Condition description tables for Range analysis.

Arkansas S&G Allotment.

EXISTING CONDITION	DESIRED CONDITION
Range Management: Currently an open-vacant allotment.	**Range Management:** Maintain as open-vacant allotment.
Vegetation: The vegetation in this allotment is in good condition, with the only disturbances being natural ones, including the effects of wildlife. This area will continue in it's natural succession for the foreseeable future. There are no known problem sites.	**Vegetation:** Continue with natural succession with native plants dominating the landscape. Noxious weeds will be very limited to nonexistant.
Wildlife: **Habitats** – Alpine, Upland Grassland/Shrubland, Riparian, and Forest Habitats **T&E Species** – UFB and Canada lynx **FSS Species – Allotment wide – Species and/or their habitats that are present or may be affected:** white-tailed ptarmigan, wolverine, Hudsonian emerald dragonfly, boreal toad, northern leopard frog, pygmy shrew, northern harrier, peregrine falcon, olive-sided flycatcher, three-toed woodpecker, boreal owl, northern goshawk, American marten, and bighorn sheep. **Terrestrial MIS** – elk **Overall** – This allotment is currently vacant This allotment is a sheep and goat allotment. Current condition was not assessed. The following is based on general knowledge of the allotment and species/habitats present. **T&E Species** – UFB (see Alpine Habitat) and Canada lynx (see Alpine, Upland Grassland/Shrubland, Riparian, and Forest Habitats) below. **Alpine Habitat –** Approximately 64% of this allotment. Appears to have good diversity of native grasses and forbs from the few areas visited. High recreation use during all season, especially summer. Climax Molybdenum Mine is also located within the allotment which has substantially affected habitats. Overall habitat conditions assumed good. **Upland Grassland/and Shrubland Habitat –** Approximately 2% of this allotment. Unknown what the status and condition is currently. **Riparian Habitat** – Approximately 8% of this allotment. Grass forb and shrub diversity and condition assumed good.	**Wildlife:** **T&E Species** **UFB:** ▪ Protect and maintain suitable habitat conditions, primarily areas of snow willow. **Canada Lynx:** ▪ Protect and maintain suitable lynx and snowshoe hare habitat conditions. **FSS Species** **Boreal Toad** ▪ Protect and maintain suitable breeding, summer, and winter hibernation habitat conditions and movement corridors for boreal toads: **Bighorn Sheep:** ▪ 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. **Terrestrial MIS** **Elk:** ▪ 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. **All Habitats** ▪ Reduce/eliminate the presence of noxious weeds to the extent possible.

