COPPER-MIRES CATTLE ALLOTMENT

MANAGEMENT PLAN

REPUBLIC RANGER DISTRICT

COLVILLE NATIONAL FOREST

REGION 6

Plans prepared by_____ Date_____

Approval of plan
Recommended by Jack Francis Date 6-30-76
District Ranger

Approval of plan
recommended by Raymond J Evans Date 7/13/76
Range Staff

Plan approved by Robert B Tunnell Date 7/23/76
Forest Supervisor

COPPER-MIRES CATTLE ALLOTMENT

MANAGEMENT PLAN

1976

I. INTRODUCTION

The Copper-Mires Allotment encompasses approximately 8100 acres in the head of Mires Creek, headwaters of the North Fork of the San Poil River, Kettle River Range, Ferry County, Washington. This range is composed of large grass parks, with open fir and pine stands as well as creek bottoms. Part of the range is dominantly of southern exposure as well as large high parks. Dominant grass species are pinegrass, beardless bluebunch wheatgrass, and Idaho fescue.

Except for isolated small parks this range is in good condition. At the present, the main problem is obtaining uniform distribution. This is, in part, caused by improper salting, herding, and poor water developments.

Prior to 1970 the allotment consisted of two allotments, Copper Butte and Mires. The two allotments were combined in 1970. The present allotment is managed under a rest rotation system with four pastures on National Forest lands and four pastures on private land. This management plan will only concern itself with National Forest lands at this time. A coordinated range management plan will be initiated at a later date.

II. INFORMATION SECTION

A. History of Range Use and Past Events

Since the allotment was once two allotments, each will be covered separately up to 1970.

Mires

a. General

No records for this allotment can be found for periods prior to 1912. Existing records show that this range was used only by cattle and horses. In 1917 neighboring allotments were thrown open to all classes of livestock; Cook Mountain, however, remained as a cattle and horse allotment. This practice was undoubtedly due to this country's entry into World War I. During this period the allotments were designated by numbers and Cook Mountain was designated No. 10, although still referred to as Cooke Mountain.

From the period of 1916 - 22, this area experienced a severe drought which hurt the cattle industry severly. Permitted season at this time was from May 15 to November 15. Trespass horses were also causing considerable damage. This is usually referred to as the "wild horse" problem. Although there were many wild horses at this time, a large amount of this stock was owned by the local ranchers. After the summer-fall work was completed the horses were turned loose and stayed out until the following spring. This "wild horse" problem was finally solved by Forest Supervisors of the Colville and Chelan (later Okanogan) National Forests.

From 1925 to the early 1940s about 100 head were allowed to use this range from May 16 to October 31. This has been the practice until the present.

b. Inportant Changes in Use

In 1923 - 24 Mr. Frank B. Lenzie conducted range surveys and found the following: (1) A general lack of demand for cattle and sheep ranges. (2) Colville Forest considered understocked by 50% for cattle and 60% for sheep. (3) Lack of interest in proper livestock handling. This was probably due to the general depression in the livestock industry, and probably caused by the 1917 - 23 drought. (4) Low range very heavily used due to early on dates and trespass horses. (5) No consideration given to alienated lands in respect to carrying capacity. (6) Very few drift fences and water developments.

It was felt that demand, stocking and interest would improve when the financial picture improved. Heavy use on spring range did not markedly improve until the early 1940s. Alienated lands are now given recognition when compiling carrying capacity. A good many improvement programs were initiated and are still going on.

When the Colville Forest was transferred into Region One in 1943 Mr. Tom Lammasson began collecting range data from the spring of 1944 to the fall of 1956, which showed the following:

(1) Seasons did not correspond with vegetative readiness. (2) Allotments were not balanced with seasons. (3) Estimated carrying capacity too high (direct conflict with Mr. Lenzie's statement). (4) Unsatisfactory distribution.

The master season was changed to May 21 through October 31. Boundaries were shifted to balance seasons of use, and carrying capacities altered to more realistic figures. The present carrying capacity is felt to be adequate under existing situations. It is interesting to note the conflict between Mr. Lenzie's conclusions and those of Mr. Lammasson.

