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CALICO BASIN MANAGEMENT AREA

INTRODUCTION-PART I

Calico Basin lies within the Red Rock Canyon National Conservation Area and is an area of unique and important cultural and natural resources. Visitors can picnic; hike and rock climb in the vicinity of three riparian areas hosting an endemic snail, a rare plant, perennial springs and many prehistoric cultural attractions. Calico Basin is a community of approx. 200 people.

As a visitor use zone apart from the core Scenic Drive, Calico Basin has been subject to heavy visitor use, resulting in habitat destruction to sensitive and endemic species and vandalism to irreplaceable cultural artifacts and petroglyphs. The Calico Basin Management Plan will help alleviate the impacts brought upon the area, due to the increasing pressure of the expanding urban sprawl of Las Vegas, and provide a greater educational experience through an interpretive trail and boardwalk at Red Springs.

MANAGEMENT OBJECTIVES AND CONSTRAINTS

MANAGEMENT OBJECTIVE

The Calico Basin Management Area (CBMA) will be managed to protect biological, sensitive species (i.e. Mariposa Lily and Spring Mountain Spring Snail), geological, hydrological, and cultural resource values. The CBMA will also provide recreational opportunities, interpretation, and access for those activities, via new parking areas and a comprehensive trail plan. The Calico Basin Management Plan will also address the Calico Basin communities concerns in regards to these activities and seek to involve the community in aspects of the planning process.

CONSTRAINTS

Constraining factors which influence the management program because of law, policy, regulation, land ownership or circumstance include the following:

1. Management of the Calico Basin Management Area consistent with the Interim General Management Plan and General Management Plan for Red Rock Canyon NCA.
2. Sensitive plant species that occur within the project area (White bearpoppy, Alkali mariposa lily).
3. Sensitive animal species that occur within the project area (Desert tortoise, spring snail).
4. Adjacent land owners.
5. Clark County Multiple Species Habitat Conservation Plan.
6. Availability of funding through Southern Nevada Public Lands Management Act.
7. Proximity to Las Vegas, a metropolitan area with over a million residents.

CALICO BASIN MANAGEMENT ISSUES

The following issues present situations and circumstances, which must be evaluated and resolved in order to achieve the management objectives of this plan.

Issue 1: Protection of Sensitive Species – What measures should be taken to promote biodiversity and protect rare endemics and species of concern?

The Spring Mountain spring snail (*Pyrgulopsis deaconi*) is an endemic snail that is found in only 3 other spring locations in the world, and exhibits a high potential for Candidate ESA-listing. The Spring Snail is listed as a USFWS Nevada Species of Concern, BLM Nevada Sensitive Species and Clark County MSHCP Covered Species. The current habitat conditions of the spring snail are subject to degradation due to people recreating directly in the spring source. This activity can cause fluctuations in water chemistry and trampling of both vegetation and the snail itself. Prior restoration efforts have excluded the source from enclosure and reduced the potential habitat area. The lack of sufficient fencing allows burro's access to the spring and further degradation of the spring snail habitat.

The Mariposa Lily (*Calochortus striatus*) thrives in the alkaline soils of the Red Springs area. The status of the alkali mariposa lily includes: USFWS Nevada species of concern; BLM Nevada sensitive species; Clark County MSHCP covered species; and is extremely rare in both Nevada and California. The population in Red Springs is the largest population found in Clark County. The Mariposa Lily's habitat in Red Springs is currently stable within the fenced in area, and almost denuded out of the fenced in area. Suitable habitat for the mariposa lily outside of the fenced area has been subject to grazing by burros and heavy recreational traffic from hikers and picnickers. A parking lot and access road have also taken away potential habitat.

The White Bearpoppy (*Arctomecon merriamii*) is a perennial plant found in flat desert scrub and Mojave Desert scrub habitats. It prefers shallow gravelly soil, rocky slopes, and less often on valley bottoms. The white bearpoppy has been found on the banks of Calico Spring. The status of the white bearpoppy includes: USFWS species of concern; BLM Nevada special status species; Clark County MSHCP covered species. This plant is currently being impacted due to burro grazing and the recreational use surrounding Calico Spring.

I. Questions For Issue # 1

1. Should all, some or none of the sensitive species be protected?
2. Should fencing be used to protect sensitive species, if so, what type of fencing should be used (post and cable, pole, steel fencing)?
3. Should there be interpretive signs or interpretive trails associated with those sensitive species.
4. Should existing trails be eliminated?

Issue 2: Restoration of Red Spring Riparian Area- What measures should be taken to restore Red Springs to its maximum habitat potential while still providing interpretation and recreation for the visitors.

