

Condition description tables for Range analysis.

Little Cochetopa C&H.

EXISTING CONDITION	DESIRED CONDITION
<p>Range Management: 10 pasture “rest- rotational” system. On date June 16, off date September 30. 99 cow/calf pairs permitted</p>	<p>Range Management: Keep dates, numbers and AUMs the same. Rotate grazing schedule on the pastures. Develop water and pipe to tanks in the uplands. Manage for better distribution of the cattle and utilization of the upland forage.</p>
<p>Vegetation:</p> <p>Spruce Creek Pasture: Mosaic of native grass and forb communities with a variety of vegetative structures. Multiple age class stands of aspen with vigorous and diverse native grass and forb understories including Thurber fescue and Parry oatgrass. Multiple age classes of sagebrush interspersed with native grasses, forbs, and pinon/juniper. Diverse mix of native upland and riparian graminoids and forbs present in proportion to moisture availability. Many areas of underused bunchgrass due to limited water sources. Pasture would benefit from new water developments.</p> <p>Dry Lake Pasture: Mixed native grass, forb, and shrubland communities with a variety of vegetative structure including Arizona fescue, muhly, grama, squirreltail, mountain mahogany, and sagebrush. Ponderosa pine with Arizona fescue understory, aspen and mixed conifer stands with diverse native grass and forb understory including Thurber fescue and Parry oatgrass. Areas of under-used upland vegetation due to limited water sources. Pasture would benefit from new water developments.</p> <p>Upper Droz Creek Pasture: Primary ecosystem of the pasture is aspen/mixed conifer with diverse native grass and forb understories. Open grasslands have mixed native grass and forb communities that provide a variety of vegetative structure. Areas of sagebrush and rabbitbrush shrublands interspersed with a variety of native grasses and forbs including prairie junegrass and muhly. Riparian areas are confined in aspen or mixed conifer stands with a riparian plant community understory occurring in rather steep drainages.</p> <p>Lower Droz Creek Pasture: Mosaic of sagebrush age classes interspersed with native grasses and forbs. 2004 CF data showed good species diversity, litter, and bare ground. Areas of multiple age class stands of aspen with vigorous and diverse native grass and forb understories. Riparian area in Lower Droz Creek confined in aspen or mixed conifer stands with a riparian plant community understory.</p> <p>Little Cochetopa Pasture: Narrow drainage confined by topography and mixed conifer overstory. Mixed native grass and forb communities with a variety of vegetative structure. Diverse mix of native upland and</p>	<p>Vegetation:</p> <p>Spruce Creek Pasture: Maintain, continue to move toward, or start moving toward community type desired conditions that are outlined in Table 1. Increase livestock distribution and upland bunch grass utilization by adding water improvements. Pasture is moving toward or meeting DC.</p> <p>Dry Lake Pasture: Maintain, continue to move toward, or start moving toward community type desired conditions that are outlined in Table 1. Increase livestock distribution and upland utilization by adding water improvements. Pasture moving toward DC.</p> <p>Upper Droz Creek Pasture: Maintain, continue to move toward, or start moving toward community type desired conditions that are outlined in Table 1. Pasture is meeting DC.</p> <p>Lower Droz Creek Pasture: Maintain, continue to move toward, or start moving toward community type desired conditions that are outlined in Table 1. Pasture moving toward or meeting DC.</p> <p>Little Cochetopa Pasture: Maintain, continue to move toward, or start moving toward community type desired conditions that are outlined in Table 1. Pasture is meeting DC.</p>

EXISTING CONDITION	DESIRED CONDITION
