

National Park Service
U.S. Department of the Interior



Audience Beliefs and Attitudes about Climate Change

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EXPERIENCE YOUR AMERICA

Knowing your audience is an important part of any interpretative product and it can be critical when interpreting climate change.

Center for Climate Change Communication
George Mason University & Yale University

<http://environment.yale.edu/climate/publications/>



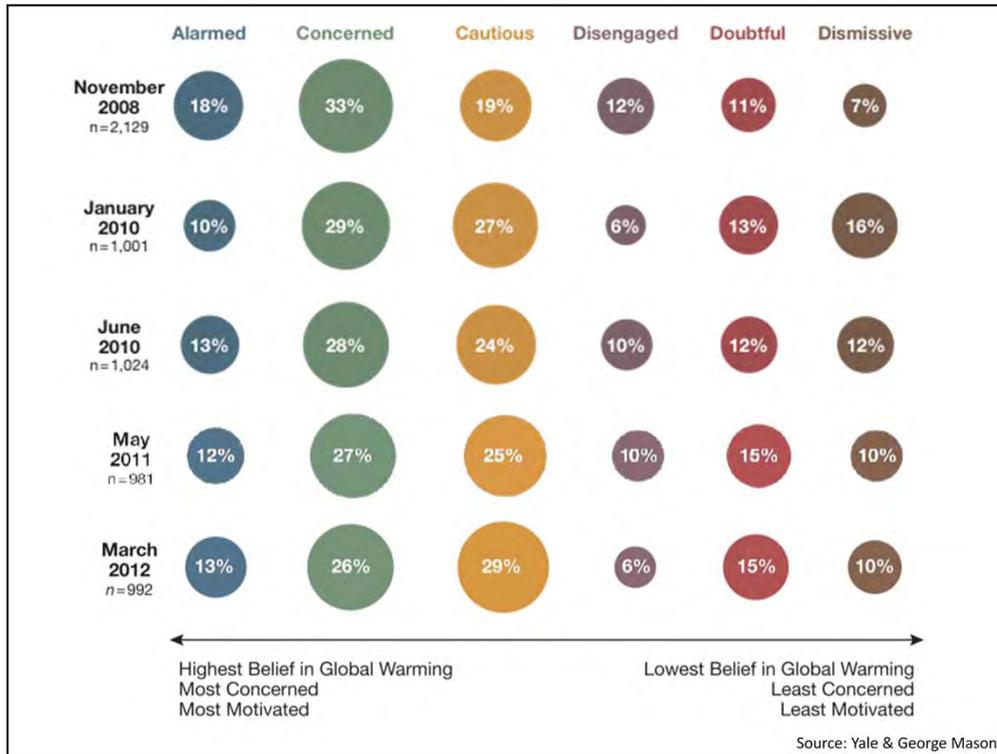
The image shows the cover of a report titled "GLOBAL WARMING'S SIX AMERICAS 2009: An Audience Segmentation Analysis". The cover features a collage of six diverse people's faces and a map of the United States. Below the cover is a banner with the same title and subtitle, "Global Warming's 'Six Americas' An Audience Segmentation". The banner also includes a small image of a snowy mountain peak. At the bottom of the banner, it says "EXPERIENCE YOUR AMERICA".

GLOBAL WARMING'S
SIX AMERICAS 2009:
An Audience Segmentation Analysis

Global Warming's "Six Americas"
An Audience Segmentation

EXPERIENCE YOUR AMERICA

However, gathering audience knowledge can be a challenge. When it comes to communicating climate change, the best tool we have in understanding the beliefs and attitudes of our audience is the Six Americas reports conducted by Yale University and George Mason University. If you listen to the media, they present climate change in black and white. People either believe it or they don't. However, with the Six Americas these studies have shown that there is a broad spectrum of belief on this topic, it is not just black and white.



The Six Americas is an ongoing survey of a random sample of Americans. They break the group into six categories with those already alarmed about climate change on the left and going down from there in amount of belief about the topic to the dismissive who are convinced climate change is not happening.

Which are your most important audiences?



So, if there are six categories, which are the most important audiences for your site? Before delving into that further, let's look at some basic recommendations that cut across all six audiences groups.