Copper Butte

a. General

Prior to 1943 this allotment was used by sheep. For the most part this area was part of the Copper Butte S & G Allotment, where from 1,000 to 1,500 sheep were allowed. This range was used heavily by sheep and a goodly amount of trampling occurred. In 1943 this area was closed to stock, to allow the deteriorated range to recuperate. In June, 1946, Mr. Lammasson, Mr. DeJarnette and Ranger Gaffney rode over this range and estimated that the area would carry 100 head of cows for the period July 15 to September 15.

The upper portions of this range are quite steep and it soon became evident that, if cattle were to fully utilize this range, water developments and drift fences were needed, also, permittees would need to ride over the area at least twice weekly.

Furthermore, cattle seem to have an aversion to using the higher portions of the slopes. This situation still exists. (See Section 10, Item a(3), page 9).

b. Important Changes in Use

In 1947 this range was incorporated into the Cooke Mountain C & H Allotment. It has existed as such until 1963. It is felt that better management will result if this area is made into a separate allotment. This was discussed with the permittees in early 1963. All present permittees agreed except Mr. Damon Fields, who abstained. Mr. Fields is a new permittee, and he stated that he had not been in the area long enough to comment. Mr. Fields has leased neighboring lands and will fence these lands. When these fences are complete they will, almost entirely, fence off the Copper Butte unit, thereby isolating the area from the Mires unit.

B. Ranch Operations and Status of Permits

Copper-Mires permittees are engaged almost completely in a cow-calf operation. At the present time, the Valley Grazing Association has nine members, who graze a total of 288 cattle on this allotment with a season of 6/1-9/30. The nine permittees depend on the National Forest to round out their ranching operation. Only a portion of the permittees' cattle graze on this allotment during the summer season. Livestock are usually pastured under a rest-rotation system off-the-Forest prior to entering the Forest.

C. Current Status of Management

In 1973, a planned rest program of use was initiated. This planned rest program has been revised and refined and is now working satisfactorily.

D. Condition and Trend of the Resource

Range allotment analysis was updated in 1975. The following table contains area and forage production/condition summaries by suitability class and vegetative type.

Table 1: AREA AND FORAGE PRODUCTION/CONDITION SUMMARY

Copper-Mires C&H ALLOTMENT

Colville NATIONAL FOREST Republic RANGER DISTRICT

Compiled 3/10/76 By W. B. REED

ITEM	NATIONAL FOREST LANDS			ALIENATED OWNERSHIP LANDS			ALLOTMENT TOTAL LANDS		
Acres		Acres	%		Acres	%		Acres	
Gross		7855	100		1575	100		9430	100
(Subject to) CLOSURE		95	1		110	7		205	2
Unusable or UNSUITABLE		1755	22		10	1		1765	19
SUITABLE		6005	77		1455	92		7460	79
PRIMARY		4610	77		1070	74		5680	76
(Transitory) (Prime/Sec)		-	-		-	-		-	-
SECONDARY		1395	23		385	26		1780	24

VEGETATIVE TYPE	%	ACRES BY FORAGE PRODUCTION/CONDITION CLASS								
		Good	Fair	Poor	Good	Fair	Poor	Good	Fair	Poor
P1 1140a.	20	90	480	45	110	405	10	200	885	55
P6 4540a.	80	410	1590	2000	20	310	210	430	1900	2210
SubT. 5680a.	100									
S1 125a.	7	-	125	-	-	-	-	-	125	-
S6 1655a.	93	215	140	915	-	100	285	215	240	1200
SubT. 1780a.	100									
SUITABLE 7460	100	715	2335	2960	130	815	505	845	3150	3465
	%	10	31	40	2	11	7	12	42	46

As a direct result of improved management by use of a planned rest system of grazing for the past three years, range conditions are improving greatly and carrying capacities may increase. In addition, most of the unsuitable outlying areas have also improved in condition. All but a few areas are considered to be in good or better condition presently.

E. Estimated Current Grazing Capacity

Shown below are tentative capacity estimates developed from the range environmental analysis survey. These figures are based only on suitable range and D & I forage production.

