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Changing the Conversation about Climate Change:

Place-based Communication & America's Public Lands

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**CHANGE
AHEAD**

Climate Change Communication Research 2004 -2008

- ✓ **More than 30 Studies in 16 different journals**
- ✓ More than 40% were related to media & journalism
- ✓ Another 40% were related to strategic communication
- ✓ 10% = Scientists & science communication
- ✓ 10% = Fear appeals, communicating uncertainty & risk

Climate Change Communication Research *Since 2008*

More than 228 Studies in more than 30 journals!

- ✓ Media, framing and campaigns
- ✓ Psychology, decision-making and action
- ✓ Social marketing, sustainable lifestyles and citizenship
- ✓ Policy, political strategy and networks
- ✓ Communicating complexity & risk perception

What doesn't work...

Fear Appeals

Doomsday Prophecies

Arbitrarily Balanced Positions

Technical & Scientific Language

Predictions Couched in Uncertainty

References to Animals & People Far Away

10 Key Strategies for Creating Messages about Climate Change:

10. Know your audience.
9. Know what type of claim you're asserting.
8. Connect to cultural values & beliefs.
7. Make the message meaningful.
6. Lead with your strongest argument.

10 Key Strategies for Creating Messages about Climate Change:

5. Make the message empowering.
4. Link global patterns to local action.
3. Partner with other organizations.
2. Start from the inside – to inspire action.
1. Communicate about ACTIONS!

Based on these strategies, let's consider:

Place-based Climate Change Engagement





What is Place-based Engagement?

Meaningful dialogue situated in a specific location, where audiences interact with each other and the landscape to develop a deeper understanding about ecological and social interrelationships.

Place-based Climate Change Engagement Model

• Adaptation

- Prioritize & Implement actions
- Monitor & evaluate
- Integrated response
- Adaptive capacity

• Leadership

- Innovations & solutions
- Leading by example
- Building resilience
- Collaboration

**Illustrate
local
impacts &
actions**

**Provide
Concrete
Action
Items**

**Actively
facilitate a
mutually-
respectful
dialogue**

**Connect
human
behavior
using a
systems
explanation**

- Outreach
- Social learning
- Community engagement
- Generate collaborative knowledge

• Lifestyle

- Local food
- Walking & biking paths
- Reducing consumption

• Policy & Planning

- Integrate climate change into regulations
- Explore scenarios
- Vulnerability & risk assessments
- Decision-making

• Mitigation

- Alternative transport
- Energy efficiency
- Technological innovations
- Reduce emissions
- Carbon tax

- Climate change Literacy
- Scenarios
- Ecosystem Changes
- Resilience
- Collaboration

How does it help audiences understand climate change?

The theories of experiential learning and group learning coupled with sense of place & norm activation theory lead us to believe that people:

Are connected to places; they have unique bonds with, and value specific landscapes/places.

Effectively learn through meaningful hands-on activities in that special place or on that landscape.

Remember lessons and adopt behaviors when they feel a sense of responsibility & have knowledge of consequences.

