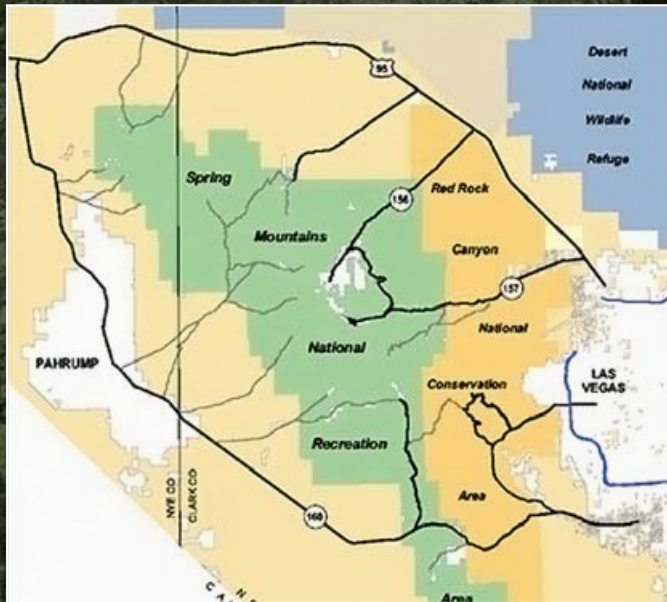




## Citizens' Guide To the Spring Mountains National Recreation Area Landscape Assessment

### BACKGROUND

The Spring Mountains National Recreation Area (NRA) encompasses approximately 316,000 acres and is part of the Humboldt-Toiyabe National Forest, managed by the US Forest Service. Located just outside of the Las Vegas Valley, the Spring Mountains NRA provides high-elevation recreation opportunities away from the desert for residents as well as visitors. In these desert surroundings, the isolation of high mountain peaks and deep canyons also provides important habitat for many unique plant and animal species.



The US Forest Service, in cooperation with the US Fish & Wildlife Service, conducted a landscape assessment for the entire Spring Mountains NRA, which was completed in August 2008. Federal agency and private consulting experts, including wildlife biologists, botanists, social scientists, archeologists, recreation specialists, planners, and many others, worked together on the Landscape Assessment.

The project was financed by Southern Nevada Public Land Management Act (SNPLMA) funds available through Clark County's Multiple Species Habitat Conservation Plan (MSHCP) program. More information on SNPLMA and the Clark County MSHCP program can be found at: [www.blm.gov/nv](http://www.blm.gov/nv) and [www.accessclarkcounty.com/depts/daqem/epd/pages/desert\\_index.aspx](http://www.accessclarkcounty.com/depts/daqem/epd/pages/desert_index.aspx).

### WHAT IS A LANDSCAPE ASSESSMENT?

A landscape assessment provides a synthesis of current and reference conditions through characterization of the physical, biological, and social aspects of a defined area. The synthesis provides the context for identifying management strategies and actions.

Typically, an assessment considers each aspect of the landscape such as ecology, geology, hydrology, soils, settlement patterns, scenic quality, and recreational quality. The resulting recommendations are intended to be used for development of program direction, project priorities, and information/data needs.



### WHY WAS THE LANDSCAPE ASSESSMENT NEEDED?

There were two reasons for pursuing the Landscape Assessment. First was the need to better understand how the biological, social, and physical resources of the Spring Mountains NRA positively and/or negatively interact. More specifically, the study was needed to help understand how and where the following factors are having the most affect on key species and their habitats:

- Recreation
- Historical fire patterns and current fire management
- Development (of non-recreational activities)
- Non-native species
- Modifications of hydrologic and stream channel systems
- Agency policy, regulations, and guidance
- Recreation strategies

The second need for the Landscape Assessment was to document the effectiveness of the US Forest Service management strategies in meeting the goals for species



of concern and identify changes in the management direction where needed. Findings would be used to help develop recommendations and strategies for achieving a balance between species conservation and recreation use on the Spring Mountains NRA.

## HOW DID WE GO THROUGH THE PROCESS?

The Landscape Assessment used a six-step process outlined in the “Ecosystem Analysis at the Watershed Scale.” This process can be summarized as follows:

### STEP 1 Characterization:

Identify dominant physical, biological, and human processes or features that affect the ecosystem.

### STEP 2 Issues and Key Questions:

Identify a set of key questions to be answered and establish the level of detail needed to address the issues.

### STEP 3 Current Conditions:

Gather information on the current conditions of the Forest that are relevant to the key questions.

### STEP 4 Reference Conditions:

Explain how the ecological conditions of the Forest have changed over time as a result of human influence and natural disturbance.

### STEP 5 Synthesis and Interpretation:

Compare the current conditions with the reference conditions of the Forest. Explain the differences and why they are occurring.

### STEP 6 Recommendations:

Develop recommendations for future management actions and projects that promote the balance between species conservation and recreation use.

## WHAT WERE THE FINDINGS AND RECOMMENDATIONS?

The analysis indicates that some species are more imperiled and require more attention, while other species are more secure and/or broadly distributed than previously thought. More information on specific species and their management category can be found in Chapter 6 of the Landscape Assessment.

