

WITTMAYER GRAZING ASSOC.

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Prepared by:

Valley Resource Area
Hanna District
Bureau of Land Management

In Cooperation With:

Wittmayer Grazing Association
Glasgow, Montana 59230

Badlands Cooperative State Grazing District
P. O. Box 422
Glasgow, Montana 59230

C. M. Russell National Wildlife Range
Lewistown, Montana 59457

and

Soil Conservation Service
Glasgow, Montana 59230

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I. General Information

A. Allotment Location and Area

In this Management Plan, the Lone Tree Allotment, South Little Beaver Allotment, and Wistmayer Brothers Allotment are combined to make the Wittmayer Grazing Association Allotment. The original allotments will now be referred to as the Lone Tree Unit, the South Little Beaver Unit, and the Fort Peck Unit.

These three units are located approximately 23 miles south and west of Glasgow, Montana in Townships 23 North through 27 North and Ranges 36 East through 39 East (see Allotment Map - Appendix 1).

Access to these units can be obtained in two ways. The first is by traveling south from Glasgow on Montana Highway 24 to the Pines turnoff and along a county road in a southwest direction to the Lone Tree Unit and the Fort Peck Unit. The second is by traveling south from Glasgow on a county road (which leaves Glasgow from 6th Avenue South on the west edge of town), to the South Little Beaver Unit.

The following table is the tabulated acres and AUMs for each of the above Units: (See next page)

Table 1

TAMPAH ACRES AND AUMs

Units	TO		IN		CEAL		District		Self-Furnished		Uncontrolled Land		TOTAL
	Acres	AUMs	Acres	AUMs	Acres	AUMs	Acres	AUMs	Acres	AUMs	Acres	AUMs	
Lone Tree	99,479	7,156	1,209	131	000	000	6,970	569	4,072	69	70	12	111,450
S. Little Beaver	21,435	2,076	1,754	245	000	000	1,000	114	440	44	20	2	24,649
100% F.R. w/Base	135	12											13
Fort Peck													
Outside W. R.	14,035	1,967	937	157			983	168	3,309	595	665	37	19,922
Within W. R.	38,693	1,941					840	71	838	171			41,113
100% F.R. w/Base	874	180					528						874
TOTAL	174,849	13,338	3,902	534	528	000	8,725	902	8,651	1,505	759	51	199,471

TOTAL FEDERAL RANGE

PD	174,849 Acres	13,338 AUMs
LJ	3,900 "	534 "
CEAL	528 "	30 "
TOTAL	179,277 Acres	13,902 AUMs

PD = Public domain.

LJ = Land utilization. Federal acquired lands, administered same as and in conjunction with PD.

CEAL = Corps of Engineers Acquired land.

W.R. = Charles M. Russell National Wildlife Range.

100% F.R. w/Base = The 100% Federal range with base designation is not limiting as to season of use, class of numbers of livestock which may graze the range in conjunction with the normal livestock operation so long as damage to the Federal range does not occur.

B. Resource Data

The Long Tree Unit and the South Little Beaver Unit lie within the Willow Creek badlands topographic type. Soils on this type are derived from Bearpaw shales and are highly erodible. This type consists of rolling shale ridges that are interlaced with flat, wide drainage bottoms. The Fort Peck Unit, which includes the Browning Place, lies within the Missouri River Breaks topographic type. Soils in this type are derived from Hell Creek and Fox Hills sandstones and Bearpaw shales. This type is made up of rolling to steep ridges and narrow drainages. This type is quite steep and highly erodible.

The largest vegetative type in these units is the grassland type. It is found mainly on upland sites with well developed soils. The major vegetation species of this type include western wheatgrass (*Agropyron smithii*), blue grama (*Bouteloua gracilis*), and big sagebrush (*Artemisia tridentata*). There are lesser amounts of green needlegrass (*Stipa viridula*), Sandberg bluegrass (*Poa secunda*), little bluestem (*Andropogon scoparius*), fringed sagewort (*Artemisia frigida*), and silver sage (*Artemisia cana*). This type is in good to fair condition. Erosion is slight to moderate with some sheet and gully erosion taking place. The grass type is the highest producing vegetative type and is important for livestock production and wildlife habitat.