Recommendation #1

To maximize the impact of your communication:

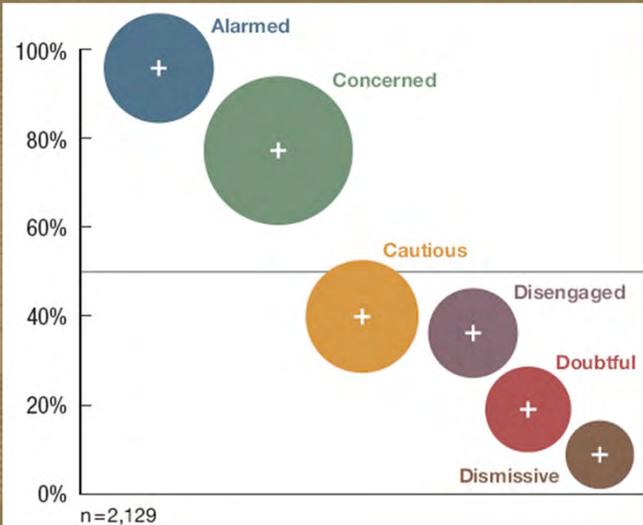
- Target your audience(s)
- Tailor your message

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If you have audience members largely in the Alarmed category, they already know climate change is happening and that it is human caused. Messages focused on actions they can take will be more effective for this group. If you have some dismissive folks in your audience, messages of science will not work for them. However, messages framed around energy efficient practices or cost saving practices will resonate with this category.

Behavioral Intentions

Proportion intending to engage in consumer activism over coming year

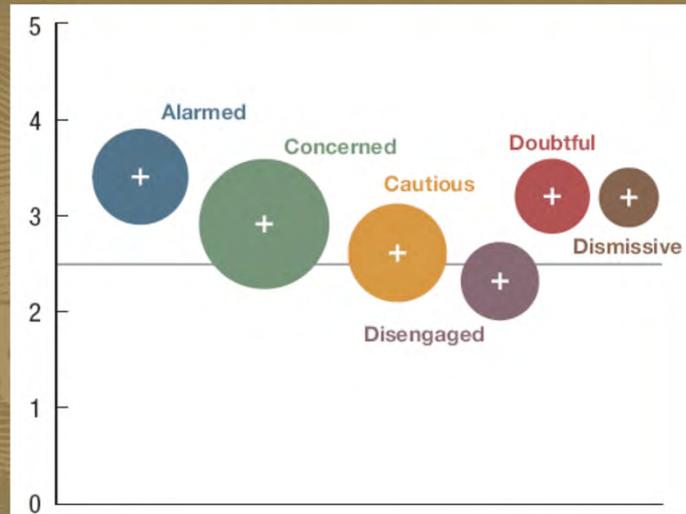


Six Americas, 2009

Part of the survey questions asked each group if they were intending to engage in consumer activism over the coming year. When framed this way, we see a predictable trend with the alarmed ranking the highest and continuing down from there.

Behaviors

Number of energy efficiency improvements made to home



Six Americas, 2009

However, when asked, how many energy efficient improvements they had already made to their homes. The alarmed fall short of expectations and the other categories rank much higher. If people can save money by an action, all six Americas are relatively likely to take that action regardless of their concern about global warming.

Even if people don't believe in climate change, there are behaviors they can engage in that benefit them in other ways. Here we can tap into individualistic values to encourage actions that benefit both the person and the environment. One of the messaging recommendations for the doubtful and dismissive groups is to offer them a face-saving way to move beyond their opposition.

Recommendation #2

Develop simple clear messages that
can be repeated often

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Keeping your messages ground in science is important. However, if it is too complicated it will not resonate. Try to keep your messages simple and repeatable as they relate to your site.

4 Key NPS Messages

4 Key NPS Messages	Response from 6 Americas
<p><i>Science/Urgency</i> Climate change is happening and human activities are contributing to and accelerating it.</p>	<p>Alarmed Concerned Cautious Disengaged Doubtful Dismissive</p>
<p><i>Relevancy</i> Changing climate has consequences for parks, people, and the planet.</p>	<p>Alarmed Concerned Cautious Disengaged Doubtful Dismissive</p>
<p><i>Hope/Action</i> The NPS is responding with practices that address climate change.</p>	<p>Alarmed Concerned Cautious Disengaged Doubtful Dismissive</p>
<p><i>Hope/Action</i> The choices we make now may help to avoid catastrophic impacts in the future.</p>	<p>Alarmed Concerned Cautious Disengaged Doubtful Dismissive</p>

In this slide, I have taken the 4 key messages in the NPS Climate Change Response Strategy and listed them on the left. These messages are ones of science/urgency, relevancy, and hope/action. When plotted against the Six Americas categories, these messages will resonate most with those highlighted in dark green, a little less with the light green, not as strongly with the groups in grey, and not at all with the groups in red.