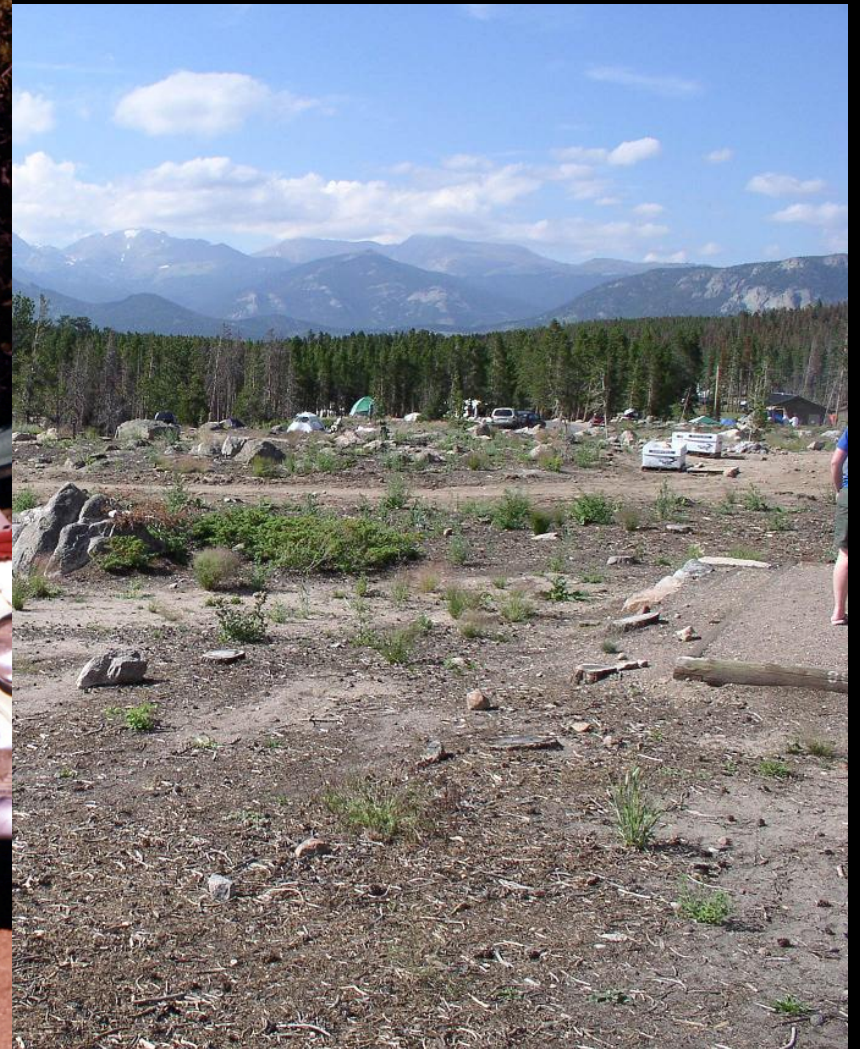
Thompson & Schweizer, 2009; Schweizer, & Thompson, 2011



"Look, I believe climate change is real. Every visit we make, such as we are making here, argues that we need to take action... Every citizen in America should see what's happening here!"