TENTATIVE COPPER-MIRES GRAZING CAPACITIES
(Based on 1975 REA)

Table 2: Acres by Forage Production/Condition Class

Vegetative Type	National Forest Lands				Alienated Ownership				
	Good	Fair	Poor	Sub Total	Good	Fair	Poor	Sub Total	Indicated AUM
P1	90	480	45	615	110	405	10	525	204
P6	410	1590	2000	4000	20	310	210	540	700
S1	-	125	-	125	-	-	-	-	21
S6	215	140	915	1270	-	100	285	385	244
Totals	715	2335	2960	6010	130	815	505	1450	1169

Actual use data tempered with impact studies, utilization studies, close observations, judgment and knowledge of the area and situations are excellent methods of determining proper stocking rates. Following are actual use tabulations and carrying capacity estimates on the allotment since 1943.

Table 3:

RECORD OF GRAZING USE

Copper-Mires Allotment

Republic Ranger District Colville National Forest

Year	Unit or Key Area	Planned/Permitted Use				Actual Use				Proper Use	
		Number	Dates From - To	AUM	% Use	Number	Dates From - To	AUM	% Use	AUM	%
		Cooke	Mountain		(Mires						
1943		192	5/1-10/31	1152		192	5/1-10/31	1152			
1944		136	5/1-10/31	816		136	5/1-10/31	797			
1945		183	5/1-10/31	1098		183	5/1-10/31	981			
1946		186	5/21-10/31	990		186	5/21-10/31	981			
1947		161	5/21-10/31	858		161	5/21-10/31	782			
1948		202	6/1-10/31	1010		202	6/1-10/31	922			
1949		191	5/21-10/31	1018		191	5/21-10/31	1020			
1950		181	5/21-10/31	965		181	5/21-10/31	1020			
1951		193	5/21-10/31	1029		193	5/20-10/25	953			
)52		210	5/21-10/31	1120		210	5/21-10/30	1024			
1953		223	5/21-10/31	1189		223	5/21-10/28	1061			
1954		223	5/21-10/31	1189		223	5/30-11/5	1012			
1955		235	5/21-10/31	1253		235	6/1-10/28	984			
1956		234	5/21-10/31	1247		234	5/21-10/30	1070			
1957		234	5/21-10/31	1247		234	5/21-10/30	1085			
1958		235	5/21-10/31	1253		235	5/21-10/30	1090			
1959		235	5/21-10/31	1253		235	5/21-11/2	1112			
1960		235	5/21-10/31	1253		236	5/21-11/18	1003			
1961		183	5/21-10/31	975		183	5/24-11/2	848			
1962		183	5/21-10/31	975		183	5/21-10/31	962			
1963		119	5/21-10/31	634		119	5/22-10/31	600			
1964		18	5/21-10/31			18	6/4-10/9	77			

Table 3 con't.

RECORD OF GRAZING USE

Copper-Mires Allotment

Republic Ranger District Colville National Forest

Year	Unit or Key Area	Planned/Permitted Use				Actual Use				Proper Use	
		Number	Dates From - To	AUM	% Use	Number	Dates From - To	AUM	% Use	AUM	%
		Cooke	Mountain			(Mires)					
1965		72	5/21-10/31	384		72	5/22-10/31	386			
1966		72	5/21-10/31	384		72	5/21-11/5	384			
1967		86	5/21-10/31	458		43	5/21-10/31	229	(43 hd non-use)		

Table 3 con't

RECORD OF GRAZING USE

Copper-Mires Allotment

Republic Ranger District Colville National Forest

Year	Unit or Key Area	Planned/Permitted Use				Actual Use				Proper Use	
		Number	Dates From - To	AUM	% Use	Number	Dates From - To	AUM	% Use	AUM	%
		Cooke	Mountain			(Copper	Butte)				
1964		93	5/21-10/31	495		93	6/6-11/4	460			
965		100	5/21-10/31	533		100	5/22-10/31	535			
1966		100	5/21-10/31	533		100	5/21-10/31	531			
1967		100	5/21-10/31	533		100	5/24-10/31	496			

Table 3 con't.

