Albuquerque Wildlife Federation * Backcountry Horsemen of New Mexico * Doña Ana County Associated Sportsmen * Great Old Broads for Wilderness * National Wildlife Federation * New Mexico Archaeological Council * New Mexico Backcountry Hunters and Anglers * New Mexico Wilderness Alliance * New Mexico Wildlife Federation Southwest Consolidated Sportsmen * The Wilderness Society Wild Turkey Sportsmen Association

May 23, 2015

Champe Green
Supervisory Forest Planner, Cibola National Forest
2113 Osuna Rd. NE
Albuquerque, NM 87113

Re: Notice of Intent to revise the Cibola National Forest Mountain Ranger Districts Land and Resource Management Plan and prepare an associated Environmental Impact Statement.

Dear Mr. Green:

We appreciate the opportunity to submit the attached comments in response to the Notice of Intent to revise the Cibola National Forest Mountain Ranger Districts Land and Resource Management Plan and prepare an associated Environmental Impact Statement (EIS). Although the scoping deadline closed on April 3, 2015, we request that you please include this letter in the administrative record for this project.

In this letter, we highlight the ecological, geologic, cultural, historic, and recreational value of seven areas across the Cibola National Forest. Together, these high value conservation areas hold the potential to conserve some of New Mexico's most outstanding wildland, wildlife and traditional way of life. We request that these areas be protected in the final forest plan and expect the Forest Service to consider the information in this letter as it prepares the EIS.

Please do not hesitate to contact us if you have any questions.

Regards,

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The Cibola National Forest (CNF) is comprised of four mountainous ranger districts that span across central New Mexico and total approximately 1.64 million acres. The CNF's mountain districts are ecologically diverse and geologically unique. Much of the mountainous terrain on the CNF is rugged, remote, and wild offering outstanding opportunities for unconfined, primitive recreation. The landscape has a rich history of indigenous peoples, Spanish explorers, pioneers, outlaws and the settlement of the West. Many of the roadless lands on the CNF's mountain islands border roadless lands managed by the BLM, including a handful of wilderness study areas (WSAs). Together, the adjacency of these national forest and BLM lands make an inter-connected network of unroaded, undeveloped, high value conservation land.

From 2012 through 2014, a coalition of conservation, recreation, and sportsmen organizations conducted fieldwork on the CNF to identify unprotected areas of high conservation value. This field work resulted in the identification of seven priority conservation areas, six of which are located on the Magdalena Ranger District. Descriptions of the seven areas are provided in this letter. We request that the CNF recognize the high conservation value of the seven areas documented by this citizen coalition, and protect them by establishing plan components, including standards and guidelines, in multiple alternatives, including the preferred alternative, that would conserve their roadless character and natural values. We fully recognize that the CNF contains many more areas with important conservation values that deserve elevated protections in the forest plan. The coalition is requesting protections for these seven areas because we had limited resources to conduct fieldwork and document the conservation values, not because other areas do not merit consideration and protection.

I. Greater Apache Kid Area

The Apache Kid Wilderness, located in the San Mateo Mountains in Socorro County, is one of the most remote wilderness areas in New Mexico. Most of the mountain range is roadless, wild, isolated and natural. The lands that are immediately adjacent to and encircle the Apache Kid Wilderness have incredible conservation value. These surrounding lands total about 71,500 acres. There are 40,700 acres of high value conservation land to the north of the wilderness; 10,000 acres to the east; about 9,100 acres to the south; and 11,600 acres to the west. In total, the Greater Apache Kid Area, including the Apache Kid Wilderness and surrounding lands, totals about 113,400 acres.

The scenery found throughout the area that is adjacent to the Apache Kid Wilderness is exceptional, with numerous open canyons to explore, high ridge lines with dramatic views and an abundance of opportunities to experience wildness in solitude. The area's size, topography and vegetation is especially suited to hiking, backpacking, hunting and other recreational opportunities for those seeking remote, backcountry experiences. It boasts a variety of wildlife including mountain lion, black bear, elk, mule deer, and turkey.

In terms of cultural and historic values, the San Mateo Mountains, including the lands that comprise the Greater Apache Kid Conservation Area are "diverse and representative of nearly every prominent human evolutionary event known to anthropology" (Basham, 2011: 1). Widespread evidence suggests human occupation that dates back 14,000 years (Basham). The area is also rich with historic Western

lore and serves as a backdrop to legends of outlaw renegades like Butch Cassidy and the Wild Bunch. Notorious Apaches like Cochise, Geronimo, and Victorio, for whom Vicks Peak was named, have ties to the mountains (Basham). Perhaps most famous of these legendary characters to call the San Mateos home was the Apache Kid for whom the Apache Kid Wilderness was named and whose grave is located there.

a. Greater Apache Kid Area – North Side

i. Overview and Description of the Area

The north side of the Greater Apache Kid area is generally defined by the Apache Kid Contiguous Inventoried Roadless Area (IRA) immediately north of the Apache Kid Wilderness, in addition to other Forest Service land in the West Red Canyon area. The area is about 40,700 acres; some 24,360 acres -- or 60% -- overlap with the IRA. Specifically, the boundary of the north side of the area is defined by Roads 138 and 330 to the north, Road 96 to the west, and Roads 1011 and 378 to the east.

The San Mateo Mountains are likely the most remote landscape that can be explored in the CNF. The absence of any significant human development within or near the range has helped to keep the mountains isolated and natural and undeveloped. The few scattered imprints of man—like primitive and naturally reclaimed routes, stock tanks, and fencing—are substantially unnoticeable due to the area's rugged canyons, steep slopes, and vegetation. There are some old Forest Service system routes in the northern area that are entirely impassible due to severe washout, erosion, and large downed trees, and natural rehabilitation. Little evidence of dispersed camping off of these old routes exists. Plant and animal communities appear natural and ecological conditions appear normal.

Steep slopes found on the north side of the Greater Apache Kid Area pour down into the surrounding canyons, which host a variety of vegetation types including ponderosa, oak, aspen, spruce, fir, and all three major juniper types. There is a large variety of grasses and wildflowers including yellow ragweed, purple verbena, sideoats grama, blue grama, burro grass, silver beardgrass, wolftail, and purple threeawn.

The San Mateo Mountains are not known for containing considerable quantities of water, yet the lands to the north feature several fresh water springs that are not delineated on most maps. These springs undoubtedly help to contribute to the health and vitality of the many wildlife species common throughout the area.

Because of limited access, the majority of the north side is isolated from areas of human activity. The area does not have motorized activity occurring within its boundaries. There appear to be no private in-holdings within the area. At the time that we wrote this letter, there were no active or pending mining claims, operations, or leases in the area.

The area does not have any permanent structures. There are a few wooden cattle pens and stock tanks in the area, yet all of the cattle pens west of Drift Fence Canyon are in extremely poor condition, and

appear not to be in use. At the mouth of Drift Fence Canyon there is a Forest Service gate that could be closed with permittee access only.

The size and shape of the Greater Apache Kid Conservation Area, including its overlap with the Apache Kid Contiguous IRA, limited number of private inholdings and motorized use, and lack of any mining activity, assures manageability for conservation purposes.

ii. Recreational Values

The size, roadless characteristics, rugged character, remarkable views, vegetation, and proximity to the Apache Kid Wilderness create outstanding potential for solitude as well as unconfined and primitive forms of recreation. Outstanding opportunities for hiking, camping, backpacking, hunting, horseback-riding, and other forms of primitive recreation within the area offer adventure and demand self-reliance. The Forest Service notes in its hiking guide for the San Mateos that Drift Fence Trail (Trail #28), which starts inside the northern area and enters the Apache Kid Wilderness, "certainly offer[s] solitude, as the only users are ranchers hauling salt for cattle by horseback about once a year." The hiking guide also notes that Cold Spring Trail, which starts in the northern side and eventually leads into the Apache Kid Wilderness, is one of the most scenic trails in the San Mateo Mountains. The trail follows the bottom and west fork of Cold Spring Canyon, both of which contain scenic rock formations and views of the high country around Blue Mountain and Apache Kid Peak. Both East Red Canyon and West Red Canyon offer enticing possibilities for hikers and backpackers to explore the heart of the area. Large ponderosas preside over both canyons in addition to dramatic rock formations that jut upward from the canyon walls. Healthy stands of gamble oak are common in the area as are stands of plains cottonwood, which line the numerous creek beds. West Red Canyon is a place where bull elk can be observed bugling and mountain lions roam. The Forest Service in its hiking guide suggests that visitors watch the ground carefully for bear droppings along East Red Trail (Trail #31), noting that many nearby trees show claw marks inflicted by bears; trail sign damage also indicates heavy bear use in the canyon.

Opportunities to experience backcountry hunting are also rich in the area. Habitat is plentiful and well-functioning ecosystems sustain healthy herds of elk, mule deer, turkey, and quail. The Rocky Mountain Elk Foundation (RMEF, 2014) identified the area as elk habitat, and the National Wild Turkey Federation (NWTF, 2009) identified lands covered by this area as habitat for Merriam's turkey. The NMDGF's harvest records indicate that Game Management Unit (GMU) 17, which encompasses this area, offers good deer, high quality elk, and excellent turkey hunting (NMDGF, 2012).

