

U.S. Department of the Interior Bureau of Land Management

Environmental Assessment MT- DOI-BLM-CO-140-2009-017-EA
December 7, 2009

Zapata Falls Campground Construction Project

Location: T 39 N, R 73 W, Sections 8 and 17
Applicant/Address: BLM



U.S. Department of the Interior
Bureau of Land Management
La Jara Field Office
15571 County road T5
La Jara, Colorado 81140
Phone: (719) 274-8971
Fax: (719) 274-6301



CHAPTER 1

INTRODUCTION AND NEED FOR THE PROPOSED ACTION

INTRODUCTION

The Bureau of Land Management (BLM) proposes to construct a campground in the Zapata Falls Special Recreation Management Area (SRMA) located approximately 20 miles north east of Alamosa, Colorado (Figure 1.1). The proposed campground includes 24 single camping units, 1 group camping unit, 1 host site, 2 accessible double vault toilets, one gate, signs and an entry/fee station. Amenities at individual camping units would include one picnic table, one fire ring and one bear proof food storage container mounted on a cement pad. Additional amenities at the host site would include a photovoltaic unit, a stainless steel cistern with a pump, and a small sewage tank. The campground would include two loops, one of which would be a tent camping loop. The other loop would be designed to accommodate small campers. Water would not initially be provided; although, the development of a water system is included in this analysis. If monitoring shows that there is a public demand for drinking water, a water system would be installed once funding is obtained. A barbed wire fence would be constructed around the campground if monitoring shows that a conflict exists between grazing and the recreational use of the campground. The potential fence construction is included in this analysis as well. Associated activities included in this proposal would be the development of a trailhead and parking area as well as the construction of a non-motorized trail that would connect the new trailhead to the existing wilderness trail and be approximately 0.4 miles in length (Figure 1. 2). Construction of this new trail would only occur following the acquisition of state land or with the permission of the State Land Board. Once this new trail is constructed, the old trailhead would be closed and approximately 0.4 miles of existing trail would be closed.

Funding for construction of the campground and trailhead is through the American Recovery and Reinvestment Act. The campground would be constructed in 2010 or 2011. The proposed trail would be constructed following the completion of a proposed land exchange with the State Land Board. The proposed well and fence would be constructed if it is determined that there is a need for these improvements and when funding becomes available.

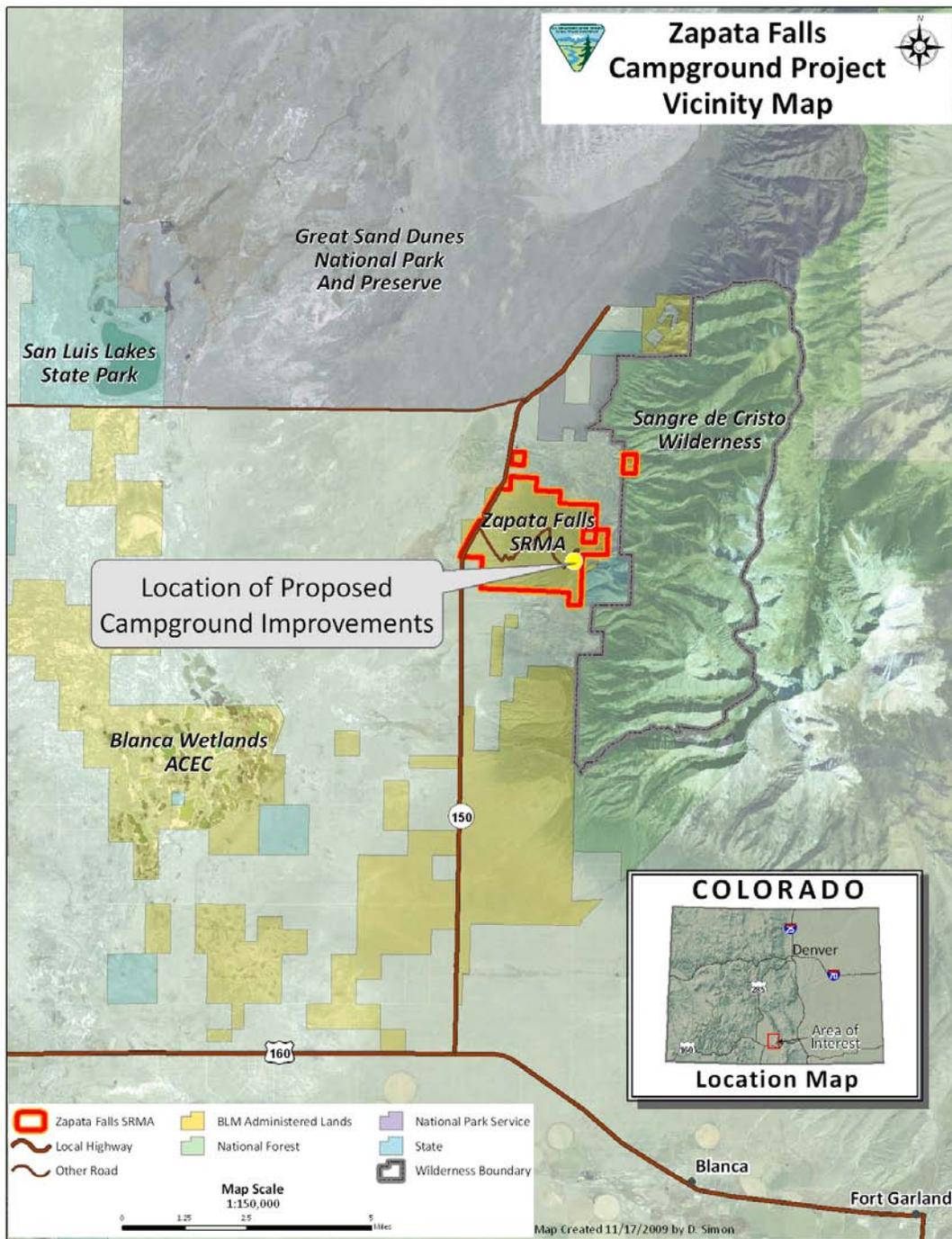


Figure 1.1 Vicinity Map

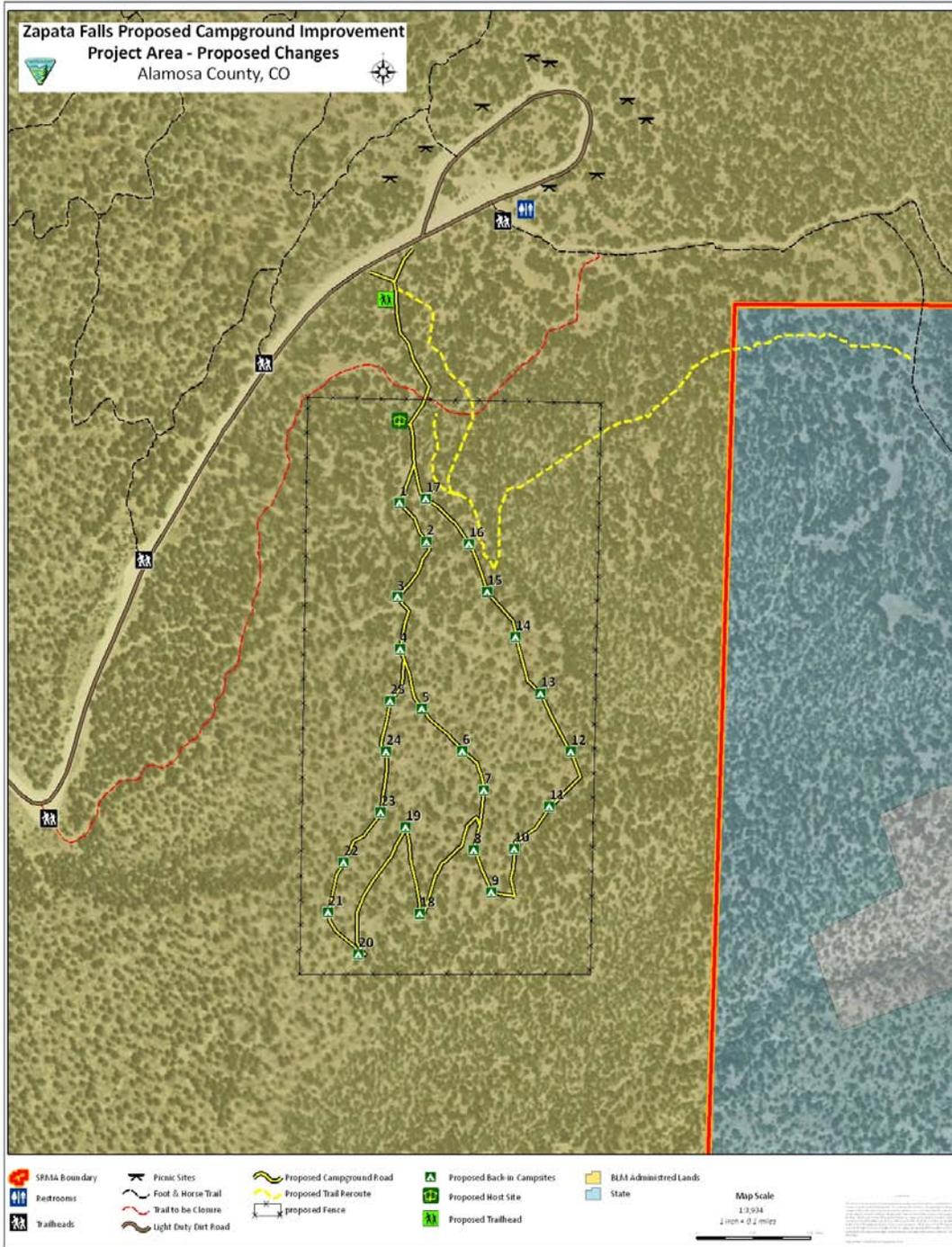


Figure 1.2. Proposed Action

Note: The actual layout of the campground road and site locations may vary somewhat once the engineering design work is complete.