RECORD OF GRAZING USE

Copper-Mires Allotment

Republic Ranger District Colville National Forest

Year	Unit or Key Area	Planned/Permitted Use				Actual Use				Proper Use	
		Number	Dates From - To	AUM	% Use	Number	Dates From - To	AUM	% Use	AUM	%
			Combined Mires		and	Copper	Butte				
1968		322	8/26-9/27	322		322	8/26-9/27	322	(Permit changed during season)		
1969		325	6/11-9/30	735		325	6/11-9/30	735			
1970		508	6/11-10/15	616		458	6/20-10/15	458			
1971		315	6/1-10/10	853		680	6/5-10/10	862			
1972		276	6/1-9/15	918		204	6/6-9/21	721			
1973		288	6/1-9/30	785		213	6/7-10/30	515			
1974		288	6/1-9/30	855		273	6/17-11/4	806			
1975		288	6/10-10/15	915		288	6/10-10/30	1257			

The preceding actual use and carrying capacity dates indicate the allotment is stocked between 95 - 105 percent of capacity. There is an improvement in condition of soil and forage generally with a few exceptions. Soil and vegetative trends in condition continue to improve.

In those areas yet in poor condition, it is recommended that use be light and delayed as long as possible.

F. Existing Improvements

Following is a list of existing structural and non-structural improvements on the allotment. All improvements are maintained by the Valley Grazing Association.

Table 4

RANGE DEVELOPMENT PROGRAM

IMPROVEMENT			CONSTRUCTION RESPONSIBILITY				FACILITY		
Date	Number	Name and Location	Material	Equip.	Labor	Maint.	Type	Capacity-Quantity	Co
1960		Herrin Cattleguard NE Sec. 14 T37N R33E	F.S.	F.S.	F.S.	F.S.	Steel deck, timber base	16'	500
1970		Lower Triangle C.G. NW Sec. 25 T37N R33E	F.S.	F.S.	F.S.	F.S.	Steel deck, timber base	16'	500
1970		Mires-Lambert C.G. NE Sec. 1 T37N R33E	F.S.	F.S.	F.S.	F.S.	Steel deck, timber base	16'	500
1970		Mires Divide C.G. NW Sec. 12 T37N R33E	F.S.	F.S.	F.S.	F.S.	Steel deck, timber base	16'	500
1940		May Spring NW Sec. 17 T37N R34E	F.S.	F.S.	F.S.	Permittee	Wooden trough	200 gal.	600
1940		Copper Butte #1 Spr. SW 14 T37N R34E	F.S.	F.S.	F.S.	Permittee	Wooden trough	200 gal.	600
1940		Copper Butte #2 Spr. SE Sec. 14 T37N R34E	F.S.	F.S.	F.S.	Permittee	Metal trough	200 gal.	600
1940		Copper Butte #3 Spr. SE Sec. 14 T37N R34E	F. S.	F.S.	F.S.	Permittee	Wooden trough	200 gal.	600
1940		Upper Belcher Spr. NE Sec. 16 T37N R34E	F.S.	F.S.	F.S.	Permittee	Wooden trough	200 gal.	600
1940		Belcher Spr. SE Sec. 16 T37N R34E	F.S.	F.S.	F.S.	Permittee	Wooden trough	200 gal.	600
1940		McNaulty Spr. SW Sec. 16 T37N R34E	F.S.	F.S.	F.S.	Permittee	Disrepair	-	600
1940		Upper McNaulty Spr. SW Sec. 16 T37N R34E	F.S.	F.S.	F.S.	Permittee	Wooden trough	200 gal.	600
1940		Neideffer Spr. NE Sec. 2 T37N R33E	F.S.	F.S.	F.S.	Permittee	Wooden trough	200 gal.	600

Table 4 con't.