The scenery found throughout the north side is exceptional with numerous open canyons to explore, high ridge lines with dramatic views, an excellent chance to view wildlife, and plentiful opportunities for those seeking quietude, solitude and wildness. The rugged rock formations and steep canyons that rise from flat plains are themselves spectacular and unusual, but the panoramic views from atop the canyon rims are breathtaking. From the canyon rims, views to the east are immense and awe-inspiring. The Magdalena Mountains rise dramatically from the basin floor, while to the west the Plains of San Agustin unfold off the northern reaches of the Gila National Forest. The area's gorges offer remarkable views of high canyon walls and open valley bottoms.

Nestled between the Withington and Apache Kid Wildernesses, the conservation area's remote location ensure solitude. Seclusion takes over once visitors leave the boundary roads. It is here where visitors enter a wild place untrammeled by humans and primeval in character. Moreover, there is a sense of vastness on a grand scale: at night, a complete lack of light pollution provides exceptional stargazing opportunities.

Access to the north side of the Greater Apache Kid Conservation Area is via Road 478, southwest of the town of Magdalena. West Red Canyon offers immediate access into the area, as do Roads 331A, 378, and 138.

There are two established Forest Service campgrounds adjacent to the north side area. West Red Canyon offers dispersed camping for those seeking a primitive experience, as does East Red Canyon and Grassy Lookout.

iii. Ecological, Geologic, Cultural and Historic Values

There are many special features and values found throughout the north side, including those described above. Those who explore the area will see craggy rock formations and steep canyons. Healthy populations of wildlife throughout the area add to its special character. In our field visits, we observed and saw signs of wildlife including mountain lion, black bear, elk, mule deer, coyote, turkey, and quail. East Red Canyon and West Red Canyon, in particular, boast numerous signs of scat from mountain lion, bear, and elk. Hundreds of bats were also observed in the open meadows of an area locals refer to as The Park. The north side conservation area is important breeding ground for mountain lion and serves as a migration corridor to the north and east (Menke, 2008). In addition, the area has been designated as critical habitat for Mexican Spotted Owl and, due to its species richness and ecological diversity, falls within a Nature Conservancy key conservation area (The Nature Conservancy (TNC, 1999 and 2004). It is also considered priority crucial habitat by the NMDGF in its Crucial Habitat Assessment Tool (CHAT) (NMDGF, 2013).

b. Greater Apache Kid Area – East Side

i. Overview and Description of the Area

The area is generally defined by the Apache Kid Contiguous IRA immediately east of the Apache Kid Wilderness and includes Cold Spring Canyon, Deep Canyon, San Juan Peak, Piñon Mountain, and The Gorge. The east side is just shy of 10,000 acres; about 7,500 acres - or 75% - overlap with the IRA. Specifically, the area's boundaries are defined by Road 138 and 330 to the north, Road 96 to the west, and Roads 1011 and 378 to the east.

Steep slopes throughout the area pour down into the surrounding canyons, providing for a variety of vegetation types including ponderosa, oak, aspen, spruce, fir, and all three major juniper types. Many species of grasses and wildflowers thrive in the expansion area including yellow ragweed, purple verbena, sideoats grama, blue grama, burro grass, silver beardgrass, wolftail, and purple threeawn. There are few non-native species within the unit, which only intensifies the feeling that the area is ruled by the forces of nature.

The area also enjoys an abundance of wildlife. The type of habitat found in this area sustains populations of mountain lion, black bear, elk, mule deer, great horned owl, and Mexican spotted owl. Though the region is not known for containing considerable water resources, the area features several fresh water springs that contribute to the health and vitality of the many wildlife species common throughout the area.

Like the north side, the lands to the east side of the Apache Kid Wilderness are predominantly natural and undeveloped. The few scattered imprints of man—primitive and naturally reclaimed routes, stock tanks, and fencing—are substantially unnoticeable due to the area's rugged canyons, steep slopes, and vegetation. There are a handful of Forest Service system routes adjacent to the area that are generally difficult to travel due to the rocky nature and lack of maintenance. Little evidence of dispersed camping off of these old routes exists. Plant and animal communities appear natural and ecological conditions appear normal.

The majority of the east side is isolated from human activity with limited access. The area does not allow motorized activity within its boundaries. In addition, there are a handful of private inholdings adjacent to the area and only one inholding within the area. At the time that we wrote this letter, there were no active or pending mining claims, operations, or leases with the lands to the east of the Apache Kid Wilderness. The size and shape of the east side of the Greater Apache Kid Conservation Area, including its overlap with the Apache Kid Contiguous IRA, limited number of private inholdings and motorized use, and lack of any mining activity, assures manageability for conservation purposes.

ii. Recreational Values

Due to its size, roadless characteristics, topography, vegetation, and proximity to the Apache Kid Wilderness, lands to the east of the nearby wilderness provide outstanding opportunities for solitude as well as unconfined and primitive forms of recreation including hiking, camping, backpacking, hunting, and horseback-riding.

Deep Canyon, Cold Spring Canyon, and The Gorge all present attractive possibilities for hikers and backpackers to explore. Cold Spring Canyon is one of the most visually appealing trails in the San Mateo Mountains. The canyon contains scenic rock formations and views of the high country around Blue Mountain and Apache Kid Peak. Large cottonwoods, boxelders, chokecherry, and walnut trees can be found throughout Cold Spring Canyon in addition to dramatic rock formations that jut upward from the canyon walls. Healthy stands of ponderosa pine can be found interspersed in the area. Signs of black bear and elk can be observed within Cold Spring Canyon.

Opportunities to experience backcountry hunting are extensive in the existing wilderness area, and they are also rich in those lands to the east. Habitat is plentiful and the area's ecosystems sustain healthy herds of elk, mule deer, turkey, and quail. The NWTF (2009) identified the area as habitat for Merriam's turkey. The RMEF (2014) identified the area as habitat for elk. The NMDGF's harvest records indicate that GMU 17, which encompasses the eastern unit, offers good deer, high quality elk, and excellent turkey hunting (NMDGF, 2012).

From atop the canyon rims, views to the east are immense and breathtaking. The Magdalena Mountains can be seen rising dramatically from the basin floor, while to the south and west, the Apache Kid Wilderness dominates the landscape, with Blue Mountain and Apache Kid Peak prominently featured. The various gorges throughout the area also afford remarkable views of high canyon walls and open valley bottoms. Furthermore, the sense of vastness translates well into nighttime when visitors are treated to stunning night skies and brilliant, untainted starscapes.

The feeling of seclusion takes hold when leaving the boundary roads. The area's remoteness and proximity to the Apache Kid Wilderness ensures a solitary experience where visitors can experience a place that is truly wild, untrammeled, and primeval.

Primary access to the east side is via Roads 984, 332, and 962 south of the town of Magdalena. There is one Forest Service campground adjacent to the east side. There are three trailheads adjacent to the boundary area – Indian Creek, Skeleton Ridge, and Cold Spring Canyon – which all offer immediate access to those seeking a primitive experience.

iii. Ecological, Geologic, Cultural and Historic Values

The scenery found throughout the area is exceptional, with numerous open canyons, arresting rock formations, and high imposing ridge lines. Panoramic views from atop the canyon rims are terrific, and the canyons themselves, not to be outdone, serve as reminders of our geologic past and present.

Healthy populations of wildlife found throughout the area add to its special character. In our field visits, we observed and saw signs of wildlife including mountain lion, black bear, elk, mule deer, coyote, turkey, and quail among other species. Thriving wildlife populations likely exist in Cold Spring Canyon based on the amount of lion, bear, and elk scat observed in the field. Deep Canyon and the Gorge are rife with evidence of wild turkey.

Lands on the east side of the wilderness area are important breeding ground for mountain lion (Menke, 2008) and has been designated as critical habitat for Mexican Spotted Owl. In addition, the area is a Nature Conservancy key conservation area due to its species richness and ecological diversity (TNC, 1999 and 2004) and is considered priority crucial habitat by the NMDGF in its CHAT (NMDGF, 2013).

c. Greater Apache Kid Area – South Side

i. Overview and Description of the Area

The area is generally defined by the Apache Kid Contiguous IRA immediately south of the Apache Kid Wilderness and includes Cañon de Quirino and Uvas Canyon. The south side is just over 9,000 acres; about 7,400 acres - or 82% - overlap with the IRA. Specifically, the boundaries of the unit are defined by Forest Service Road 225 on the east and 377 (Burma Road) on the west.

The area appears predominantly natural and undeveloped with few scattered imprints of man such as primitive and naturally reclaimed routes, stock tanks, and fencing, which are all substantially unnoticeable due to the area's rolling topography, canyons, vegetative diversity, natural reclamation,

and steep slopes. There are a few old system routes in the area that are entirely impassible due to severe erosion, large downed trees, and natural rehabilitation. Little evidence of dispersed camping off of these old routes exists. Plant and animal communities appear natural and ecological conditions appear normal.

This area encompasses the foothills and volcanic crags that sprawl south from majestic Vicks Peak. There is a wealth of plant diversity in the area including all three major juniper types (mountain, alligator, and one-seed juniper), as well as a large variety of grasses including vine mesquite, sideoats grama, blue grama, silver beardgrass, wolftail, sacaton, needle and thread grass, and burro grass. Other vegetation commonly seen includes Apache plume, desert spoon stool, narrowleaf yucca, Torrey yucca, piñon pine, desert holly, scarlet globemallow, purple aster, and penstemon. There are few non-native species within the unit, which only increases the feeling that the area is controlled by the forces of nature.