BACKGROUND/CONCERNS

Riparian areas are essentially the transition zone between permanently saturated wetlands and dry uplands. The riparian area at Red Springs occurs adjacent to a spring and its reach. The spring creates a continuum of soil conditions, from wet to moist to dry, each harboring plant and animal associations that are adapted to these respective habitat conditions. Riparian areas also provide important water stops for migratory birds. Consequently, the spring and riparian area are the epicenter of Red Springs biodiversity.

Red Springs has historically been used as a picnic area and recreational area for the past three decades. It is an improved recreational site with picnic tables, vault toilets, barbeque grills and trash cans. Picnic tables were installed in the 1970's and vault toilets were installed in 1986.

A road leads from Calico Basin Road, past three parking/picnicking areas and terminates at the Red Springs spring source. This roadway was built prior to 1963, and with little consideration to the wetland. In 2001 the Red Spring area was resurveyed to define the wet meadow, the saline meadow, and the surrounding uplands. The study showed that the road and parking/picnicking areas cut through portions of both the wet and saline meadows

Three post and pole fence enclosures were built, one in the mid 1990's, one in the late 1990's and the last in early 2000. These fences were built to help protect the riparian habitat, the meadow, sensitive species and the spring. The fences were effective in preserving habitat within their boundaries but directed traffic to unfenced areas of equal sensitivity. This unfenced area bore the brunt of activities thereby eliminating the chances for the sensitive species to proliferate into their otherwise suitable habitat.

Questions for Issue # 2

1. Should there be a new parking area and "if so" where should it be located?
2. Should new picnic areas be established and "if so" where should they be located?
3. Should the road into Red Springs be removed?
4. What areas should there be interpretation for? Where do we want to limit public use "if any"?
5. Do we need more bathrooms and trash sites?

Issue 3: Protection of Calico Spring- What measures should be taken to protect Calico Spring from burro and recreation impacts.

Calico Spring is a small spring that lies adjacent to a popular parking area and hiking trail. It occasionally dries up, but is in comparatively good condition for a non-persistent spring. It is currently used as a water source for free roaming burros, although it is not within the Herd Management Area. Vegetation around the spring shows burro related impacts. Calico Spring has a comparatively high biodiversity. The white bearpoppy (*Arctomecon merriamii*) is found on the slopes surrounding the spring. There is also an aquatic lichen (*Dermatocarpon luridum*) that has been found in Calico Spring. This lichen has not been recorded anywhere else in Nevada (research is currently underway to confirm the sensitivity of this species). Additional use at this spring could degrade riparian vegetation.

Questions for Issue # 3

1. Should the area be fenced and “if so” what kind of fencing should be used?
2. Should a trail be established to direct people to Calico Spring? Should Calico Spring be an interpretive destination? Should this trail be tied into the Red Springs trails?
3. Should the existing parking be removed, enhanced or left the same?
4. Should there be trashcans at the parking area and/or the trail and/or the interpretive site?
5. Should (if established) the trail tie into an Ash Spring/Calico Mountain Trail?

Issue 4: Protection of Ash Spring- What protection should be taken given to Ash Spring in regards to recreation impacts.

Ash Creek Spring is small, and it can be dry during droughts. Vegetation diversity is near average for springs in the range, but aquatic animal diversity is low. Portions of this spring are within the Herd Management Area and burros currently use it as a water source. There is a gated dirt road that leads to an uncompleted brick structure and terminates just SE of the spring. Off-road vehicles have been circumventing the fencing, going past the structure and driving into the riparian area as well as the spring itself. There are a couple of trails both within the riparian area and to the North and South. These trails are popular hiking and running trails as well as access trails to rock climbing areas.

Questions for Issue # 4

1. Should the area be fenced and “if so” what kind of fencing should be used?
2. Should a trail be established to direct people to Ash Spring? Should Ash Spring be an interpretive destination? Should this trail be tied into the Red Springs trails?
3. Should parking be established for Ash Spring and “if so” where should it be?
4. Should there be trashcans at the parking area and/or the trail and/or the interpretive site?
5. Should (if established) the trail tie into the Calico Spring/Red Spring Trail? Should the Ash Spring trail (if established) be tied into the Calico Mountain trail?
6. What should become of the “Rattlesnake Ranch”?

Issue 5: Wild Horse and Burro Management- How should burros be managed in Calico Basin and what water sources should be available for the burros.

Calico Basin has several populations of burros within its boundaries. The Red Rock Canyon NCA Herd Management Area (HMA) borders the southern, western and northern perimeter of Calico Basin. The boundary drops into the basin around the northwestern corner and incorporates a portion of Ash Spring. All of Calico Basin is within the Herd Use Area (HUA). This area was identified as the historical range of the herd as of 1971. The burros within the HUA are allowed free range unless they are deemed a domestic nuisance.