The sagebrush type in these units is important for livestock and wildlife. This type contains important grasses for livestock as well as forage and cover for grouse and big game species. This type is presently in fair to good condition. Erosion is slight to moderate on some areas and moderate to severe on others. The sagebrush areas outside the Wildlife Range are suitable for improvement through management practices. Big sagebrush and western wheatgrass are the dominant species of this type. Other important species existing in this type in smaller amounts are silver sage, fringed sagewort, blue grama, and Sandberg bluegrass.

The greasewood (*Sarcobatus vermiculatus*) type is the second largest type in this area and is tied closely to soils with high salt concentrations. If the salt content is only moderate, western wheatgrass will be interspersed with greasewood. If the salt concentrations are high, only greasewood is able to survive. Other important species in this type include rabbitbrush (*Chrysothamnus* spp.), squirreltail (*Sitanion hystrix*), and Nuttall saltbush (*Atriplex nuttallii*). This type is in fair to good condition. Erosion varies from slight to severe depending on the location. This type is considered fair for livestock grazing and wildlife use.

The saltbush type is limited to the broad alkaline-saline plains of Willow Creek and its tributaries. Plant species included in this type are Nuttall saltbush, western wheatgrass, big sagebrush, Sandberg bluegrass, and prickly pear cactus (Cylindropuntia polyacantha). These sites are in fair to poor condition. Erosion is moderate to severe with numerous headcuts advancing throughout the area. These areas have a high potential for development through contour furrowing, water spreading and other land treatments to increase vegetative production and habitat improvement.

The annual weed type is located entirely in the Willow Creek drainage. It occurs on shale sites and is in fair to poor condition. Erosion is from moderate to severe. This type has very little value for livestock, wildlife, or recreation activities. Some important vegetative species in this type are annual atriplex (Atriplex argentea), sixweeks fescue (Festuca octoflora), Russian thistle (Salsola kali), fireweed (Kochia scoparis), cheatgrass (Bromis tectorum), and western wheatgrass.

The conifer and juniper type is located along the Missouri River Breaks. This type occurs on thin shallow soils with 30 to 45% slopes. This type is in good condition. There is some severe gully erosion with sheet erosion classed as slight to moderate. Important species in this type are ponderosa pine (Pinus ponderosa), juniper (Juniperus sp.), blue grama, western wheatgrass, and needle and thread grass (Stipa comata). These areas have high value for recreation development, big game habitat, and grazing for livestock. There is no commercial timber in this type.

Waste and barren types occur on the badland sites with rolling to steep slopes. Both types have little or slight grazing value. The waste type is covered with vegetation and is extremely limited as grazing land. The barren type is so sparsely vegetated that it will not lend itself to grazing. These areas are rated as producing no livestock AUMs. Erosion on these sites are severe to critical.

Between 1948 and 1962, the Bureau of Land Management has developed 2,399 acres of water spreaders and 347 acres of contour furrowing within the Lone Tree and South Little Beaver Units (Refer to the section on existing projects and Appendix I for additional information). These development areas have provided an increase in vegetation. They are an important tool in controlling erosion and protecting watershed values. Many of these developments have increased the recreation use by providing fishing and hunting opportunities.

The following table shows the total acres of each vegetation type in each unit.