<p>riparian graminoids and forbs present in proportion to moisture availability. Self-perpetuating riparian plant communities including sedge, rush, wetland grasses, cinquefoil, willow and alder. 2005 photo points represent mesic meadow areas and show excellent species composition and vigor of riparian and upland grasses including bluejoint reedgrass, tufted hairgrass and sedges.</p> <p>Beaver Creek Pasture: Large pasture with the greatest proportion of suitable range in the allotment. Healthy mixed native grass and forb communities with a variety of vegetative structures. Properly functioning and self-perpetuating riparian plant communities including sedge, rush, wetland grasses, cinquefoil, willow and alder. Multiple age class aspen stands with diverse native grass and forb understories including Arizona fescue and Parry oatgrass. 2004 CF grassland site showed good diversity and litter and bare ground to be a little high, likely resulting from drought conditions at the time. 2004 riparian photo point shows vigorous riparian community with good diversity and excellent woody species canopy. 2004 bench/transition site photo point shows desirable vegetation intermixed with Kentucky bluegrass, clover, and higher than desired bare ground. This site is not meeting DC and is representative of some spots along the lower portions of Poncha, Beaver, and Grays Creeks that receive heavy annual recreational use. There are also spots of Canada thistle and yellow toadflax present along these creeks. These sites would benefit from developed camp sites, removal of road from riparian bottom, and recreational enclosures for vegetation improvement.</p> <p>Marshall Pass Pasture: Major community types in this pasture are grassland and mesic meadow surrounded by spruce-fir forest. Mixed native grass and forb communities with a variety of vegetative structure. Diverse mix of native upland and riparian graminoids and forbs present in proportion to moisture availability including tufted hairgrass and riparian rushes and sedges. 2004 grassland and mesic meadow photo points show dense and vigorous riparian and upland graminoids with minimal bare ground and adequate litter. Increased moisture regime over the last two growing seasons have produced very vigorous plant communities.</p> <p>Poncha Loop Pasture: Mainly Areas of sagebrush and rabbitbrush shrublands interspersed with a variety of native grasses and forbs. The shrubland community is mature and would benefit from disturbance to create a mosaic of age classes and vegetative communities. The riparian area along lower portion of Silver Creek receives heavy annual recreational use. This site would benefit from developed camp sites, removal of road from riparian bottom, and recreational enclosures for vegetation improvement.</p> <p>Murphy’s Hole Pasture: Small pasture with intermittent surface water in tributary of Silver Creek.</p>	<p>Beaver Creek Pasture: Maintain, continue to move toward, or start moving toward community type desired conditions that are outlined in Table 1. Control or eradicate Canada thistle and yellow toadflax. Manage for less recreation and livestock impact and higher native species diversity in spots along the lower portions of Poncha, Beaver, and Grays Creeks. Overall pasture is moving toward DC with areas meeting and not meeting.</p> <p>Marshall Pass Pasture: Maintain, continue to move toward, or start moving toward community type desired conditions that are outlined in Table 1. Pasture is moving toward or meeting DC.</p> <p>Poncha Loop Pasture: Maintain, continue to move toward, or start moving toward community type desired conditions that are outlined in Table 1. Manage for less recreation and livestock impact and higher native species diversity in spots along the lower portion of Silver Creek. Manage for increased mosaic pattern and stimulation of current stagnant mature shrubland community. Pasture is moving toward DC with spots along Silver Creek not meeting.</p> <p>Murphy’s Hole Pasture: Maintain, continue to move toward, or start moving toward community type desired</p>

EXISTING CONDITION	DESIRED CONDITION
