



# Engaging on Climate Change

As national parks develop strategies to respond to climate change, one concept is clear:

*Resource managers cannot succeed without engaging employees of all fields of work, other agencies, or the public.*

Engagement involves:

- operating transparently,
- discovering new options from others,
- learning where support lies,
- developing new support, and
- reinforcing the democratic ideals that call for government led by an educated populace.

## Engagement Efforts by Sequoia & Kings Canyon National Parks

A Resource Stewardship Strategy (RSS) that addresses a range of possible climatic shifts, from the inconvenient to the dire, is under development at these parks. The final product will document:

- climate-smart management objectives;
- desired conditions for focal resource values, including sequoias;
- current conditions and resource vulnerabilities; and
- a menu of possible strategies to achieve and maintain desired conditions over time and space, a framework for future resource-plan implementation.

Two of the basic strategies in the RSS are:

- Facilitate education and engagement of internal and external audiences about resource issues in and around these parks. The motto for this effort is “We are all stewards.”
- Develop collaboration and partnerships to support climate-smart conservation and education.



### Why engage employees?

- Because management decisions cannot be based on science alone. Human values will ultimately control where and how we apply which responses.
- Because applying climate-change response strategies will affect the work of almost every employee in every field.
- Because park resources do not exist only within the parks. They are embedded geographically and climatologically in a regional matrix.
- Because national parks cannot use all of the management tools available to other agencies.