The southern area also affords habitat to an abundance of wildlife. The ecosystem here sustains healthy populations of mountain lion, black bear, turkey, bobcat, mule deer, pronghorn, elk, coyote, kestrel, quail, red tail hawk, golden eagle, great horned owl, and Mexican spotted owl. Cañon de Quirion in particular has plentiful signs of bear and mule deer.

The majority of the area is isolated from human activity with limited access. The area does not have motorized activity occurring within its boundaries. There is one private in-holdings within the unit but Road 907 would continue to offer access. At the time that we wrote this, there were no active or pending mining claims in the area. The size and shape of the south side of the Greater Apache Kid conservation area, including its overlap with the Apache Kid Contiguous IRA, limited number of private inholdings and motorized use, and lack of mining activity, assures manageability for conservation purposes.

ii. Recreational Values

The area's size, roadless characteristics, topography, vegetation, quality habitat and remarkable views provide exceptional backcountry opportunities for hikers, hunters, backpackers, campers, and horseback riders. The area's remoteness and proximity to the Apache Kid Wilderness ensures solitude as well as opportunities for unconfined and primitive forms of recreation. The area offers visitors adventure and demands self-reliance.

Cañon de Quirino and Uvas Canyon are exceptionally enticing to hikers and backpackers who want to explore the heart of the lands to the south of the Wilderness area. Cañon de Quirino is one of the most attractive canyons in the Greater Apache Kid conservation area. The canyon contains scenic rock formations and views of the high country around Vicks Peak, as well as unobstructed views to the south of the Chihuahuan Desert floor. Cañon de Quirino offers especially viable black bear, mule deer, and great horned owl habitat.

Backcountry hunting is exceptional in the lands to the south of the Apache Kid Wilderness where mule deer, turkey, and quail habitat is plentiful. The RMEF (2014) identified the area has elk habitat, and the NWTF (2009) identified the area as habitat for Merriam's turkey. The NMDGF's harvest records indicate that GMU 17, which encompasses the southern unit, offers good deer, high quality elk, and excellent turkey hunting (NMDGF, 2012).

The area's remoteness and proximity to the Apache Kid Wilderness ensures solitude. Once visitors leave the boundary roads, they experience complete seclusion and know that they are within a wild place untrammeled by humans and primeval in character. The scenery found throughout the southern area is exceptional, with numerous volcanic crags and plugs to explore, and surrounding narrow canyons that offer excellent chances to view wildlife and experience complete seclusion. From atop the canyon rims, views to the south are immense.

The Chihuahuan Desert floor stretches as far as the eye can see and the Gila National Forest unfolds to the west. To the north, Vicks Peak dominates the landscape. The various gorges in the area also offer remarkable views of high canyon walls and open valley bottoms. And like its counterparts, the lands to the south of the Apache Kid Wilderness area ideal for those seeking the tranquility and vastness of a pristine night sky.

Primary access to the lands to the south of the wilderness is via Road 225, as it travels south from Springtime Campground. Luna Park Campground offers immediate access into the area, as does FS Road 377 (Burma Road). The Luna Park Campground is the only established Forest Service campsite adjacent to the area and is located on its east side.

iii. Ecological, Geologic, Cultural, and Historic Values

The striking and unusual rock formations, steep canyons, and panoramic views all contribute to the special character of the southern area. Healthy populations of wildlife throughout the area also add to the special character. The south side area is important breeding ground for mountain lion (Menke, 2008) and is within a Nature Conservancy key conservation area due to its species richness and ecological diversity (TNC, 1999 and 2004).

d. Greater Apache Kid Area – West Side

i. Overview and Description of the Area

The area is generally defined by the Apache Kid Contiguous IRA immediately west of the Apache Kid Wilderness and includes Kelly Canyon, San Mateo Canyon, and Holdup Canyon. The west side is about 11,600 acres; some 10,200 acres -- or 90% -- overlap with the IRA.

Like the rest of the Greater Apache Kid area, the lands to the west side of the wilderness appear predominantly natural and undeveloped with few scattered imprints of man's presence -- primitive and naturally reclaimed routes, stock tanks, and fencing -- substantially unnoticeable due to the rugged canyons, steep slopes, natural reclamation, and vegetation. The presence of large predators like mountain lion and black bear, in addition to healthy herds of mule deer and elk, indicate that human

activity and use in the area is not substantial. Plant and animal communities appear natural and ecological conditions appear normal. There are a few system routes adjacent to the area that are generally difficult to travel due to lack of maintenance and the rocky nature of the system roads.

Steep slopes in the eastern portion of the area pour down into the surrounding canyons, providing for a variety of vegetation, including ponderosa, oak, and all three major juniper types. There is a large variety of grasses including vine mesquite, sideoats grama, blue grama, silver beardgrass, wolftail, needle and thread grass, and burro grass. Other vegetation includes Apache plume, desert spoon stool, narrowleaf yucca, Torrey yucca, pinyon pine, desert holly, scarlet globemallow, purple aster, and penstemon.

Wildlife habitat is also abundant here. One can find healthy populations of mountain lion, black bear, elk, mule deer, great horned owl, and Mexican spotted owl in addition to countless other species. The San Mateo Mountains are not known for having water resources, but the west side area features fresh water springs.

The majority of the west side area is isolated from areas of human activity, with limited access and very few encumbrances. The area does not have motorized activity occurring within its boundaries. There is one private in-holding adjacent to the area and another within the area that is accessible via Road 907. At the time that we wrote this letter, there were no active or pending mining claims, operations, or leases in the area. The size and shape of the west side of the Greater Apache Kid conservation area, including its overlap with the Apache Kid Contiguous IRA, limited number of private inholdings and motorized use, and lack of any mining activity, assures manageability for conservation purposes.

ii. Recreational Values

Like the rest of the Greater Apache Kid Area, those lands on the west side of the wilderness offer unparalleled opportunities to experience backcountry recreation. Due to its size, its roadless characteristics, remarkable views, rugged topography, vegetation, and proximity to the Apache Kid Wilderness, those lands immediately west of the wilderness possess outstanding opportunities for solitude and unconfined or primitive forms of recreation including hiking, camping, backpacking, hunting, and horseback-riding. The area demands self-reliance while rewarding visitors with a memorable adventure.

Maverick Canyon, Kelly Canyon, Holdup Canyon, and San Mateo Canyon all present attractive possibilities for hikers and backpackers to explore. The vegetation common throughout these canyons consists of pinyon juniper and gray oak. Views of the high country around Blue Mountain, San Mateo Mountain and Apache Kid Peak are prominent. Signs of black bear and elk can be observed within Kelly Canyon and Maverick Canyon. The Forest Service notes in its hiking guide that the San Mateo Trail, which starts in the area and enters into the Apache Kid Wilderness, is very remote, very rough, and primitive, and that solitude is the trail's most attractive feature. The hiking guide also notes that the Maverick Trail, which starts inside the conservation area and enters into the Apache Kid Wilderness, is seldom used and also offers a great deal of solitude.

Opportunities to experience backcountry hunting are also rich in the west side. Habitat is plentiful, with well-functioning ecosystems able to sustain healthy herds of elk, mule deer, turkey, and quail. The RMEF (2014) identified the area as having elk habitat. The NMDGF's harvest records indicate that GMU 17, which encompasses the western unit, offers good deer, high quality elk, and excellent turkey hunting (NMDGF, 2012).

The area's remoteness and proximity to the Apache Kid Wilderness ensures solitude. Once visitors leave the boundary roads, they experience seclusion and know that they are within a place untrammeled by humans and primeval in character. The scenery found throughout the west side is exceptional, with numerous deep canyons to explore, excellent chances to view wildlife, and an abundance of opportunities to be alone and experience wildness. Furthermore, there is a sense of vastness on a grand scale when in the area, so much so that at night there is a complete lack of light pollution, which offers exceptional stargazing.

Primary access to the area is via FS Road 377 (Burma Road) and 140, north of the town of Monticello.

There are no established Forest Service campgrounds adjacent to the west side. However, there are four trailheads within or adjacent to the area – San Mateo Canyon, Shipman Canyon, Maverick Canyon, and Post Trail – which all offer easy access for those seeking a primitive experience.

iii. Ecological, Geologic, Cultural, and Historic Values

There are many special features and values within the area, starting with the rugged canyons, striking rock formations and high ridges that contrast so dramatically with the surrounding plains. Panoramic views from atop the canyon rims are terrific, as are the sights as one explores the numerous canyons.

Healthy populations of wildlife found throughout the area add to its special character. In our field visits, we observed and saw signs of wildlife including mountain lion, black bear, elk, mule deer, pronghorn, coyote, turkey, quail, great horned owl, and Mexican spotted owl. Kelly Canyon, in particular boasts numerous signs of scat from bear, mountain lion, mule deer, and elk. Signs of quail and wild turkey can also be found throughout the unit.

The area is important breeding ground for mountain lion (Menke, 2008) and is critical habitat for Mexican Spotted Owl. It is within a Nature Conservancy key conservation area due to its species richness and ecological diversity (TNC, 1999 and 2004) and is considered priority crucial habitat by the NMDGF in its CHAT (NMDGF, 2013).

II. Withington Wilderness - East Side Area

a. Overview and Description of the Area

Immediately east of the Withington Wilderness is a high value conservation area that totals about 9,940 acres and comprises several canyons, including the stunning Big Rosa Canyon, as well as Whitecap Canyon. The boundaries of the area are generally defined by the White Cap IRA immediately east of the

Withington Wilderness. This conservation area has an 81% overlap – or 8,071 acres – with the IRA. Specifically, the boundary is defined by Road 138 to the west and Road 330 to the south.