<p>Riparian areas and mesic meadows provide most of the grazing. Steep slopes on borders of pasture are forested with aspen and mixed conifer. Diverse mix of native upland and riparian graminoids and forbs present in proportion to moisture availability. Mixed native grass and forb communities with a variety of vegetative structures. 2004 photo point shows drought stressed plants. Photos from last two growing seasons with improved moisture regime show vigorous vegetative community with a variety of structure and age classes present in a functioning system.</p> <p>Silver Creek Pasture: Ecosystem communities in this pasture are dominated by riparian stringers with beaver ponds, self-perpetuating riparian plant communities, and diverse mix of native upland and riparian grasses and forbs present in proportion to moisture availability including sedges, rushes, wetland grasses, cinquefoil, willows, alder and spruce. Some areas along Silver Creek receive heavy recreation use and are not meeting DC. These areas would benefit from developed camp sites, removal of road from riparian bottom, and recreational enclosures for vegetation improvement.</p>	<p>conditions that are outlined in Table 1. Pasture is moving toward DC.</p> <p>Silver Creek Pasture: Maintain, continue to move toward, or start moving toward community type desired conditions that are outlined in Table 1. Manage for less recreation and livestock impact and higher native species diversity in spots along Silver Creek. Overall pasture is moving toward DC with some areas not meeting.</p>
<p>Wildlife: Habitats – Alpine, Upland Grassland/Shrubland, Riparian, and Forest Habitats</p> <p>T&E Species – UFB, Gunnison prairie dog, and Canada lynx</p> <p>FSS Species – white-tailed ptarmigan, wolverine, Brewer’s sparrow, Gunnison’s sage grouse (GSG), loggerhead shrike, bighorn sheep, Hudsonian emerald dragonfly, boreal toad, northern leopard frog, pygmy shrew, bald eagle, peregrine falcon, northern harrier, olive-sided flycatcher, purple martin, Lewis’ woodpecker, three-toed woodpecker, boreal owl, flammulated owl, northern goshawk, fringed myotis, Townsend’s big-eared bat, Gunnison prairie dog, hog-nosed skunk, American marten, and spotted bat</p> <p>Terrestrial MIS – Abert’s squirrel and elk</p> <p>Overall – Livestock distribution is generally poor and very limited to a very small proportion of this allotment (approximately 5-15%). Of this, livestock use has been concentrated primarily in riparian areas and adjacent habitats. Little to no livestock use has occurred in many portions of the allotment over past decade, while other areas have had much heavier use. Most of the use occurs in Beaver Creek, Poncha Loop, and Marshall Pass Units. Precipitation is low to relatively high (ranging from 12-28 inches annually, depending on elevation and location), which affects wildlife</p>	<p>Wildlife: T&E Species</p> <p>UFB:</p> <ul style="list-style-type: none"> ▪ Protect and maintain suitable habitat conditions, primarily areas of snow willow. <p>Canada Lynx:</p> <ul style="list-style-type: none"> ▪ Protect and maintain suitable lynx and snowshoe hare habitat conditions. ▪ Provide for the development of snowshoe hare habitat in natural or created openings within lynx habitat. ▪ Maintain and restore habitat connectivity across forested landscapes. ▪ For willow, achieve mid seral or higher condition, to maximize cover and prey availability. Such areas that are currently in late seral condition should not be degraded. ▪ In aspen stands - ensure sprouting and sprout survival is sufficient to perpetuate long-term viability of aspen clones. <p>Gunnison Prairie Dog:</p> <ul style="list-style-type: none"> ▪ Protect and maintain suitable habitat conditions. <p>FSS Species</p> <p>Boreal Toad:</p> <ul style="list-style-type: none"> ▪ Protect and maintain suitable breeding, summer, and winter hibernation habitat conditions and movement corridors for boreal toads:

EXISTING CONDITION	DESIRED CONDITION
<p>habitats and the capability of the allotment to support livestock grazing. Existing range developments (fences, stock tanks, pit, ponds, etc.) on the allotment generally lack wildlife escapement ramps/structures, and have not been constructed to be compatible with/for wildlife use. Poor to fair habitat conditions in some areas, good condition in others depending on livestock use and concentrations. Breeding/reproductive, cover/shelter, forage/prey, and dispersal/movement habitats for the below wildlife species/habitats have all been adversely impacted to varying degrees, primarily in riparian and associated forested and upland habitats.</p> <p>T&E Species – UFB (see Alpine Habitat), Canada lynx (see Alpine, Upland Grassland/Shrubland, Riparian, and Forest Habitats), and Gunnison prairie dog (see Upland Grassland/Shrubland Habitat) below.