I. DESCRIPTION

The Superior Allotment is located adjacent to the town of Superior and extends on either side of Highway 60. It is bounded on the west by the Forest and District boundaries; on the south by the Forest boundary; on the north and the east by the Devil's Canyon and Brushiest Allotments.

Elevations range from 2,400 feet on Queen Creek to 5,200 in at Fortuna Peak.

The allotment is characterized by steep, topographic features and by relatively level mountainous surroundings. Perpendicular features, such as Apache Leap Cliffs on the east side of the allotment, and high peaks, such as Picket Post Mountain, make up the inaccessible range found primarily on the south and east edge of the allotment.

A. Management Units

The Superior Allotment will be divided into six pastures (see map for pasture division). They are named Montana Mountain, Silver King, 88, TU, Wildhorse and Home pastures.

Montana Mountain is a large pasture on the north end of the allotment. This pasture includes the greatest part of the high country which is in fair condition. It also contains a small portion of the lowland country in very poor to poor condition. Montana Mountain pasture will be created by a division of the old North pasture.

Silver King pasture will also be created by dividing the old North pasture. This pasture contains most of the lowland country north of the highway. The town of Superior is in the southeast corner of the pasture.

The "88" pasture is one of the four pastures south of the highway. It is one of the largest pastures and contains about 80% poor condition range.

The "TU" pasture is the smallest of the larger units. It has the advantage of good water development and will be grazed in conjunction with other pastures.

The smaller pastures, Wildhorse, Home, and Silver King, will be used in conjunction with the "88" and "TU" pastures. The purpose of this is to manage the lowlands so that traditional grazing patterns will be broken up, improve distribution of cattle, and provide more rest for important perennial vegetative species.

B. Type of Operation

Mr. James C. and Albert D. Herron and Mrs. Ann Taylor maintain a cow-

calf-yearling operation on the Superior Allotment. Yearlings are permitted until May 31 following the year of their birth.

Mr. James C. Herron is the designated manager and authorized agent for the operation.

C. Animal Husbandry

This management plan will aid the permittees by concentrating their cattle in one pasture at a time. During this time it is possible more cows will breed and result in a larger and more uniform calf crop. Calves dropped more uniformly may be heavier at the time of shipping.

Roundup should be easier and serve to account for cattle plus facilitate the handling of livestock prior to shipping.

D. Permitted Numbers and Season of Use

The following is a summary of current demand for grazing livestock:

(1) James C. and Albert D. Herron have a term permit for 35 cattle from 1/1 to 12/31 plus 22 yearlings from 1/1 to 5/31.

(2) Mrs. Ann Taylor has a term permit for 279 cattle from 1/1 to 12/31 plus 156 yearlings from 1/1 to 5/31.

E. Range Limitations and Allowable Use

The Superior Allotment is separated by Highway 60 into two areas, north and south. The north part has not yet been divided by fences. The south portion is fenced into two large pastures plus one smaller pasture. There are highland areas in the north portion which need water development to help reduce grazing impact on the lowlands.

Historic grazing pressure on the allotment has been extremely heavy. From 1915 to 1940, stocking ranged from 800 to 1,874 adult cattle plus NI. There were also numerous trespass cattle, wild horses, burros and goats. The pattern of grazing has always been concentrated on the desert shrub type adjacent to the TU ranch and town of Superior.

The 1961 allotment analysis estimated the grazing capacity at 5,300 AUM's.

Current range inspections reveal that most of this capacity is in the highlands. The lowlands cannot tolerate the current stocking level without the benefit of a management plan.

F. Problems and Conflicts

Much of the damage to soil and vegetation is due to past improper grazing. As a result, current conditions on the allotment, especially on the lowlands, are very poor and in some cases damage is irreversible. The proposed system will serve to mitigate these impacts by providing additional rest in areas which historically received heavy livestock use and are still deteriorating.

Trespass has long been a problem, and may continue to be a problem, as long as the town of Superior remains relatively unfenced. Grazing livestock in a smaller area for specified periods will enable one to maintain better control on authorized livestock.

As a result of extensive mining activity, recreation and other uses, many roads have been built. This has created a problem of increased vandalism of range developments and theft of government and private property related to grazing. In many instances, gates have been left open allowing livestock from BLM and private land to trespass. A serious problem of safety also is occurring when livestock get onto the state highways. The use of metal and concrete for construction of improvements along with installation of cattleguards and use of "please close the gate" signs will help minimize these impacts.