Glacier Basin Campground at Rocky Mountain National Park

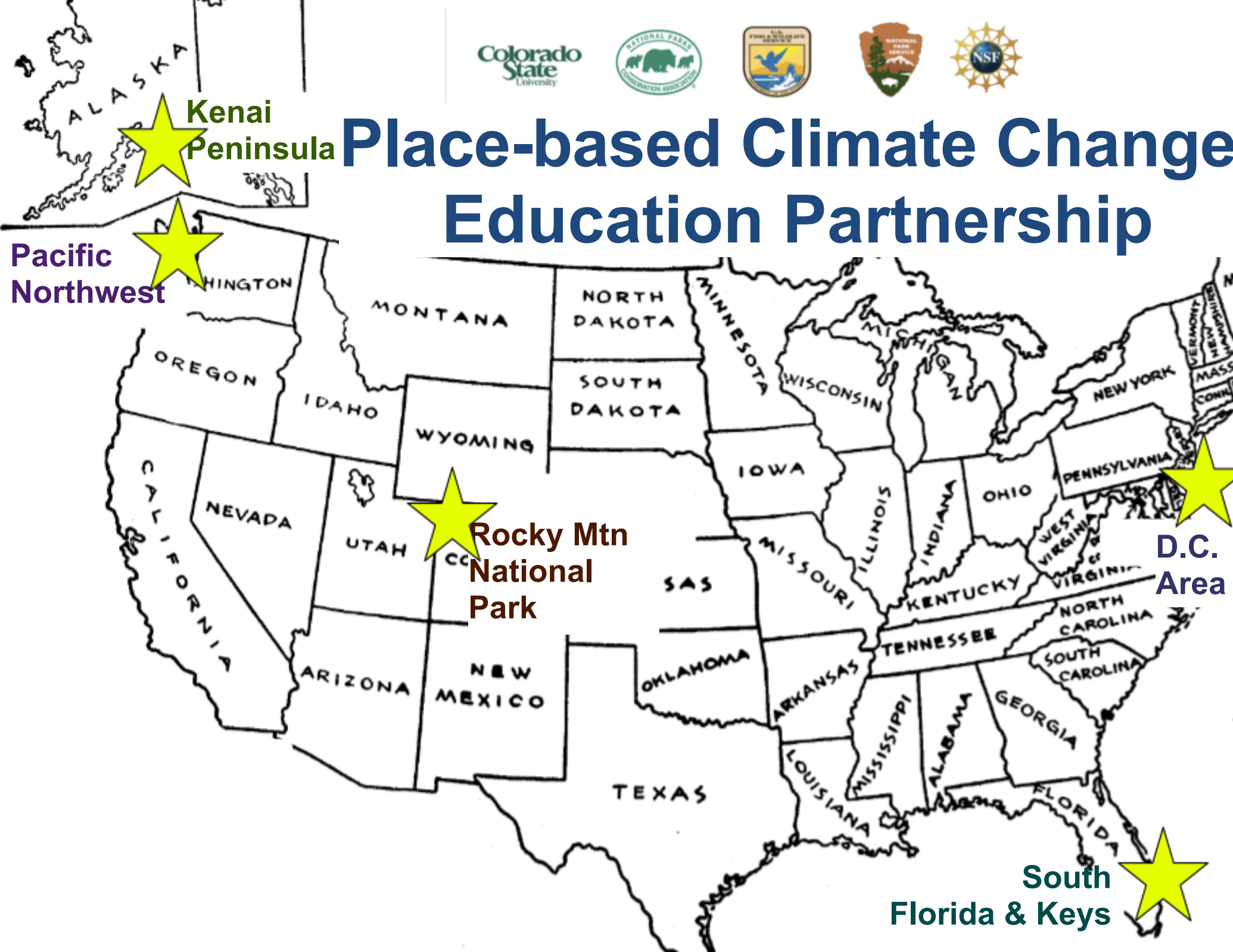


How can we change the climate change conversation through the lens of places we love?





Place-based Climate Change Education Partnership



Kenai Peninsula

Pacific Northwest

Rocky Mtn National Park

D.C. Area

South Florida & Keys



Project Objectives

Discover ***current activities*** at each site

Identify ***barriers & opportunities*** for collaborating and communicating about climate change

Identify ***issues & impacts*** to be communicated

Integrate ideas for place-based climate change education/engagement strategy

Project Activities

Survey of Agency Staff & Partners ($n = 847$)

Site Visits & Focus Groups with Site Partners ($n = 47$)

World Café workshops (285 participants)

Quantitative and qualitative data collection regarding visitor knowledge & concerns about climate change

- 2,968 visitor surveys

- 231 visitor interviews



Preliminary Results

Objective 1: Current Activities

- #1 – Formal Education Programs
- #2 – Website, Webinars & Web-based Media
- #3 – Workshops & Meetings
- #4 – Publications
- #5 – Interpretive Programming
- #6 – Professional Development & Trainings
- #7 – Presentations
- #8 – Special Exhibits & Displays

Preliminary Results

Objective 2: Barriers & Opportunities

Barriers:

Lack of a connection to people's "everyday"

Lack of climate/science literacy

Politicization of the issue

Lack of local evidence / data to illustrate effects

Apathy, disbelief & disinterest

Lack of effective & consistent messages

Opportunities:

Focus on the local effects / visible changes

Make the link to the economy & jobs

The potential for collaboration, partnerships & support

Educate the youth – early and often!

Local action can make a difference!

Preliminary Results

Issues & Impacts

199 of 220 workshop participants said effects can be seen now!

Northern Colorado *(11% said 1-2 effects; 83% said several effects)*

Changes in Precipitation & Temperature Patterns

Alpine & Subalpine species shifts (e.g., Pika, Ptarmigan)

Reduced Snowfields

Increase in Wildland Fires



Preliminary Results

Issues & Impacts

199 of 220 workshop participants said effects can be seen now!

Southern Florida *(23% said 1-2 effects; 68% said several effects)*

Coral Bleaching

Sea Level Rise

Abnormal Weather Patterns & Storms

Increased Land & Water Temperatures



Preliminary Results

Issues & Impacts

199 of 220 workshop participants said effects can be seen now!

Washington DC *(43% said 1-2 effects; 41% said several effects)*

Sea Level Rise

Superheated Run-off

Changing Vegetation Patterns (e.g. cherry blossoms)

Urban Heat Island Effect

Erratic Weather & Storm Intensity



Preliminary Results

Issues & Impacts

199 of 220 workshop participants said effects can be seen now!