</p> <p>Alpine Habitat – Approximately 10% of this allotment. Very little to no livestock use has occurred in portions of these habitats over the past decade although historical use still evident. Overall, there is a diverse mix of native grass, forb, and shrub communities, ground cover is suitable where developed soils exist. Generally good habitat conditions.</p> <p>Upland Grassland/Shrubland Habitat – Approximately 9% of this allotment. Very little to no livestock use has occurred in these habitats in some units over the past decade; however, historical use still evident. Generally, there is good species diversity present in grasses and forbs, with a mosaic of vegetative structure in some areas, less so in concentrated use areas. Some areas have had a species composition shift to forbs. Plant species composition shifts from desirable (for wildlife) to less desirable species have been observed in some areas with concentrated livestock use. High incidence of litter in some areas, poor amount in others. Upland grasses decadent in some areas with low plant vigor. Mature shrub community composed of mountain mahogany, mountain sagebrush, and currant. Good growth and regeneration of mid-late seral shrub species. Native grasses and forbs interspersed. Mountain mahogany hedged in areas. Fair to good habitat condition, depending on use and location.</p> <p>Riparian Habitat – Approximately 4% of this allotment. Fens may be present in some areas in the higher elevations. Good vegetation cover, willow communities present and vigorous in some</p>	<ul style="list-style-type: none"> ▪ Maintain riparian-wetlands in proper functioning conditions (PFC). ▪ Minimize activities that may cause direct mortality (trampling) of boreal toads, egg masses, tadpoles, metamorphs (toadlets), and adults by livestock. ▪ Provide sufficient vegetation in boreal toad breeding, summer, and wintering areas (hibernacula) and movement corridors. Locate and protect toad movement corridors from livestock grazing impacts. ▪ Maintain a minimum of 75% of the streambank or shoreline in stable condition. ▪ Protect and enhance boreal toad habitat where possible with water developments. ▪ Minimize the spread of <i>Bd</i> (a chytrid fungus) to new areas from livestock grazing and associated activities. <p>GSG:</p> <ul style="list-style-type: none"> ▪ Protect and maintain suitable habitat conditions for sage grouse (summer/fall range). <p>Bighorn Sheep:</p> <ul style="list-style-type: none"> ▪ Protect lambing areas during the spring (May 15 to June 30) from disturbance. ▪ Maintain in perpetuity temporal and spatial separation between domestic sheep/goats and native bighorn sheep. <p>Terrestrial MIS</p> <p>Abert’s Squirrel:</p> <ul style="list-style-type: none"> ▪ Encourage mature widely dispersed and interconnected ponderosa pine stands which sustain Abert’s squirrel populations where potential exists. <p>Elk:</p> <ul style="list-style-type: none"> ▪ Maintain or improve habitat conditions for elk. ▪ Maintain adequate forage and security cover year-round to allow CDOW to meet management objectives. ▪ Maintain and provide for movement corridors for elk that do not act as barriers/restrict movement or cause mortalities from range developments. ▪ Protect calving and other concentration areas. <p>All Habitats</p> <ul style="list-style-type: none"> ▪ Reduce/eliminate the presence of noxious weeds to the extent possible.

EXISTING CONDITION	DESIRED CONDITION
<p>locations with some heavy browse/utilization and limited regeneration in other areas with concentrated livestock use. Some late-seral woody species present but many are hedged/mushroomed, with little early and mid-seral species present in high use areas. Willow dieback in some areas. Plant species composition shifts to forbs, non-native, and least desirable (for wildlife) from more desirable/native species have been observed in some areas with concentrated livestock use. High incidence of Kentucky bluegrass and dandelions in many areas and in other areas these species are moving out of the system. Noxious weeds present in main drainages (Canada thistle, yellow toadflax, hoary cress and downy brome). Generally good bank vegetation, diverse riparian/wetland species composition, and seral stages in some lower areas but not in others. Some bare banks and sign of heavy trampling. Trampling of vegetation by livestock has been documented in some areas. Some systems have experienced significant drying and active headcutting observed. Some downcutting observed. Some areas of have shown a decrease in wetted area. Some a pedestaling/hummocking present in wet meadows in concentrated use areas. Litter is lacking in many areas. Benchmarks at Lower Cochetopa, Beaver Creek, and Marshall Pass Units rated at PFC. Benchmark in Murphy’s Hole rated at functioning-at-risk. Fair to good habitat condition, depending on location and use.