PURPOSE AND NEED FOR THE PROPOSED ACTION

The purpose of this proposal is to provide camping opportunities to the public in the Zapata Falls SRMA. The project is needed to alleviate resource damage resulting from illegal camping and to meet public demand for additional camping opportunities on public lands in the vicinity of Great Sand Dunes National Park.

CONFORMANCE WITH BLM LAND USE PLAN(S)

The proposed action has been reviewed for conformance with the RMP (43 CFR 1610.5, BLM 1617.3). The Record of Decision for the San Luis Resource Area Resource Management Plan (RMP) was approved on December 18, 1991. The RMP provides direction to “Provide special management in areas with significant recreation potential and increased use; e.g., Penitente Canyon, Zapata Falls, etc.” and to “Develop as activity plan for Zapata Falls SRMA focusing on improved access to the falls and needed facilities including day use, interpretative signing, etc. (RMP, page 16).” This action is consistent with the San Luis Resource Area RMP and an amendment to the RMP will not be required prior to implementation of this proposal.

RELATIONSHIPS TO STATUTES, REGULATIONS AND OTHER PLANS

This EA is tiered to the Zapata Falls SRMA Recreation Plan which was approved on December 3, 2009. The RMP included direction that an activity plan be completed for the Zapata Falls SRMA that addresses needed facilities. The Zapata Falls SRMA Recreation Plan identifies the need for a campground in the SRMA. The Zapata Falls SRMA Recreation Plan was developed in accordance with benefits based management principles as mandated in IM-2006-60 and Appendix C of the Land Use Planning Handbook.

The proposed action is consistent with all federal laws and regulations.

The proposed action is consistent with all other plans, programs and policies of affiliated tribes, other federal agencies, state and local governments to the extent practical within federal law, regulation and policy.

The proposed action is consistent with Native American trust resource policies.

This project would not contribute significantly to climate change. Machinery used for construction would utilize fossil fuels.

The project is located in an area currently identified as having low potential for oil, gas and geothermal development and this proposal is consistent with the US Energy Policy.

The proposed action will require that a storm water management plan be prepared by the contractor and the appropriate state permits obtained.

This action will require that a well drilling permit and acquisition of water rights be obtained through the Colorado Division of Water Resources.

CHAPTER 2

DESCRIPTION OF ALTERNATIVES

INTRODUCTION

This EA focuses on the Proposed Action and on the No Action alternative. The No Action alternative is considered and analyzed to provide a baseline for comparison of the impacts of the proposed action.

ALTERNATIVES CONSIDERED BUT ELIMINATED FROM DETAILED ANALYSIS

An alternative was considered that included the construction of a campground at a lower elevation closer to the paved road. A campground in this location would accommodate larger campers and motor homes which are unable to use the existing road to the proposed campground location. This alternative was dropped from further consideration because a campground in this location would not meet the desired setting characteristics identified in the Zapata Falls SRMA Recreation Plan for the proposed campground. The Zapata Falls SRMA Recreation Plan identified the need for a relatively primitive campground which would provide unique physical, social and recreational settings that differ from the existing camping facilities in the area.

NO ACTION

Under this alternative, a campground would not be constructed as identified in the Zapata Falls SRMA Recreation Plan. The Zapata Falls SRMA would continue to primarily provide day use opportunities.

PROPOSED ACTION

The Bureau of Land Management (BLM) proposes to improve infrastructure and visitor services in the Zapata Falls Special SRMA by constructing a campground, relocating a trailhead, and constructing a non-motorized trail connecting the campground to an existing trail. The proposed work includes:

- constructing a campground road with two loops (approximately 1 mile in length). One loop would be a tent camping loop and the other would accommodate small campers,
- constructing 24 single camping units with gravel tent and parking pads, 1 picnic table, 1 fire ring, 1 site marker and 1 bear proof storage container mounted to a cement pad,
- constructing 1 group camping unit with gravel tent and parking pads, 3 picnic tables, 1 group fire ring, 1 site marker and 1 bear proof storage container mounted on a cement pad,
- constructing 1 host site with gravel tent and parking pads, 1 picnic table, 1 fire ring, 1 site marker and 1 bear proof storage container mounted on a cement pad, 1 stainless steel cistern with a pump, 1 photovoltaic unit, and 1 small sewage holding tank,

- installing 2 accessible double vault toilets,
- installing 1 gate,
- installing entrance signs and traffic signs,
- installing 1 entry/fee station,
- installing 1 trailhead parking area on the campground access road which would accommodate 6 to 8 vehicles,
- constructing a non-motorized trail approximately 0.4 miles in length from the campground/trailhead to the existing wilderness trail,
- closing the existing trailhead and closing approximately 0.4 miles of trail,
- installation of a water system if public demand indicates that one is needed, and
- construction of a barbed wire fence around the campground that would enclose an area approximately 50 acres in size.

Mitigation measures included with this alternative are listed in Table 2.1.

Table 2.1. Mitigation Measures by Resource Area

| |
|---|
| Recreation |
| Caution signs will be posted on road number 5415 during periods of heavy truck traffic. |
| At a minimum, the campground will be closed from October 15 through March 30. |
| Wildlife |
| Campground construction activities will not occur from May 15 through July 15. |
| Air Quality |
| Contractor will comply with all local, state, and federal air quality regulations and provide documentation to the BLM that they have done so. |
| Contractor will apply BLM approved dust suppressants (e.g. water or chemical stabilization methods) during dry periods when dust plumes are visible. |
| Construction vehicle speeds must not exceed 15 miles per hour on road number 5415. |
| Clearing, grading, earth moving or excavation activities will not be permitted when wind speeds exceed a sustained velocity of 20 miles per hour. |
| Construction equipment will be maintained in good operating condition. |
| Hydrology |
| Where access roads cross ephemeral channels or drainages, they shall be built at or close to right angles to the channel beds and washes. |
| Design and construct waterbars, stream crossing structures and culverts to avoid disturbance of natural flow patterns. |
| The parking area will be designed and constructed to divert flow and avoid concentrated flows that will cause soil erosion. |
| Mechanized construction activities will not be permitted when soils or road surfaces are saturated. |
| Soils |
| Clearing vegetation should be minimized to the extent possible. |
| Heavy equipment should operate only when the soil moisture is below the plastic limit. |
| Erosion nets, wattles, straw bales or other mechanical sediment control measures will be installed where necessary and removed upon completion of restoration activities. |
| Native plant material will be used to reclaim disturbed areas, especially along road edges at a slope of 3:1(horizontal:vertical increase). |

| |
|--|
| Range Management |
| Brush will be removed from the site and disposed of by the contractor. |
| Invasive Species |
| All equipment will be cleaned and inspected off site prior to initiating ground disturbing activities. |
| Material sources (sand, gravel, borrow, fill material) must be inspected on site prior to being transported to assure that they are weed free. |
| Vegetative materials such as seed, hay bales and mulch used for site rehabilitation must be certified that they are weed free. |
| Minimize soil disturbance to the extent practical, consistent with project objectives. |

The construction of the campground would occur in 2010 or 2011 and the duration of the project would be from two to six months once work commences. The construction of the trail would occur once state lands in the SRMA can be acquired or once approval for this project is granted by the State Land Board.

CHAPTER 3

AFFECTED ENVIRONMENT/ENVIRONMENTAL IMPACTS

INTRODUCTION AND GENERAL SETTING

The proposed campground is located at about 9,050 feet in elevation on the west side of the Sangre de Cristo mountain range. The slopes in this area are generally under 20% with a westerly aspect. The site is relatively rocky and dry with numerous small drainages. The vegetation is primarily piñon-juniper forest.

Table 3.1 identifies critical elements (resources) that must be addressed but are not present or are not affected by this proposal. The remaining portions of the effects analysis focuses on resources that are truly relevant to this project.

Table 3.1.

| CRITICAL ELEMENTS | | |
|--------------------------|---|--|
| Determination* | Resource | Rationale for Determination |
| PI | Air Quality | |
| NP | Areas of Critical Environmental Concern | The RMP does not identify ACEC's in the analysis area. |
| NP | Cultural Resources | An archeological survey was performed and cultural resources were not identified. |
| NP | Environmental Justice | Inequitable environmental burdens were not identified for this action. |
| NP | Farmlands (Prime or Unique) | No prime or unique farmlands were identified in the analysis area. |
| NP | Floodplains | None exist in the project area. |
| NP | Invasive, Non-native Species | Proposed area surveyed for invasive species and none were identified. |
| NP | Native American Religious Concerns | Tribal consultation with Native Americans did not identify religious concerns. |
| PI | Threatened, Endangered or Candidate Plant or Animal Species | |
| NP | Wastes (hazardous or solid) | The site was inspected for hazardous materials and none were identified. |
| PI | Water Quality (drinking/ground) | |
| NP | Wetlands/Riparian Zones | None exist in the project area. |
| NP | Wild and Scenic Rivers | Wild and Scenic Rivers were not identified in RMP or Rio Grande NF LMP for this area. |
| NP | Wilderness | The analysis area is adjacent to the Sangre de Cristo Wilderness Area but designated wilderness is not present in the analysis area. |

*Determinations:

NP=not present in the area impacted by the proposed or alternative actions.

NI=present, but not affected to a degree that detailed analysis is required.

PI=present and may be impacted to some degree. Will be analyzed in affected environment and environmental impacts.