Kenai Peninsula *(17% said 1-2 effects; 76% said several effects)*

Sea Level Rise

Erosion

Erratic Weather & Storm Intensity (e.g. lightning)

Glacial Retreat





Project Objectives

- ✓ Discover ***current activities*** at each site
 - ✓ Identify ***barriers & opportunities*** for collaborating and communicating about climate change
 - ✓ Identify ***issues & impacts*** to be communicated
- Integrate ideas for place-based climate change education/engagement strategy!**

Preliminary Results

Staff & Visitor Surveys

Agency Staff Survey (courtesy of Bernuth & Williamson Consulting)

847 total

402 National Park Service

445 U.S. Fish & Wildlife Service

Visitor Survey

1,070 analyzed / 2,968 collected

55% male / 45% female – average age 45

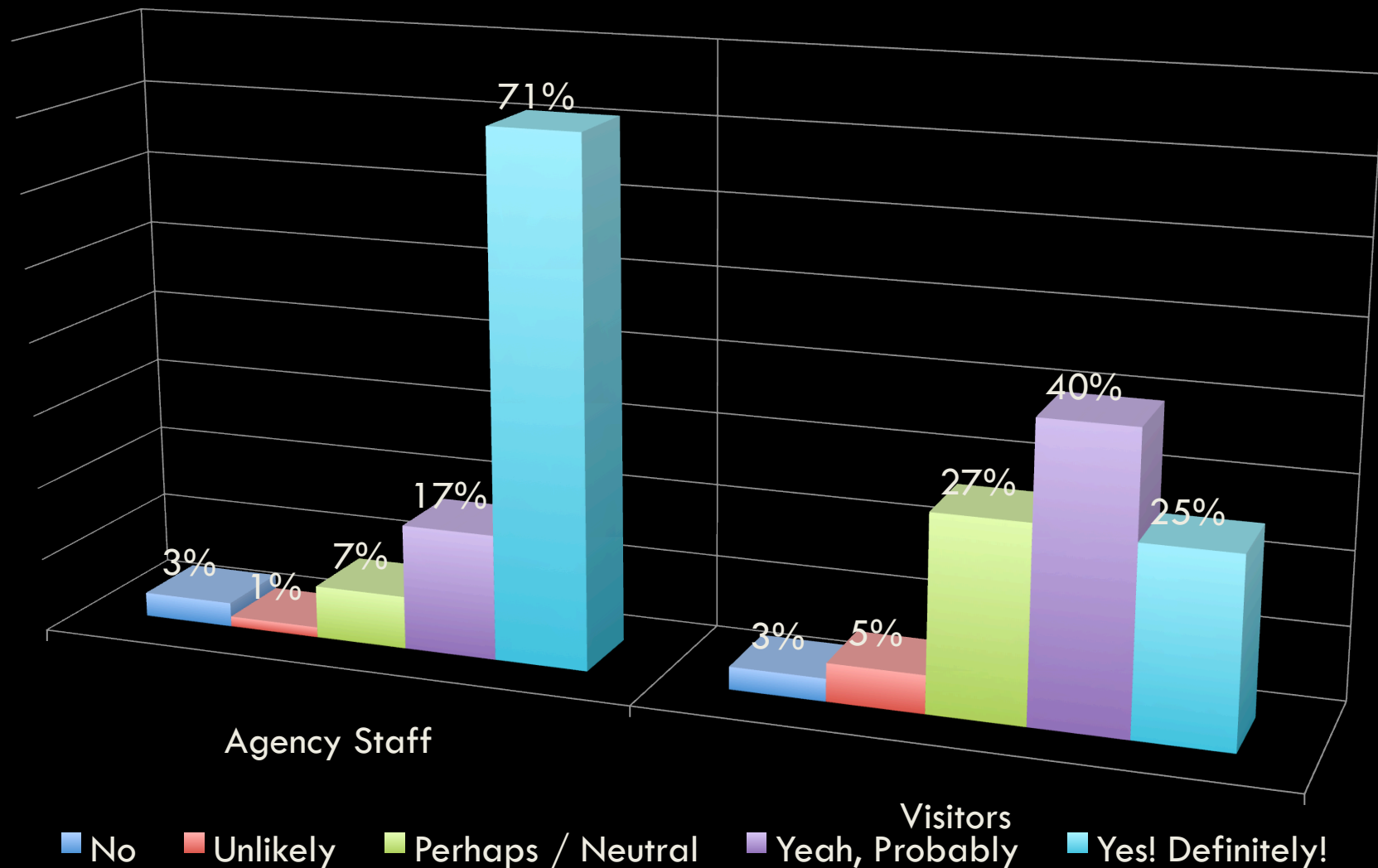
85% Caucasian / 68% with a college degree+