</p> <p>Forest Habitat – Approximately 72% of this allotment. Aspen stands are diverse age structure including regeneration with an understory of down logs, forbs, and grasses present. Aspen is being encroached by conifer in some locations. Regeneration is limited in areas. Understory of down logs, forbs and grasses present, but grasses largely decadent. Ponderosa pine has experienced recent infestations of MPB. Bunchgrass understory is increasing as canopy cover is reduced due to insect infestations, timber harvesting, and prescribed burning. Some un affected/untreated forests are denser and drought stressed. Some mortality of ponderosa pine resulting in higher numbers of snags/logs in untreated areas. . Lodgepole is limited in occurrence. Mixed conifer past spruce budworm activity as resulted in some mortality. Upland grasses increasing in quality and quantity due to decrease of overstory vegetation cover due to dead and dying trees. Canopy cover is decreasing due to mortality, which is also causing under story to increase. Overall, the</p>	<p>Alpine Habitat:</p> <ul style="list-style-type: none"> ▪ Protect and maintain healthy alpine plant communities with a diverse mix of desirable native grass, forb and shrub communities, and minimal ground disturbance that provide suitable habitat conditions for alpine species. ▪ Where developed soils exist, ground cover is 80% or greater. ▪ Protect and maintain suitable habitat conditions in alpine and subalpine use areas (primarily willow carrs and riparian areas) to maintain or achieve mid seral or higher conditions to provide cover and forage for these species. <p>Forest Habitat:</p> <ul style="list-style-type: none"> ▪ Maintain/create forests with diverse age structure, late successional communities, openings, snags and down woody debris across forested areas; vigorous understory of native grasses (e.g., grama, needle and thread, junegrass, Arizona fescue, mountain muhly, mutton grass) and forbs where light allows. ▪ Perpetuate aspen communities with diverse age structure. Aspen areas shall include late successional communities, regeneration, openings, snags and down woody debris; vigorous and diverse native grass and forb understories shall be present. Protect aspen and other hardwoods. <p>Upland Grassland/Shrubland Habitat:</p> <ul style="list-style-type: none"> ▪ Protect and maintain healthy upland grassland and shrubland plant communities that provides and maintains and/or enhances suitable habitat conditions for these species. <p>Riparian Habitat</p> <ul style="list-style-type: none"> ▪ Protect and maintain healthy riparian and wetland plant communities that provides and maintains and/or enhances suitable habitat conditions for riparian dependant species. Provide habitats for viable populations of wildlife species.

EXISTING CONDITION	DESIRED CONDITION
<p>habitat is in good condition.</p>	
<p>Fisheries: There are several fish bearing streams on the allotment including Poncha Creek and the tributaries of Silver Creek, Grays Creek, Starvation Creek, and Beaver Creek. Little Cochetopa Creek and Stumpy Creek are tributary to the South Arkansas River. Tributaries to Poncha Creek near their confluence are characteristic of the Poncha Creek fishery and dominated by brown trout. Despite an extensive stocking history of rainbow and cutthroat trout in Poncha Creek, none, or very few exist now due to the presence of Whirling Disease. A mix of brown and brook trout are found as you move up these tributary streams and in the upper reaches they become dominated by brook trout. The tributary streams and Poncha Creek are all represented by multiple year classes of fish demonstrating natural reproduction and self-sustaining fish populations. Little Cochetopa Creek possesses a high density, high biomass brook and brown trout population. Stumpy Creek does not support a fishery.