Recommendation #3

Be a trusted source of information

- Park rangers are viewed as credible (especially on own turf)

Credible = Trust x Experience

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Recommendation 3, our visitors are looking to park rangers to give them an honest, unbiased perspective on climate change. Visitors will be likely to trust your interpretive messages, especially when related to what is occurring at your site.

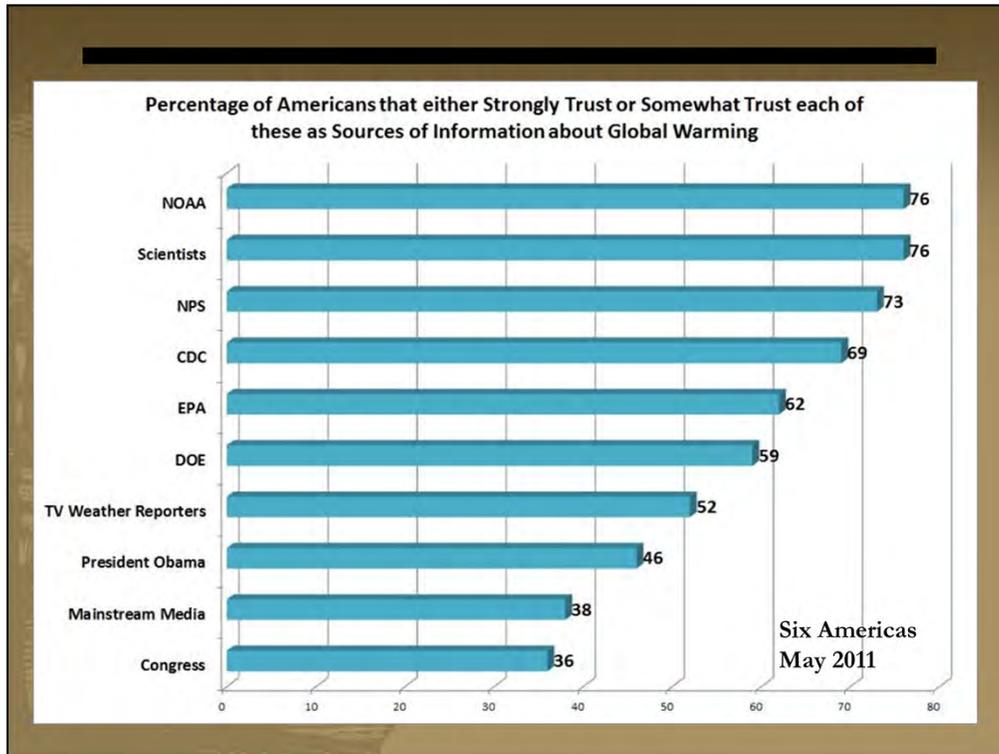
TABLE 15| Trust in Information Sources, Continued

How much do you trust or distrust the following as a source of information about global warming? ¹		National Average	Alarmed (1,224)	Concerned (2,774)	Cautious (2,233)	Disengaged (1,094)	Doubtful (1,230)	Dismissive (1,091)
The National Park Service	<i>Strongly trust</i>	13	34	20	6	2	6	0
	<i>Somewhat trust</i>	62	58	68	73	69	55	24
	<i>Somewhat distrust</i>	20	6	10	18	27	28	51
	<i>Strongly distrust</i>	6	3	2	3	2	11	25
The U.S. Department of Energy (DOE)	<i>Strongly trust</i>	11	25	17	9	3	3	1
	<i>Somewhat trust</i>	48	53	58	54	65	30	10
	<i>Somewhat distrust</i>	28	16	22	27	27	45	36
	<i>Strongly distrust</i>	13	6	3	11	5	21	53
President Obama	<i>Strongly trust</i>	11	34	17	6	4	3	0
	<i>Somewhat trust</i>	35	40	45	37	58	18	3
	<i>Somewhat distrust</i>	24	8	24	36	25	26	13
	<i>Strongly distrust</i>	30	19	14	22	13	53	84
Television weather reporters	<i>Strongly trust</i>	5	16	6	5	2	1	2
	<i>Somewhat trust</i>	47	55	58	48	60	36	8
	<i>Somewhat distrust</i>	34	21	28	37	29	44	46
	<i>Strongly distrust</i>	14	8	8	10	8	18	43

¹Order of the 10 sources was randomized in the survey. Sources are listed here from most to least strongly trusted.

Six Americas May 2011

In fact, in one of the Six Americas surveys in May of 2011, the question was asked “How much do you trust or distrust the following source of information about global warming?” The National Park Service was included in this list.