The San Mateo Mountains are the most remote landscapes that can be explored in the Cibola National Forest. Located in the northern portion of the San Mateo Mountains, the topography here is gentler than in the south. From atop Whitecap Canyon, sweeping vistas unfold to the northeast of the Magdalena Mountains. The absence of any significant human development within or near the range has helped to keep the mountains remote and natural. The scenery found throughout the area is exceptional, with numerous open canyons to explore, high ridge lines with dramatic views and an abundance of opportunities to be alone and experience wildness. Largely due to its size, roadless characteristics, topography and vegetation, this area provides outstanding hiking, backpacking, hunting and other recreational opportunities for those seeking solitude and a remote, wild experience. It boasts a few springs in the canyon bottoms, as well as a variety of wildlife including mountain lions and black bear.

The Withington area appears predominantly natural and undeveloped, with few scattered imprints of man, such as primitive and naturally reclaimed routes, stock tanks, and fencing. These are substantially unnoticeable, however, due to the steep slopes, ridge lines, vegetative cover, and natural reclamation. Plant and animal communities appear natural and ecological conditions appear normal.

The conservation area is characterized by deeply incised canyons resulting from the uplift, faulting and weathering of an ancient volcanic cauldron; these canyons are both beautiful and geologically interesting. The panoramic views from atop the canyon rims are spectacular, as are the sights as one walks through the secluded canyons bottoms.

The abundance of wildlife throughout the area gives the feeling of complete naturalness. Habitats found in this area sustain healthy populations of mountain lion, black bear, elk, and mule deer. In our field visits, we observed and saw signs of wildlife including mountain lion, black bear, elk, mule deer, coyote, turkey, and quail. The upper portion of Big Rosa Canyon, in particular, boasts numerous signs of scat from mountain lion, bear, and elk. A group of seven bull elk were also observed in a canyon north of the Rosedale Camping Area.

The area has a variety of native vegetation, including ponderosa, oak, aspen, spruce, and fir, all three major juniper types, yellow ragweed, purple verbena, sideoats grama, blue grama, burro grass, silver beardgrass, wolftail, and purple threeawn. Very large alligator juniper trees – sometimes reaching upwards of sixty feet – can be found in the area, particularly near the Whitecap ridgeline.

The majority of the conservation area is isolated from areas of human activity, with limited access. The area does not have motorized activity occurring within its boundaries. There appear to be no private in-holdings within the unit. At the time that we wrote this letter, there were no active or pending mining claims, operations, or leases in the area. The size and shape of the Withington Wilderness East Side Area, including its overlap with the Whitecap IRA, lack of private inholdings and mining activity, assures manageability for conservation purposes.

b. Recreational Values

Outstanding opportunities for hiking, camping, backpacking, hunting, horseback-riding, and other forms of primitive recreation are excellent in the area given its natural and rugged character, proximity to the Withington Wilderness, high quality habitat, remarkable views, easy access by bounding roads, and size. The area offers visitors adventure and demands self-reliance.

Big Rosa Canyon offers enticing possibilities for hikers and backpackers to explore lands to the east of Withington Wilderness. The canyon climbs to the southwest, gradually gaining in elevation as it reaches the crest of the San Mateo Mountains. Open meadows, dispersed ponderosa and plains cottonwood are all common within Big Rose Canyon.

The Whitecap ridgeline also offers exceptional opportunities for primitive recreation. For instance, visitors can experience elk bugling throughout the Whitecap ridgeline area; black bear can be spotted foraging on the abundant supply of acorns. From atop the ridgeline, the views of the Magdalena Mountains to the east are immense. To the south, views of the southern portion of the San Mateo Mountains, including Blue Mountain within the Apache Kid Wilderness are visible.

Opportunities to experience backcountry hunting are also rich in the area. Habitat is plentiful, with well-functioning ecosystems able to sustain healthy populations of elk and mule deer. The RMEF (2014) identified the area as elk habitat, and the NWTF (2009) identified the area as habitat for Merriam's turkey. The NMDGF's harvest records indicate that GMU 17, which encompasses the area, offers good deer, high quality elk, and excellent turkey hunting (NMDGF, 2012).

The area's remoteness and proximity to the Withington Wilderness provide for isolation and solitude. Once visitors leave the boundary roads, they know that they are within a wild place primeval in character. Moreover, there is a sense of vastness on a grand scale when in the area, so much so that at night there is a complete lack of light pollution, which affords exceptional stargazing.

Primary access to the area is via Road 330, south of the town of Magdalena. Roads 56, 138 and 1052 also offer access. The Rosedale Camping Area Canyon offers immediate access. Opportunities exist for dispersed camping in Rosedale Canyon and Big Rosa Canyon. Both areas are undeveloped, with no facilities available, and they both provide immediate access to those seeking a primitive, backcountry experience.

c. Ecological, Geologic, Cultural and Historic Values

The area lies within a volcanic caldron, underlain by ash flow tuffs and lavas dating back to about 24 million years ago. Uplift, faulting and weathering of these rocks during the past 20 million years has resulted in the incision of deep canyons along the flanks of the range.

The steep, northeastern slopes of this range dramatically drop down from the Withington Wilderness into Big Rosa Canyon. The canyon then breaks upward to form the Whitecap ridgeline. The Whitecap ridgeline and surrounding drainages provide for a variety of vegetation, including ponderosa, oak, aspen, spruce, and fir, and all three major juniper types. There is an assortment of grasses and

wildflowers, including yellow ragweed, purple verbena, sideoats grama, blue grama, burro grass, silver beardgrass, wolftail, and purple threeawn. Old growth alligator juniper trees are within the area.

The area is also rich with wildlife. Healthy populations of mountain lion, black bear, elk, and mule deer inhabit these mountains. The high value lands to the east of Withington Wilderness are important breeding ground for mountain lion and serve as a corridor for mountain lion movement to the north and east (Menke, 2008). The area also encompasses Mexican Spotted Owl critical habitat. The area is within a Nature Conservancy key conservation area due to its ecological diversity and species richness (TNC, 1999 and 2004), and is considered priority crucial habitat by the NMDGF in its CHAT (NMDGF, 2013). Although the San Mateo Mountains are not known for containing considerable quantities of water, the Withington Area is unusual in that it features fresh water springs that contribute to the vitality and abundance of wildlife and add a certain beauty and complexity to the area.

Basham (2011) notes that the lands within which this area is located is "diverse and representative of nearly every prominent human evolutionary event known to anthropology." Widespread evidence suggests human occupation that dates back 14,000 years (Basham). The area is also rich with historic Western lore and serves as a backdrop to legends of outlaw renegades like Butch Cassidy and the Wild Bunch. Notorious Apaches like Cochise, Geronimo, and Victorio, for whom Vicks Peak was named, have ties to the mountains (Basham).

III. Panther Canyon Area

a. Overview and Description of the Area

The Panther Canyon conservation area is 28,900 acres and is located immediate southwest of the Withington Wilderness and northwest of the Apache Kid Wilderness in the San Mateo Mountains. The area comprises numerous canyons, including Panther Canyon, Chimney Canyon, Whitewater Canyon, and Spring Hollow Canyon. Panther Canyon itself is a major tributary on the north side of Chimney Canyon. The boundaries of the unit are defined by Road 549 to the west, Road 138 to the northeast, Road 96 to the east and southeast, Roads 73 and 72 to the south, as well as private land to the south. While the Panther Canyon Area generally aligns with the Forest Service's Chapter 70 preliminary wilderness inventory, the boundaries do not align precisely.

From atop Panther Canyon, sweeping vistas unfold to the south of Bay Buck Peaks. The San Mateo Mountains are one of the most remote landscapes that can be explored in the Cibola National Forest. The absence of any significant human development within or near the range has helped keep the mountains remote and natural. The scenery found throughout the area is exceptional, with numerous open canyons to explore, high ridge lines that offer dramatic views and an abundance of opportunities to be alone and experience wildness. Largely due to its size, topography and vegetation, the Panther Canyon area provides remarkable hiking, backpacking, hunting and other recreational opportunities for those seeking seclusion and challenge. The unit is rich with wildlife including mountain lions and black bear as well as a number of springs in the valley bottoms.

Within the area as a whole, plant and animal communities appear natural and ecological conditions appear normal. The area is undeveloped, with the few scattered imprints of man – such as primitive and naturally reclaimed routes, stock tanks, and fencing – substantially unnoticeable due to the rugged canyons, steep slopes, and vegetative cover. The presence of large predators, such as mountain lion and black bear, in addition to healthy herds of mule deer and elk, indicate that human activity in the area is relatively insubstantial. There are a number of old tracks in the unit that are entirely impassible due to some combination of severe washout, erosion, large downed-trees, and natural rehabilitation.

The majority of the Panther Canyon conservation area is isolated from areas of human activity, with limited access and very few encumbrances. The area does not have motorized activity occurring within its boundaries. At the time we wrote this letter, there were no active or pending mining claims, operations, or leases in the area. There is one small private in-holding within the unit, at the end of Rad 219A; however, the route is in extremely poor condition with numerous washouts, downed trees, and is overgrown with vegetation up to two feet high in places. It appears that Road 219A receives little to no use from recreational users or the private property owner due to the route's condition and lack of dispersed recreational campsites stemming off of the route.