RECREATION:

Affected Environment

The Zapata Falls day-use site was developed for two principal reasons. One was to provide for public use and enjoyment of the site's outstanding recreational amenities. These include Zapata Falls itself and the superlative scenic vistas across the valley and of the Sangre De Cristo Mountains. The second principal reason for developing the day-use site was to help stabilize struggling economies of adjoining service communities by making longer stays to nearby Great Sand Dunes National Park possible, thereby facilitating the production of increased economic benefits. However, sustained production of those beneficial outcomes requires maintenance of desirable area and site amenities to maintain the availability of desired high-quality activity, experience, and benefit opportunities for visitors and communities alike. This, in turn, requires maintaining the area's distinctive and highly-valued recreation settings and increasing stewardship of area facilities to prevent adverse impacts associated with unauthorized overnight use.

As visits to the day use site have risen, so have associated management needs. Despite signing to the contrary, a persistent problem has developed with visitors camping overnight to enjoy the spectacular sunsets and sunrises that may be viewed from this elevated position above the valley. The day use site was not developed to accommodate overnight use, and overnight use in that immediate vicinity is inconsistent with day-use objectives. Secondly, associated use of area trails has not been easily managed, given the distant proximity of the South Zapata Lake trailhead, primarily used by visitors wishing to access the Sangre De Cristo Wilderness Area, and the day-use site. The South Zapata Lake trail users are primarily backpackers and equestrian, while the users on the day trail to the falls are primarily families and day hikers. The joining of these two trails creates conflicts between the different user types. Lastly, the South Zapata Lake trailhead is not conducive for overnight parking. It is located on the outside of a switch back along the rough gravel road that the day use visitors use to access the day use area.

Environmental Consequences

No Action

Under this alternative the campground would not be built, and the SRMA would continue to focus on day use activities. By not building a campground the problem with illegal camping in the picnic area would not be addressed. The parking for the South Zapata Lake trail would continue to not meet the needs of overnight trail users. Also, the trail user conflicts along the trail to the falls would not be resolved.

PROPOSED ACTION

Direct and Indirect Impacts of the Proposed Action

There are multiple reasons for building this campground. One is the need to curb illegal overnight use of the existing day-use site. Sustaining desirable day-use recreation and resulting spin-off benefits to local communities and their economies requires sustaining

the area’s desirable amenities as well as its reputation as a safe and enjoyable place to visit.

Development of the Zapata Falls Campground would greatly help visitors achieve their desired recreation outcomes (be they for day use of the falls, overnight stays related thereto, or for overnight stays related to extended trips into adjoining USFS back country); facilitate greater compliance with bans against overnight stays at the day use facility; and significantly facilitate more efficient associated foot and vehicular traffic management.

In addition, the new Zapata Falls campground would be designed to explicitly complement rather than compete with three other campgrounds in the vicinity (i.e., San Luis Lakes State Park, Great Sand Dunes National Park, and Great Sand Dunes Oasis Resort). Table 3.2 illustrates the differences being purposely designed into the Zapata Falls campground:

Table 3.2.

| Amenity | Zapata Falls BLM | Great Sand Dunes National Park <i>National Park Service</i> | Great Sand Dunes Oasis <i>Privately- Owned</i> | San Luis Lakes State Park <i>Colorado State Parks</i> |
|----------------------------|---|--|---|--|
| Physical Setting Character | Front Country and Middle Country | Rural | Rural | Front Country |
| On-Site Services | Bear-Proof Containers Initially No Water Development Campground Host Vault Toilets | Running Water Flush Toilets Firewood Sales Visitor Center Bear-Proof Containers Campground Host | Potable Water Showers | Running Water Flush Toilets Camper Hookups Showers |
| Access | Via steep gravel road | Black top loops | Gravel loops off black to highway | Gravel loops off black to highway |
| Campsite Selection | Possible separate vehicle and tent camping loops | Vehicle and tent camping in same loops | Vehicle and tent camping in same loops | Vehicle and tent camping in same loops |
| Campsite Spacing | Some in plain sight and others screened by trees and/or topography | Extremely close | In plain sight | In plain sight |
| Campsite Size | Limited length (will not accommodate full-size motor homes) | Accommodates full-size motor homes | Accommodates full-size motor homes | Accommodates full-size motor homes |
| Fees | Planned | Yes | Yes | Yes |

The Zapata Campground would complement the other three sites in several ways. It would be in a more remote setting than the others and rustic in character, yet would be an excellent facility in its class. It would have fewer services than all other sites. Perhaps

the biggest distinguishing characteristic of this site would be its wider campsite spacing. The new campground would therefore offer greater opportunities for quietude than any of the other areas.

The purposive design and operation of this campground to avoid competing with the other sites is also important. Fees are planned, to be compatible with the other sites for services rendered so that it would not siphon customers away from the other facilities. Its more limited palette of services would also reduce its appeal for those looking for a full-service camping experience. Last of all, Zapata campsites would be designed to exclude larger trailers and motor home units. Related safety and sanitation problems would also be substantially reduced by the campground.

Additional needs to be met by developing the campground involve improving the flow of visitors through the site. In addition to day-use visitors focused on visiting the falls and those who drive to the site simply to see the view, are those who come to hike or backpack through immediate site environs to access National Forest lands to the east. Relocation of the trailhead parking and the realignment of initial trail segments associated with campground construction would also help reduce or avoid user conflicts between Zapata Falls day use hikers and backpackers destined for Blanca Peak and other adjoining National Forest attractions. By moving the trailhead from its existing location along the main road to the entrance of the campground, users should feel more comfortable leaving vehicles overnight. The proposed reroute of the South Zapata Lake trail would physically separate it from the day use trail. The trail could also be used by campground visitors to access the surrounding backcountry or the day use trail to the falls, via a section of existing trail.

Recreation- Cumulative Effects

Previous development in this SRMA includes a network of non-motorized trails, the wilderness trail, the trail to the falls, as well as the day use area. The construction of the campground would result in less than two acres of additional disturbance. The construction of the campground would result in improved visitor services and more opportunities for quality recreation experiences in the SRMA.

WILDLIFE:

Affected Environment

Migratory Birds: The Migratory Bird Act (MTBA) protects all migratory birds and their parts (including eggs, nests, and feathers). A primary concern for migratory birds from actions analyzed by this EA involves possible impacts of campground construction and the associated activities during the breeding season, particularly those that may result in the loss or disturbance of occupied nests. Possible related impacts to habitat are a concern in regards to increased recreation use of the area and effective loss of nesting and foraging habitat due to structures and removal of available habitat at the campground site.

Table 3.3. Migratory Birds: FWS Birds of Conservation Concern (BCC) for BCR 16 and their status within the project area (FWS 2008 list)

| Species | Associated Habitat Types(s) | Occurrence in Analysis Area |
|----------------------------|--|-----------------------------|
| American Bittern | Wetlands | No |
| Bald Eagle | Lakes and rivers | Possible |
| Ferruginous Hawk | Grassland, Mountain Shrub, Semi-Desert Shrubland, Sagebrush Shrublands | No |
| Golden Eagle | Agricultural, Grassland, Cliff/Rock/Talus | Possible |
| Peregrine Falcon | Agricultural, Pinyon-Juniper, Spruce-Fir, Ponderosa Pine, Cliff/Rock/Talus, Wetlands | Possible |
| Prairie Falcon | Agricultural, Grassland, Semi-Desert Shrubland, Cliff/Rock/Talus | Possible |
| Gunnison's sage-grouse | Mountain Shrub, Sagebrush Shrubland, Low Elevation Riparian | No |
| Snowy Plover | Wetlands | No |
| Mountain Plover | Agricultural, Grassland, Semi-Desert Shrubland, Sagebrush Shrubland | No |
| Long-billed Curlew | Shorelines | No |
| Willow Flycatcher | Willow-Riparian | No |
| Juniper Titmouse | Pinyon-Juniper Woodlands | Yes |
| Yellow-billed Cuckoo | Low Elevation Riparian, Wetlands | No |
| Flammulated Owl | Aspen, Ponderosa Pine, Mixed-Conifer, Spruce-Fir | Possible |
| Burrowing Owl | Grassland, Semi-Desert Shrubland, Sagebrush Shrubland | No |
| Veery | Dense riparian thickets, willow-riparian | No* |
| Lewis's Woodpecker | Ponderosa Pine, Low Elevation Riparian | Possible |
| Gray Vireo | Oak woodlands/scrub | No* |
| Pinyon Jay | Pinyon-Juniper, Ponderosa Pine | Yes |
| Bendire's Thrasher | Semi-Desert Shrubland | No |
| Black Rosy Finch | Spruce-fir forest; alpine | No* |
| Brown-capped Rosy Finch | Nests above timberline in alpine zone in cliffs, crevices; also utilizes spruce-fir forest | No |
| Cassin's Finch | Primarily spruce-fir, but also mixed-conifer forest | Possible |
| Grace's warbler | Ponderosa pine | No* |
| Brewer's sparrow | Sagebrush Shrubland | No |
| Grasshopper Sparrow | Grasslands | No |
| Chestnut-collared longspur | Shortgrass Prairie | No* |

* Excluded from analysis because the species does not occur or has very rare migratory occurrence in the SLV.

A review of Table 3.3 indicates that five species on the BCC List for BCR 16 are excluded from analysis because they do not occur or are considered accidental within the San Luis Valley and would therefore not be affected by any management actions. These species include the veery, gray vireo, black rosy finch, Grace's warbler, and chestnut collared longspur. Species that do not occur or have habitat present in the Zapata

Campground area are those labeled “No” in the Occurrence in the Analysis Area column of Table 3.3.

