TULEDAD HERD MANAGEMENT AREA

RESOURCES INFORMATION

1. Soils

The soils in the Tuledad Allotment vary from nearly flat deep soils in the Duck Flat area to steep shallow soils in the higher elevations. There are six general soil associations in the allotment.

Disabel-Weimer-Boulder Lake and the Playas-Couch-Lolak Associations are found around Duck Flat. These soils are deep to very deep, well drained to poorly drained, nearly level to gently sloping. These soils are often affected by a saline or alkali condition.

The soil associations which are characteristic to upland plateaus, terraces, and lower mountain slopes are the Ninemile-Karlo-Catnip Association and the Olson-Badlands-Nevador Association. These soils are shallow to moderately deep and are often rocky to stony.

The associations characteristic of the upland and mountain areas within the allotmont are in the Home Camp-Newlands Association and the Hapgood-Snag Association. These soils are moderately deep to deep, well drained and moderately sloping to steep. These soils have the highest productivity of any soils found within the allotment.

The erosion hazard for these soils vary according to the slope and to the texture and structure of the soil. Each area must be evaluated individually as to the crossion potential for a specific site.

All areas selected for any type of range improvement will be evaluated individually as to the potential for the site for range improvements.

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2. Watershed

The topography of the Tuledad Allotment is comprised almost entirely of steep, rugged slopes. Lack of herbaceous vegetative cover has resulted in considerable soil movement, especially in the upper reaches of the allotment. The majority of the allotment is in the moderate erosion class.

3. Vegetation

The Tuledad Allotment contains several major vegetation types. Each of these vegetative types are related to specific range sites which have been determined for the area. $\frac{1}{}$

Vegetation in the allotment varies according to soil and climatic conditions, primarily precipitation. The greasewood/Great Basin wildrye type is located at the lower elevation of the allotment around the Duck Flat area. This type is characteristic of soils that are affected to some degree by saline conditions.

Vegetative types in the more mesic higher elevation sites are numerous and very diverse. The low sage/Idaho fescue vegetative type is found on the shallow upland soils. The big sage/bluebunch wheatgrass, big sage/bluebunch wheatgrass-Great Basin wildrye and the bitterbrush-big sage/bluebunch wheatgrass vegetation types are found on the deep to moderately deep upland soils.

Each of these vegetation types are currently in various stages of disclimax. Improper grazing management has led to a decrease in the production of desirable forage plants in some areas. This in turn has led to an increase of shrubs and weedy plants in these areas.

4. Wildlife

The unique diversity of vegetation found in the Tuledad Allotment supports a wide diversity of wildlife species. Approximately 3,500 mule deer occupy the higher sagebrush-juniper areas. About 500 antelope utilize the lower predominatly sagebrush portions of the allotment. At least eight sage grouse nesting complexes supporting 1800 sage grouse are known in the allotment. Quail, chukar, ducks, geese and most of the approximately 300 species of non-game mammals, birds, and reptiles inhabiting the Surprise Resource Area, are also found throughout the allotment. (Refer to overlays at end of attachment section).

1/ United States Dept. of Agriculture, 1974. Soil Survey, Surprise Valley-Home Camp Area, California-Nevada.

5. Livestock

The Tuledad Allotment presently supports five cow/calf operations consisting of 1,484 head of cattle and one sheep operation consisting of 3,000 head of sheep. Livestock grazing has occurred in the Tuledad area since the late 1800's. The grazing practices which took place at this period in time have resulted in deteriorated range condition in localized areas in the allotment. $\frac{1}{2}$ These conditions have been perpetuated by a lack of systematic grazing coupled with poor animal distribution.

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Operator	Total	Active	Suspended Nonuse	Exchange of Use
E.B. Berryessa	462	134	328	15
Wesley Cook	11,886	5,420	6,466	602
Wesley Cook ls Bicondoa	567	425	142	174
Wesley Cook ls Miura	1,190	487	703	28
Lazy SJ Ranch	1,435	733	702	
North Fork Ranch	6,591	2,099	4,492	215
Joe Stevenson	320	218	102	
Totals	22,451	9,516	12,935	1,034

6. Wild Horses and Burros

With the passage of the Wild Horse and Burro Act in 1971, the BLM is mandated to provide habitat for wild horses and burros. The terrain and lack of water in some areas has caused wild horses to continually use the same areas each year. This has lead to some areas being used heavily while other areas have received only slight use. Currently there are about $200^{2/2}$ wild horses in the allotment. (Refer to overlay at end of attachment section).

