Wilderness Restoration: Bureau of Land Management and the Student Conservation Association in the California Desert District

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Abstract-The California Desert Protection Act of 1994 was the largest park and wilderness legislation passed in the Lower 48 States since the Wilderness Act of 1964. It designated three national parks and 69 Bureau of Land Management wilderness areas. The California Desert and Wilderness Restoration Project is working to restore and revitalize these lands through a public/private partnership. The Project utilizes Student Conservation Association crews to inventory, to remove and rehabilitate unauthorized vehicle ways, to restore important wildlife habitats, and to help maintain popular hiking trails and other recreational infrastructure. Since 2000, hundreds of miles of unauthorized vehicle ways in wilderness have been removed and rehabilitated by utilizing techniques such as decompaction, scarifying/pitting, recontouring, erosion control, vertical mulching, vegetative restoration, boundary signing, and placement of vehicle barriers. These efforts have decreased the visual and environmental impacts of vehicle ways, restored wildlife habitat and native plant communities, and reduced the illegal use of motorized vehicles within wilderness boundaries at a significant cost savings.

The California Desert District (CDD) of the Bureau of Land Management (BLM) manages approximately 11 million acres (4,451,542 ha) of public lands in southern California. The California Desert Protection Act (CDPA) created approximately 3.6 million acres (1,456,868 ha) of designated Wilderness under BLM management in the CDD. This equates to 51 percent of BLM Wilderness acres nationwide. The recent (1994) establishment of these Wilderness areas has brought with it a number of management challenges for the BLM.

Management Challenges

The passage of the CDPA created a number of management challenges for the BLM. These challenges centered on protecting the Wilderness character of newly created areas through educational and enforcement actions. Many of the challenges were complicated by the proximity to large urban populations such as Los Angles, San Diego and Las Vegas, high population growth rate in regional cities and counties, public perceptions of the desert environment, historic mining and off highway vehicle (OHV) use, BLM staffing levels, and the extreme climate.

The limited BLM Wilderness staff began to prioritize actions that would have the most impact on protecting the Wilderness character. Chris Roholt, California Desert District Wilderness Specialist, and others thought that the restoration of old roads or vehicle ways within Wilderness boundaries would be an effective way to eliminate illegal motor vehicle access and the associated impacts. Chris began promoting a "Six-Point Mantra" to help prevent illegal vehicle trespass. This mantra was: 1) boundary signage; 2) accurate maps; 3) outreach and education; 4) hard barriers; 5) soft barriers; and, 6) law enforcement. In an attempt to achieve these points the idea of a work crew developed. The work crew would help mark Wilderness boundaries, install hard boundaries, create soft barriers or restore old vehicle ways to a more natural state, and provide some baseline data for future monitoring efforts. In 2000, the CDD proposed using Student Conservation Association (SCA) volunteers to do Wilderness restoration. The justification included not only the restoration of OHV routes but also to provide an educational experience for youth (wilderness exposure, conservation ethics and environmental awareness) and to help create a cadre of potential environmental leaders and players in public land management for the future. The first SCA Wild Corps consisted of six volunteers and began work in September of 2000.

Management Actions

The SCA Wild Corps model focused on preventing illegal vehicle access to Wilderness. This was primarily through the establishment of soft barriers (visual barriers to old vehicle ways within Wilderness). These barriers are referred to as restoration because of the use of native materials to return the area to a natural setting. Restoration efforts needed to address the questions of why, where, when, who, and **how**? Why has already been addressed, to prevent illegal vehicle access and its associated impacts. Where to do restoration was in all five Resource Areas of the CDD, which included 66 Wilderness areas. When to do the work would be from September through May to avoid the extreme summer heat. Who would accomplish this work was the BLM and SCA (see List of Contacts) with assistance from a number of other organizations including the California State Parks Off Highway Vehicle Commission, the U.S. Forest Service, the U.S. Boarder Patrol, and Eco Associates. How would be through the use of a number of restoration techniques.

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These techniques included pitting and scarifying, contouring, decompaction, vertical mulching, horizontal mulching, rockwork, raking and sweeping. Through the use of these techniques work crews could adapt to site-specific characteristics and make old vehicle ways literally disappear (see figs. 1 and 2). Pitting, contouring, vertical mulching (planting dead plant material) and horizontal mulching (placing dead plant material on the ground) helped promote re-vegetation. These techniques helped capture wind blown seeds and more effectively retained moisture. These restoration efforts reduced the visual impacts of vehicle ways and effectively prevented illegal vehicle access into Wilderness areas.



Figure 1—Before CDD wilderness restoration of a vehicle way.



Figure 2—After CDD wilderness restoration of a vehicle way.

The work accomplished through SCA Wild Corps from 2000-2005 is impressive. They worked in 64 BLM Wilderness areas, provided treatments to approximately 1,500 sites, restored approximately 70 miles (113 km) of illegal vehicle ways in Wilderness, and provided a cost savings of approximately 50 percent compared to in-house BLM costs (see fig. 3). The work has been well received by the public

and provided approximately 30 SCA Wild Corps graduates valuable personal and professional experiences. Future SCA Wild Corps efforts will now focus on monitoring Wilderness character including treated areas and applying re-treatment when necessary. The BLM will continue to monitor the efficacy of these restoration efforts.

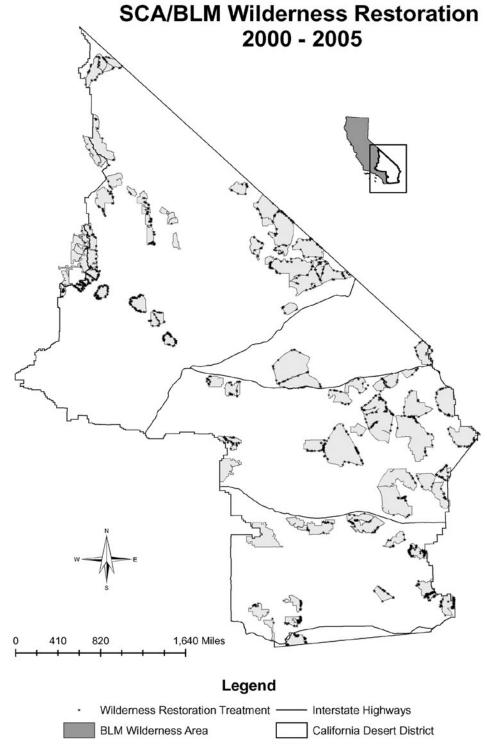


Figure 3—Wilderness restoration efforts in the CDD; 2000-2005.

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Conclusions_

The SCA Wild Corps model, as used in the CDD, has provided a win-win situation for the BLM, SCA, other involved organizations and the public. Not only does it provide a valuable management tool for the BLM as a "turn-key" operation, with SCA providing the personnel and logistical support for Wild Corps staff, it helps ensure that valuable Wilderness resources in the California desert are protected for future generations.