The information provided in Table 3.3 indicates that nine species designated as Birds of Conservation Concern (BCC) for BCR 16 could breed in or near the analysis area or migrate through the general vicinity. Most migratory bird use in the San Luis Valley is limited to the summer period due to the harsh fall, spring and winter months. Most birds arrive during late spring (April/May) and migrate from the area in early fall (August/September). The species present during summer are most likely breeding and rearing young. Most species on the BCR 16 list follow this migration pattern; however, a few species are present during the wintertime. Resident species that spend all or part of the winter in the San Luis Valley include the ferruginous hawk, golden eagle, Gunnison’s sage-grouse, peregrine falcon, prairie falcon, Lewis’s woodpecker, and pinyon jay. Of these winter resident species, golden eagle, peregrine falcon, prairie falcon, Lewis’s woodpecker and pinyon jay have potential year-round habitat present in the Zapata Campground project area.

Threatened and Endangered Animal Species: Twenty-seven species of threatened, endangered, or sensitive wildlife may occur in the San Luis Resource Area (Table 3.4) based on reports from the Colorado Natural Heritage Program (CNHP), Natural Diversity Information Source (NDIS), Bureau of Land Management, and personal observations. Based on life history information, seven species are carried forward because they may have potential foraging, roosting, and/or burrowing habitat in the area and/or cannot be completely discounted due to lack of occurrence data. These species include the Texas horned lizard, Northern goshawk, peregrine falcon, big free-tailed, bald eagle, Yuma myotis, and Townsend’s big-eared bat. The Zapata Campground project area does not support habitat for any federally listed threatened, endangered, or candidate species. Habitat is present for BLM sensitive species and species of concern. Overall the Zapata Campground project area does not appear to supply important source or primary habitat for BLM sensitive species. Effects to sensitive species are anticipated to be negligible from the development, construction, and maintenance/use of this campground.

Aquatic Wildlife- The Zapata Campground occurs on sloped rocky topography and encompasses arid desert shrubland habitat types including piñon-juniper, some Douglas fir and ponderosa pine woodland, rabbitbrush, mountain mahogany, currant, snowberry, serviceberry, yucca, prickly pear cactus, forbs and grasses. This area has dry drainages that may run water during large precipitation events and during snowmelt but are considered ephemeral drainages. There is no associated riparian habitat and no riparian vegetative species present within these dry drainages and impacts are not expected on aquatic species since habitat is not available to support aquatic species.

Terrestrial Wildlife- The Zapata campground is dominated by semi-desert shrubland habitat that is comprised primarily of piñon-juniper, ponderosa pine and Douglas fir woodland, mountain mahogany, currant, skunkbush, ocean spray, serviceberry, and four-wing saltbrush, various grasses and forbs. The area is designated crucial winter range (in the 1991 SLV RMP) and critical by CDOW (NDIS) for elk and mule deer.

In general, semi-desert shrublands are occupied by ungulates, small mammals and select bird species but may support a high diversity of reptiles. Large carnivores use the area such as coyotes, black bear, mountain lion, bobcat, and fox. Native ungulates occupy semi-desert shrubland and piñon-juniper woodland including pronghorn antelope, elk, and mule deer which are probably the most prevalent. Elk will frequent this habitat type when food resources, water, and habitat security is available. Mule deer use the area year-round because it provides browse and cover. The project area is utilized by most native ungulates and the quantity and quality of forage available to these species remains a critical habitat consideration.

Previous observations have revealed that these animals focus on winter browse species such as mountain mahogany, currant, skunkbush, serviceberry, chokecherry, and four-wing saltbush and winterfat if it is available above the snow line. The native ungulates have resorted to foraging on piñon pine and juniper as well as young ponderosa pine and Douglas fir during severe winters when forage is limited and climate conditions are harsh.

Environmental Consequences

No Action

The no action alternative would maintain the current status of wildlife habitat for migratory birds, sensitive species, aquatic wildlife, and terrestrial wildlife. There are no direct or indirect effects expected under the no action alternative to these wildlife species.

PROPOSED ACTION

Direct and Indirect Impacts of the Proposed Action

Migratory Birds- The project area includes habitat for nine species of conservation concern, including five species that may be present during the winter period. The proposed action authorized under this EA may pose a risk for disturbance of species present during the breeding season. Disturbance to migratory birds includes destruction of nests, loss of life of the individual due to collisions with vehicles or by other means, and disturbance to individual birds that can cause them to abandon a nest or an area during the nesting season which would lower individual reproductive success and fecundity (the number of offspring a female produces over her lifetime). Direct impacts are those that cause disturbance to individual birds or take of a nest. Indirect impacts are those that remove habitat from use or availability to migratory birds is the present or future.

Activities in the Zapata SRMA are reduced in the winter due to limited OHV access from winter conditions and seasonal big game closures (January 1 to March 31) of the roads, as well as campground use in the spring/summer/fall allowable only between April 1 and October 15. Therefore, the footprint of the campground would remove a small amount of winter foraging and roosting habitat (indirect impacts) for winter resident bird species but would have little effect on migratory bird species using the area in the winter because the

habitat occurs contiguously throughout the Sangre de Cristo Range and is generally available for foraging and roosting activities.

The campground construction would pose a risk of take of occupied nests or individuals (direct impacts) during project construction activities if project work occurs within the breeding and nesting season (May 15 to July 15). Construction associated with the campground that occurs outside of the May 15 to July 15 primary breeding and nesting season would not likely affect migratory birds within the area to the degree of loss of recruitment into the population.

Recreational use of the campground (direct impacts) between April 1 and October 15 (the campground open season) poses a risk of take of an individual bird or a nest in the immediate area of the campground due to human disturbance through presence and recreational activities associated with camping which would likely continue to increase with further recreational development. This campground area is effectively a loss of nesting and foraging habitat for most migratory bird species, except for more common species that are adapted to human presence and activities.

Threatened, Endangered, Candidate, Sensitive Species- BLM sensitive species that have potential foraging, roosting or burrowing habitat within the project area include Texas horned lizard, Northern goshawk, peregrine falcon, bald eagle, Townsend's big-eared bat, big free-tailed bat, and Yuma myotis.

Direct impacts to bald eagles, peregrine falcons and Northern goshawks include disturbance to individuals roosting or foraging from presence of recreationists leading to lost foraging opportunities and abandonment of the area when humans are present. No nesting habitat is present for these three raptor species.

There are perch trees available within the allotment and foraging opportunities for small mammals and carrion during the winter for bald eagles and Northern goshawks are available. Under the proposed action there is no overlap in the campground use between bald eagles (present from mid-November through March) and campers (campground open from October 15 to April 1), therefore direct effects to bald eagles are not anticipated. There is overlap in habitat use between Northern goshawks and peregrine falcon foraging activities and recreationists using the area of the campground.

The footprint of the campground and associated activities such as hiking, horseback riding, mountain biking in the area is generally confined to the roads and trails. The greatest effects come from indirect impacts such as loss of habitat (though it is considered marginal foraging and roosting habitat) and direct impacts such as disturbance from human presence during foraging and roosting activities. Overall, the three raptor species would not be measurably affected by any campground activities even though the campground presence effectively removes the project area from available roosting and foraging habitat for raptors. The foraging and roosting opportunities are plentiful in the area and the habitat is relatively contiguous even though the habitat is considered

marginal and low quality for the three raptor species. Human activity and use of this area is not considered a significant loss of habitat or disturbance for these species.

Impacts on the Texas horned lizard are not expected from the campground construction, use or maintenance because the occurrence of these lizards is unlikely or extremely rare in the San Luis Valley. No direct or indirect impacts are anticipated for amphibians or for the Texas horned lizard specifically.

Potential habitat is present for three bat species – the big free-tailed bat, Yuma myotis, and Townsend’s big-eared bat – all of which may forage along the edges of the tree lines and the roads, trails or meadows. There is not a primary roost habitat available for any bat species and the campground construction or subsequent use is not expected to have any impacts on local bat species.

Table 3.4. Direct, Indirect, and Cumulative effects on threatened, endangered, and sensitive species for the Zapata Campground Development and Maintenance.

| Species | Status | Species Occurrence | Proposed Action | No Action |
|--|---------------|---|------------------------|------------------|
| Federally Listed Species & Candidates | | | | |
| Black-footed Ferret | FE | No habitat present; no known occurrence | None | None |
| Canada Lynx | FT | No habitat present; no known occurrence | None | None |
| Whooping Crane | FE | No habitat present; no known occurrence | None | None |
| Southwestern Willow Flycatcher | FE | No habitat present; no known occurrence | None | None |
| Mexican Spotted Owl | FE | No known occurrence. Not suitable habitat in project area | None | None |
| Yellow-billed cuckoo | FC | No habitat present; no known occurrence | None | None |
| Gunnison Prairie Dog | FC | No habitat present; no known occurrence | None | None |
| Rio Grande Cutthroat Trout | FC | No habitat present; no known occurrence | None | None |
| BLM Sensitive Species | | | | |
| Amphibians & Reptiles | | | | |
| Northern Leopard Frog | SS | No habitat present; no known occurrence | None | None |
| Milk Snake | SS | No habitat present; no known occurrence | None | None |
| Texas Horned Lizard | SS | No known occurrence; possible suitable habitat | NI | NI |
| Invertebrates | | | | |
| Great Basin Silverspot Butterfly | SS | No habitat present; no known occurrence | None | None |
| Birds | | | | |
| American White Pelican | SS | No habitat present; no known occurrence | None | None |
| Bald Eagle | SS | Foraging habitat available, winter | NI | NI |

| | | | | |
|--------------------------|----|--|------|------|
| | | range | | |
| Barrow's Goldeneye | SS | No habitat present; no known occurrence | None | None |
| White-faced Ibis | SS | No habitat present; no known occurrence | None | None |
| Northern Goshawk | SS | No known occurrence; Suitable foraging habitat | NI | NI |
| Ferruginous Hawk | SS | No habitat present; no known occurrence | None | None |
| Peregrine Falcon | SS | No known occurrence; Suitable foraging habitat | NI | NI |
| Mountain Plover | SS | No habitat present; no known occurrence | None | None |
| W. Snowy Plover | SS | No habitat present; no known occurrence | None | None |
| Black Tern | SS | No habitat present; no known occurrence | None | None |
| Burrowing Owl | SS | No habitat present; no known occurrence | None | None |
| Gunnison's Sage Grouse | SS | No habitat present; no known occurrence | None | None |
| Mammals | | | | |
| Big Free-tailed Bat | SS | Foraging habitat present, may occur across the area. | NI | NI |
| Yuma Myotis | SS | Foraging habitat present, may occur across the area. | NI | NI |
| Townsend's Big-eared Bat | SS | Foraging habitat present, may occur across the area. | NI | NI |

**Species Status:*

FE = Federally Endangered
 FT = Federally Threatened
 SE = State Endangered
 ST = State Threatened
 SS = BLM Sensitive Species

*Determinations for Federally listed (T&E) species: NE = No Effect; NLAA = Not Likely to Adversely Affect; MA = May Affect; LAA= Likely to Adversely Affect; None= Species or its habitat is not present.