The area has a variety of native vegetation, including ponderosa, oak, aspen, spruce, and fir, and all three major juniper types. There is a large variety of grasses and wildflowers including yellow ragweed, purple verbena, sideoats grama, blue grama, burro grass, silver beardgrass, wolftail, and purple threeawn. There are few non-native species. The area also enjoys an abundance of wildlife. In our field visits, we observed and saw signs of wildlife including mountain lion, bear, elk, mule deer, coyote, turkey, and quail. Keeping a keen eye on the ground, scat from mountain lion, bear, and elk can be spotted throughout Chimney Canyon and Whitewater Canyon. A herd of sixty elk, with scores of calves, were also observed in the rolling hill country south of Bay Buck Peaks.

The size and shape of the Panther Canyon area, limited number of private inholdings, lack of any mining activity, assures manageability for conservation purposes.

b. Recreational Values

Outstanding opportunities for hiking, camping, backpacking, hunting, horseback-riding, and other forms of primitive and unconfined recreation are excellent in the area given its natural and rugged character, high quality habitat, remarkable views, easy access by bounding roads, and size. The area offers visitors adventure and demands self-reliance.

Chimney Canyon offers enticing possibilities for hikers and backpackers to explore the other seldom visited canyons to the east, which all gradually gain in elevation as the canyons reach the crest of the northern half of the San Mateo Mountains. Large ponderosa trees can be found throughout Chimney Canyon, alongside thick stands of undulating blue grama grasses. Whitewater Canyon affords equally exceptional opportunities for primitive recreation. Significant oak stands – in some instances reaching over forty feet in height – are common in the canyon bottom. Bull elk can be heard bugling within Whitewater Canyon, and black bear can be spotted foraging on the abundant supply of acorns.

Opportunities for backcountry hunting are also rich in the area. Habitat is plentiful, with well-functioning ecosystems able to sustain healthy herds of elk and mule deer. The RMEF (2014) identified the area has elk habitat, and the NWTF (2009) identified the area as habitat for Merriam's turkey. The NMDGF's harvest records indicate that GMU 17, which encompasses the Panther Canyon area, offers good deer, high quality elk, and excellent turkey hunting (NMDGF, 2012).

The area's remoteness and proximity to the Withington Wilderness creates an elevated feeling of isolation and solitude. Once visitors leave the boundary roads, they experience complete solitude and know that they are within a wild place, untrammeled by humans and primeval in character. From atop the various canyon rims, views to the west are immense and breathtaking. The Plains of San Agustin unfold to the north off the northern reaches of the Gila National Forest. To the south, views of the southern portion of the San Mateo Mountains, including Blue Mountain within the Apache Kid Wilderness, are visible, as is the northern section of the Black Range. There is a sense of vastness on a grand scale when in the area, so much so that at night there is a complete lack of light pollution, which offers exceptional stargazing.

Access to the Panther Canyon Area is via Road 549, southwest of the town of Magdalena. Hughes Miles Trail offers immediate access into the area, as do Roads 219, 72, and 73. Bear Trap Canyon Campground and Hughes Mill Campground are both located on the west side of the area, providing immediate access to those seeking a primitive, backcountry experience.

c. Ecological, Geological, Cultural and Historic Values

The Panther Canyon conservation area is within a volcanic caldron and underlain by ash flow tuffs and lavas dating back to about 28 to 24 million years. The most spectacular of these deposits is the Vick's Peak tuff, the 1,000-foot high cliffs forming the southernmost escarpment of the range. Uplift, faulting and weathering of these rocks during the past 20 million years has resulted in the incision of deep canyons along the flanks of the range.

Steep slopes in the northeastern portion of the area cascade down into the area's canyons, providing for a variety of native vegetation, including ponderosa, oak, aspen, spruce, and fir, and all three major juniper types. There is a large variety of grasses and wildflowers noted in the overview section.

The Panther Canyon area also boasts an abundance of wildlife. The area's habitat sustains healthy populations of mountain lion, black bear, elk, and mule deer. The area is important breeding ground for mountain lion and serves as a corridor for mountain lion movement to the north and west (Menke, 2008). The area also encompasses several thousand acres of critical habitat for Mexican Spotted Owl. It is within a Nature Conservancy key conservation area due to its species richness and ecological diversity (TNC, 1999 and 2004), and is considered priority crucial habitat by the NMDGF in its CHAT (NMDGF, 2013).

The San Mateo Mountains are not known for containing considerable quantities of water, yet the Panther Canyon Area features several fresh water springs that are not delineated on available maps.

These springs undoubtedly help to contribute to the health and vitality of the many wildlife species common throughout the area.

Basham notes that the lands that comprise the Magdalena Ranger District, which includes our Panther Canyon area, are "diverse and representative of nearly every prominent human evolutionary event known to anthropology" (Basham, 2011:1). Widespread evidence suggests human occupation dates back 14,000 years (Basham). The area is also rich with historic Western lore and serves as a backdrop to legends of outlaw renegades like Butch Cassidy and the Wild Bunch. Notorious Apaches like Cochise, Geronimo, and Victorio, for whom Vicks Peak was named, have ties to the mountains (Basham).

IV. Magdalena Mountains Area

a. Overview and Description of the Area

The Magdalena Mountains Conservation Area is about 49,300 acres and is located approximately twenty miles west of the town of Socorro above the Rio Grande Valley. The unit comprises several major canyons, including Sixmile Canyon, South Canyon, and the east and west forks of Sawmill Canyon. Other major drainages in the area include Milligan Gulch, Ryan Hill Canyon, and Copper Canyon. The area has a 67% overlap – or 33,173 acres – with the Ryan Hill IRA. The boundaries of the area are defined by the congressionally-designated Langmuir Research Site, with additional acreage to the south and north of Road 235 as it ascends Water Canyon, as well as lands west of the research site. Lands to the north of Road 235, including Copper Canyon, are also within the area, as are other lands west of the research site and south of Road 45. The Devil's Backbone and Devil's Reach WSAs, both managed by the BLM, are immediately adjacent to the Magdalena Mountains area. The size of the combined Forest Service and BLM roadless areas is nearly 59,500 acres.

The Magdalena mountain range is approximately 18 miles long and is a fairly remote landscape. The absence of any significant human development within or near the range has helped to keep the mountains isolated and natural. The scenery found throughout the area is exceptional, with numerous secluded canyons to explore, towering ridge lines that afford dramatic views and an abundance of opportunities for solitude. Largely due to the size of the area, topography, vegetation, and brilliant night sky, the Magdalena Mountains conservation area provides remarkable hiking, backpacking, hunting, star gazing, and other recreational opportunities for those seeking remote and wild experiences. It boasts a variety of wildlife including mountain lions and black bear as well as a number of springs in the valley bottoms.

The Magdalena Mountains area appears predominantly natural and undeveloped, with the scattered imprints of man substantially unnoticeable. Plant and animal communities appear natural and ecological conditions appear normal. The establishment of the Langmuir Research Site by Congress in 1980 has helped to preserve the area's overall naturalness. Public Law 96-550 specifically outlined that "roads shall be limited to those necessary for scientific research activities," and that "motor vehicle use shall be restricted to roads designated in the plan."

The variations in elevation provides for a large diversity of vegetative types. Scrubland, pinyon-juniper woodland, ponderosa pine forest, spruce-fir forest, grassland, and riparian areas are all represented. Grasses include black and sideoats grama, poverty threeawn, fluffgrass, burrograss, and galleta grass at the lower elevations. Higher up, grass species include blue and hairy grama, little blue stem, and Arizona fescue. Large aspen stands can be found throughout the unit, in addition to ponderosa, spruce and Douglas-fir. Shrubs that are mixed in the grasslands include sotol, cholla, yucca, Apache plume, mountain mahogany, shrub live-oak, gambel oak, and alligator juniper.

The area contains a variety of high-quality habitats, which is a primary reason that an abundance of wildlife exists in the area. Observations and signs of mountain lion, pronghorn, mule deer, black bear, coyote, red and gray fox were surveyed in the field. Bird species common to the region include bald and golden eagle, prairie falcon, kestrel, Mearn's quail, and species of hawks and owls.

The majority of the Magdalena Mountains area is isolated from areas of human activity, with limited access and very few encumbrances. Any human development or structures that do exist are not substantially noticeable. There are a number of old Forest Service roads in the area that are closed to motorized use, and most of these old routes have naturally rehabilitated. In terms of improvements beyond roads, the area does not have any permanent structures, and the occasional signs of human activity, such as abandoned routes, stock tanks, and fencing, are substantially unnoticeable due to the rugged canyons, vegetative diversity, natural reclamation, and steep slopes. Old prospects and mining adits dot the mountains from the days when Magdalena was a mining town. Most of these impacts are barely evident today, even up close, because many have collapsed, covered by plant growth, and located in canyons where the topography screens them. Non-native species are rare.

At the time that we wrote this letter, there are no active or pending mining claims, operations, or leases in the area. There are three private in-holdings. The principle research site, including all associated facilities, are outside of the Magdalena Mountains conservation area. Access to the Langmuir Research Site and its facilities will remain open. The access routes and facilities themselves will be cherry-stemmed.