Table II

VEGETATIVE TABULATION (Acres)

Vegetative Type	Units				Total	% of Total
	Lone Tree	S. Little Beaver	Fort Peck	Federal w/Base		
Grass	23,832	2,088	23,806	1,009	60,835	31
Sagebrush	11,577	12,388	5,549	-	39,492	20
Greasewood	39,634	725	7,983	-	48,347	24
Saltbush	9,969	8,516	-	-	17,507	9
Annual Weeds	10,348	473	-	-	10,816	6
Waste-Barren	2,372	482	5,518	-	8,372	4
Juniper-Scalder	-	-	13,145	-	13,145	6
TOTAL	111,152	24,649	61,086	1,009	198,494	100

C. Federal Range Qualifications

Unit	FD AUMs	LU AUMs	CEAL AUMs	Total AUMs
Lone Tree	7,156	131	-	7,287
South Little Beaver	2,076	246	-	2,322
100% FR fenced/wild base	12	-	-	12
Fort Peck	3,903	157	30	4,095
100% FR fenced/base	186	-	-	186
TOTAL	13,329	518	30	13,902

D. Correlation with other Uses

No problem is anticipated in correlating livestock grazing with other multiple uses in the allotment.

Recreation in the form of sightseeing and hunting is an important use. Fishing in the waterspreaders along the Lone Tree drainage and the larger dams is also significant.

Trees are not plentiful in this allotment. Those that do exist will be maintained for their aesthetic value, watershed protection and to provide cover for wildlife.

Mining in this area is not important at this time. The possibilities for future development that exist are oil and gas, bentonite, and gravel. Bentonite claims have been staked in the immediate allotment to the north.

Protection of the watershed is of prime concern. Erosion and sediment damage in the Willow Creek drainage is a major problem. Gullies and numerous headcuts occur throughout this drainage and thousands of tons of soil is eroding annually. The gullying process is lowering the water table and desirable species are being replaced by less desirable species. Therefore, no increase in livestock use will be permitted until the erosion process has been curtailed.

Wildlife habitat may be improved by using the rest rotation system described in this plan. Eliminating winter livestock grazing should also enhance wildlife habitat and therefore benefit wildlife.

Future use conflicts, public priorities, or joint Wittmayer Grazing Association, B.S.F.&W., BLM, evaluations of the plan may identify necessary or needed changes in areas of use, amount of use, or the grazing formula. This plan may be revised at that time.