26% democrat / 25% republican / 18% independent

Preliminary Results

Staff & Visitor Surveys

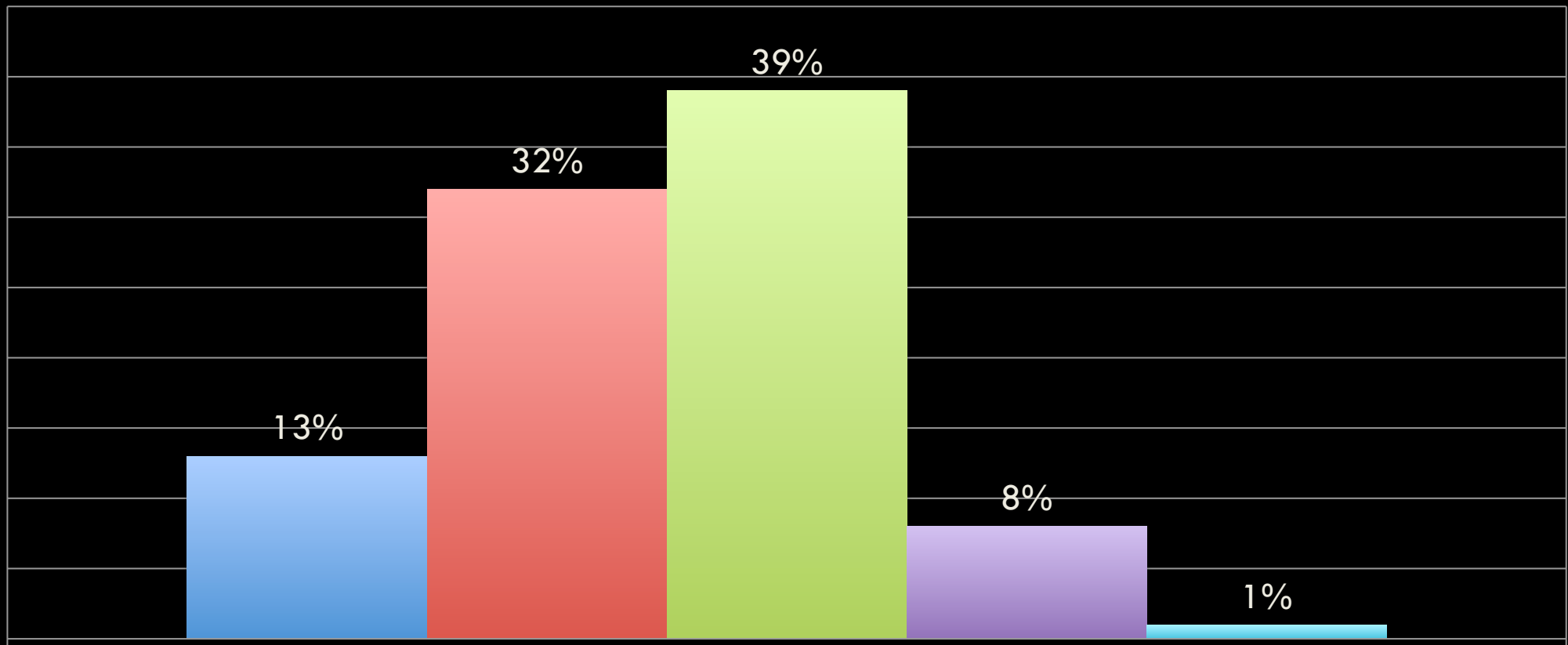
Are the effects of climate change already seen at places managed by NPS & USFWS?



Preliminary Results

Staff & Visitor Surveys

We asked the Staff: Are Your Visitors Concerned about Climate Change?