RANGE DEVELOPMENT PROGRAM

Date	IMPROVEMENT Number	Name and Location	CONSTRUCTION RESPONSIBILITY Material	Equip.	Labor	Maint.	FACILITY Type	Capacity-Quantity	Co
1940		Box Canyon Spr. SE Sec. 2 T37N R33E	F.S.	F.S.	F.S.	Permittee	Wooden trough	200 gal.	600
1940		North Mires Spr.. NW Sec. 11 T37N R33E	F.S.	F.S.	F.S.	Permittee	Wooden trough	200 gal.	600
1940		Bear Spr. NE Sec. 13 T37N R33E	F.S.	F.S.	F.S.	Permittee	Metal trough (2)	600 gal.	600
1940		Olsen Spr. NE Sec. 13 T37W R33E	F.S.	F.S.	F.S.	Permittee	Wooden trough	200 gal.	600
1960		Whiskey Spr. SW Sec. 11 T37N R33E	F.S.	F.S.	F.S.	Permittee	Metal trough	600 gal.	600
1966		Ranger Gaffney Spr. NE Sec. 1 T37N R33E	F.S.	F.S.	F.S.	Permittee	Disrepair	-	-
1960		Ranger Cory Spr. SE Sec. 12 T37N R33E	F.S.	F.S.	F.S.	Permittee	Metal trough	150 gal.	600
1960		Mires-Lambert Fence NE Sec. 1 T37N R33E	F.S.	F.S.	F.S.	Permittee	Allotment Boundary Fence	.50 mi.	400
1971		N. Fork San Poil Fence	F.S.	F.S.	F.S.	Permittee	Allotment Boundary Fence	1.20 mi.	2640
1960		Upper Canyon Fence NW 17 T37N R33E	F.S.	F.S.	F.S.	Permittee	Allotment Division Fence	.30 mi.	400
1967		Lower Canyon Fence NW Sec. 20 T37N R32E	F.S.	F.S.	F.S.	Permittee	Allotment Division Fence	.30 mi.	400
1940		Copper Butte FEnce SE Sec. 15 T37N R34E	F.S.	F.S.	F.S.	Permittee	Allotment Division Fence	.25 mi.	300
1970		Mires Divide Fence NW 11 T37N R33E	F.S.	F.S.	F.S.	Permittee	Allotment Division Fence	3.30 mi.	7,260
1973		Bear Springs Division Fence SE Sec. 12 T37N R33E	F.S.	Permittee	Permittee	Permittee	Allotment Division Fence	1.00 mi.	1,400

G. Importance of this Range

The Copper-Mires allotment is used for a variety of services. The nine permittees within the Valley Grazing Association rely on this area to round out their livestock operations. The area is important from the standpoint of timber production, producing quality water from the watershed, and providing recreation in the form of sightseeing, hunting, and fishing. The allotment is tied socially and economically to Ferry County, the State, and the Nation.

Livestock operators using this area are quite stable. Permit transfers are very few and commensurability is not a problem.

H. Special Problems and Conditions

Several critical areas yet remain on this allotment. A planned rest system of management and permit administration should encourage regeneration of plant cover on these sites. These areas are primarily native range areas with the exception of some old homesteads. The planned rest system of management described in the action section of this plan will aid in improving these areas. However, this system will not substitute completely for good administration, methods of distribution, such as salting away from these areas, and dispersing animals when they congregate in these locations.

III. MANAGEMENT GOALS

The management objectives for this allotment are to develop and manage the forage resources as follows:

A. To achieve site stability and maintain productivity potential:

1. Increase both plan density and litter in the open innerspaces on the used native range areas to prevent sediment discharge.
2. Design a system of grazing that will reduce livestock handling to a minimum.

B. To obtain an appropriate mix of output values.

1. Coordinate livestock grazing with potentials and objectives with timber management.
2. Achieve a distribution of livestock that avoids congregating on key areas, along streams, roads, and cattleguards.
3. Include wildlife numbers in future stocking levels.
4. Deliver high quality water to the forest boundary.

C. To capture available forage values after the above prerequisites and constraints are met, the available forage will be used to maximize AUM's.

D. Basic resource damage, vegetative resource damage and unauthorized livestock use will not be allowed or tolerated.

IV. ANALYSIS SECTION

A. Site and Use Requirements and Limitations

The management program for this allotment will take into consideration the physiological, and phenological requirements of plants. An opening date of June 1 should allow for adequate growth of all plants. By this time, development and vigor establishment would be well advanced. All suitable range areas should have a ground cover percentage between 60 and 70 percent. Cattle should not lose weight while in any unit. These requirements can be observed while making range inspections and impact studies and be relying on the experience and observations of the herder.