The NPS ranked #3 on the list, just after NOAA and Scientists. Ranking higher than even the president, EPA, or weather reporters.

Recommendation #4

Every member of your audience has two processing systems in the brain:

- Experiential
- Analytical

Strive to activate people's experiential learning as it can be more effective

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My last recommendation, #4, every member of your audience learns in two way – analytically and experientially – strive to activate both learning types.

Experiential Learning

Gained in many ways (in descending order):

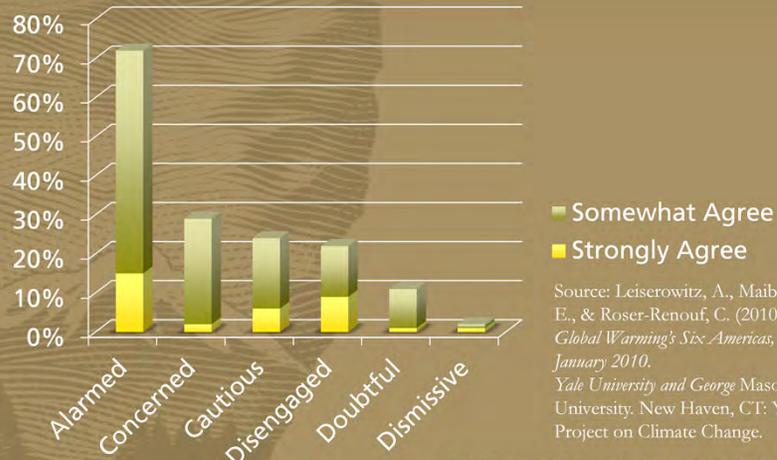
- Personal experience
- Witnesses an event (live or media)
- When trusted others relate an experience
- When a story is recounted to the audience

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Experiential learning can be gained through a personal experience, witnessing an event, when a trusted source (family member, friend, park ranger) relates an experience or shares a personal story.

Experiential Learning

"I have personally experienced global warming"



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To emphasize the importance of this, when polling the six Americas, those that are the most aware of climate change, are those that say they have personally experienced it.

Relevant Stories

"Will You Please Help Save The Children?"

- Food shortages in Malawi are affecting more than 3 million children.
- In Zambia, severe rainfall deficits have resulted in a 42% drop in maize production from 2000. As a result, an estimated 3 million Zambians face hunger.
- Four million Angolans — one third of the population —

Rokia, a 7-year-old girl from Mali, Africa, is desperately poor and faces a threat of severe hunger or even starvation. Her life will be changed for the better as a result of your financial gift. With your support, and the support of other caring sponsors, Save the Children will work with Rokia's family and other members of the community to help feed her, provide her with education, as well as basic medical care and hygiene education.



The picture of Rokia that accompanied her story

bia need immediate

Six Americas, 2009

In fact, an experiment was done where two post cards were sent out. One with lots of facts and one that was a story of a single child's struggle with starvation. People were asked to donate to this cause.

Stories Connect, Numbers Numb



Small, D. A., et al. (2007). Sympathy and callousness: The impact of deliberative thought on donations to identifiable and statistical victims. *Organizational Behavior and Human Decision Processes*, 102, 143–153

Six Americas, 2009

The postcard with just the story of the individual brought in more than twice as much in donations than the facts alone. And ironically when the facts were on one side of the postcard combined with the story on the other side, it generated only slightly more in donations. Sharing personally stories or experiential opportunities can be a powerful way to connect climate change with our visitors. And our national parks are a perfect venue for this type of learning.

Six Americas: Messages

Alarmed — (13%)

- *Here is what you can do*
 - Provide concrete actions they can undertake

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The next six slides list some examples of messages that can be used to reach each group.

Alarmed—messages framed in terms of the dangers of climate change for ...future generations, and for other species

Six Americas: Messages

Concerned— (28%)

- *Climate change is happening right here*
 - Provide relevancy through personal tangible experiences or narratives
 - They are not quite convinced of science
- *You can make a difference*
 - They need some encouragement

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Concerned—messages emphasizing the potential for local impacts and those impacts that are already occurring in their area and elsewhere may particularly important for this group as they see global warming as happening elsewhere and a decade into the future

Six Americas: Messages

Cautious— (24%)

- *There is strong scientific agreement*
 - This group needs the most help understanding the science
- *Climate change is happening right here*
 - Connect relevancy with science
- *You can make a difference*
 - Need to feel empowered

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CAUTIOUS- “There is strong scientific agreement.” This group needs the most help to understand the science, think analytically, and analyze the issue. In addition to analytical learning, they would benefit from experiential learning to understand that “Climate change is happening right here.” Finally, this group need to hear that they are empowered to “Make a difference.”