*Determinations for State Sensitive Species: NI = No Impact; MI= May Impact (May Impact Individuals, but is not likely to cause a trend towards Federal listing or loss of viability in the planning area); BI= Beneficial Impact; LI= Likely Impact (Likely to result in a trend towards Federal listing or a loss of viability in the planning area); None= Species habitat is not present or species is known not to be present

Aquatic Wildlife- No direct or indirect effects to aquatic species are anticipated under the proposed action because the project area does not afford aquatic habitat for aquatic species to be present.

Terrestrial Wildlife- It is possible that the human presence and associated recreational activities may influence native ungulates such as elk and mule deer. Direct interactions such as disturbance and displacement to individuals may occur because recreational use of the area occurs during the breeding, birthing and rearing periods for ungulates. The area is very crucial elk and mule deer winter concentration and winter range.

Campground availability would likely increase use of the area by recreationists for hiking, biking, camping, and hunting activities which would continue to displace wildlife that are not habituated to human presence, leading to increased direct impacts to wildlife.

Indirect effects include effective loss of foraging and cover habitat due to campground presence and increases in recreational opportunities based on camping availability. Indirect impacts can lead to permanent habitat loss or avoidance of the area due to human presence or alteration of the current condition of the habitat.

It is also possible that livestock grazing activities may influence carnivores and small mammals. Black bears, mountain lions, bobcats, coyotes, and red foxes have overall range throughout this project area. Direct interactions may occur between carnivores and campers but are likely uncommon due to the development of the campground and precautions taken by campers to correctly store their food and contain their pets. Indirect impacts such as removal of foraging habitat and cover are likely through campground development and maintenance. It is possible that campground activities may influence reptiles, small mammals, and song birds through direct displacement and disturbance or indirectly through loss of habitat. Direct interactions may occur through crushing or removal of burrows or nests or disturbance to individuals through direct contact and presence.

Habituation of select wildlife individuals to human presence and because of feeding opportunities can also lead to human-wildlife interactions that can be hazardous. Birds (especially ravens, jays, magpies), small mammals, deer, and bears, foxes, raccoons, skunks, chipmunks, and squirrels can be attracted to human presence for easily accessible food and foraging opportunities. All species listed above have been observed in the area and precautionary measures are important such as the proposed bear boxes and education/interpretation to humans about avoiding wildlife and protecting personal possessions from curious wildlife would help to reduce interactions.

Direct and indirect impacts are likely for native ungulates, small mammals, carnivores, some lizards, and birds. These impacts, namely disturbance and habitat loss are considered minimal due to the nature of the surrounding habitat, abundant available cover and foraging areas across a broad landscape, and the relative containment of camping and human use activities within the campground footprint and existing trails. Animals would likely avoid the area when recreationists are present, except for the few individuals that are attracted to human activities.

Wildlife- Cumulative Effects

The current recreation based activities appear to be having minimal influences on migratory birds, sensitive species, terrestrial, aquatic wildlife and the habitats that support them. These animals have adapted to human use in this area and tend to avoid humans, however the habitat lends cover, foraging, and nesting/burrowing/birthing habitat for many wildlife species. Cumulative effects to native ungulates are of future concern because the available habitat surrounding campground is readily available to wildlife but

extensive recreational development or development on private lands may serve to fragment the contiguous habitat currently available.

Private lands nearby are subdivided in the Zapata subdivision and other private lands are currently used and have houses. Activities on private lands are not under the control of the BLM and loss of habitat could occur through land clearing/conversion, development, fencing, or other activities. This situation puts the impetus on the public lands to support more and more ungulates during critical periods as they are displaced from adjacent habitat from human presence and habitat loss or fragmentation.

The Sangre de Cristo Wilderness Area is located east of the campground and wilderness designation generally limits the use and development of the area and conserves the habitat for wildlife use. Further designating the trail network and containing recreational use of the area once BLM acquires the State Land Board Land at Zapata falls or we renew the expired MOU would help to improve recreational use of the area and human safety as well as protect habitat for wildlife.

Habitat work for mule deer and elk was accomplished by the BLM fuels program to enhance browse vegetation for ungulates as well as protect the wildland-urban interface from catastrophic wildfires in 2004-2005 and retreated in 2009-2010. This project has shown beneficial results in rejuvenating decadent browse vegetation and improving winter forage availability for ungulates. This project was used to create habitat diversity for elk and deer and reduce piñon-juniper stand density and loss of browse vegetation in winter range and to thin the woodland.

AIR QUALITY

Affected Environment

The existing air quality throughout the San Luis Resource Area can only be inferred, because insufficient monitoring data is available for most pollutants. The air quality of the study site is considered to be typical of undeveloped regions in the western United States and has been designated as Prevention of Significant Deterioration (PSD) Class II (USDI-BLM, 1989). Ambient pollutant levels are usually near or below the measurable limits. However, Total Suspended Pollutants (TSP) around the project site are expected to be higher because of unpaved roads and wind blown dust particles.

The Colorado Air Pollution Control Division (APCD) assesses the maximum 24- hour average of particulate matter (PM₁₀) levels at Alamosa center. The center is located in close proximity to the project site. The data shows that the PM₁₀ level is well above the National Ambient Air Quality Standard (NAAQS) for PM₁₀ (24-hour average) of 150 µg/m³ for some years in the recording period. For example, historical maximum of PM₁₀ levels recorded at Alamosa center were 473, 424, and 412 µg/m³ for the years of 1991, 2006, and 2007, respectively. According to the 2008 Colorado state ranking based on PM₁₀ level monitoring by 24-Hr maximum concentration, the Alamosa center has the third highest PM₁₀ concentration level from the 41 monitoring stations located throughout the state (APCD, 2008).

Environmental Consequences

No Action

Dust would continue to move around the site at the current levels. No increased air quality problems are anticipated.

PROPOSED ACTION

Direct and Indirect Impacts of the Proposed Action

Minor, localized, and temporary air pollution would be created by heavy equipment during construction phase of the project but would end after completion of the project. The air quality criteria pollutant likely to be most affected by the proposed actions is the level of inhalable particulate matter, specifically particles ten microns or less in diameter (PM10) associated with fugitive dust. Due to dust particle blowout caused by motor vehicles and smoke generated by campfires at the campsites, a long-term, minor, and adverse impact on air quality would also be anticipated following completion of the construction phase of the project. Smoke generated by campfires at the campsites is sporadic, confined to the campground area and is for short durations, which would not violate air quality standards. The project area is located over 2.5 miles away from the nearest resident. There are no expected impacts to these residents from the proposed action.

Air Quality-Cumulative Effects

There are currently no other projects occurring in proximity to the project area. There are also no planned activities in the reasonably foreseeable future. Air quality impacts from this project would be intermittent and are expected only during the construction phase of this project. Ground disturbing construction activities are anticipated to last no more than several weeks. The proposed projects are small and not anticipated to exceed the 5.0 mg/m³ dust action level. However, long term, negligible adverse impact on air quality would continue to occur after opening of the Zapata campground.

HYDROLOGY, WATER QUALITY AND WATER RIGHTS

Affected Environment

The project area is situated about eight miles south of Great Sand Dunes National Park and Preserve, within the Zapata Falls fifth level watershed (HUC-1301000307). The site receives between 16 and 20 inches of precipitation per year with most rainfall events occurring in July and August. There are no perennial streams within the proposed area. The Zapata campground is located about half a mile to the west of South Zapata Creek and about a mile to north of Urraca Creek (Figure 3.1). Ephemeral channels supply runoff to the tributaries of these two perennial streams. However, due to rapid permeability of the Urraca soil, it is uncertain that substantial amounts of runoff reach these creeks from the Zapata campground area. The 2002 and 2003 water quality assessment report indicates that both south Zapata and Urraca Creeks are not on the 303 list of impaired waters; therefore meeting designated uses (Colorado Water Quality Control Division, 2004).

Water rights: According to the proposed action, a well would potentially be drilled to withdraw groundwater for use of campground visitors. BLM would request water rights for this project. Application would be filed to Region 3 Water Court to acquire water rights and drill the well with a capacity of 15 gallons per minute and a maximum annual usage of 1,008 gallons.