</p> <p>Mollusks: Presence of Rocky Mountain capshell snail or suitable habitat on the allotment is unknown.</p> <p>Aquatic invertebrates: Suitable habitat for <i>O. susanae</i> (large springs) does not exist on the allotment.</p>	<p>All aquatic species: Riparian ecosystems meet or move towards at least an upper mid-seral stage. Riparian plant communities are healthy and self-perpetuating. State and Federal water quality standards met. Stream channels and still water-body shorelines are stable and well vegetated with appropriate species. Suitable riparian habitat exists for viable populations of wildlife, fish and terrestrial and aquatic invertebrates.</p>
<p>Hydrology:</p> <p>Marshall Pass Unit:</p> <p>Marshall Pass benchmark. Site visited June 23, 2005. Per crew, 'East end of benchmark has large amount of willows, stream is step-pool, stable riparian area, not suitable for grazing. West end mostly controlled by beaver with braiding and chaotic water flow but seems stable, growth of large and small willows throughout.' Fish observed in ponds. Braiding effect seen could be result of road. Crew rated benchmark as proper functioning condition. Hydrologist concurs.</p> <p>Little Cochetopa Unit:</p> <p>Head of Little Cochetopa benchmark. Site visited August 17, 2005. Per crew, 'Not a lot of grazing area for cattle. Stream bed composed mostly of boulders. Large woody debris present. Stream in a spruce-fir and aspen forest. Willows present...Step-pool geomorphology. Some areas with game/cattle crossing caused erosion but not bad enough to cause major channel instability.</p>	<p>Hydrology:</p> <p>Marshall Pass Unit:</p> <p>Benchmark at desired condition. Maintain the existing condition.</p> <p>Little Cochetopa Unit:</p> <p>Benchmark at desired condition. Maintain the existing condition.</p> <p>Beaver Creek Unit:</p> <p>At desired condition as long as beaver dams are stable. Hydrologist concurs. Reduce pedestaling by restricting grazing where saturated soils are present.</p> <p>Murphy's Hole Unit:</p> <p>Stabilize vertical instability through adaptive management options and a watershed improvement project if necessary. Reduce pedestaling by</p>

EXISTING CONDITION	DESIRED CONDITION
<p>Crew rated benchmark as proper functioning condition. Hydrologist concurs.</p> <p>Beaver Creek Unit:</p> <p>Beaver Creek benchmark. Site visited June 23, 2005. Per crew, ‘Very good. Beaver dams have stabilized stream, vegetation is thriving: lots of willow, alder, carex. Erosion is kept to a minimum.’ Crew rated benchmark as proper functioning condition. Hydrologist concurs.</p> <p>Murphy’s Hole Unit:</p> <p>Murphy’s Hole benchmark. Site visited June 22, 2005. Some alders and willows present. Stream is downcutting at three places. Pedestaling evident in lower and upper ends of benchmark. PFC rating was changed from proper functioning condition to functional-at-risk at May 4, 2006 Ramps meeting based on input from other specialists. Road crosses through benchmark.</p> <p>Water Developments:</p> <p>Existing:</p> <p>4 tanks 3 pits</p>	<p>restricting grazing where saturated soils are present. Increase woody species where possible.</p> <p>Water Developments:</p> <p>Existing unchanged:</p> <p>2 tanks 2 pits</p> <p>Existing redeveloped:</p> <p>2 pits each piped to one new tank 1 tank piped to one new tank</p> <p>Proposed:</p> <p>6 sources each piped to one new tank 1 source piped to two new tanks</p> <p>Summary:</p> <p>18 developed watering sites on NFS (if redeveloped sites are fenced, then cattle would have access to 15 sites). 5.4 miles of pipeline constructed</p>
<p>Soils:</p> <p>Dry Lake Unit: Key area LCDLK1: soil type 110F, Cryoborolls Cryaquolls association is found in valley bottoms and have an effective rooting depth greater than 60 inches.</p> <p>Lower Droze Creek Unit: Key area LCLDK1: soil type 233S, Ess - Bushvalley families complex, found on dry, south facing mountains and mesas with an effective rooting depth of greater than 20 inches.</p> <p>Upper Droze Creek Unit Key area LCUDK1: soil type 150F, Handran family, found on montane, dry valleys, upland plains, and alluvial fans with an effective rooting depth of greater than 60 inches.