



# Implementing Denali's Resource Stewardship Strategy: Achieving desired conditions for park resources



**Denali's Resource Stewardship Strategy will guide how the park manages its resources, including Dall's sheep.**

When Charles Sheldon's envisioned a national park to protect the Dall's Sheep and other wildlife and their habitat near the tallest mountain in North America in the years prior to 1917, he couldn't have known what challenges would face the expanded Denali National Park and Preserve 90+ years later.

In late 2009, Denali's new strategic document, the Resource Stewardship Strategy (RSS), was approved by the Alaska Regional Office. The RSS provides guidance for the research, resource management, and resource education programs of the National Park Service (NPS) at Denali over the next 20 years.

Denali is the second unit in the National Park system—and the first park with extensive natural resources—to complete an RSS. Thus, Denali's RSS document may serve as a prototype for other large parks managing extensive natural and cultural resources.

Denali has long recognized the importance of information-based decision making, as well as the need to increase the public's understanding of park issues, through a science- and scholarship-based approach. Denali has operated using its Resource Management Plan (1998), but in 2001, the NPS instituted a new planning process through its Management Policies, which changed the principal program document for resource management from the Resource Management Plan to the Resource Stewardship Strategy (Director's Order 2-1).

## **What is a Resource Stewardship Strategy?**

The RSS is a bridge between the desired conditions in a park's General Management Plan (GMP) and the goals and implementation actions determined through park planning. In the RSS process, parks identify *indicators* of resource condition, establish *targets* for each indicator, and assess the *current condition* of these indicators. "Comprehensive Strategies" are developed to fill any gaps in resource knowledge; to determine indicators and targets, if unknown; to determine resource condition; and to plan studies or research that help the park achieve or maintain desired conditions.

The scope of an RSS is the desired conditions of the park's natural and cultural resources, and the desired conditions for visitor experience that directly depend upon resources conditions. The RSS provides the park with a strategy for investing both human and fiscal resources in the stewardship of park resources. It also reports accountability toward attaining and maintaining desired resource conditions in the park.

## **Development and updating Denali's RSS**

Denali's RSS team followed the national guidance for RSS development, but adopted new approaches for Denali's extensive natural resources. Denali's RSS is a document that will be reviewed and updated at periodic intervals, incorporating new findings and understandings.

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*The Resource Stewardship Strategy serves as a bridge between the qualitative statements of desired conditions established in a park's General Management Plan (GMP) and the measurable goals and implementation actions determined through park strategic planning.*

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## Denali's Fundamental Resources and Values

(1) Wildlife populations, wildlife habitat, and the processes and components of the park's natural ecosystems



(2) Wilderness character, wilderness resource values, and wilderness recreational opportunities



(3) Scenic and geologic values of Mount McKinley and surrounding mountain landscape

(4) Visitor enjoyment and inspiration from observing wildlife in its natural habitat and other natural features



## Denali's Other Resources and Values

(5) Historic, archaeological, and ethnographic resources



(6) Subsistence resources and opportunities

(7) Paleontological resources



(8) Air quality

(9) Scientific research, education, and interpretation about natural ecosystems and geological features and processes



## Resources and values, and status of knowledge

Denali's *resources and values* (see panel at left) were incorporated from a review of enabling legislation for the "old park," the Alaska National Interest Lands Conservation Act or ANILCA (1980), and Denali's GMP (2006). Fundamental resources and values reflect the park's purposes and significance. Other important resources and values are ones the park is mandated by Congress to protect, but are not the reason the park was established. The desired condition for each value was derived from the documents reviewed.

Staff assembled a *status of knowledge* in relation to desired condition for many aspects of physical, biological, and cultural resources, as well as park visitation and the human environment in and around the park. Some resources have extensive data while some areas need additional information.

## Indicators and targets for desired condition

Denali's RSS team selected 119 indicators. Targets were able to be set for 80 indicators and current condition is known for 46 indicators. Research and planning are needed to identify the targets and current condition for the remaining indicators and to identify some indicators related to visitor experience.

## Comprehensive strategies

Denali's RSS team developed 19 *comprehensive strategies* (see panel at right) and 99 associated projects that address one of three needs: (1) monitoring and managing park resources and visitor activities to assure that targets for each indicator are achieved, (2) filling data gaps necessary to define and evaluate indicators and targets for park resources, and (3) implementation of research or resource management activities required by legislation or the park's GMP. Each strategy and project are arranged on a timeline with a budget with a start year of 2008. Projects were prioritized into higher, medium, and lower bands. The comprehensive strategies were scrutinized during "expert review." The NPS Alaska Regional Director signed the approved document.

## Implementing Denali's RSS

Funded projects will proceed through planning and NEPA compliance. At regular intervals, park staff will review and adjust the RSS. Existing specific park program plans such as the Subsistence Management Plan, Museum Management Plan, and the Bear-Human Conflict Management Plan will continue to provide the details for day-to-day operations.

## How to get a copy of Denali's RSS

The entire RSS is posted on the Denali web site—[www.nps.gov/dena/naturescience/rss.htm](http://www.nps.gov/dena/naturescience/rss.htm)—along with a summary document. Printed copies of the summary are also available by contacting the park.

## For more information

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## Denali's Comprehensive Strategies

### Base Knowledge of Park Resources

**Strategy A:** Complete biological, physical, and cultural resource inventories for Denali  
**Strategy B:** Develop an understanding of basic ecological relationships necessary for management decisions  
**Strategy C:** Develop the historic contexts necessary to evaluate nominations for National Register significance

### Monitoring Resources

**Strategy D:** Develop and/or implement vital signs monitoring protocols for physical and biological resources  
**Strategy E:** Monitor natural resources that may need management response



### Management and Mitigation

**Strategy F:** Develop and implement plans to monitor and manage vulnerable park resources  
**Strategy G:** Restore and monitor disturbed lands  
**Strategy H:** Determine and monitor visitor carrying capacity by management area  
**Strategy I:** Minimize habituation of park wildlife  
**Strategy J:** Detect, monitor, and mitigate environmental influences external to the local natural ecosystem  
**Strategy K:** Mitigate the risk of wildland fire to park infrastructure and cultural resource sites  
**Strategy L:** Preserve the museum collection and rehabilitate and preserve park historic structures  
**Strategy M:** Monitor and manage consumptive uses of park resources, including subsistence use  
**Strategy N:** Enhance and increase the effectiveness of wildlife protection by deterring illegal activities

### Parks and People

**Strategy O:** Improve estimation of park visitation  
**Strategy P:** Monitor trends in adjacent community populations, land use, and local economy

### Data Management

**Strategy Q:** Develop and implement effective data management strategies

### Education and Communication

**Strategy R:** Facilitate the education of all audiences (external and internal) about resource issues  
**Strategy S:** Develop staffing and infrastructure to enhance bridges between research and interpretation