The size and shape of the Magdalena Mountains conservation area, including its overlap with the IRA and Langmuir Research Area, small number of private inholdings, lack of any mining activity, assures manageability for conservation purposes.

b. Recreation Values

Outstanding opportunities for hiking, camping, backpacking, hunting, horseback-riding, star-gazing and other forms of primitive recreation are excellent in the area given its natural and rugged character, high-quality habitat, remarkable views, easy access by bounding roads, and size. The area offers visitors adventure and solitude, and demands self-reliance. Once visitors leave the boundary roads, they experience complete solitude and know that they are within a place untrammeled by humans and primeval in character. The adjacent BLM Devil's Backbone and Devil's Reach WSAs add to the area's isolation and solitude, as do the breath-taking night skies.

Both Sixmile Canyon and South Canyon offer outstanding possibilities for hikers and backpackers to explore the heart of the area, as well as the opportunity to summit some of the tallest peaks in the range. Large ponderosa trees, stands of quaking aspens, and large meadows can be found throughout the area. As the canyons climb upward, they become quite steep in places, making traveling to the peak very challenging. Many scenic rock formations form the canyon walls along Six Mile Canyon Trail. Ryan Hill Canyon and Sawmill Canyon equally afford exceptional opportunities for primitive recreation. Hikers on Ryan Hill Trail will encounter an Arizona Alder designated a National Champion Big Tree near Italian Spring. Interesting rock formations are found on both sides of the trail along the bottom of Sawmill Canyon.

Opportunities to backcountry hunt and view wildlife are rich in the area. The habitat found in the conservation area is plentiful, with well-functioning ecosystems able to sustain healthy herds of elk and mule deer. Bull elk were observed throughout Sawmill Canyon, and a black bear was observed near Italian Peak. The RMEF (2014) identified important over-winter and calving ranges for elk within the conservation area, and the NWTF (2009) identified the area as habitat for Merriam's turkey. The NMDGF's harvest records indicate that GMU 17, which encompasses the Magdalena Mountains, offers good deer, high quality elk, and excellent turkey hunting (NMDGF, 2012).

Excellent views of the San Mateo Mountains to the west and Sawmill Canyon and Timber Ridge to the east can be found all along Hardy Ridge Trail. The Forest Service remarks in its hiking guide that "due to the undeveloped nature of the trail itself, and its remote location, the trail imparts quite a feeling of solitude." All along the Timber Peak Trail, one is afforded grand views on all sides. This trail follows the highest ridge in the southern portion of the Magdalena Mountains and has some of the best views available in the mountain range. The Sierra Ladrones WSA can be seen jutting from the basin floor to the north, while the hulking San Mateo Mountains unfold to the southwest. To the east the Rio Grande Valley can be seen stretching from the towns of Socorro all the way to Truth or Consequences. On clear days, the vistas seem to stretch on indefinitely – allowing the viewer to observe the White Mountain Wilderness in south-central New Mexico over 100 miles away. Views of distant peaks such as Sierra Blanca, Mt. Taylor, the Sandia, Manzano, and Jemez Mountains are plentiful along the North Baldy Trail. Hiking along Copper Canyon Trail, one will encounter a variety of interesting tree species, such as walnut, boxelder, cottonwood, and alder, in the bottom of Copper Canyon due to the water flow.

Primary access to the area is via Road 235 along with Roads 37, 235B, 235C, and 235E. There are currently two Forest Service campsites located immediately adjacent to the area. Both the Water Canyon Campground and Group Campground sites are located on the north side of the area, providing immediate access to those seeking a primitive experience. There are also several designated non-motorized trails in the area.

c. Ecological, Geologic, Cultural and Historic Values

In addition to those values mentioned above, there are many other special features and values within the Magdalena Mountains area.

The Magdalena Mountains are part of the basin and range formation. The uplifted halves of east-tilted blocks form the crest of this mountain. These blocks are superimposed on giant volcanic collapse structures (calderas) that formed 29-32 million years ago in the Oligocene time period. During that time, these structures were as much as 12 miles across. As the Earth's crust has extended in the last 28 million years, the blocks have tilted upward, causing portions within them to break and tilt at even greater angles. This complex geological past is what today makes the scenery of the Magdalena Mountains so breathtaking, and an interesting place to explore. The jagged rock formations in the area are unusual and eye-catching, and make the mountain distinct from the surrounding landscape.

The Magdalena Mountains conservation area contains a variety of high-quality habitats. Observations and signs of mountain lion, pronghorn, mule deer, black bear, coyote, red and gray fox, were all surveyed in the field. Although not spotted in the field, desert bighorn sheep are also found in the Magdalenas. They were reintroduced in 1997 after having been hunted to extinction in the mountains by around 1900. The area encompasses several thousand acres of Mexican Spotted Owl critical habitat. It is important habitat for mountain lion and serves as a corridor for mountain lion movement to the east and west (Menke, 2008). The area is considered important for species movement across the landscape (Theobald, 2010). The area is within a Nature Conservancy key conservation area due to its ecosystem diversity and species richness (TNC, 1999 and 2004) and is considered priority crucial habitat by the NMDGF in its CHAT (NMDGF, 2013).

In the summer, during New Mexico's monsoon season, thunderheads build over the Magdalenas and offering an impressive display of lightning over South Baldy peak, famous among meteorologists. The area is also known among professional and amateur astronomers alike for its starry breathtaking night sky. The designation of the Langmuir Research Site, which is a multi-use research facility that studies both atmospheric and astrophysics, is testament to the outstanding opportunities for scientific research in the area.

In terms of cultural and historic values, Basham (2011: 1) notes that the lands within which this area is located is "diverse and representative of nearly every prominent human evolutionary event known to anthropology." Widespread evidence suggests human occupation that dates back 14,000 years (Basham). The area is also rich with historic Western lore and serves as a backdrop to legends of outlaw renegades like Butch Cassidy and the Wild Bunch. Notorious Apaches like Cochise, Geronimo, and Victorio, for whom Vicks Peak was named, have ties to the mountains (Basham).

V. Scott Mesa – Bear Mountains Area

a. Overview and Description of the Area

The Scott Mesa area, about 48,300 acres located in the Bear Mountains, is just north of the town of Magdalena in Socorro County. The Scott Mesa area is generally defined by the Scott Mesa IRA with additional acreage north of Road 354P, south of 354L, and south of 123F. About 79% of the area – or 38,272 acres – overlaps with the IRA. The area comprises several major ridgelines and canyons, including

Baca, Las Cabras, Bear Springs, and La Jencia canyons. Additional land is located to the east of the core area. This area is defined by a power line on the west side that runs diagonally, road 354 in the northwest corner, the 45,308-acre Sierra Ladrones WSA to the east, and the forest boundary to the north. Additionally, the 230,000 acre Sevilleta National Wildlife Refuge adjoins the Sierra Ladrones WSA. The proximity of the Scott Mesa area to the BLM WSA and Wildlife Refuge greatly enhances the region's overall naturalness and opportunities to experience primitive forms of recreation.

The absence of any significant human development within or near the range has helped to keep the mountains isolated and natural. The scenery found throughout the area is exceptional, with numerous open canyons and ridgelines that afford dramatic views and an abundance of opportunities to be alone, explore, and experience wildlands. Largely due to the size of the area, rugged topography and vegetation, the Scott Mesa area provides remarkable hiking, backpacking, hunting, horseback riding and other dispersed recreational opportunities for those seeking a remote, backcountry experiences. It boasts a variety of wildlife including mountain lions, black bear, mule deer, and numerous bird species. The Bear Mountains are not known for containing considerable quantities of water, yet the Scott Mesa area cradles several fresh water springs in the various canyons. These springs undoubtedly help to contribute to the health and vitality of the many wildlife species common throughout the area.

The Scott Mesa Area appears predominantly natural and undeveloped, with the scattered imprints of man substantially unnoticeable. Plant and animal communities within the area appear natural and ecological conditions appear normal. The area does not have any permanent structures, and the occasional signs of human activity, such as abandoned routes, stock tanks, and fencing, are substantially unnoticeable due to the rugged canyons, vegetative diversity, natural reclamation, and steep slopes. There are few non-native species within the unit, which only increases a feeling of apparent naturalness and that the area is ruled by the forces of nature.

The variations in elevation provides for a diversity of vegetative types. Scrubland, pinyon-juniper woodland, Gambel oak, mountain mahogany and grassland areas are all represented. Grasses include black and sideoats grama, poverty threeawn, fluffgrass, burrograss, and galleta grass. Shrubs that are mixed in the grasslands include sotol, cholla, yucca, and Apache plume.

b. Recreational Values

A visitor can feel alone and remote just about anywhere in the area due to its rugged character and size. The adjacency of the Sierra Ladrones WSA enhances the sense of isolation and solitude. When in the area, a visitor feels as if they are the only one in a vast expanse of ridges and canyons. Because of its remoteness, the area has remarkable nighttime darkness which makes it particularly good for amateur astronomy and stargazing.

Visitors have opportunities to experience primitive, dispersed recreation such as hiking, bird watching, camping, backpacking, hunting, and horseback-riding. These opportunities are enhanced by the presence of high-quality habitat, remarkable views, easy access by bounding roads, and size. The area offers visitors adventure and solitude, and demands self-reliance. There are no developed facilities within the area.

The crest of the Bear Mountains offers grand views in all directions. The Sierra Ladrones WSA is one of the most prominent features in the region – jutting out of the basin floor to the east, while the massive Magdalena Mountains unfold to the immediate south. To the north, the Rio Salado carves an intricate canyon eastward as it makes its way towards the Rio Grande Valley. On clear days, the vistas seem to stretch on indefinitely, allowing the viewer to observe the Manzano Mountain Wilderness in central New Mexico over 60 miles away.