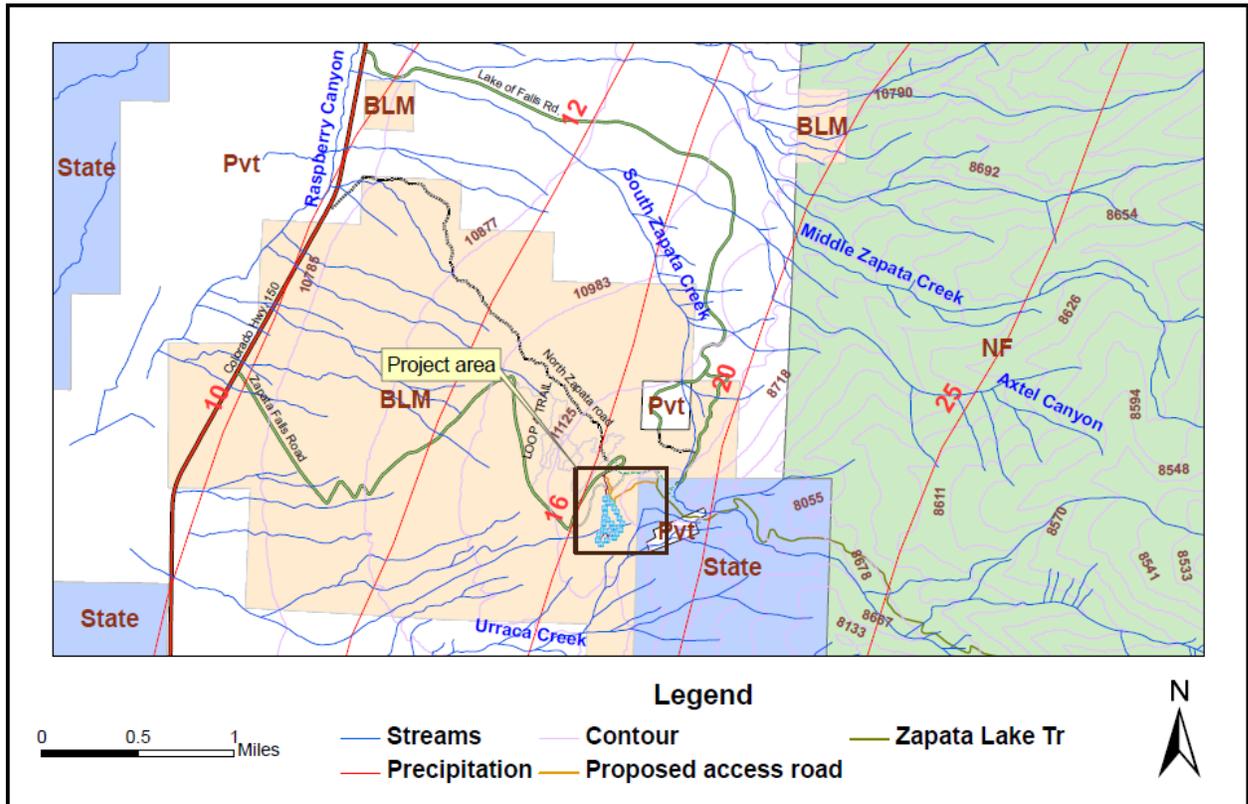


Figure 3.1 Hydrology map of Zapata Fall campground and surrounding

Environmental Consequences

No Action

No new impacts to water quality and hydrologic processes around the project area are likely to occur under the No Action Alternative. No new surface disturbances would take place at the site and current management would continue.

PROPOSED ACTION

Direct and Indirect Impacts of the Proposed Action

The proposed action would have local, short-term, minor to moderate, adverse impacts on hydrologic processes and water quality from construction activities related to the development of the Zapata campground sites, construction of access roads, and a parking lot. The primary sources of water pollution from these activities are sediment-laden runoff water from construction sites. Reduction of soil permeability due to compaction would lead to an increase in runoff rates and volume on the ephemeral channels and

accelerate sediment transport and hence affect water quality. Recreational activities such as horseback riding and hiking can lead to the introduction of organic, physical, and chemical pollutants into surface and groundwater systems. Nonpoint-source runoff from roads and parking lots may potentially affect water quality by introducing organic chemicals and heavy metals.

Clearing and grading activities may temporarily alter overland flow and natural groundwater recharge patterns. There are no downstream natural or developed springs and seeps that the ephemeral channels draw pollutants to. Near-surface soil compaction caused by construction equipment and vehicles could reduce the soil's ability to absorb water and may increase surface runoff and sediment loading to surface waters system. The magnitude and duration of potential impacts to surface runoff and groundwater recharge would depend on soil depth, soil type, vegetation type and density, slope, aspect, erosive force of rainfall or surface runoff, and duration and extent of construction activities.

Hydrology, Water Quality and Water Rights-Cumulative Impacts

Very minor adverse long-term impacts might occur from the increased use of the project area, beyond existing conditions. Disturbed soil due to construction activities, generate occasional oil/grease releases from equipment and vehicles can represent a short-term nonpoint surface water pollution source. It is unlikely that the campground area itself would adversely affect water quality. However, insignificant localized adverse water quality impacts may result from oil/grease from motorized vehicles and vegetative trampling and associated soil disturbance following the campground development phase of the project. Installation of two accessible double vault toilets would also impact groundwater quality. Overall, past, present, and future activities at the proposed campsite, considered cumulatively with proposed action, would have a local, long-term, negligible, adverse impact on hydrologic processes and water quality.

SOILS

Affected Environment

Soils in the project area are described in the Alamosa County area soil survey report (USDA-SCS, 1973). The soil series within the proposed project area are Comodore and Uracca. The Comodore series consists of well-drained and extremely steep soils. These soils are underlain by acid igneous and metamorphic rock at a depth of 4 to 6 inches. They are noncalcareous and have many cobblestones throughout the profile and on the surface. Comodore soils have moderate permeability to the bedrock and very low available water holding capacity. Runoff is very rapid and the hazards of erosion very severe for Comodore extremely rocky loam, 40 to 150 percent slope (CmF) soils (Table 3.5 and Figure 3.2).

The Uracca series consists of somewhat excessively drained, moderately steep, very cobbly soils. These soils formed in alluvium and there are many large cobblestones of acid igneous origin throughout the soil and covering a large part of the surface. Uracca soils have moderate permeability in the subsoil and very rapid permeability in the

substratum. They have very low available water holding capacity. The Uracca series is a very cobbly loam, 15 to 35 percent slopes (UrF) soils have very slow runoff because the soil is very cobbly. Many streams that originate in the mountains disappear into these fans and the hazard of erosion is only slight.

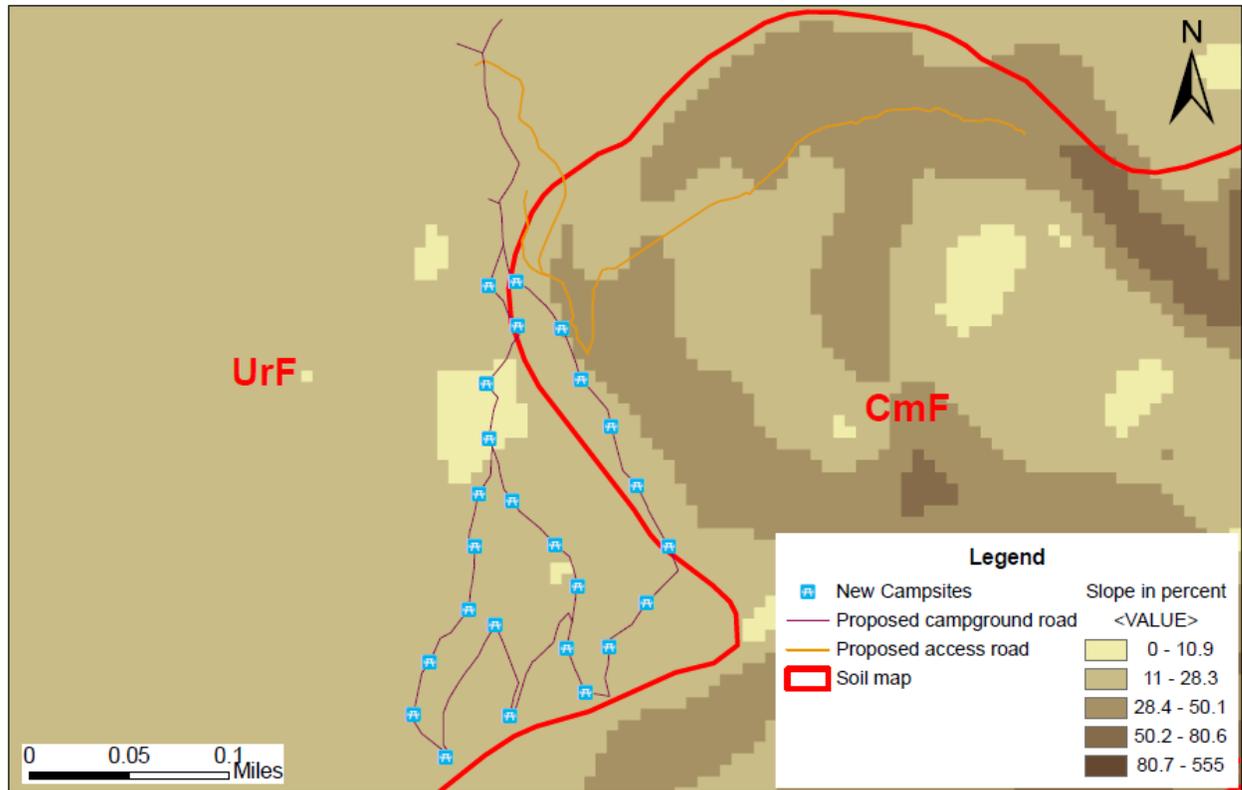


Figure 3.2 Slope and soil map of Zapata Falls campground

Both Comodore and Uracca soils have moderate values of erosion factor (K) indicating moderate to high susceptibility to soils erosion depending on land cover (Table 3.5). Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. The K factor is one of six factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water. Although erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water, it is important to note that slope of the area has also significant impacts on water erosion in addition to the K factor. About 90 percent of the Zapata Falls campground has a slope within the range of 11 to 28 percent. The site has high gradient slope (28 to 50 percent) where new road construction is proposed at northeast part of the campground (figure 3.2).