Six Americas: Messages

Disengaged— (10%)

- *There is strong scientific agreement*
 - This group has spent the least time listening to the science or political debate
- *Climate change is happening right here (and now)*
 - Most think they won't be affected
 - Most think it is 100 years off

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DISENGAGED- "There is strong scientific agreement." This group has spent little time considering the science or engaging in the debate. Another important message is that "Climate change is happening right here and now." This group sees climate change as a far off vague threat that won't be noticed in their lifetime.

Six Americas: Messages

Doubtful— (12%)

- *There is strong scientific agreement*
 - Half of this group is truly undecided
- *Benefits to reducing carbon footprint*
 - Appeal to economics
- *Here is what you can do*
 - Provide simple pragmatic actions

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DOUBTFUL- “There is strong scientific agreement.” Nearly half of this group is truly undecided. Well-presented facts may have an impact upon their opinions. This group more than others is likely to be swayed by economics, so conveying the “Benefits of reducing their carbon footprint” may be well received regardless of their opinion on the changing climate or its causation. Finally, common ground can be found by providing simple pragmatic actions and communicating “Here’s what you can do.”

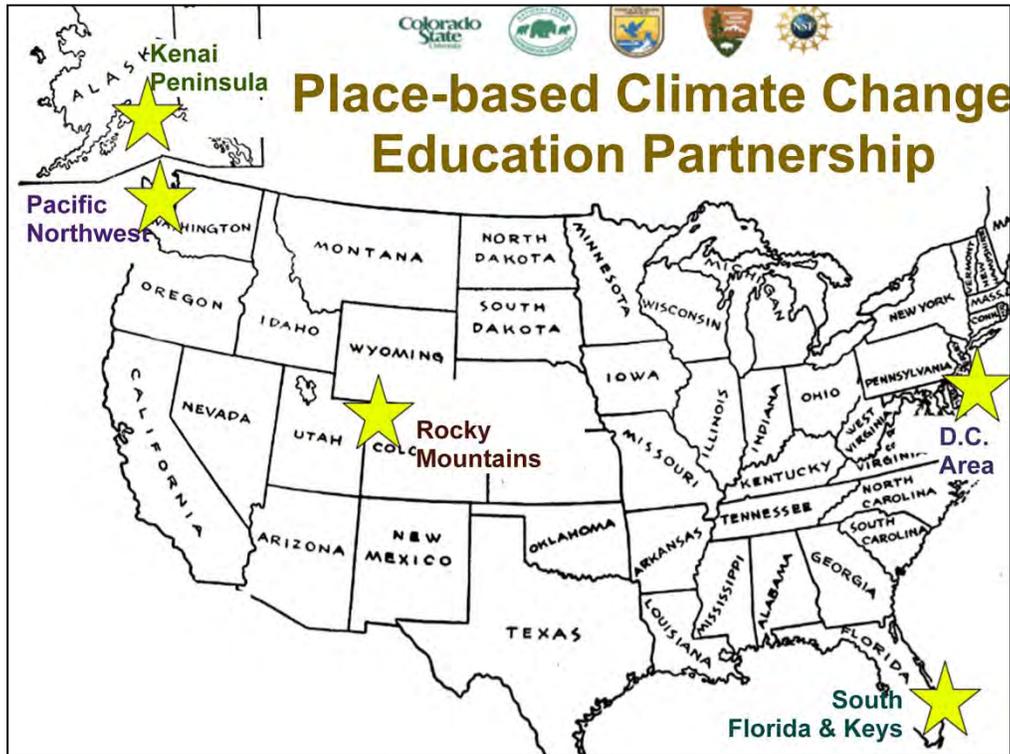
Six Americas: Messages

Dismissive— (12%)

- *Consider avoiding scientific argument*
 - Audience may react adversely
- *Here is what you can do*
 - Provide simple pragmatic actions
 - Offer group face-saving ways to move beyond their opposition

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DISMISSIVE- “This group has strongly held beliefs and values that may make it difficult to communicate the science. They may react negatively to such a message. An alternative is to simply say “Here is what you can do” without expressing underlying purpose or reason. Simple pragmatic actions are likely to be considered and you want to provide a way to the stewardship pathway without getting hung up in politics or intractable debate.