</p> <p>Spruce Creek Unit: Key area LCSPK1: soil type 256M, Granile family, found on upland plains, pediments, and</p>	<p>Soils:</p> <p>For all units: Maintain and/or improve ground cover with stable soils. Continue to stabilize and decrease areas where mild to moderate evidence of hoof shear, bank trampling, and bank downcutting are evident; maintain/improve good vegetative cover in riparian areas.</p> <p>Dry Lake Unit: Key area LCDLK1: soil type 110F, Cryoborolls Cryaquolls association, Adjacent Management activities can impact these wetland areas and require special considerations. Revegetating these soils with riparian vegetation requires maintaining a high water table. Buffer zones are required on adjacent map units to minimize impacts to wetlands.</p> <p>Lower Droze Creek Unit: Key area LCLDK1: soil type 233S, Ess - Bushvalley families complex, Management activities are limited by steep slopes and erosion hazard. Maintaining and enhancing the potential</p>

EXISTING CONDITION	DESIRED CONDITION
<p>alluvial fans with an effective rooting depth of greater than 20 inches.</p> <p>Little Cochetopa Unit: Key area LCLCK1 & Benchmark: soil type 100F, mild bank downcutting at several stream crossings. Cryofluvents Cryaquolls - Histosols complex, found in subalpine valley flood plains. This complex has an effective rooting depth greater than 40 inches and a depth to seasonal high water table of 1 foot (very shallow water table).</p> <p>Marshall Pass Unit: Key area LCMPK1: soil type 100F, See above. Most of area in and near riparian area shows good vegetative cover. Key area LCMPK2 & Benchmark: soil type 625G, Leighcan family - Cryaquolls complex, glaciated valley bottoms of the survey area where igneous and metamorphic rocks predominate with an effective rooting depth greater than 60 inches.</p> <p>Beaver Creek Unit: Key area LCBCK1& Benchmark: soil type 150F, Mild to moderate evidence of hoof shear, bank trampling, and bank downcutting at several stream crossings. Most of area in and near riparian area shows good vegetative cover. Key area LCBCK2: soil type 233M, Ess - Bushvalley families complex, found on mountains, mesas, and pediments. Ess soils have an effective rooting depth greater than 20 inches. Bushvalley soils have an effective rooting depth less than 20 inches.</p> <p>Poncha Loop Unit: Key area LCPLK1: soil type 256M, Granile family, dry, found on upland plains, pediments, and alluvial fans, with an effective rooting depth of greater than 20 inches.</p> <p>Murphys Hole Unit: Key area LCMHK1& Benchmark: soil type 100F, some areas of bare soil adjacent to stream channel. Trampled, exposed soil at several stream crossings. Most of area in and near riparian shows good vegetative cover.</p>	<p>natural plant community can reduce the erosion hazard and maintain sustained multiple use.</p> <p>Upper Droze Creek Unit Key area LCUDK1: soil type 150F, Handran family, Maintaining and enhancing the potential natural plant community can reduce the erosion hazard and maintain sustained multiple use.</p> <p>Spruce Creek Unit: Key area LCSPK1: soil type 256M, Granile family, Mulch or similar treatment will protect the soil from erosion, help conserve soil moisture, and protect emerging plant seedlings.</p> <p>Little Cochetopa Unit: Key area LCLCK1 & Benchmark: soil type 100F, Cryofluvents Cryaquolls - Histosols complex, Buffer zones are required on adjacent map units to minimize impacts to wetlands. A short growing season reduces the potential for successful planting. Maintaining a high water table is required to replant riparian vegetation.</p> <p>Marshall Pass Unit: Key area LCMPK1& Benchmark: soil type 100F. See above. Key area LCMPK2: 625G, Leighcan family - Cryaquolls complex. Management activities require buffer zones to protect riparian habitat: Revegetating Leighcan soil requires mulch to retain soil moisture. Revegetating Cryaquolls soil with riparian vegetation requires maintaining a high water table.</p> <p>Beaver Creek Unit: Key area LCBCK1& Benchmark: Key area LCBCK2: soil type 233M, Ess - Bushvalley families complex, Mulch or similar treatment will protect the soil from erosion, help conserve soil moisture, and protect emerging plant seedlings.</p> <p>Poncha Loop Unit: Key area LCPLK1: soil type 256M, Granile family, dry. Trees are slow to return after a disturbance. Planting grasses and forbs have the best chance of success. Aspen may generate naturally if the disturbance is not severe. Mulch or similar treatment will protect the soil from erosion, help conserve soil moisture, and protect emerging plant seedlings.</p>