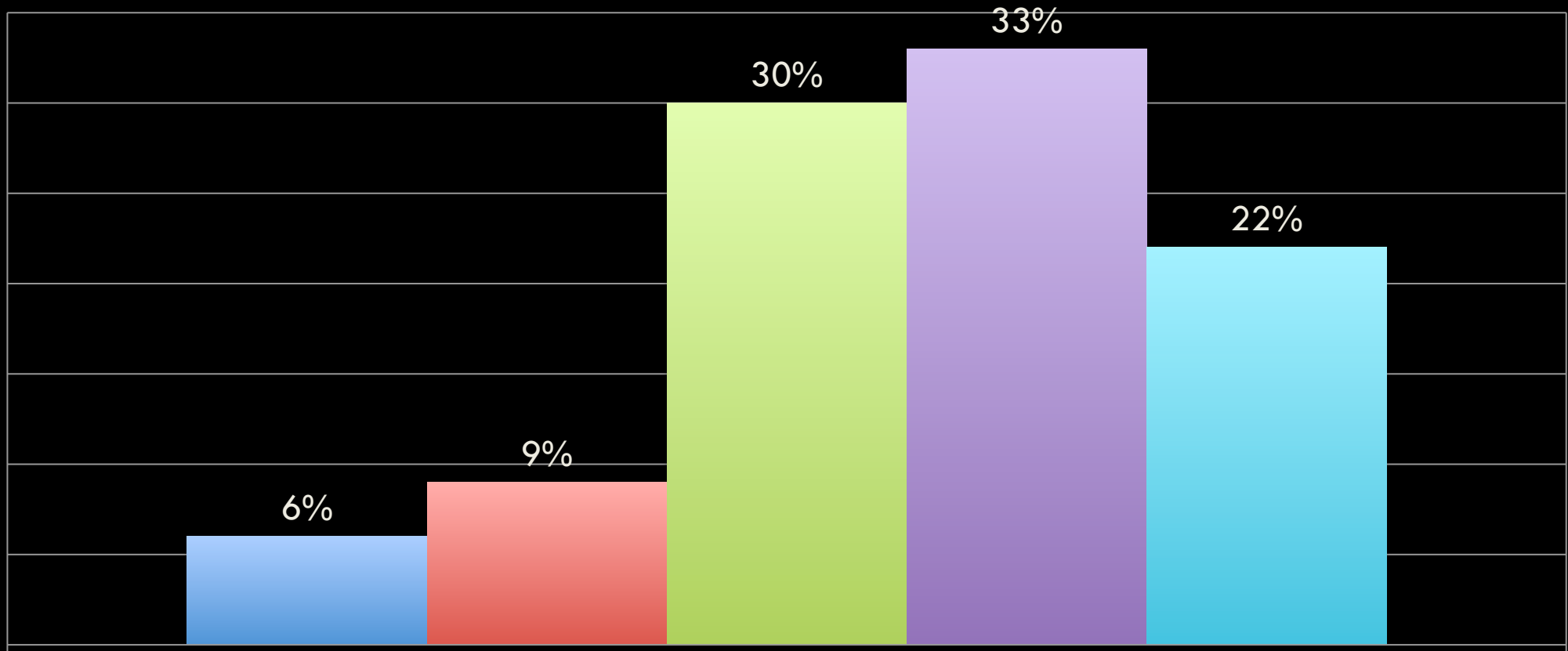


■ Not Concerned ■ Slightly ■ Somewhat ■ Very Concerned ■ Extremely Concerned

Preliminary Results

Staff & Visitor Surveys

Then we asked the Visitors: How Concerned are You about Climate Change?