Now to bring this home to our NPS audiences, the next set of slides is an overview of a project that was funded through the National Science Foundation (NSF). This was a partnership with NPS & FWS, the National Parks Conservation Association (NPCA), and Colorado State University (CSU). Our team gathered internal & external audience data through surveys, interviews & interactive workshops with USFWS, NPS, community partners and stakeholders at several locations across the country – the Kenai peninsula in Alaska, the pacific northwest, rocky mountain, the DC area and south Florida.

Project Activities

- Survey of Agency Staff & Partners (*n = 847*)
- Site Visits & Focus Groups with Site Partners (*n = 47*)
- World Café workshops (*375 participants*)
- Quantitative and qualitative data collection regarding visitor knowledge & concerns about climate change



We surveyed 847 internal staff members with the NPS and FWS.

We also conducted site visits, focus groups, and world café workshops to gain a better perspective of agency staff on climate change and provide an opportunity for collaboration.

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

4,181 total

3233 National Parks

948 National Wildlife Refuges

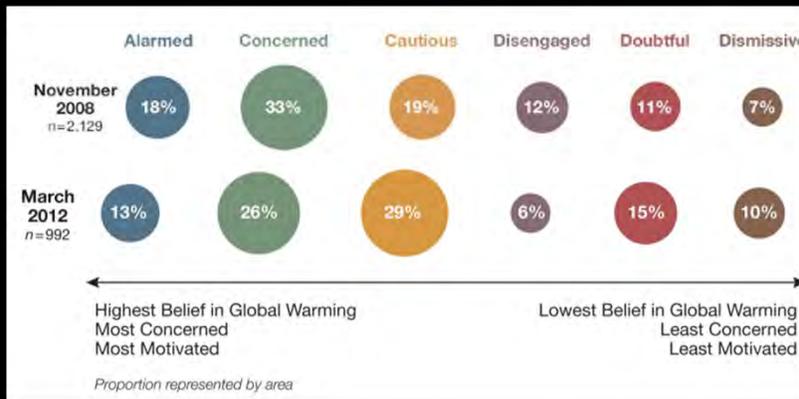
51% male / 49% female – average age 54

83% Caucasian / 69% with a college degree+

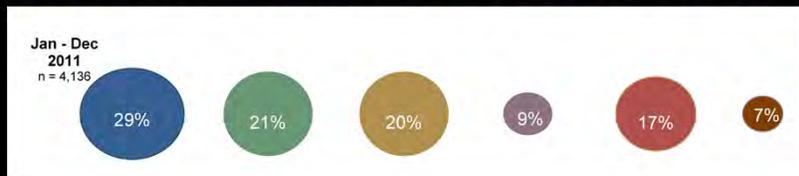
33% democrat / 18% republican / 17% independent

We also surveyed 4,181 visitors to national parks and refuges. We asked agency staff and visitors very similar questions.

Notice the break down in demographics of our visitors – probably not too surprising since we have a specific demographic that tend to visit national parks.



Six Americas in Protected Areas

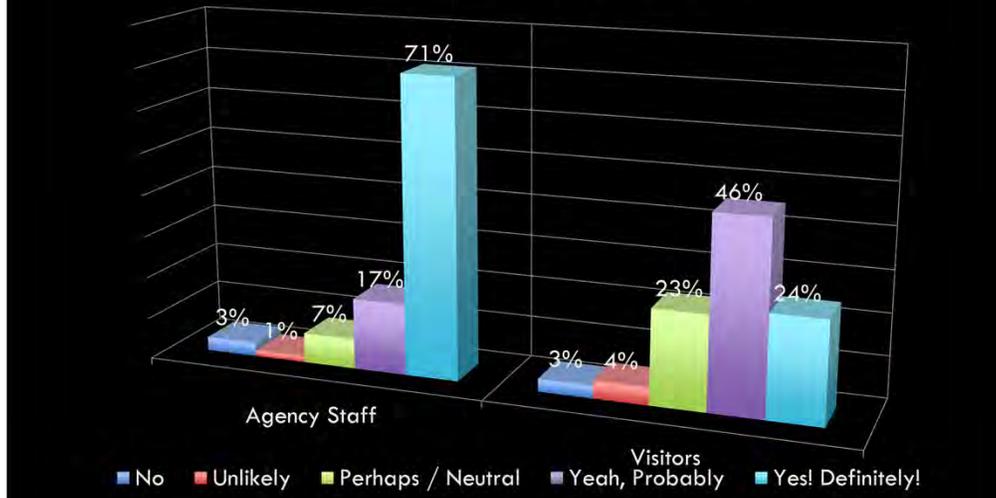


When we compared the survey results from park and refuge visitors to the Six Americas. Our audience was slightly different compared to the national average with higher numbers in the alarmed, concerned and cautious making up 70% of our visitors. With only 7% in the dismissive category.