A primary problem relating to management is distribution of livestock. Some areas of the allotment, particularly in the highlands, are not being utilized at all. Whereas, areas around water developments continue to be sore spots. Salting on water has accentuated this problem. Efforts exerted by the permittee to employ sound management techniques such as riding, herding, salting away from water and following the planned rotation is the key to correcting this problem. The development of additional waters in the highlands will also serve to correct this problem.

II. GOALS AND OBJECTIVES OF MANAGEMENT

A. Long-Term Goals for the Superior Allotment

1. Since the Superior Allotment's chief value is for watershed, it is important to improve and maintain water quality; therefore, ground cover will need to be increased to minimize the volume of silt entering the drainage system of Queen Creek.

2. Protect and enhance wildlife habitat with special consideration for rare and endangered nongame species by improving riparian zones through livestock manipulation.

3. Improve perennial grass forage species by considering their physiological growth requirements within the framework of an allotment management plan. This improvement will help provide forage for livestock and wildlife on a sustained-yeild basis.

B. Specific Objectives That If Accomplished will Meet the Long-Term Goals

1. Maintain the following allowable use levels on perennial grass species in key areas.

	Allowable Use
a. Montana Mountain Pasture	60%
b. Silver King Pasture	50%
c. 88 Pasture	50%
d. Woods Canyon or TU Pasture	50%
e. Wildhorse Pasture	60%
f. Home Pasture	50%

2. Reduce grazing impact on riparian zones and canyon stringers, by improving livestock distribution.

3. Develop water in the high country to draw livestock off of the low country, riparian zones, and canyon stringers.

4. Divide the North pasture to stop drift of cattle into the town of Superior, reduce impact on the lowlands and reduce hazard of livestock straying onto Highway 60.

Objectives #1, 3 and 4 will provide the primary accomplishment for long-range goals #1 and #3.

Objectives #2 and 3 will serve to improve wildlife habitat and afford an opportunity for wildlife enhancement.

C. Schedule and Procedure for Monitoring Objectives

	Every 6 Months	Every 10 Years	Every 5 Years
Range Inspections	X		
Trend and Condition Transects		X	
Pace Transects	As needed		X
Production and Utilization Study			X or as needed

1. Range inspections should be scheduled every 6 months to coincide with movement of livestock. The permittee or his representative will be invited to participate. Following the inspection written documentation will be provided to the permittee to assure a common understanding of problems and remedial action required.

2. Upon implementation of the allotment management plan, trend and condition transects should be read thus provide a basis for comparison when remeasured in 10 years.

3. Pace transects should be used as a tool for interim periods to monitor soil and vegetative conditions. This will allow the Range Conservationist an opportunity to determine if problems are developing or to acknowledge if range conditions are improving more rapidly than anticipated.

4. A production utilization study should be scheduled in 1985 to monitor the progress of improving distribution patterns and to determine if key vegetative species are progressing physiologically.

Production utilization studies will also determine carrying capacity and provide justification for upward or downward adjustment in term numbers.

III. MANAGEMENT SYSTEM

The system designed for this allotment is a six pasture six month rest rotation system.

The intent of the proposed system is to provide for extended period of rest to the lowland pastures. As a minimum the lowland pastures (TU, Wildhorse, Silver King and Home) will receive spring summer rest back to back two years out of three. The Montana Mountain and 88 pastures will receive somewhat less rest. These pastures will however, receive a full year's rest following grazing. Although these pastures will not get the full benefit of spring summer rest back to back they should be maintained due to the fact they are in better condition.

The grazing system is illustrated on form R3-2200-18 which follows.

IV. DISTRIBUTION AIDS

A. This section is essential in reaching the objectives of this plan. Improved distribution of livestock will reduce the grazing impact on traditional sore spots. Efforts in this regard will insure success of this management plan.

The following techniques for livestock distribution are essential for the permittee to follow:

1. Water

Water will be the most effective distribution tool on this allotment. Several new stock tanks and springs will be developed to facilitate distribution. In addition the control of waters can be employed to achieve this objective.

2. Trails

The allotment has a numerous network of roads existing which are used as trails. Livestock can be moved to outlying areas of the allotment via these access routes.

3. Salting

Proper placement of salt will help considerably to distribute livestock. Salt will not be placed in areas where livestock normally concentrate. Areas to be avoided include waters, old salt grounds, riparian zones, shaded areas, and areas of normal use where salting could create a sore spot. Normally salt will be placed one quarter to one half mile from water and on areas receiving light use. The permittee and District Range Conservationist will jointly select areas where salt will be placed.

4. Horseback Distribution

Relocation of livestock away from concentration areas will be another effective tool to improve distribution. It will be the permittee's responsibility to distribute cattle properly upon moving into a new unit.