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Forest Habitat – Approximately 3% of this allotment. Unknown what the current status and condition is.	
Fisheries: The allotment contains two fish bearing streams. The East Fork Arkansas River supports a high biomass brown trout population, while Chalk Creek supports a low density cutthroat trout population. **Mollusks:** Presence of Rocky Mountain capshell snail or suitable habitat on the allotment is unknown. **Aquatic invertebrates:** Suitable habitat for *O. susanae* (large springs) does not exist on the allotment.	**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.
Hydrology: No surveys were conducted since this allotment will remain vacant. Surveys will be completed if the allotment is stocked in the future.	**Hydrology:** Maintain all riparian ecosystems in at least an upper mid-seral stage based upon the R2 Riparian Ecosystem Rating System (PSICC LRMP, III-50). Provide healthy, self-perpetuating plant communities, meet water quality standards, provide habitats for viable populations of wildlife and fish, and provide stable stream channels and still water-body shorelines (PSICC LRMP, III-203).
Soils: **MAP UNIT SETTINGS** ***Location:*** alpine and mountainous areas where igneous and metamorphic rocks predominate. ***Landform:*** mountains. ***Parent material:*** residuum and colluvium. ***Elevation range:*** 9,000 to 13,500 feet. ***Climatic zone:*** subalpine to alpine ***Mean annual precipitation:*** 20 to 50 inches. ***Mean annual air temperature:*** 34°F. to 40°F. ***Average annual snowfall:*** 300 to 500 inches. ***Climatic zone:*** alpine. ***Revegetation limitations for representative soil types include:*** **Moran:** severe- short growing season, low available water capacity and low inherent fertility. **Cryaquolls:** severe- short growing season and high water table. **Histosols:** severe- short growing season; organic material takes thousands of years to replace. **Rubble land:** severe- short growing season, shallow depth to bedrock, and low available water capacity. **Teewinot:** severe- rubble land.	**Soils:** Vegetative cover must remain intact for soils of this allotment because of climatic and landscape issues elaborated upon below. Management activities are limited by cold climate, steep slopes and erosion hazard. Alpine plant associations vary from area to area and are controlled by microsite conditions. This diversity of plant associations creates a relatively high degree of biodiversity on steep alpine slopes. In Subalpine areas, Precipitation is such that there is adequate moisture during the growing season, and moisture leaches through the soil profile. This leaching removes base-forming cations (nutrients), and the soil is usually moderately to strongly acid. These soils have low buffering capacity. Wind velocities can be very strong, probably exceeding 50 miles per hour at times. Most precipitation falls in the form of snow. *Management Considerations:* The growing season is short and temperatures cold. Frost can occur any time during the growing season. This reduces the survivability and growing rates for plants. Revegetation is possible but takes at least 2 years to develop sufficient cover to become effective in controlling erosion. Forest regeneration can be slow in returning to a disturbed site, especially on south facing slopes. Seedling growth is slower due to colder air and soil temperatures. Often, plant competition with grasses, forbs, and

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	shrubs is high, and moisture is limiting making it difficult for the tree seedlings to establish. Shrub canopy cover is important, however, for the establishment of tree seedlings. Shrub canopy cover provides shade and reduces the evapotranspiration rate. Planting late fall or early spring and covering with mulch or similar material will optimize success. Mulch will help protect seeds and seedlings from freezing and sun scald. In addition, mulch will reduce the evapotranspiration rate and conserve soil moisture. Revegetating Cryaquolls soil with riparian vegetation requires maintaining a high water table. Histosols revegetation requires high water table and replacing organic materials. In Alpine areas, precipitation is such that there is a surplus of moisture during the growing season, and moisture leaches through the soil profile. This leaching removes base-forming cations (nutrients), and the soil is moderate to very strongly acid. These soils have low buffering capacity. Wind velocities can be very strong, probably exceeding 80 miles per hour at times. Most precipitation falls in the form of snow. *Management Considerations*: The growing season is very short. Soil and air temperatures are cold. Frost can occur at any time during the short growing season. Wind can create high evapotranspiration rates. Revegetation is extremely difficult in this harsh environment, stressing the importance of maintaining the existing vegetation through proper management. Erosion hazard rating is high. High winds may blow seed and mulch off the site, and strong durable tackifiers are recommended if revegetation in this manner is attempted. These plant communities and soils usually have very poor trafficability or the ability to bear a load.
Recreation: Recreation use is low with the major activities including big game hunting, scenic drives, and disperse camping.	**Recreation:** Maintain the existing recreation opportunities. Grazing does not have a substantial effect on recreation activities.
Forestry: Aspen forests are mature and most aspen stands are being encroached with a dense, sub-alpine fir understory. Lodgepole pine forests are mature and currently are only showing isolated infestations of the mountain pine beetles and dwarf mistletoe. Understory forage and grasses are minimal. Engelmann spruce and sub-alpine fir forests exist on steeper slopes at the higher elevations of the allotment. No recent salvage timber sales or prescribed burning projects have	**Forestry:** Maintain a healthy, mixed-conifer forest community of 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 understory of native grasses (grama, needle and thread, junegrass, Arizona fescue, mountain muhly,

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occurred or are planned on the allotment.	mutton grass) and forbs throughout these forest communities. Minimize the encroachment of conifers onto the grassland types