1. Maintenance Program

LONE TREE UNIT

Reservoirs

Project Number	Name	Sub-division	Location			Maintenance Responsibility	Project Condition
			S.	T.	R.		
MI-R-1599	Pugnosa Retention	SWNE	28	27	36	BLM	
MI-R-1598	Shortfin Retention	SWSE	25	27	36	BLM	
MI-R- 951	Past Retention	SW $\frac{1}{2}$	6	24	38	BLM	
MI-R- 440	Pearson Detention Dam	NW $\frac{1}{2}$	4	25	38	BLM	
MI-R- 439	Gutshot Detention Dam	SE $\frac{1}{2}$	34	26	37	BLM	
MI-R- 433	Jim Detention Dam	NE $\frac{1}{2}$	10	26	36	BLM	
MI-R- 283	Carp Retention Reservoir	NWSW	4	25	38	BLM	
MI-R- 262	Elgin Retention Reservoir	SWNE	34	26	37	BLM	
MI-R- 261	Dart Retention Reservoir	SWNW	6	25	38	BLM	
1-G- 443	White Rock Reservoir	SESE	14	25	37	BLM	
1-G- 443	Beaverhead Reservoir	SENW	3	25	37	BLM	
MI-1039	Twin Forks Detention Dam	SWSW	20	26	36	BLM	
MI-1032	Dead Horse Detention Dam	SENE	15	26	36	BLM	
MI-1031	Double Crossing Det. Dam	SESW	23	26	36	BLM	
MI-1029	Winter Day Reservoir	NESW	19	26	38	Cooperator	
MI-1028	Stormy Day Reservoir	NWNW	26	26	37	Cooperator	
MI-1027	Snowbank Pit Reservoir	SESW	1	25	36	Cooperator	
MI-1026	Pearson Coulee Pit Res.	SESW	32	26	38	Cooperator	
MI-1025	Crossing Pit Reservoir	NESW	35	26	36	BLM	
MI- 952	Browning Detention Res.	NW $\frac{1}{2}$	29	25	38	BLM	
MI- 942	Arribide Detention Res.	NE $\frac{1}{2}$	1	26	36 $\frac{1}{2}$	BLM	
MI- 941	Script Detention Reservoir	NW $\frac{1}{2}$	4	26	37	BLM	
MI- 940	South Beaver Detention Res.	SW $\frac{1}{2}$	9	26	37	BLM	
MI- 939	Itcaina Detention Res.	SENW	17	26	37	BLM	
MI- 921	Half Barrel Detention Res.	S $\frac{1}{2}$	4	24	37	BLM	
MI- 890	Willow Bunch Pit	SENW	22	26	36	Wittmayer Assn.	
MI- 889	Trail Pit	NWNW	10	26	37	Wittmayer Assn.	
MI- 888	Willow Lakes Reservoir #2	SWNW	19	26	37	Wittmayer Assn.	
MI- 886	Piper Reservoir	SENW	15	25	38	BLM	
MI- 885	Potholes Retention Res.	NWNE	30	26	37	Wittmayer Assn.	
MI- 884	Lower Lone Tree Exc. Res.	SWSW	1	25	37	BLM	
MI- 883	Divida No. 2 Reservoir	SWNE	28	26	37	BLM	
MI- 882	Crowder Pit	SENW	3	25	38	BLM	
MI- 879	Forest Detention Reservoir	SE $\frac{1}{2}$	28	25	37	BLM	
MI- 875	Collins Detention Reservoir	SESE	24	25	37	BLM	
MI- 845	Chico Flats Detention Res.	E $\frac{1}{2}$ SW	6	24	38	BLM	

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LOMA TREE UNIT

Reservoirs cont.

Project No. Det.	Name	Location			Maintenance Responsibility	Project Condition
		Sub-division	S.	T.		
MI-844	Two Fork Detention Res.	NWSE	12	24	37	BLM
MI-819	Short Creek Detention Res.	SWW	27	25	37	BLM
MI-827	Madpot Detention Res.	SWW	31	25	37	BLM
MI-782	Corral Jct. Ext. Det. Res.	NESW	24	25	36	BLM
MI-717	Corral Jct. Det. Res. #2	SWNW	29	25	37	BLM
MI-716	Rinnie Division Dam #3	EWSW	34	27	36	BLM
MI-715	Rinnie Division Dam #2	NENE	4	26	36	BLM
MI-709	Hardpan Dugout	SESE	3	26	37	BLM
MI-701	Cottonwood Detention Res.	NWSE	23	25	37	BLM
MI-700	Three Treas Detention Res.	SWNW	15	25	37	BLM
MI-698	Your Name Detention Res.	SESE	9	25	37	BLM
MI-697	Skull Detention Reservoir	SENE	8	25	37	BLM
MI-696	Corral Jct. Det. Res. #1	SENE	24	25	36	BLM
MI-691	Gravel Hill Det. Reservoir	SWNW	14	25	36	BLM
MI-684	Bomber Ext. Drop Dam	SWSE	3	25	38	BLM
MI-647	Fair Weather Reservoir	NWSE	27	26	35	BLM
MI-601	Barnett Headcut Det. Res.	SESE	29	27	33	BLM
MI-595	Rinnie Detention Res.	NESW	4	26	36	BLM
MI-591	Dog Creek Detention Res.	NENE	29	26	38	BLM
MI- 44	Wilderness Reservoir	SENE	29	26	38	BLM