There are 3 springs located in Calico Basin. These springs are Red Spring, Calico Spring, and Ash Spring. Burros currently use all three springs as a water source. Red Spring and Calico Spring are both outside of the HMA and both springs have endemic species associated with them. Portions of Ash Spring are located within the HMA and of the three springs in Calico Basin, Ash Spring has the lowest biodiversity (Sada, Nachlinger 1996).

Actions in regard to the Wild Horses and Burros according to the RRCNCA Interim General management Plan are as follows: High use and congested areas will be fenced to eliminate human-burro problems. This includes sites such as the Visitor Center and the Red Springs Day Use Area. In addition, BLM will assist private landowners in Blue Diamond and Calico Basin in reducing or eliminating burro trespass onto private lands through cooperative fencing projects or removals.

Questions for Issue # 5

1. What springs should burros have access to?
2. If a spring is fenced off from burros, should water be piped off to a drinking trough?
3. Should BLM remove burros from Calico Basin? Where and how are burros creating the most impact to the residence of Calico Basin?
4. State Law requires that private landowners must have sufficient fencing to keep burros off of their land.

Issue 6:

Recreational Uses-What kinds of recreational opportunities should be offered to visitors? What measures should be taken to provide for those recreational opportunities, while limiting impacts to sensitive areas. What measures should be taken to ensure adequate parking with the least impact on the riparian area and the residence of Calico basin.

Recreation in Calico Basin has a history that goes back many years. Under the current management plan, recreation activities that are allowed include: picnicking, hiking, rock climbing, bouldering and viewing of cultural resources. Activities not allowed are as follows: OHV use, mountain biking and camping. Impacts to sensitive areas (i.e. springs, riparian areas and cultural sites) have occurred due to proximity to hiking trails, picnic sites and parking areas.

Picnicking at Red Springs has always been allowed without much constraint. Visitors are currently allowed to picnic anywhere in Red Springs, except within the enclosures. There are 5 sites with picnic tables and barbeques that are easily accessible from various parking areas.

Roped rock climbing at Red Springs is done on the cliffs both north and west of the riparian area. Bouldering is done to the south of the springs. These activities do not directly impact Red Springs although the trails leading to them do.

There are no designated trails or interpretive signs that help to explain the significance of the cultural resources within the Red Springs area.

There are many braided trails in the Red Springs area, some of which travel through and around both the alkaline meadow and the spring itself. These trails are used for casual hiking, viewing cultural resources, or as access trails for other activities.

There are currently four different parking areas for Red Springs. These parking areas are accessed by Calico Basin road and a dirt road that is located within the Red Spring Area. The lowest parking area is directly on Calico basin road and when full, can create a traffic problem. The other three parking areas are on the dirt road spur that leads up to the spring. These parking areas and the road itself are within the potential alkaline meadow and riparian area habitat.

Questions for Issue # 6

1. How many Parking areas are needed for recreational parking in Calico Basin?
2. Where should these parking areas be located?
3. How should the parking areas be defined (fenced with post and cable, pole, wire fencing, carsonite, all or some of the above, not defined)?
4. Should parking areas be paved, gravel or dirt?
5. Should roads leading to parking be paved, gravel or dirt?
6. Should there be defined USER trails for the various recreational activities (rock climbing, bouldering, cultural viewing...)?
7. Should there be established picnic areas in calico Basin? Where should they be?

Issue 7:

Cultural Resources-How should cultural and paleontological resources be managed. What measures should be taken to provide interpretation and viewing of these cultural resources.

The Calico Basin area of Red Rock Canyon National Conservation Area (RRCNCA) is rich with the traces of prehistoric people. Water was readily available at Red Spring, Calico Spring, and Ash Creek Spring, and several groups utilized the area including the Patayan (Colorado River/Mohave), Anasazi, and Southern Paiute. Petroglyph styles indicate a long tradition of visitors carving numerous designs into the colorful red rock escarpment.

No evidence has been found in Red Rock Canyon of any pithouse or surface structure indicating native peoples probably made short trips to or through the area using rockshelters as temporary housing. These people practiced a mobile lifestyle, traveling with the seasons in search of food. In the spring, agave was ready for harvest. The stalk was removed and the leaves trimmed, leaving an artichoke-like heart. The hearts were then roasted in large circular earth ovens. Several of these “roasting pits” are found in Calico Basin. The seeds of various grasses and shrubs were ready in late spring-early summer and in the fall, the people moved into the mountains to harvest Pinyon nuts. Large and small game such as deer, bighorn, rabbits, birds, rodents, reptiles and the desert tortoise were all caught and consumed. Worked stone, seed grinding implements, pottery fragments, and burned bone have all been recovered at shelters in the basin providing evidence of previous residents.

Questions for Issue # 7

1. Should all, some, or none of the cultural sites be accessible to the public?
2. Should cultural sites be fenced?
3. Should an interpretation trail be established for all, some, or none of the cultural sites?