- 1/Camacho, Steve and John Kingston, 1977. Early Livestock Grazing in the Home Camp/Tuledad Units.
- 2/ BLM count, November 16, 1979

3 uc KHOPAN COPPERSMIN 35 F 3 REN 1981 caunt - adult 53 adults 7 colts Coppersmith Det: 1983 - 100 adults 21 Jule dad Oct. 1983 BUCKHORN -ADDED 3 Hoases from Rep Rock - 25% colt crep + -19

7. Archaeological Resources

Archaeological sites such as camp sites, chipping areas and shallow caves abound throughout the Tuledad Planning Unit. Riparian communities and wet meadows were important to prehistoric man and thus represent some of the most valuable sites.

8. Recreation

Recreational use of the allotment largely consists of hunting, rockhounding, and camping.

9. Land Ownership

Private land ownership is approximately 11% (17,800 acres) of the total land in the allotment. The remaining land (142,600 acres) within the allotment is administered by the Bureau of Land Management.

Several large blocks of private land are located in the Duck Flat area and also in the Boot Lake area. See overlay for the location of private land within the allotment.

There are several absentee landowners who own small tracts of land within the allotment which are presently not fenced. There are also some landowners who have property within the allotment but who do not have grazing privileges on public land within the allotment.

C. OBJECTIVES

The major objective of this plan is to initiate and maintain an upward trend toward range site potential $\frac{1}{}$ in the natural vegetative communities. Grazing management and range improvement practices are important in reaching this objective.

Timeframes for meeting the objectives of this plan are subject to change or modification if vegetative data or livestock management practices indicate these timeframes to be unrealistic. The following objectives are the goals of the plan.

1. Soils and Watershed

- a. Increase canopy cover of rushes, sedges, and grasses, to 90-100 percent (i.e., reduce bare ground 0-10%) within six years on all wet meadows and riparian communities.
- $\frac{1}{2}$ Obtain ecological balance of vegetative species in terms of percent by weight, as defined by SCS Guide.

- b. Demonstrate statistically significant increase in ground cover (litter included) within six years on study plots located in each pasture.
- c. Improve soil stability by initiating and maintaining an upward trend toward range site potential in natural vegetative communities.

2. Vegetation

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- a. Initiate and maintain an upward trend toward range site potential.
- b. Demonstrate wet meadow and riparian vegetative recovery within six years as described in la above.
- c. Demonstrate a statistically significant¹/increase in perennial grass basal cover within 12 years on study plots located in each pasture.

3. Wildlife

- a. Leave winter forage in a satisfactory condition^{2/}(squawapple, snowberry, antelope bitterbrush, serviceberry) for both game and non-game species in all pastures.
- b. Demonstrate wet meadow and riparian vegetative recovery within six years as described in la above.
- c. Improve wildlife habitat to the point where it could sustain a population of 3,750 deer and 1,000 antelope. (See Attachment #8 for current population counts by Fish and Game Departments).
- d. Increase wildlife carrying capacity and plant diversity by initiating and maintaining an upward trend toward range site potential in the natural vegetative communities.

4. Livestock

Increase livestock productive capacity of the range by initiating and maintaining an upward trend toward range site potential in the natural vegetative communities (i.e., increase productivity of cows, increase lamb and calf weights).

- 1/ Statistically significant at the 0=.10 level, is that there is at most a one in 10 chance that the apparent increase or decrease is due to chance alone.
- 2/ See Attachment 4b.

5. Wild Horses and Burros

Reduce and maintain wild horse numbers at proper management levels of 100 head, as per the Tuledad/Home Camp MFP (see Attachment #8 for annual BLM horse count figures).

6. Archaeological Resources

Archaeological resources are negatively effected primarily through soil compaction and erosion. Therefore, the objectives are identical to those for watershed.

7. Recreation

Enhance the overall quality of hunting, rockhounding, camping, and other recreational experiences through attainment of watershed, vegetation and wildlife objectives.

8. Lands

Pursue land exchanges which would facilitate the management of public and private lands.