5. Fences

In order to control the drift of livestock on the north side a division fence will be constructed to create the Silver King and Montana Mountain pastures. This fence will need to be constructed in its entirety within three years' time. These fences will be a valuable aid to help permittees control their livestock as the grazing schedule is followed. All fences assigned for maintenance must be kept in good condition and capable of controlling livestock movement.

V. RANGE IMPROVEMENT CONSTRUCTION

A. Structural Range Improvements

Priority I

Year	Improvement Name	Responsibility	Estimated Cost
1980	Lower Montana Tank Done	Forest Service to construct through contract	3,500
1980 Done	Switchback Tank NO GOOD		3,000
1980	Upper Montana Tank		3,000
1980 1980 1981	Montana Mountain Silver King Division Fence Done	Forest Service will purchase materials, permittee to construct under coop	24,000
1980	Happy Camp Cattleguard Done 1980/81	Forest Service to construct	3,500
1980	Wildhorse Horizontal Well and pipeline Done 1980	Forest Service to drill well and purchase materials, permittee to install pipeline and trough	3,000
1980 81	Pickett Mill (Substitute - Silverking will Done 10/15/81	Forest Service to redrill well, permittee to reconnect system	2,000
1981 81	Mud Spring #1 Done	Forest Service to contract trench and purchase materials and install pipe	1,500
1980 1980 + 1981	Superior Horizontal Well & Arnett Well Done	Forest Service to purchase materials, install 30,000 gal. storage and dig trench, permittee to install pipeline and connect system plus construct drinking trough and cap well	6,000

Priority II

1981 (1981)	Telegraph Spring 1980-4 Done 10/15/81	Permittee to reconstruct concrete trough	1,000
1981 81	Kanes Spring 1980-4 Done	Forest Service to purchase materials, permittee to reconstruct with redwood trough & pipeline	1,000
1981	Goatwater Spring FY1982 todo Done	Permittee to reconstruct spring box, pipeline and concrete trough	500

Priority II

Year	Improvement Name	Responsibility	Estimated Cost
1981	Cottonwood Corral Done	Permittee to relocate trap. Facilitate continuance of Rd. 650 that was damaged by flooding	500
1981	Alamo Tank #1 Done 1980	Forest Service to clean out tanks and purchase bentonite, permittee to apply bentonite	2,500
	Lime Tank		2,500
	Comet Tank		2,500
			10,500

Priority III

1982 (1981)	Roblas Cattleguard	Forest Service to purchase and install	3,500
1982	~~Reymert~~ Tehipite Cattleguard Dne.		3,500
1982 (1981)	TU Cattleguard		3,500
1982	Rudd Spring #1 } 46 AU water rights rec'd 3/14	Permittee to develop new springs	1,000
	Rudd Spring #2		
1982 Done 1980	Silver King Cattleguard	Forest Service to construct	3,500
1982 (1981)	Bored Well Spring Done	Permittee to repair pipeline, construct one concrete trough on the east side	1,000
			14,000

VI. MAINTENANCE OF IMPROVEMENTS

All improvements listed in CPO 2200-5 of the term permit are the permittees maintenance responsibility. Each improvement should be maintained to assure the system can be adequately followed.

VII. INSPECTIONS AND FOLLOWUP ACTION

A. Annual Inspections

The Forest Service will inspect the Superior Allotment each year with the permittee. The amount of time on the allotment will depend upon the relative success of the grazing system. More time will be spent on the allotment in the event the system appears to be failing, so that adjustments can be made accordingly.

B. Annual Permittee instructions will include the following items:

1. Maintenance projects
2. Rotation scheme
3. Management practices
4. New construction
5. Salting practices
6. Tagging
7. Planned inspections
8. Any changes in grazing system

C. Management Instructions

1. Deviation from the plan will only be done in close consultation with the District Ranger and his Range Staff.

2. During the time livestock are scheduled to be in a specific unit, all other units must be free of all livestock.

3. Four weeks will be considered as the moving period; 2 weeks before and 2 weeks after the date the cattle are to be off. During this period, gates may be left open to allow livestock to move in the unit scheduled for grazing.

4. Place salt and supplemental feed in lightly-used areas at least one quarter mile from water. District personnel must be contacted so that they may assist the permittee in selecting these areas.

5. If overuse is occurring within any of the specific units, the District Ranger can request livestock be moved earlier than scheduled. Conversely if the permittee feels that the livestock can remain in a specific unit longer than scheduled, the District Ranger can approve this action.