Results

Staff & Visitor Surveys

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



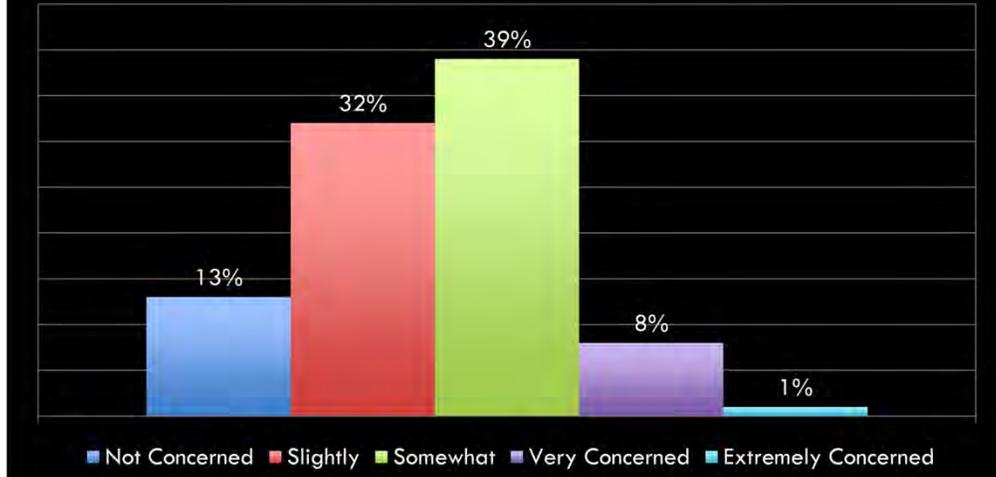
When we asked our staff “are the effects of climate change already seen at your site?” We have a very high percentage of agency staff that said “Yes! Definitely” 71%

When we asked our visitors this same question, they weren’t quite as sure, with only 24% in the “Yes! Definitely” category, but 46% said, “yeah, probably.”

Results

Staff & Visitor Surveys

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

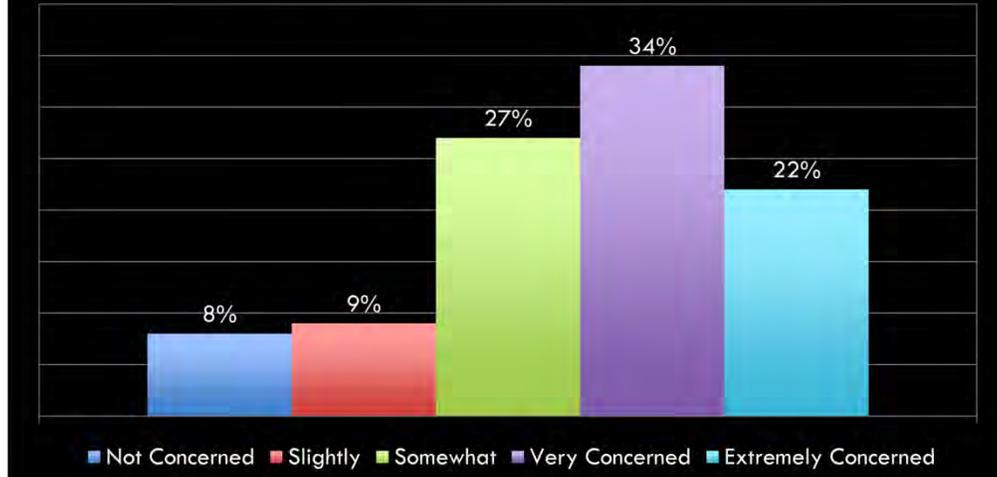


Next we asked our staff if they thought our visitors were concerned about climate change. Notice the bell curve that is skewed towards “not concerned” With only 1% of our staff saying that they felt our visitors were concerned about this topic.