## ENGAGEMENT ROUND 1

### Regional Agencies, Scientists, & Partners

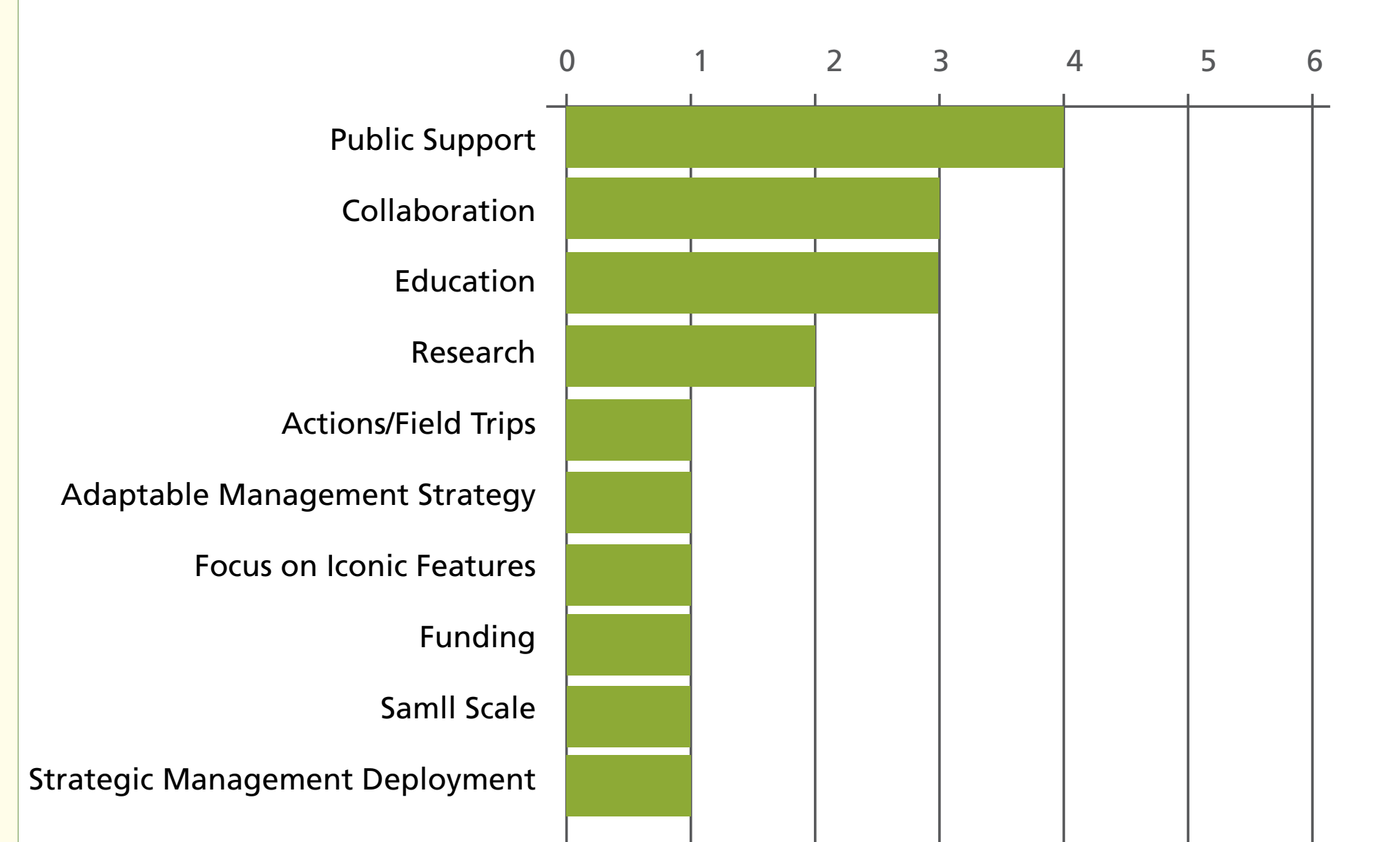


### Southern Sierra Change Adaptation Workshop, 2013

This interagency effort brought 170 scientists, land managers, conservation practitioners, and educators from across the region to address the question: “Given uncertain and rapidly changing conditions in the 21st century, how do we best achieve our shared conservation goals for the Southern Sierra Nevada Region?”

Participants identified shared values, examined the vulnerabilities of six focal resources to climate change and other stressors, drafted potential revised objectives for these resources, and identified strategies and management tools to meet these objectives. Agencies explored how their resources, interests, and missions differ and how they overlap in addressing climate change.

#### Strategies and Tools to Help Meet Objectives



Regional workshop participants identified public support, collaboration, and education as the top three tools to meet resource objectives, reinforcing the parks' direction.

## ENGAGEMENT ROUND 2

### Park Employees

Because almost every employee has a hand in achieving and maintaining desired conditions, management surveyed park employees to gain insight about what employees understood about climate change and about the RSS itself, and about how employees value/prioritize protection of different park resources.

An NPS-wide effort to use facilitated dialogue (FD) led to the decision to use it with park employees and visitors. FD is a technique that provides a safe space for visitors to engage in conversations about compelling issues of the past and present, e.g., immigration, civil rights, climate change.... It provides a powerful way for people to share differing perspectives about controversial topics in order to move beyond conversation into action.

The park held training in FD for a number of its employees. With that completed and the employee survey results in hand, park managers designed and hosted three “We Are All Stewards” workshops for employees from all fields.

Workshops started with short educational presentations on climate change, the RSS, and park resource vulnerability. These formed the basis of a “shared experience” for the group, as called for by the facilitated-dialogue technique. Workshop leaders then created three groups of participants, introduced a values-laden topic, and facilitated sharing and discussion about it. They then played a game using three very different, very plausible scenarios of possible climate futures.

Using scenarios to imagine such futures, so that everyone can think about what might be done, changes people's perspective. It helps to make sense of overwhelmingly complex problems so that we aren't paralyzed by uncertainty.

Employees in groups then developed activities and strategies within their field that would support resource-management goals if a given scenario proved real.

#### Park Employees Focus on Climate Change

Most time-sensitive and important natural or cultural issues, ranked by park employees in order of importance:

- Climate Change
- Water/Drought
- Air Quality
- Giant Sequoia
- Invasive/Non-native Plants
- Visitor Use
- Trails
- Education/People Connection
- Invasive/Non-native Species
- Resilience of Natural Systems
- Non-native Fish
- Floods
- Vegetation Management
- Footpaths
- Wildlife Connectivity
- Mixed Conifer Forests
- Sustainability/Water Conservation
- Evaluate Park Purpose/Goals under Climate Change
- Counterproductive regulations
- Wilderness Values

## ENGAGEMENT ROUND 3

### The Public

The next goal: Helping people to understand climate-change challenges faced by park management, asking them to consider what and how they value from the park and its vulnerable resources, and helping them envision options and make personal decisions about what their future could look like.

This effort has just begun. Facilitated dialogue is now used in a number of public programs within the parks, touching on topics such as non-native species, wilderness, and climate change. Staff are considering how to integrate it in future civic-engagement exercises.



*Giant sequoia groves are an epicenter of interest, devotion, and transformative experiences for people. In their presence, people open themselves to learning that can be transformational – especially when contemplating the possible effects of climate change.*

*Given this, the parks should engage their staff, partners, and the public in considering the future of sequoias in a changing world. The exchange should rely on accurate science and acknowledge human values. This will lead to similar discussions that reach beyond sequoia groves.*