

frontcountry natural zone with a historic zone overlay. The management emphasis of the natural zone is the conservation of natural resources and processes. The plan states that "In certain locations, uses are allowed that do not adversely affect these resources and processes."

The park's trail plan for the Cactus Forest section of the Rincon Mountain District was completed in 1991. In addition to hiking and equestrian use, the plan proposed that the Cactus Forest Trail inside the Cactus Forest Loop Road be open to bicycle use for a one-year trial period. The plan also proposed the monitoring program designed to evaluate the environmental and social impacts of mountain bike use on the trail. The park adopted the plan's proposal and the trial period was extended for more than 10 years. The monitoring plan results indicated, overall, that any adverse impacts associated with bicycle use was negligible.

Starting in 1991, bicyclists, pedestrians, and equestrians were allowed to use the portion of the Cactus Forest Trail within the paved loop drive area. Recently, it was brought to the Park's attention that National Park Service regulations appear to require promulgation of a special regulation to permit bicycle use along the 2.5-mile section of the Cactus Forest Trail. In reviewing the actions leading to the opening of this trail for mountain bike use over 10 years ago, the Park discovered that the requirements in the regulation governing bicycle use had not been followed. While the trail is located in the frontcountry as identified in the GMP, the area is designated a natural zone. Under the servicewide regulations, because the trail is not in a developed area or special use zone the park is required by 36 CFR 4.30(b) to adopt a special regulation to designate a route for bicycle use. In part the regulations state that:

Routes may only be designated for bicycle use based on a written determination that such use is consistent with the protection of a park area's natural, scenic and aesthetic values, safety considerations and management objectives and will not disturb wildlife or park resources. Except for routes designated in developed areas and special use zones, routes designated for bicycle use shall be promulgated as special regulations. (36 CFR 4.30)

Based on the criteria in the regulations, and the fact that the trail was not identified as being in a developed zone in the GMP in 1988, the Park determined that it did not then have the authority to allow such use on the trail. On April 15, 2002, the park

closed the Cactus Forest Trail to bicycle use and initiated an Environmental Assessment and the special regulation process. In addition, the park will be addressing the bicycle use issue in a comprehensive way through the new GMP process that began in September 2002. The new GMP is scheduled to be complete in approximately 2–3 years. Apart from this Final rule, in the meantime, bicycles are allowed to use paved and unpaved roads in the park pursuant to 36 CFR 4.30(a).

History of Bicycle Use

In the early 1990's the NPS was in the process of preparing a trails management plan for the Cactus Forest section of the park. During the planning process, public scoping revealed that some members of the local community and the visiting public were interested in mountain bike trails in the park. Based on this information, the NPS analyzed the appropriateness of establishing mountain bike trails. As noted above, the park opened that portion of the trail inside the Cactus Forest Loop Road to mountain bike use for a one-year trial period. The park monitored the trail for resource and social impacts by implementing a monitoring plan that included sixteen photo-points along the trail. Park staff monitored these locations on a monthly basis.

The park recorded approximately 1,200 bicyclists, or nearly 50% of all trail users, on the trail between May 1, 1991 and June 30, 1992. There were no major incidents or accidents during the trial period. At the end of the one-year period, the park concluded that monitoring data revealed little measurable resource impact caused by bicycle use and the decision was made to keep the Cactus Forest Trail inside the loop road open to bicycle use. The park continued to monitor the trail for resource damage at the designated monitoring points, performed patrols, and engaged in informal contact with visitors using the trail. Continued use of that trail by bicyclists had been authorized by the Superintendent's Compendium since that time. Until bicycle use was prohibited in April 2002, the trail continued to be a popular trail for mountain biking. Much of the trail follows an old two-track road that was allowed to revegetate and become a trail. About half the use of the trail is by hikers and equestrians.

Impacts

Soils: Reinstating mountain bike use would likely result in added visitation on the trail. This type of use would impact soils differently than hiking and

equestrian use. Some monitoring points show that soil erosion and loss has been exacerbated by the "cupping" of the cross-section of the trail that is caused by repeated use in the center of the trail. At times, multiple uses occurring on the trail have resulted in beneficial impacts by redistributing soils across the trail. Soils may be distributed from the center of the trail to the sides by cyclists, and then loosened and redistributed in the center of the trail by horses and hikers. Park staff would continue to maintain the trail depending on available staffing and funding levels. With proper trail repair and maintenance, the overall effect of added visitation on soils would be of minor intensity.

Vegetation: Mountain bike use would contribute to a greater amount of disturbance of vegetation from riders dismounting from their bikes onto the side of the trail to yield to another trail user or to push their bike uphill. Vegetation that is affected is typically located in steeper slopes or where the trail curves and is lost through repeated trampling. Impacts from the added use would be of minor intensity. Trail repair and rehabilitation may offset some of the impacts associated with trailside vegetation loss. Trailside re-vegetation efforts could help to restore the natural scene, as well as contribute to a more defined trail path.

Wildlife: Wildlife would be frightened or displaced by the presence of visitors. However, given the higher speeds that mountain bicycles may reach on the trail, there may be a greater tendency for cyclists to encounter and frighten wildlife. There may also be a greater tendency for mountain bikers to run over smaller vertebrates such as snakes on the trail. These factors, along with an anticipated increase in the amount of use on the trail are expected to result in more individual wildlife species being frightened and displaced from the immediate area. Overall, the impacts of this use on wildlife would be of minor intensity.

Archeological resources: Reinstating bicycle use on the Cactus Forest Trail would not have any additional impacts on archeological resources or historic structures. As with any increase in visitation, however, there is a greater possibility that cultural resources could be discovered and/or damaged. Bicycle use off the trail would not be permitted and it is anticipated that visitors would remain on the trail; therefore, impacts to archeological resources and historic structures would be negligible.

Visitor conflicts: Bicyclists would view the opportunity for an off-road experience in the park as beneficial. However, some hikers and equestrians