



Vehicle Use in the California Desert Development and Evolution of related BLM Wilderness Management

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The California Desert Protection Act of 1994 [CDPA] was the third major regional BLM wilderness bill, after two bills for Arizona, which was signed into law. Prior to the passage of the CDPA, the State Office and Desert District determined that a transition plan was needed quickly. That plan had fourteen objectives that dealt with a wide variety of tasks, such as transferring records for lands being transferred to other agencies, training BLM staff in the fundamentals of the Wilderness Act and what was to become the CDPA, budgetary issues, preparing maps and legal descriptions, providing user friendly maps, needed wilderness management guidance, and a host of other tasks.

Henri Bisson, the California Desert District Manager who had recently arrived from Arizona, reviewed the transition plan. Henri's first priority was to "Get wilderness management implemented on-the-ground along the boundaries!"

The CDPA designated 3.6 million acres of wilderness on BLM Public Lands, which are one-third of the lands that the Desert District administers and manages.

The quickest on-the-ground task BLM could implement after designation was installation of wilderness boundary signs. The Field Offices embraced the job and installed 4,000 signs very quickly. Most stayed in the ground and most were placed in the right locations. Producing user friendly maps took a while longer. The Desert District embarked on the enormous task of developing new Desert Access Guides to reflect the changes caused by the CDPA. But the BLM was not alone. The American Automobile Association [trademark] revised their county maps to depict the wilderness areas and three National Park Units. These maps were very easy to use and were widely available even before the Desert Access Guides.

A reasonable BLM premise is that most desert recreational users want to do the right thing. The BLM's responsibility is to make feasible, even easy, desert users ability to locate wilderness boundaries on-the-ground, so that responsible users will not drive vehicles into wilderness. The concern was that approximately 1,400 vehicle ways and other linear features leading into wilderness along 4,000 miles of wilderness boundary made it easier to do the wrong thing – drive vehicles into wilderness. The California Desert Conservation Area is known world-wide as an area that has been traditionally used for a wide variety of vehicle oriented recreation activities. And there are millions of people very close to the desert who recreate in it. So the premise that every desert user both knows the right thing in a particular portion of the desert and wants to do the right thing may not be prove correct in every case. So the third management technique BLM quickly implemented was a BLM Ranger presence along the boundary. The geographic scope of the Rangers' jobs is huge. There are 4,000 miles of wilderness boundary and there is another seven million acres of non-wilderness BLM lands for which they have major law-enforcement responsibilities. So while the Rangers cannot be every place at once, their presence is another of

BLM's management tools for wilderness management, particularly vehicle use along the boundary.

These three efforts became included in a group of five wilderness boundary management tools: Installation and maintenance of adequate boundary signing; Widely available user friendly maps; A BLM Law Enforcement presence; Installation of gates and barriers at wilderness boundary sites where they were likely to be effective, and; Outreach to desert users to help them understand appropriate uses.

Gates and barriers are not feasible and effective at all wilderness boundary locations where vehicle incursions are likely to occur. And they can be quite expensive to install and maintain. The first wilderness barrier was placed across the mouth of Fossil Canyon in the Coyote Mountains Wilderness area by the El Centro Field Office. In the five years after wilderness designation the field offices installed over 100 'hard barriers'. The Palm Springs – South Coast Field Office installed large boulders on washes on the Mecca Hills wilderness boundary. The boulders were attractive and effective. Several years later massive floods buried them in sand, so the staff dug them out and reinstalled them on the surface.

BLM/We realized from the outset that public outreach was a key element of our five management techniques. We worked with desert user groups and communities to broaden their understanding of wilderness as part of the Public Land spectrum of values and resources. We produced information packets, fact sheets, and brochures and installed kiosks and informational signs. And something not unexpected, but nevertheless remarkable happened. Many of those same groups and communities produced their own informational maps and materials.