Based on the hydrologic soil group classification (Table 3.5), Comodore soils have higher runoff potential (Group D) compared to the Uracca soils (Group B). Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups (A, B, C, and D) according to the rate of water infiltration when the soils are not

protected by vegetation and are thoroughly wet. Group A Soils have a high infiltration rate (lowest runoff potential) and group D soils have a very slow infiltration rate (highest runoff potential); while Group B and C soils are in between. The Natural Resource Conservation Service Curve Number method of determining runoff from various land-uses is based on this soil grouping.

Table 3.5 Properties of Zapata Falls campground soils

| Soil series | Map symbol | Depth from surface (inches) | Dominant USDA texture | Permeability (inches per hour) | Erosion factor, <i>F</i> | Hydrologic soil group | Available water-holding capacity (inches per inch of soil) |
|-------------|------------|-----------------------------|--|--------------------------------|--------------------------|-----------------------|--|
| Comodore | CmF | 0-15 | Extremely stony loam | 0.6 -2.0 | 0.24 | D | 0.08 - 0.1 |
| | | 15-19 | Unweathered bedrock | > 5.0 | — | | |
| Uracca | UrF | 0 - 9.0 | Very cobbly loam and very cobbly clay loam | 0.6 - 2.0 | 0.28 | B | 0.06 - 0.08 |
| | | 09 - 23.0 | Very cobbly coarse sandy loam | 6.0 -20.0 | 0.20 | | 0.03 - 0.05 |
| | | 23.0 - 60 | Cobblestones, gravel, and boulders | > 20.0 | 0.32 | | 0.03 - 0.05 |

Environmental Consequences

No Action

Impacts to soil resources would continue to occur naturally from the effects of various climatic events. Other impacts to soils may occur from livestock use and human effects.

PROPOSED ACTION

Direct and Indirect Impacts of the Proposed Action

Approximately 2 acres of land would be disturbed during the construction of the campground. Development of the Zapata campground and construction of the proposed parking area and access roads would result in soil erosion, compaction, and soil profile mixing. Soil contamination would also occur due to machinery involved with construction activities that may deposit small amounts of natural and synthetic petrohydrocarbons onto soils through equipment failure or normal operations. In addition, after completion of campground development, road uses by motorized vehicles would have the potential to impact soils adversely by erosion, compaction, and loss of vegetative cover. Overall, the proposed action would result in local, short-term, minor, adverse effects on soils during the development phase of the project and these effects

would continue for the long term at lesser extent following completion of the construction phase and use of the campground by visitors.

Soils-Cumulative Impacts

Adverse impacts to soil resources from current uses, fire disturbance, and hydro-axing of bushes/brushes have occurred for several decades at existing sites. After the opening of the campground visitor use of unpaved areas, including campsites, trails, and parking areas that would result in further degradation of soil resources. Impacts from soil loss and degradation of soil resources through foot and vehicular traffic would likely continue over an extended period of time. The continued visitor use of unpaved areas associated with the proposed action would result in a local, long-term, minor, adverse impact to soil resources. Compaction due to foot traffic and soil erosion from the parking area would continue to occur. Additional impacts would include increased runoff and less infiltration of storm water and snowmelt due to soil compaction.

FUELS/FIRE

Affected Environment

The Scope of the Analysis area for this campground would include the area defined by the project leader. The area is primarily pinon/juniper timber types with a sparse grass understory. Fire in this ecosystem is usually a wind driven/slope dominated event, starting with either natural or human-caused ignitions. There have been many small fires in the vicinity and one large fire within the last 30 + years. All have been wind driven or slope dominated events. Most natural ignitions are single tree fires that have very little impact on the surrounding ecosystem and do very little to contribute to changing fire regimes or condition classes.

There have been fuel treatments implemented around the campground area in the past 5-7 years. These treatments have created a more open canopy within the pinon/juniper and have allowed for more grass growth, but have not increased the likelihood of a fire that would cause resource damage.

Environmental Consequences

No Action

No action in the project area would not change fuel or fire conditions from what has been in place over the past 30 years.

PROPOSED ACTION

Direct and Indirect Impacts of the Proposed Action

Building the campground and associated developments to the trails system would increase the number of people in the immediate vicinity and thereby could increase the possibility of a human ignition, however this would also increase the access to the area that would decrease the threat to the surrounding area. Over time, use in the campground would help to reduce fuels on the ground and lessen the possibility of an escaped fire from the fire rings. In the past concerns have been raised about the threat of an escaped

wildfire from the campground to the two adjoining subdivisions, Zapata to the north and Urraca to the south. Both subdivisions are down slope and in directions that are not typical for the winds to push a fire towards them. Fuels treatments have been implemented around the proposed campground that should make it less likely to impact these subdivisions. The fuel types present within the treated areas down slope from the proposed campground are such that it should be easy to implement a direct attack on a backing fire with hand crews or engines, with little resistance.

Cumulative Impacts

The proposed action for the campground would over the long term have a positive effect on fuels. The construction process would disturb portions of the slope and create breaks in the fuels, thereby making effective fuel breaks. Campground users' consumption of the fuels created by previous treatments would clean the area and make fires with longer flame lengths less likely. Future fuel treatments in the area would further enhance the camping facilities by keeping the stands of timber open and less able to support a crown fire.

RANGE MANAGEMENT

Affected Environment

The area of concern or the affected environment under the proposed alternative lies within the Pinon (#14120) grazing allotment. The Pinon allotment currently consists of 3,145 acres of BLM lands. The allotment is grazed by 77 head of cattle from 10/15 to 12/06 for a total of 125 active Animal Unit Months (AUM's). The allotment was assessed for meeting rangeland health standards in 1999 in the following NEPA document (CO-056-99-22-EA) located at the La Jara BLM field office. It was found at that time that the Pinon allotment was meeting rangeland health standards, therefore, no changes were made to the grazing system. Presently, the Nature Conservancy is undergoing another ten year term permit renewal to assess rangeland health standards once again.

Environmental Consequences

No Action

Under the No Action Alternative, there would be no campground area constructed and therefore no direct or indirect impacts to the range management program and the acreage of the Pinon grazing allotment. There would be no environmental impacts from the proposed action because it would be denied.

PROPOSED ACTION

Direct and Indirect Impacts of the Proposed Action

Under the proposed action alternative, fifty (50) acres of BLM lands lying within the Pinon grazing allotment would be considered for a campground. This section analyzes the impacts of the proposed action to those resources described in the affected environment. The loss of 50 acres would have a direct impact on the allotted size of the Pinon grazing allotment, however, due to only the occasional use of cattle in this area of

higher elevation and less forage production it is expected that impacts would be minimal. The proposed action may have a direct impact on cattle/camper encounters but is expected to be minimal due to the time of use that the cattle use the Pinon allotment.

Range Management-Cumulative Impacts

The proposed action or alternatives are not anticipated to result in cumulative impacts because there are no other ongoing or reasonably foreseeable actions planned for the same area.

VEGETATION

Affected Environment

The proposed campground site lies on the west facing slope of the Sangre de Cristo mountains, south of Great Sand Dunes National Park and approximately nineteen miles northeast of Alamosa, Colorado. The elevation of the proposed campground site is approximately 9,100 feet. The proposed campground site is located in the higher, steeper portions of the Pinon allotment. The vegetation consists of a rather dense, closed-canopied, stand of pinyon pine. Juniper is scattered throughout the woodland site along with an understory of mountain mahogany. The limited grass and forb component consists of Indian ricegrass, blue grama, needle and thread, wormwood, prickly pear, yucca and other limited forb and grass species.

Environmental Consequences

No Action

Under the No Action alternative, there would be no campground constructed and therefore no direct or indirect impacts to the vegetation component.

PROPOSED ACTION

Direct and Indirect Impacts of the Proposed Action

Under the proposed action alternative, fifty (50) acres of BLM lands would be considered for a campground causing disturbances to the existing vegetation. The overall vegetative disturbance to the site is said to involve less than 2 acres within the 50 acre campground. This section analyzes the impacts of the proposed action to those resources described in the affected environment. The proposed campground would have a direct impact on approximately 1 acre of vegetation. Pinyon pines would be selected, cut and cleared from the premises for the construction of roads, bathrooms and recreation facilities such as campsites. Shrubs and other vegetation would be eliminated from the site in favor of roads and recreation facilities, however, disturbance to the existing vegetation would be minimal to allow for the area to remain as close to its former, undisturbed state as possible and to emulate as natural a setting as possible.

Vegetation-Cumulative Impacts

The proposed action or alternatives are not anticipated to result in cumulative impacts because there are no other ongoing or reasonably foreseeable actions planned for the same area.

INVASIVE, NON-NATIVE SPECIES

Affected Environment

A site survey of the proposed project area revealed that there are no known non-native or invasive species.

Environmental Consequence

No Action

The area would remain undisturbed which would reduce the chance of introducing non-native or invasive species.

PROPOSED ACTION

Direct and Indirect Impacts of the Proposed Action

The potential for introduction of non-native or invasive species would be greatest under the proposed action. This is a result of soil disturbance and soil exposure which provides an ideal seedbed for non-native species, the potential for contaminated equipment being moved on site, and the potential for contaminated material being moved to the site. Special attention would be observed during equipment usage of ground disturbing activities such as, project construction or road maintenance. This would reduce the chance of spreading noxious weeds by seed distribution from a contaminated area to a non-contaminated area. Reseeding of disturbed areas immediately after ground disturbances would ensure native re-vegetation occurs. There are no foreseen indirect effects that would result from the proposed action.

Invasive, non-native species-Cumulative impacts

Previous development in this area included construction of the access road, day use area and trails which had the potential to introduce non-native species to the area. Following implementation of the proposed action, no further development is planned which could lead to the introduction or spread of non-native species. The greatest potential for the introduction of non-native species is through routine road maintenance activities and from livestock, particularly recreational equestrian use.

