to leave your home. Develop waysides illustrating the dramatic climatic changes that may have forced the Sinagua to abandon the site and questions about our own future in the face of modern climate changes.

Thomas Edison National Historic Site

- Significance to site resources – the transformative power of scientific innovation has had both negative and positive ramifications related to climate change
- Relevance to site audiences – As humans struggled to create a better world in the 1800s through technological inventions like automobiles, factories, and electric lighting, did they realize the long term environmental impacts of their actions? Today we look to technology as well to help us address climate change and continue to create a healthier world to live in. Universal concepts: awareness, insight, consequences, regret, empathy, family, sustainability, future, hope
- Possible strategies and techniques – Facilitated dialogue for 11th grade US history education program – following a tour of Edison’s lab (as the shared experience), students participate in a facilitated dialogue to address the ways in which Edison’s inventions have been both a blessing

and a curse, and share their thoughts and concerns for a “brighter” future.

Antietam National Battlefield

- Significance to site resources – the carbon footprint of the Army of the Potomac can be compared to help us grasp the scale of the carbon footprint of modern society
- Relevance to site audiences – the burning of coal and other fossil fuels has long fueled society. These resources were essential to the Civil War effort and were often fought over commodities. When compared with the amount of greenhouse gases released in the atmosphere for one day of battle to the amount released by a coal-fired power plant in one present day, the numbers are startling and begin to illustrate the rapid rate of increase in the causes of climate change. Universal concepts: surprise, dismay, concern, consequences, learning, future, hope
- Possible strategies and techniques – Statistics and questions for social media discussion – create a Facebook post entitled “Civil War Energy Sources” – show statistics and briefly describe the ways in which the Civil War was a battle for control of critical energy resources; end with a question to prompt discussion about where in the world today there are battles over critical resources. Leave it open-ended so that discussion can go in any direction (may not go to climate change per se, but raises related questions).

Rocky Mountain National Park

- Significance to site resources – climate change is resulting in the loss of pine forests due to pine bark beetles and resulting fire dangers
- Relevance to site audiences – At Rocky Mountain National Park in Colorado, more than 90% of the pine trees in the park have died in recent years. This is a dramatic change to the natural landscape at the park that is apparent to every visitor. Scientists have found this die-off is due to native pine beetles thriving under a warmer climate. This change is making a strong impression on the people who live in Colorado and recreate in Rocky on weekends. This is also resonating with visitors who have a special connection to Rocky, like those visiting the park with their parents decades after a memorable family vacation, and witnessing the dramatic change on the landscape evident before them or obvious in old photographs. Universal concepts: death, loss, family, science, challenge, hope
- Possible strategies and techniques – Before-and-after photos for reflection and expression/sharing and seeing the perspectives of others – create a temporary exhibit for the visitor center illustrating the before-and-after views of the forest, with a brief bit of information about the beetle kill – and the question, “What will we tell our grandchildren?” Provide an invitation for visitors to leave a response in an adjacent notebook or on a large post-it note wall next to the exhibit.