Results

Staff & Visitor Surveys

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

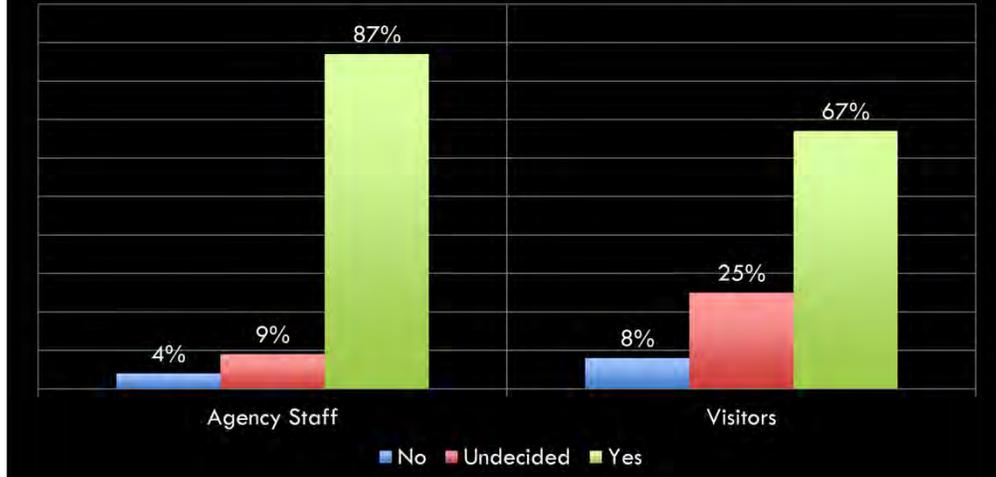


When we asked our visitors this same question, the bell curve is now overwhelmingly in the other direction with 22% saying they are extremely concerned and 34% very concerned. This has proven to be very empowering for our staff. No longer do we need to second guess that our visitors aren't concerned about climate change, or that they are on vacation and don't want to hear about it. That is very much the opposite, as shown in the next question.

Results

Staff & Visitor Surveys

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



When we asked staff and visitors if the NPS should be communicating about climate change, 87% of staff said “yes” and 67% of our visitors said “yes” They do want to hear from us on this topic.

Results

Visitor Qualitative (open-ended) Surveys

1. What does climate change mean to you?

"I guess it didn't mean a whole lot until I'm seeing this stuff. It's happening, I guess I didn't think it was that important before. I see now that it is." Female, 69, retired, Hamburg WI

2. How would you describe climate change to a friend?

"Alterations in the climate due to human activity, I think it's often called global warming but I think it probably manifests itself in other ways besides just straight up warming." Female, 43, stay at home mom, Westborough, MA

"I don't know, I don't really know. I don't really know how to answer. I haven't really seen climate change myself that much..." Female, 58, retired, Pearland TX

We also conducted qualitative surveys (or open ended questions). And we saw a wide range of responses, from the very informed to those that maybe hadn't thought a lot about the topic before. But many were open to talking with our survey staff about these questions.

Results

Visitor Qualitative (open-ended) Surveys

3. Have you seen anything in the park or refuge today that makes you think, "I think that's happening because of climate change"?

"No I don't have anything to compare it to."

****came back through the same area on his return to his car, he said "Hey we just hiked up to the toe of the glacier, and I see the impacts of climate change because the glacier has retreated a bunch since the mid-1900s"*

Male, 54, sales, Garfield MN

This particular answer was from a visitor prior to walking the trail out to exit glacier at Kenai Fjords. He was very excited when he came back and sought out the crew to follow up with them to let them know he now got it.

Results

Visitor Surveys

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



We also asked visitors if they would be willing to change their behavior during a visit to a national park to reduce their carbon footprint. Overwhelmingly they said they would be extremely or very willing to change their behavior.

Results

Visitor Surveys

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

Ranking	Communication / Engagement Method
#1	The Park or Refuge Website (46%)
#2	Trailside Exhibits (42%)
#3	Indoor Exhibits (38%)
#4	Printed Materials (32%)
#5	Films, Movies or Videos (31%)

We also asked what venue the parks should use to communicate about climate change. These are the top 5 responses. Perhaps just as surprising for you as it was for us. (Especially as an interpretive ranger, I was really disappointed that ranger programs were not in the top 5)

*However, when we asked this question in the qualitative surveys we were much more likely to get the response, "by a ranger, or interpretive program" This question was flawed in the way it was conducted in the quantitative survey and we are looking to reproduce this in the summer of 2014 to get better results.

The CCRP is working with the George Mason Center for Climate Change Communication and we are working through the process of getting questions approved for a survey that would build from what was accomplished in the NSF project. We hope to survey in 30 parks this coming summer and have a more complete snapshot of national park visitors beliefs, perceptions, and preferences for climate change communication in parks.

Interpretive Dance



And remember, when all else fails, there is always interpretive dance to get your messages across 😊