VISUAL RESOURCES

Affected Environment

Zapata Falls is currently mapped as a Visual Resource Management Class II (VRM). The VRM Class II is defined on the ground as activities may be visible but activities would be subordinate to the characteristic landscape (Figure 3.3). This area is currently heavily screened by vegetation and landforms. The campground would be located off the road near the current parking area to the falls. The area identified for the construction of the campground is located on relatively flat terrain below the base of the foothills where the falls are located. The grade is approximately 2%-10% and very little can be seen from the road to Zapata. The main access road to the campground would be from the Zapata Road off Highway 150 to the Great Sand Dunes National Park. From the Highway to the Great Sand Dunes National Park it is expected that the new campground

design would not be visible due to topography and vegetation. It would also not be visible from any surrounding sub-developments including Urraca and North Zapata.

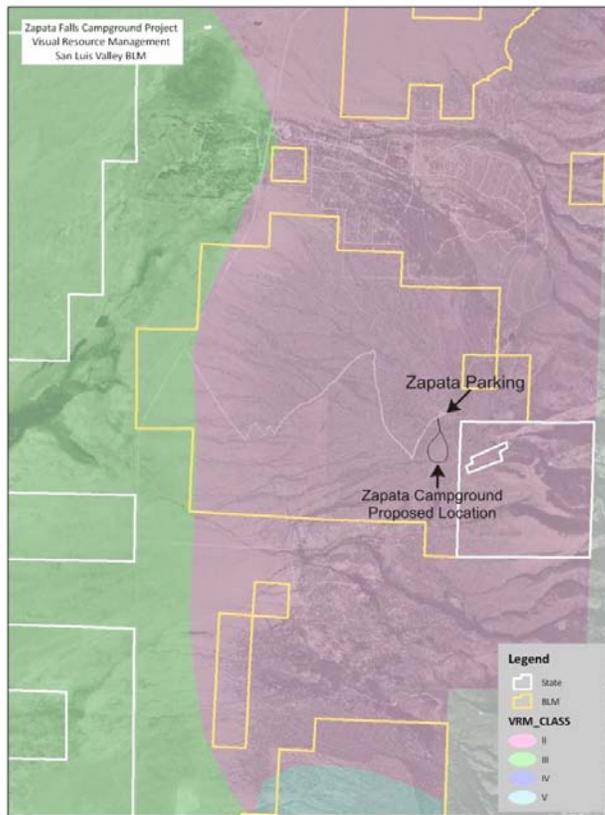


Figure 3.3. Zapata Falls SRMA VRM Classes

Environmental Consequence

No Action

The No Action Alternative would have the least amount of impacts to the Visual Resources due to the fact that there would be no construction. However, there are expected to be additional impacts to the Zapata area from visitors camping in areas designated as day use only and impacts from vehicles parked along the Zapata Road to access the South Zapata Lake Trailhead (currently the only overnight parking allowed in the area).

PROPOSED ACTION

Direct and Indirect Impacts of the Proposed Action

It is expected that Most of the activities associated with the new campground design would be subordinate to the characteristic landscape. The only noticeable impact to the landscape would be the campground entrance from the Zapata Falls Road. All other activities are expected to be screened by vegetation and topography.

The proposed action would have impacts on the visual resources to the foreground from road construction, campground unit construction, toilet and kiosk placement. It is expected that the majority of the construction would be unseen due to vegetation and topography. The campground entrance would be seen from the Zapata Road in the foreground as visitors approach the parking area to the trail. However, in the middle ground from the Zapata Road and from the background from Highway 150 the campground would be unseen. All constructed features are expected to meet the Design Guidelines and fit within the characteristic landscape for Class II and the Zapata Area.

Visual Resources-Cumulative impacts

The current development at Zapata Falls includes a parking area, picnic ground, interpretive sites, and trail to the falls. The campground would be considered an asset to the current development given the feedback from visitors asking for an opportunity to camp at this location. The new campground would add more development to the Zapata Falls SRMA, however the development itself would fit within the context for the Zapata Falls SRMA. The addition of the campground would not exceed development recommendations for this recreation area and would be subordinate to the characteristic landscape.

CHAPTER 4

PERSONS, GROUPS, AND AGENCIES CONSULTED

Public Scoping and Issues

Public scoping for this project was initiated on August 25, 2009. A legal notice was published in the Valley Courier newspaper and a scoping notice was mailed to forty-four government agencies, tribal contacts, special interest groups and members of the public. No significant issues were identified. A concern was raised by the State of Colorado Board of Land Commissioners regarding increased public use of state lands as a result of additional development in the area as well as liability concerns resulting from a potential increase in use. This concern is outside the scope of this analysis and will be addressed through future agreements and land exchanges.

List of Preparers

Table 4.1. List of Preparers

| Name (and agency, if other than BLM) | Title | Responsible for the Following Section(s) of this Document |
|---|------------------------------------|--|
| John Murphy | Recreation Program Manager | Interdisciplinary Team leader |
| Bruce Rittenhouse | Associate Center Manager | Approving Official |
| Amanda Walker | Recreation Planner | Recreation/Socio-Economics |
| Angie Krall | Archeologist | Archeology and Paleontology |
| Melissa Garcia | Wildlife Biologist | Terrestrial and Aquatic Wildlife |
| Negussie Tedele | Natural Resource Specialist | Soil/Water/Air/Wetlands/Riparian |
| Steve Sanchez | Natural Resource Specialist | Soil/Water/Air/Wetlands/Riparian |
| Dario Archuleta | Range Technician | Invasive Species |
| Paul Minow | Fire Management Officer | Fire/Fuels |
| Kelly Ortiz | Landscape Architect | Visual resources |
| Doug Simon | GIS Specialist | GIS Support |
| Melissa Shawcroft | Range Conservationist | Range Management/Vegetation/Sensitive Plants |
| Nick Sandoval | Geologist | Geology/Minerals/Hazardous Materials |
| Leon Montoya | Realty Specialist | Transportation/Access/Farmlands |

Finding of No Significant Impact

MT-DOI-BLM-CO-140-2009-017-EA

Based on review of the EA, I have determined that the project is not a major federal action and will not have a significant effect on the quality of the human environment, individually or cumulatively with other actions in the general area. No environmental effects from the proposed alternative assessed or evaluated meet the definition of significance in context or intensity, as defined by 43 CFR 1508.27. Therefore, an environmental impact statement is not required. This finding is based on the context and intensity of the project as described below:

RATIONALE:

Context:

The proposal to construct a campground in the Zapata Falls Special Recreation Management Area (SRMA) would result in the disturbance of less than two acres of land. The adverse effects to all resources were determined to be low. This action would result in improved visitor services and recreational opportunities in this SRMA. This campground would be constructed in the vicinity of Great Sand Dunes National Park where there is a demand for additional camping opportunities. This campground would be designed to complement rather than to compete with the three other campgrounds in the area.

Intensity:

Impacts that may be beneficial and adverse: Adverse impacts include a small loss of wildlife habitat and increased disturbance to wildlife as a result of human use. Further adverse impacts resulting from construction activities such as soil disturbance, erosion, effects on water quality, and the potential for the introduction of non-native species would be short in duration. These adverse impacts could be managed and mitigated to assure they occur at acceptable levels and to assure compliance with all federal, state and local laws. There is the potential for the loss of 50 acres of rangeland if it is determined, through monitoring, that there is a need for fence construction around the campground. The beneficial impacts include improved visitor services, opportunities, experiences, and outcomes in the Zapata Falls SRMA.

Public Health and Safety: The proposed action includes the implementation of management practices to protect important water supplies by minimizing erosion and sediment production during construction activities. Public safety at the Zapata Falls SRMA would improve due to the presence of a campground host. A campground host would provide increased security at the site and improve the maintenance and sanitation of facilities.

Unique characteristics of the geographic area: The EA evaluated the area of the proposed action and determined that no unique geographic characteristics such as: wild and scenic rivers, prime or unique farmlands, areas of or designated wilderness areas or Areas of Critical Environmental Concern were present.

Degree which effects are likely to be highly controversial: No controversial effects were identified during the analysis. Zapata Falls is located on lands owned and administered by the State Land Board and there are concerns over public use of these lands and liability concerns. There is a proposal in place to address these issues through a land exchange.

Degree to which effects are highly uncertain or involve unique or unknown risks: The BLM has a long history of managing public lands for recreation and resource specialists who evaluated the effects of the proposed action. Their determination was that there are no highly uncertain, unknown or unique risks associated with this project.

Consideration of whether the action may establish a precedent for future actions with significant impacts: The proposed action does not establish a standard of precedent for future actions in the Zapata Falls SRMA or on other BLM administered lands in the San Luis Resource Area.

Consideration of whether the action is related to other actions with cumulatively significant impacts: Consideration was given to whether this proposal would result in significant cumulative impacts and it was determined that it would not. Construction of this campground would add to the existing recreation developments in the Zapata Falls SRMA and provide a facility that would complement the three other campgrounds in the area.

Scientific, cultural, or historical resources, including those listed in or eligible for listing in the National Register of Historic Places: No known cultural resources eligible for the NRHP will be adversely affected by this action. Initially the Navajo Nation had concerns over this project and potential impacts to Mount Blanca and the Great Sand Dunes, which are sacred sites. After consultation with tribal representatives, it was determined that these sacred sites would not be negatively impacted by this proposal.

Threatened or endangered species and their critical habitat: The Zapata campground project area does not contain habitat for any federally listed threatened, endangered, or candidate species.

Any effects that threaten a violation of Federal, State or local law or requirements imposed for the protection of the environment: The proposed action conforms with the provisions of NEPA (U.S.C. 4321-4346) and FLPMA (43 U.S.C. 1701 et seq.) and is compliant with the Clean Water Act and The Clean Air Act, the National Historic Preservation Act and the Endangered Species Act.