Fences

MI-R-1484	Teal Fence	(Refer to Allotment Map - Appendix 1, Overlay A)	BLM
MI-R-1480	Pike Fence		BLM
MI-R- 167	Loma Tree Protection Fence		Wittmayer Assn.
MI-4- 575	Wittmayer Horse Pasture		Wittmayer Assn.
MI-957	Collins Res. Protection Fence		Fred Collins
MI-810	Tree Waterspreader Fence		BLM
MI-787	Bomber Waterspreader Fence		BLM
MI-781	Handley-Wittmayer Bdry. Fence		Handley and Wittmayer Assn.
MI-693	Smiley Unit Bdry. Fence		Smiley et al.
MI-632	Little Beaver Bdry. Fence		McIntyre et al.
MI-612	Etchart-Wittmayer Bdry. Fence	Etchart and Wittmayer Assn.	
MI-R-5801	Unity Fence	Archambeault	

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SOUTH DUTCH CREEK UNIT

Reservoirs

<u>Project Number</u>		<u>Sub-division</u>	<u>S.</u>	<u>T.</u>	<u>R.</u>	<u>Maintenance Responsibility</u>	<u>Project Condition</u>
MI-R-1294	Line Retention Reservoir	NENE	19	26	39	BLM	
MI-R-1169	Pink Retention Reservoir	SESW	18	26	39	Wittmayer Assn.	
MI-R- 946	Barry Retention Reservoir	NNE	9	23	38	Wittmayer Assn.	
MI-R- 945	Bliss Retention Reservoir	NW	13	26	38	Wittmayer Assn.	
MI-R- 944	Briar Retention Reservoir	NW	36	26	38	Wittmayer Assn.	
MI-R- 943	Boone Retention Reservoir	NE	17	26	38	Wittmayer Assn.	
MI-R- 857	Grub Detention Dam	NE	2	26	37	BLM	
L-C- 239	VR-89 Reservoir	SESE	7	26	38	BLM	
L-C- 149	Saturn Reservoir	SWSE	3	26	38	BLM	
MI-1012	Blanchard Detention Dam	SESW	32	27	39	BLM	
MI- 954	Baldy Pit Reservoir	SESW	32	27	39	BLM	
MI- 952	Tiney Pit Reservoir	NW	3	26	38	BLM	
MI- 961	Lost Retention Reservoir	NENE	1	26	38	BLM	
MI- 700	Harapan Dugout	SENE	2	26	37	-	
MI- 667	Olson Retention Reservoir	SWNW	13	26	38	Olson & Jordon	
MI- 513	Blanchard Reservoir	SESE	30	27	39	BLM	

Fences

MI-R-1478	Goose Fence	(Refer to Allotment Map - Appendix 1)					BLM	
MI-R- 537	Big Fork Fence						A. Olson, Olsen & Jordon, W. Blanchard, Wittmayer Assn., T. McIntyre	
MI-R- 453	Louie Allotment Bdry. Fence					Wittmayer Assn. & L. Archambeault		
MI-4- 106	Boundary Fence					Archambeault		
MI-922	Dog Creek Divide Bdry. Fence					Wittmayer Assn.		
MI-326	Beaverett Waterspreader Fence					Little Beaver Unit		
MI-790	Dog Creek Waterspreader Fence					BLM		
MI-719	Willow Flat Waterspreader Fence					L. Archambeault		
MI-442	Beaver Willow Fence					Wittmayer Assn.		

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LONE TREE WATER

Cattleguards

<u>Project Number</u>	<u>Name</u>	<u>Sub-Division</u>	<u>Location</u>			<u>Maintenance Responsibility</u>	<u>Project Condition</u>
			<u>S.</u>	<u>T.</u>	<u>R.</u>		
MI-R-1731	Art Cattleguard	SWSE	19	27	36	Etchart Ranch	
MI-R-392	Lone Tree Pro. Fence Cattleguard	SWSW	27	26	37	BLM	
MI-1016	MI-S & M Field Camp.	SENE	18	26	37	BLM	