EXISTING CONDITION	DESIRED CONDITION
	<p>Murphys Hole Unit: Key area LCMHK1& Benchmark: soil type 100F. See above.</p>
<p>Recreation: Recreation use is high with the major activities including camping , scenic drives on the Marshall Pass road in the fall, hunting from the last week in August to about November 20, fishing, hiking, biking, and OHV use. There is one developed campground, O’Haver Lake, which is one of the most popular campgrounds on the district. Other developed sites are the Woods Cabin located in Droz Creek and the Hutchinson/Barnett Cabin near the top of Marshall Pass. There are two trailheads with toilets and parking located at Marshall Pass and Shirley Site (located at the junction of Poncha and Silver Creek. Other less developed trailheads are at the lower end of Starvation Creek and above the private land in Little Cochetopa Creek. There are two major trails bisecting the allotment, the Continental Divide National Scenic Trail going through Marshall Pass and Silver Creek Units, and the Rainbow Trail going through Poncha Loop and Murphys Hole Units. Other National Forest System trails are Starvation and Little Cochetopa. In 2006 a fence was built around O’Haver Lake Campground to keep the cattle out. Dispersed camping along Silver Creek and the lower end of Poncha Creek is heavy from Memorial Day weekend to Labor Day weekend. Cattle and campers are intermixed when cattle are grazing in these pastures. Both cattle and campers prefer being next to the water. ISSUES: Concerns with cattle intermixed with dispersed campers are: cattle’s waste is smelly, messy, and attracts flies, and cattle may rub up against vehicles, or other items campers have. Show the developed recreation sites on the Range map.</p>	<p>Recreation: Maintain compatible use with campers and cattle where campers are minimally affected by cattle’s waste and trampling, and campers are not blocking cattle paths. Recreationist are well informed they are sharing the land with cattle, and when to keep gates closed and open, depending on whether cattle are in the pastures. Range improvements do not conflict with recreation use, i.e. placing water improvements in highly desirable campsites and trails. Locate structural improvements to meet visual quality objectives The gate to Murphys Hole is locked or signed to keep OHVs and campers out of the meadows and non-system routes.</p>
<p>Forestry: Majority of the ponderosa pine forests has been infected with the mountain pine beetles and the Douglas-fir forests have been affected by defoliation from the spruce budworm and infestation of the Douglas-fir bark beetles. Heavy mortality of both ponderosa pine and Douglas-fir trees has resulted throughout the allotment. Aspen forests are mature and most aspen stands are being encroached with a dense, sub-alpine fir understorey. Lodgepole pine forests are mature and currently are only showing isolated infestations of the mountain pine beetles. Engelmann spruce and sub-</p>	<p>Forestry: : Maintain a healthy, mixed-conifer forest community of ponderosa pine, Douglas-fir, lodgepole pine, spruce-fir, and aspen with a dispersed age structure, openings, snags and down woody debris across these forested areas. Improve forest health conditions throughout. Perpetuate aspen communities with diverse age structures including late successional communities, regeneration, and openings. Maintain a vigorous understorey of native grasses (grama, needle and thread, junegrass, Arizona fescue, mountain muhly, mutton grass) and forbs throughout these forest</p>

EXISTING CONDITION	DESIRED CONDITION
<p>alpine fir forests exist at the higher elevations of the allotment. These forests are on steep slopes. Upland bunch grasses have increased in quantity and quality due to the decrease of overstory trees, but the increased downfall of dead trees is restricting cattle movement into these areas. Salvage timber sales or prescribed burning projects are occurring and planned on the allotment near O'Haver Lake, Poncha Pass, Spruce Creek, Silver Creek, and Dry Lakes.</p>	<p>communities. Minimize the encroachment of conifers onto the grassland types.</p>