Both Cedar Springs Canyon and Bear Springs Canyon offer outstanding possibilities for hikers and backpackers to explore the heart of the area and to summit the tallest, unnamed peak in the range. There are no marked trails in the area, which only increases its wilderness character. Backcountry hunting and wildlife watching are also rich in the area as the well-functioning ecosystems are able to sustain healthy herds of mule deer and numerous bird species. The Mountains are locally known for their hunting attractions, but receive relatively little use from other recreational users. The RMEF (2014) identified a portion of the area as habitat for elk. The NMDGF's harvest records indicate that GMU 13, which encompasses the Bear Mountains, offers good turkey and high quality elk hunting (NMDGF, 2012).

c. Ecological, Geological, Historic Values

There are many special features and values within the Scott Mesa area. Panoramic views from atop the ridgelines are breathtaking, as are the sights as one walks the numerous canyon bottoms. The jagged volcanic formations in the unit are unusual and eye-catching and are what make the mountains distinct from the surrounding landscape.

The Bear Mountains are geologically diverse. Similar to many of the mountains found in this region, the Bear Mountains formed during the general geological turmoil in central New Mexico during mid-Cenozoic time, beginning about 36 million years ago. Most of the range consists of domino-tilted layers of ash flow tuffs expressed as cuestas, or long, linear ridges. This area contains the northernmost known exposures of lower Mississippi rocks in New Mexico and is therefore of special interest to those wanting to become familiar with the lithology and paleontology of the Mississippian geologic era.

Healthy populations of wildlife found throughout the area make it remarkably special. Observations and signs of mountain lion, pronghorn, mule deer, black bear, and coyote were all surveyed in the field. There is very little information available to the public on the Bear Mountains, yet in Robert Juylan's book, *The Mountains of New Mexico*, the author points out that because of the various springs in the region, the range is rather popular amongst birders. Portions of Scott Mesa area are considered crucial habitat by the NMDGF in its CHAT (NMDGF, 2013).

There is a high potential to see cultural and historical resources in the area. Indeed, scattered pottery shards were observed in the field. The adjacent Sierra Ladrones WSA was heavily used by indigenous people. Sierra Ladrones translates to "Mountain of Thieves," a name Spaniards gave to the range in reference to Navajo and Apache bands that raided Spanish settlements along the Rio Grande, then took refuge in these mountains. Basham (2011) notes that the lands within which this area is located is

"diverse and representative of nearly every prominent human evolutionary event known to anthropology." Widespread evidence suggests human occupation that dates back 14,000 years (Basham). The area is also rich with historic Western lore and serves as a backdrop to legends of outlaw renegades like Butch Cassidy and the Wild Bunch. Notorious Apaches like Cochise, Geronimo, and Victorio, for whom Vicks Peak was named, have ties to the mountains (Basham).

VI. Datil Mountains Area

a. Overview and Description of the Area

The Datil Mountains area is 60,970 acres and located just north of the town of Datil in Catron County. The area's boundaries are generally defined by the Madre Mountain and Datil IRAs, with additional acreage to the south and north of Madre Mountain, as well as lands to the north of the Datil IRA. Of the 60,970 acre area, there is a 54% -- or 32,730 acres -- overlap with IRA lands. Road 14 bisects the Datil Mountains area into two "units." Specifically, the boundaries of the Datil Mountains "north unit" are defined by all lands east of Thompson Canyon and road 440, lands west of 14 and 14Z, and lands south of 507 and 424. The boundaries of the Datil Mountains "south unit" are defined by lands south of Road 14. The area includes the major ridgeline of Madre Mountain, which is sacred ground to the Acoma, Laguna, and Zuni tribes, as well as several other unnamed peaks and ridges (Basham, 2011). Other major features include Main Canyon, Ox Spring Canyon, and Thompson Canyon.

The Datil Mountains are an isolated landscape. The area is absent any significant human development within or near the range, which has helped to keep the mountains remote and natural. The scenery found throughout the area is alluring, with significant geological features, numerous open meadows to explore, steep-sided hills cloaked with dense conifer forest, and dramatic ridgelines that offer exceptional views. The chance to experience the southwest's humbling silence and wild nature abound. Largely due to the size of the two areas, isolation from human activity, topography and vegetation, the Datil Mountains area provides remarkable hiking, backpacking, hunting, climbing, and other recreational opportunities for those seeking a wilderness experiences.

The Datil Mountains area appears predominantly natural and undeveloped, with the scattered imprints of man substantially unnoticeable. Plant and animal communities within the unit appear natural and ecological conditions appear normal. There are a number of old Forest Service system routes in the area that the agency identified in its recent travel analysis as decommissioned and closed to motorized use. Most of these old routes have naturally rehabilitated and hence do not disrupt the natural appearance of the landscape. In terms of improvements beyond roads, the area does not have any permanent structures, and the occasional signs of human activity, such as stock tanks and fencing, are substantially unnoticeable due to the rugged canyons, vegetative diversity, natural reclamation, and steep slopes. There is one small in-holding located in the southern unit; the Forest Service is proposing to close the route to public motorized use that leads to it in the travel plan. The majority of the area is isolated from high levels of human activity, with limited access and very few encumbrances. The area does not have

motorized activity occurring within its boundaries. At the time when this letter was written, there were active mining claims in the T1N R10W township.

The Datil Mountains are a small range on the northern edge of the Datil-Mogollon Volcanic Field, just northwest of the Plains of San Agustin. The crest of Davenport Lookout offers exceptional views of an expansive and natural landscape; jagged rock spires and craggy country are common throughout the area. Even more striking is the view from the east, where a huge fault scarp has created a fortress wall of vertical cliffs. To the west, the jagged Sawtooth Mountains rise like gothic castles with intricately carved peaks and towering formations.

The Datil Mountains area contains a variety of high-quality habitats, which is a primary reason the area is rich with wildlife. Observations and signs of elk and mule deer, as well as Merriam's turkey, black bears, bobcats, coyotes, foxes, and quail were surveyed in the field. Bird species common to the region include: bald and golden eagles, prairie falcon, kestrel, Merriam turkey, and many species of quails, hawks and owls.

Scrubland, pinyon juniper woodland, ponderosa pine forest, deciduous oak and grassland areas are all represented in both units. Plant species are predominantly native. Grasses include black and sideoats grama, poverty threeawn, burrograss, and galleta grass at the lower elevations. Higher up, grass species include blue and hairy grama, and little blue stem. Shrubs include sotol, cholla, yucca, Apache plume, mountain mahogany, shrub live-oak, gambel oak, and alligator juniper.

The size and shape of the Datil Mountains Area, including the overlap with two IRAs, few private inholdings, assures manageability for conservation purposes.

b. Recreational Values

Outstanding opportunities for hiking, camping, backpacking, hunting, rock climbing, horseback riding and other forms of primitive, dispersed recreation are excellent in the area given its natural and rugged character, quality habitat, remarkable views, and size. The area offers visitors adventure and solitude, and demands self-reliance. The Datil Mountains area does not have any developed facilities or designated trails in either unit, which provides exciting opportunities for exploration and challenge.

The ridgeline of Madre Mountain presents significant possibilities for hikers and backpackers to explore the heart of the area, as well as the opportunity to summit the tallest peak in the range. Thompson Canyon is a special draw for rock climbers seeking a challenging experience in the backcountry, while Main Canyon invites would-be explorers to venture through the numerous open meadows and sheer-walled canyons common throughout the area.

The habitat found in the conservation area is plentiful, with well-functioning ecosystems able to sustain healthy herds of elk and mule deer. The RMEF (2014) identified the area as habitat for elk. The area therefore provides outstanding opportunities for wildlife watching and hunting. In fact, the Datil

Mountains hold the Safari Club International's number two all-time record for typical elk in the state.[1] The NMDGF's harvest records indicate that GMU 13, which encompasses the Datil Mountains, offers good turkey and high quality elk hunting (NMDGF, 2012).

The area invokes a sense of wildness at a grand scale. Visitors will feel that they are in a place untrammeled by humans and primeval in character. A true feeling of self-reliance overcomes would-be explorers as they leave the bounding roads and experience complete solitude. The area's quietude and isolation reveal an infinite vastness. The night sky only reinforces this feeling, commanding evening visitors to gaze at the stars that shine brilliantly without interference from light pollution.

Primary access to the Datil Mountains area is via Roads 100, 14, and 6. Although there are no established Forest Service campsites in the area, the access roads provide ample opportunities for backcountry camping to would-be explorers.

c. Ecological, Geologic, Cultural and Historic Values

The Datil Mountains area has outstanding geology, scenic vistas, and natural habitats. Panoramic views from atop Madre Mountain are breathtaking, as are the sights as one walks through the numerous ponderosa meadows. The dark skies are mesmerizing. The jagged rock formations in the unit are unusual and eye-catching, and make the mountain distinct from the surrounding landscape.

The Datil Mountains are on the northern edge of the Datil-Mogollon Volcanic Field, just northwest of the Plains of San Agustin. Gray-pink-lavender rocks found in the range are reminiscent of those found in the San Mateo and Magdalena Mountain ranges. The Cenozoic volcanoes whose debris formed these rocks erupted 31 – 28 million years ago. When the hot ash fell in the area of the present day Datil Mountains, it was transformed by heat and compression into welded ashflow tuff, a hard rock characterized by jagged edges and holes formed by gas bubbles. As the welded tuff cooled, it fractured vertically and subsequently weathered along the joints, resulting in dramatic geology that includes free-standing pillars and jagged rock formations.