BLM continued to improve and implement wilderness management techniques and to look for additional techniques. The California Desert District staffs had discussed for two decades whether and how to reclaim or restore surface disturbance in areas that were likely to become wilderness. The discussion was rather general and not particularly applicable to wilderness objectives. For example, the BLM has had extensive experience with reclamation of non-wilderness lands after coal mining or pipeline construction. And there was considerable experience with reclamation in BLM wilderness study areas to meet the 'restoration deadline'. But almost fortuitously, a sixth technique that was very relevant was found in the middle of the desert! A paved road through Joshua Tree National Park had been realigned in the 1980's. The Park staff developed some novel and imaginative techniques to restore de-vegetated lands along the new road. A key feature was propagating plants with root columns several feet long. This allowed deep planting and dramatically decreased transplant mortality, although the technique was quite expensive. The staff noticed that natural re-vegetation rates and density were significantly higher on the north side of transplanted stock irrespective of whether that vegetation survived, due to lower average temperature and decreased evaporation. So the Park staff started planting dying or dead vegetation. Such dead vegetation became known as 'vertical mulch'. A second key feature was to dig small [8 inch diameter] inverted hemispheres on restoration sites which collected both moisture and local windblown seed. This was referred to as 'pitting'. Many BLM staff had an opportunity to visit the Park nursery and see their restoration successes. An additional benefit of this technique was that visitors could discern these treatments and were less likely to drive [or even walk] on those sites.

Many BLM staff recognized the potential of this ‘pitting’ and ‘mulching’ technique. Field Office wilderness staffs’ initial efforts were to perform the treatments behind gates and barriers in order to make those structures more effective. The next step was to perform the treatments on wilderness ways without installing gates or barriers. By increasing the density of vertical mulch, wilderness ways were less apparent and users were less likely to drive vehicles on them into wilderness. This became known as the ‘visual barrier’ technique and became the sixth wilderness boundary management tool. An advantage was that it could be implemented using hand tools. This illustrated that some important wilderness management tasks could be performed in wilderness in a cost effective manner without the use of motorized equipment. The ‘pit and mulch’ technique also has the advantage that novices can quickly learn to successfully produce ‘visual barriers’.

Many BLM staff and others have made significant contributions to wilderness boundary management by producing visual barriers and contributing to improvements in the technique. However, performing this technique along 4,000 miles of wilderness boundaries requires an enormous amount of hard work. Perhaps the most significant result of implementing visual barrier techniques is that it has grown into an incredible partnership. In 1999, the BLM successfully applied for a grant from the Division of Off-Highway Motor Vehicle Recreation of the California Department of State Parks and Recreation. The success was due to support from a wide variety of desert recreational users, including off-highway vehicle organizations. The BLM provided federal funding, which made including the Student Conservation Association as a third partner feasible. The Student Conservation Association has helped many young motivated volunteers to make an essential contribution to this effort and, hopefully to their continuing education. This partnership of a non-profit organization and a Federal and a State agency has produced one of our most successful and well known wilderness management efforts.

What are some of the observations of and lessons learned from implementing BLM wilderness management in the California Desert District?

- Developing a broad overall strategy is essential to achieve wilderness management goals.
- Since everything can’t be done at once, a sequence of the implementation of the tasks to meet objectives has to be decided. Example - Signs first, gates later.
- A diverse collection of several techniques provides more options to achieve goals than a collection of fewer techniques. Example - Six techniques are better than five or less.
- No matter what novel techniques you believe you are developing and implementing, similar techniques have been previously developed by others. Example - Joshua Tree Monument restoration efforts.
- In borrowing or adapting the techniques of others, it is essential to understand the goals for which those techniques were developed. Otherwise you may not achieve the desired goals of wilderness management. Example - A vegetative planting technique to reclaim realignment of a road evolved into a site preparation treatment for enhancing re-vegetation success which evolved into ‘visual barriers’.
- It is essential to monitor efforts to determine effectiveness and improve not only a particular technique, but to determine the optimal mix of techniques applied in specific situations.

- In some cases one or two techniques are sufficient to achieve goals, such as boundary signs and maps. In other cases, all combined techniques may be necessary. Achieving wilderness objectives generally involves recurring tasks. Examples – Maintaining a Ranger presence or maintenance of signs.
- The BLM cannot achieve wilderness management goals alone. The diversity of partnerships can be strength in that each brings something unique to the effort and can learn from the other partners. Perhaps the ultimate product of such partnerships will be a more common understanding of the value of wilderness on Public Lands by all desert users and a shared commitment to make management successful.
- Management of vehicles along wilderness boundaries is not the only objective of wilderness management. The challenge will be maintaining this effort while identifying, developing, and achieving broader and more holistic wilderness management objectives.