C. Management and Development Opportunities

The grazing formula planned for this allotment is one of planned rest. A rotating system of rest and deferrment is built into the system. Consideration has been given to the ease of livestock movement. As it is arranged, only 2 moves are necessary throughout the season.

Reconstruction of water developments and the development of others and fence construction and reconstruction are opportunities remaining on this allotment. Some seeding possibilities may exist in some units.

D. Potential Grazing Capacity

The exact possible increase or decrease of carrying capacity will be determined by actual use studies associated with impact analysis and general observations over the next three years. The allotment appears to be between 95 to 105 percent of capacity at this time. Improvement of conditions and increased capacity is occurring annually on this allotment. With soil and moisture relationships as desirable as they are, potentials are very favorable for continued improved conditions.

E. Relationships with Other Uses and Activities

The environmental analysis report for this allotment describes these relationships and is found in the reference section of this plan.

F. Economic Analysis of Opportunities

Any future improvements requests will be accompanied with an economic analysis. Grazing of livestock on this allotment is economically justifiable as forage is a resource.

V. ACTION SECTION

A. Selected Management Prescription

1. The management system is planned rest rotation system of 4 units in four year cycle of a 153 day grazing period annually, June 1st to October 31st.

Cycle Year	Unit Sequence by Periods Early Use	Mid Season	Late	Rest
First	2	4	3	1
Second	1	3	4	2
Third	2	1	3	4
Fourth	1	2	4	3

Repeat above cycle

This system is not based on graphic formula as such, but is designed to meet the physiological requirements of plants. Each unit is deferred until seed-ripe or near seed-ripe time at least one year in four. In addition, each unit is rested one year in four. A few aspects of the proper use management made will be practiced such as range readiness and proper use on key areas. Topography and physical arrangement of the four units, including restrictions such as vegetative barriers (timber stands) renders the allotment nearly impossible to manage, in other ways allowing for ease of handling, minimum of movement and balanced rest and use of the range.

It is hoped that maximum benefits to plants can be realized under this system. Trampling and soil disturbance should be less. Heavy demand on water sources and supply can be

reduced. Overall, this system favors improvement of the allotment.

B. Opportunities still remain for fence construction and reconstruction and water development and redevelopment on the allotment. These opportunities will be developed as the need arises.

3. Correlation with Other Use and Activities

Coordination with timber management is needed within the allotment to make the system work. This is specifically outlined in the environmental analysis report found in the Appendix of this plan. All fences, corrals, cabins, and cattleguards, both present and proposed, should be studied carefully to make sure they do not conflict with other values and uses.

4. Administrative Action Needed to Implement the Program

a. Use the prescribed system beginning in 1976.

b. Provide for herding, salting, and hauling of water (if needed to utilize secondary range) as instructed by the Forest Officer in charge under a planned rest system of grazing as outlined in the annual plan of use.

c. Continue grazing follow-up studies.

d. Refine grazing system as changes become necessary.

e. Reconstruct and construct range improvements when necessary and as funds permit. Non-structural range improvements programs will be worked into the planned rest cycle.

f. Improve permit administration.

g. Do not allow unauthorized use, take immediate action when found.

VI. FOLLOW-UP SECTION

A. Examination and Studies

1. Annual record on Form R-6 2200 - the actual impacts and observations for units grazed.
2. Annually prepare a range utilization map to show intensity and distribution of forage utilization on used units.
3. Interpret use patterns and intensities; trend indicators, livestock responses, coordination requirements, and management goals.
4. Determine need for program modification and/or structural improvements.
5. Note needed changes; incorporate into next year's annual plan of use.
6. Select and map study sites (key areas); establish or re-measure trend studies and utilization as necessary to confirm that management goals are being achieved.

B. Modifying and Improving the Program

Most programs can be improved. Desirable modification will become evident with application. Remarks to this effect should be made on inspection notes and incorporated into this management plan periodically.