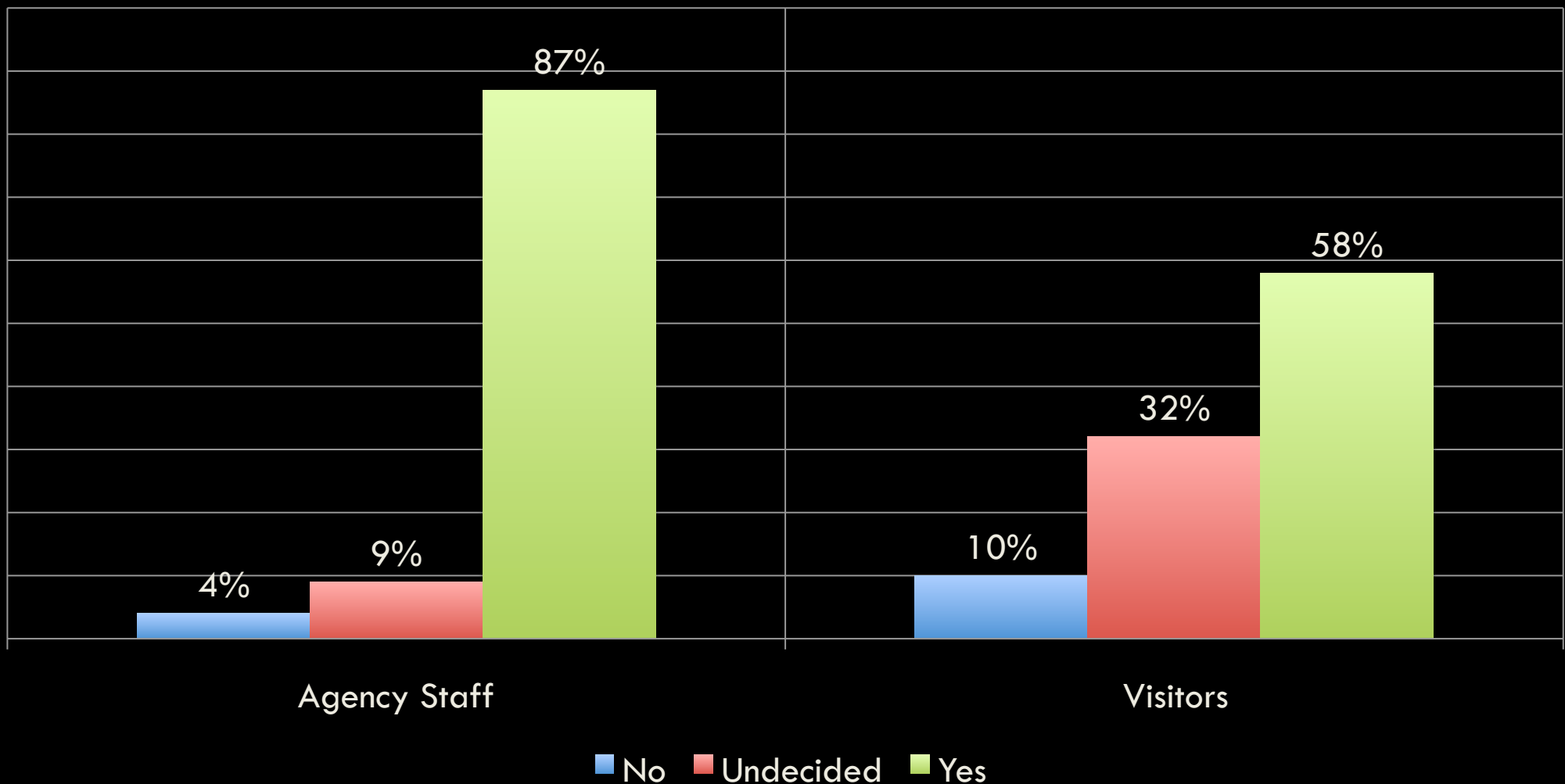


■ Not Concerned ■ Slightly ■ Somewhat ■ Very Concerned ■ Extremely Concerned

Preliminary Results

Staff & Visitor Surveys

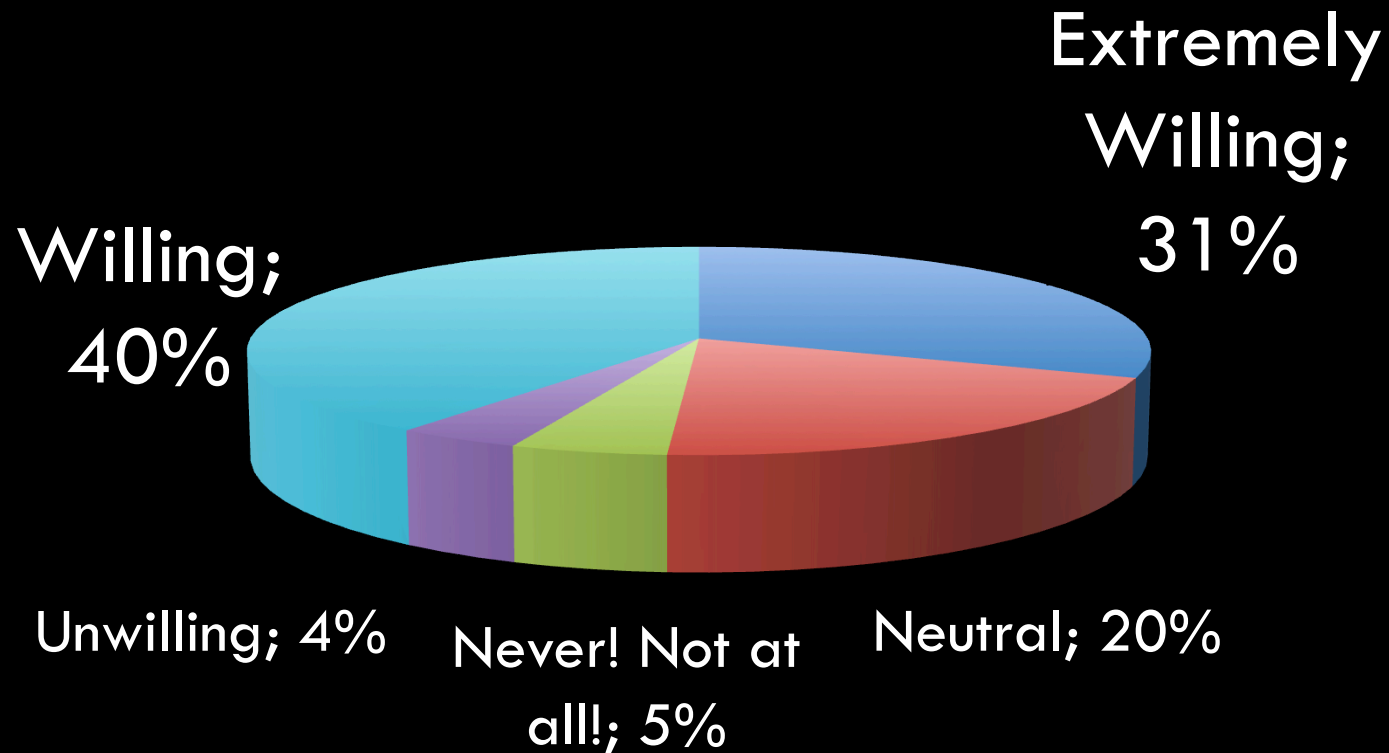
Should the National Parks and National Wildlife Refuges be Communicating about Climate Change with Visitors?



Preliminary Results

Visitor Surveys

Are you willing to change your behavior during your visit to help reduce the impacts of climate change at this place?



Preliminary Results

Visitor Surveys

Top Ways Visitors Want to Learn about Climate Change at National Parks & Wildlife Refuges

Ranking	Communication / Engagement Method
#1	
#2	
#3	
#4	
#5	
#6	
#7	

Preliminary Results

Ideas for Engagement Strategy

Who is our Target Audience(s)?

#1 – Children / Youth Audiences

#2 – Staff

#3 – Web Audience

Preliminary Results

Ideas for Engagement Strategy

Top Actions to Promote: “We Want The Audience To...”

- #1** – Know that the ecosystem is changing, Now!
- #2** – Know that they can make a difference
- #3** – Appreciate that they don't need to know everything to start taking action!
- #4** – Understand local examples and have a connection to place
- #5** – Take responsibility for everything from understanding the science to lifestyle choices!

Preliminary Results

Ideas for Engagement Strategy

Top Themes for Effective Engagement

- #1 – Tell local, personal stories about our changing landscape
- #2 – Create a citizen science program
- #3 – Utilize new technology and social media
- #4 – Make connections to the economy, to our families, to patriotism – to make it personally relevant
- #5 – Create messages of hope!

THE IMPORTANT MESSAGE ABOUT COMMUNICATING CLIMATE CHANGE:

There is no template or “ready-made” solution!
We need to experiment with – and – test
different strategies.

Making progress means that we link our
understanding of ecological changes with our
understanding of our audiences and develop
meaningful messages to engage them in
climate dialogue and action.



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