The area contains a variety of high-quality habitats and wildlife. Observations and signs of mountain lion, mule deer, black bear, coyote, and Merriam's turkey were all surveyed in the field. The entirety of the Datil Mountains area is important breeding ground for mountain lion (Menke, 2008). The Nature Conservancy identified the Datils as a key conservation area in the state due to its ecological diversity and species richness (TNC, 1999 and 2004), and the NMDGF identified portions of the Datils as priority crucial habitat in its CHAT (NMDGF, 2013).

In terms of cultural and historic resources, Basham (2011) notes that the lands within which this area is located are "diverse and representative of nearly every prominent human evolutionary event known to anthropology." Widespread evidence suggests human occupation that dates back 14,000 years (Basham). The name for the Datil Mountains dates back over two hundred years. The name *Sierra del Dátil* appears on Bernardo Miera y Pacheco's 1779 map, based on the Dominguez-Escalante Expedition

[1] New Mexico Department of Game and Fish Big Game Records available online here: http://www.wildlife.state.nm.us/hunting/applications-and-draw-information/big-game-records/.

of 1776-1777 (*Place Names* 105). The area is also rich with historic Western lore and serves as a backdrop to legends of outlaw renegades like Butch Cassidy and the Wild Bunch. Notorious Apaches like Cochise, Geronimo, and Victorio, for whom Vicks Peak was named, have ties to the mountains (Basham).

VII. Greater Guadalupe Canyon Area

a. Overview and Description of the Area

The Guadalupe area is about 19,300 acres and is located approximately 30 miles west of the town of San Ysidro in Sandoval County. The unit encompasses several major canyons that include Guadalupe Canyon and Cañon Salado as well as the northeastern rim of the massive Mesa Chivato. Other major features found in the area include Mesa de la Vereda, Piedra Blanca and Black Mesa. The boundaries of the area are generally defined by the Guadalupe roadless area adjacent to the BLM Chamisa WSA, with additional acreage to the west. Specifically, the boundary is defined by all lands east of Road 194.

The far northeastern corner of the Mount Taylor Ranger District is a very remote landscape. The absence of any significant human development within or near the area has helped to keep it isolated and predominantly natural. The scenery found throughout the area is exceptional, with several deep canyons, numerous open meadows and small lakes, and expansive ridgelines that provide remarkable views. Opportunities to find solitude and experience wild nature are abundant in the area. Largely due to its size, topography and vegetation, the Guadalupe area offers significant hiking, backpacking, hunting, horseback-riding, and other recreational opportunities for those seeking a remote and backcountry experience. It boasts a variety of wildlife including large elk herds, mule deer, black bear, mountain lion and Merriam's turkey.

The area appears predominantly natural and undeveloped, with the scattered imprints of man substantially unnoticeable. Open grasslands, juniper dotted grasslands, old growth ponderosa pine, and riparian habitats are all represented in the Guadalupe Area. The Rio Puerco watershed surrounds the area. The Rio Puerco is also a major tributary of the Rio Grande, joining it just north of the Sevilleta National Wildlife Refuge. As such, it is a key riparian corridor in an otherwise arid landscape.

The majority of the area is isolated from areas of human activity, with limited access and very few encumbrances. The area does not have motorized activity occurring within its boundaries. At the time this was written, there were no active or pending mining claims, operations, or leases in the area. There are a few old routes in the area that are either closed to motorized use or that have naturally rehabilitated. In terms of improvements beyond roads, the area does not have any permanent structures, and the occasional signs of human activity, such as abandoned routes, stock tanks, and fencing, are substantially unnoticeable due to the rugged canyon, vegetative diversity, natural reclamation, and steep slopes. Little evidence of dispersed camping exists in the unit. Non-native species are rare.

The size and shape of the Greater Guadalupe Canyon area, including its overlap with the Guadalupe IRA, lack of private inholdings and mining activity, assures manageability for conservation purposes.

b. Recreational Values

Outstanding opportunities for hiking, camping, backpacking, horseback-riding, hunting, and other forms of primitive recreation are excellent in the area given its natural and rugged character, high-quality habitat, remarkable views, and size. The area offers visitors adventure and solitude, and demands self-reliance. Of particular note are the opportunities provided in the wide, rugged canyons and on the cliff edges of Mesa de la Vereda, Piedra Blanca, as well as in Guadalupe Canyon and Cañon Salado. Within the area, there is a sense of vastness on a grand scale, so much so that at night the stars shine brightly without interference from light pollution and offer exceptional stargazing opportunities.

Much of the year, the area surrounding the Guadalupe Area is closed to motorized vehicles in order to protect the natural resources found on this portion of Mesa Chivato. Primary access to the Guadalupe area is via Forest Road 239, 194 A, and BLM Road 1103. However, both Forest Road 239 and BLM Road 1103 have seasonal closures between July 1 – September 14 and November 15 – April 14. Subsequently, in order to access the area during these times it is necessary to pack in 5 miles from the north, and over 20 miles from the south just to reach the boundary of the area. These seasonal road closures enhance the remoteness and solitude within the area, and make the area a true backcountry recreational treasure defined by challenge and primitive exploration.

The Chamisa WSA, managed by the BLM, is immediately adjacent to the Guadalupe area. The size of the combined Forest Service IRA and BLM WSA is about 35,900 acres. Three other BLM WSAs (the Ignacio Chavez, Empedrado, and La Lena) adjoin the Chamisa WSA. Taken together, this interconnected network of wilderness quality lands totals about 92,850 acres. In addition to these WSAs, the BLM in its Draft RMP for the Rio Puerco Field Office has proposed several more adjacent and nearby designations and management areas amounting to several thousand acres. The entire 66,880 acres of adjacent WSA lands make the area that much more remote and isolated. Moreover, the area has a high core area to boundary ratio which ensures a large interior core far from bounding roads. Once visitors leave the boundary roads, they experience complete solitude and know that they are within a place untrammeled by humans and primeval in character.

Opportunities to experience backcountry hunting are also rich in the Guadalupe area. Habitat is plentiful, with well-functioning ecosystems able to sustain healthy herds of elk and mule deer. The RMEF (2014) identified the area as habitat for elk. The NMDGF's harvest records indicate that GMU 9, which encompasses the Guadalupe area, offers good pronghorn and good to excellent turkey hunting (NMDGF, 2012).

c. Ecological, Geologic, and Historic Values

There are numerous special features and values within the Guadalupe roadless area. The area consists of lands on the northeastern reaches of Mesa Chivato with cool pine forests and elevations over 8,000 feet. The panoramic views from atop the mesa ridgelines are exceptional and offer sweeping views of the Rio Puerco Valley. Volcanic knobs, and crags dot the surrounding landscape, including the iconic Cabezon Peak to the north.

Mesa Chivato itself is composed of basaltic lava flows and viscous lavas of an especially rare type, that erupted from over 300 small, geologically young (3.3 to 1.5 million years old) volcanic vents and craters. The lava flows from these volcanoes cap colorful Cretaceous shoreline and marine rock layers that are well-exposed where the lava cap ends and the elevation drops quickly to the Arroyo Chico to the north.

The area is considered culturally significant – both past and present – to the Navajo, Hopi, and Pueblo peoples. The Mount Taylor Traditional Cultural Property (TCP) encompasses almost the entirety of the Guadalupe area. The lands within the TCP designation hold long-standing and ongoing historical, cultural, and religious importance for the Navajo Nation, the Hopi Tribe, the western Pueblos of Acoma, Zuni, and Laguna, many of the Rio Grande Pueblos, and the Jicarilla Apache (Benedict, 2008). The area contains a number of cultural sites, both historic and pre-historic. Prehistoric cultural resources include numerous Paleo-Indian, Archaic, Navajo, and Pueblo sites. The high elevation of Mesa Chivato and its steep drop to the Rio Puerco Valley make it more likely that early humans hunted and gathered rather than lived in the area (Benedict, 2008).

A prehistoric Pueblo ceramic/lithic scatter and a historic Navajo hogan have been surveyed in the adjacent Ignacio Chavez WSA to the northwest. The Navajo site of Big Bead Mesa, a National Historic Landmark, is located to the east. The Pueblo sites in this general region tend to be located near drainages, on the nearby mesas and throughout the Rio Puerco watershed. One of the reported sites is a large pueblo (over 150 rooms) characterized by over 1000 square feet of rubble mound. The remainder of the reported Pueblo sites range from small lithic/sherd scatters to field houses and small room blocks (New Mexico Statewide Wilderness Study; DOI, 1986).

The area also enjoys an abundance of wildlife. The type of habitat found in the unit sustains healthy populations of game species such as elk and mule deer. Bird species are particularly diverse in the area and include great blue heron, white faced ibis, canvasback, common merganser, rough legged hawk, red tail hawk, ferruginous hawk, sharp-shinned hawk, osprey, golden eagle, barn owl, great horned owl, and kestrel, whip-poor-will, white-throated swift, western kingbird, warbling vireo, western meadowlark, purple finch, swifts, swallows, prairie falcon, gray-headed junco, Stellar's jay, and pinyon jay. Furthermore, the area offers excellent raptor-nesting habitat on the various cliffs that spill down into the Rio Puerco valley below. Signs of mountain lion, pronghorn, mule deer, black bear, coyote, and red and gray fox were all surveyed in the field. The entirety of the Guadalupe area is important breeding ground for mountain lion (Menke, 2008).

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