Recommendations were developed in response to the Key Questions initially developed by the Project Interdisciplinary Team. Key recommendations offered to promote the balance between species conservation, recreation use, and management activities included:

### General Recommendations

1. Revise the list of special status species and management strategies to better reflect current understanding of species. Synthesis of existing information and analysis show that dif-



Photo courtesy Edd Ruskowitz

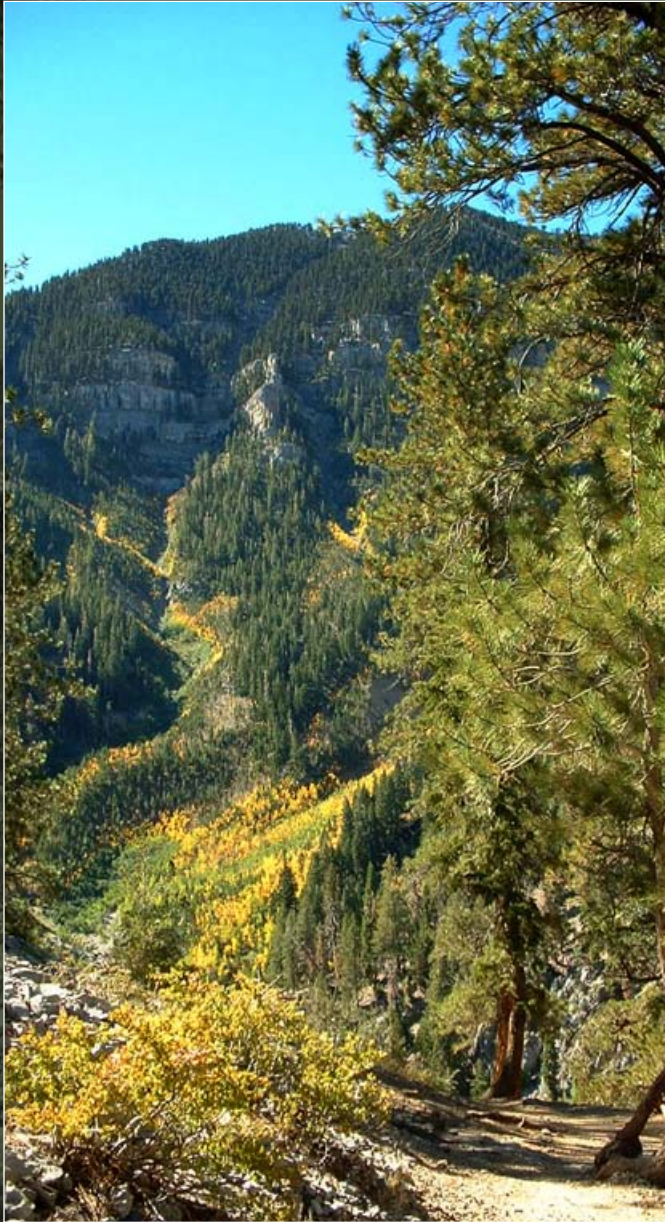
ferent levels of management are needed for different species. Those species found to be more imperiled would have more intense management while those species that were found to be more secure would be conserved under existing policies, laws, and conservation efforts.



2. Develop, implement, and monitor a comprehensive environmental education, interpretation, and outreach program for the Spring Mountains NRA. The analysis indicated that education, interpretation and outreach measures can be effective tools in managing visitor behavior in similarly sensitive public land recreation settings.

3. Improve data management. The analysis showed the need to integrate internal and external data sources to better understand the distribution of species and effects of management actions.





### Recreation

1. Develop and implement a recreation strategy. Analysis indicates that conflicts exist between multiple species and recreation infrastructure such as the transportation system, recreation sites, motorized trails, ski area, and hiking trails. A recreation strategy that includes inventory and monitoring of these activities would help determine which sites need more intense management, relocation, or closure.

### Fire Management

1. In ecosystems where fire suppression will continue, treatments should involve integrated resource planning. Fire activities cover large areas and therefore were found to impact the highest number of species across the Spring Mountains NRA.

### Development

1. Manage wild horses and burros to the Appropriate Management Level (AML) in the General Management Plan (GMP) and consider adjusting AML based on further analysis of species impacts. Analysis demonstrates there is significant overlap between wild horse territories and habitat for many species.
2. Acquire private property that contains special status species and their habitat from willing sellers. The analysis demonstrates that acquisition of private inholdings would allow the US Forest Service to protect additional lands that are occupied by special status species and their habitat. The report recommended specific areas for acquisition.

### Non-Native Species

Implement Best Management Practices (BMPs) for noxious weeds, especially along paved and unpaved roads and during construction of developments. The analysis identified 31 exotic species. Many of these invasive species are located in habitat for special status species and pose a threat to these species.

### Modification of Hydrologic Systems

Implement appropriate BMPs to protect water quality in the Spring Mountains NRA. Trail and road related activities have the potential to affect water quality through soil compaction, soil erosion, pollution/littering, and nutrient loading. Implementation of BMPs can mitigate these effects.

### Agency Policies and Legislation

Update the Conservation Agreement (CA) and the GMP for the Spring Mountains NRA to include a revised list







of species and conservation measures. The Landscape Assessment offers a revised list of conservation measures based on this revised understanding and the changes that have taken place in the region as a whole.

### Current Recreation Strategies

Use the Adaptive Management Guidelines for recreation from the Southern California Forest Plan to resolve potential conflicts between recreation use and habitat protection. The analysis showed conflicts between recreation and existing habitat. Use of this plan would help resolve conflicts.

### HOW WILL THE LANDSCAPE ASSESSMENT HELP WITH MANAGEMENT OF THE SPRING MOUNTAINS NRA?

The data from biological, social, and recreation surveys were used to develop recommendations to improve recreation facilities and visitor's experience on the Spring Mountains NRA, while protecting and conserving the unique natural resources of the area. This assessment will provide context for determining future habitat protection, restoration, enhancement, and recreation opportunities.



Photo of Nevada Admiral Butterfly  
courtesy Kate Walker

For more information contact the US Forest Service Spring Mountains NRA at:  
[www.fs.us/r4/htnf/districts/smnra/major-projects](http://www.fs.us/r4/htnf/districts/smnra/major-projects)  
or call (702) 515-5400.