Land Treatments - Maintenance Responsibility - BLM

			<u>Acres</u>		<u>Date Constructed</u>
MI-R-108	T. C. Waterspreader	(Refer to Allotment	1,500		Fall - 1952
MI-819	Lone Tree Contouring	Map - Appendix 1,	75		Fall - 1955
MI-816	Dog Creek Contouring	Overlay A)	272		Fall - 1955
MI-820	Bomber Waterspreader		160		Fall - 1953
MI-616	Lone Tree Waterspreader System		117		Summer - 1953
MI-115	Burnett Dikes		160		Spring - 1952

Wildlife

MI-R-1636	D. Plantings	SENW	19	26	37	BLM
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SOUTH LITTLE BEAVER UNIT

Cattleguards

<u>Project Number</u>	<u>Name</u>	<u>Location</u>			<u>Maintenance Responsibility</u>	<u>Project Condition</u>
		<u>Sub-division</u>	<u>S.</u>	<u>T.</u>		
ML-R-1728	Creek Cattleguard	SWNW	36	26	38	Wittmayer Assn.
ML-R-1727	Dog Cattleguard	NESW	35	26	38	Wittmayer Assn.
ML-R-1723	Hive Cattleguard	SENE	35	27	37	Wittmayer Assn.
ML-R-1720	Sun Cattleguard	SWSE	3	26	37	Wittmayer Assn.

Wells

ML-R-663	Dog Creek Well	SWNW	25	26	38	R. & H. Wittmayer
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Land Treatments - Maintenance Responsibility - BLM

		<u>Acres</u>	<u>Date Constructed</u>
16-C-408	Dog Creek Flat Waterspreader (Refer to Allotment	354	Summer - 1948
ML-924	Cactus Flat Waterspreader Map - Appendix 1, Overlay A)	108	Winter - 1958

FORT PECK UNITReservoirs

Project Number	Name	Sub-division	Location			Maintenance Responsibility	Project Condition
			S.	T.	R.		
ML-R-1169	Rink Ret. Res.	SEW	18	26	39	Wittmayer Assn.	
ML-R-950	Dates Ret. Res.	SE	11	23	36	Wittmayer Assn.	
L-O-399	Six Point Res.	SESE	9	24	39	BLM	
L-O-235	VR-59 Reservoir	NWSE	1	24	38	BLM	
ML-902	Rogers Ret. Res.	SESW	4	24	39	Wittmayer Assn.	
ML-887	Snuff Pit	NESE	35	24	38	Wittmayer Assn.	
ML-881	D. & H. Reconstruction	SWSE	30	24	38	Wittmayer Assn.	
ML-674	Eagle Ret. Res.	SWNE	4	23	37	Wittmayer Assn.	
ML-673	Sheepman Ret. Res.	NWSE	34	24	36	Handley	
ML-672	Three Bears Ret. Res.	NWNW	5	23	37	Handley	

Fences

ML-785	Etchart-Wittmayer Bdry. Fence	(Refer to Allotment-Wittmayer Assn. Map)				
ML-784	Sutherland Creek Bdry. Fence	Etchart Ranch Wittmayer Assn.				
ML-687	Wittmayer Interior Fence	Wittmayer Assn.				
ML-621	Wittmayer Allot. Bdry. Fence	Wittmayer Assn.				
ML-457	Wittmayer Drift Fence	Wittmayer Assn.				
ML-805	Wittmayer-Browning Bdry. Fence	(Refer to Allotment Map) Wittmayer Assn.				
ML-771	Browning-Wittmayer Fence	Wittmayer Assn.				

Cattleguards

ML-R-1734	Nova	SESW	25	24	36	Mont. F. & G.
ML-R-1730	Thru Cattleguard	NENE	14	24	38	Mont. F. & G.
ML-R-1729	Pass Cattleguard	SWNW	24	24	37	Mont. F. & G.
ML-R-1726	Ronte Cattleguard	SWNE	23	24	37	Mont. F. & G.
ML-R-1715	Nes Cattleguard	NESE	24	24	37	Mont. F. & G.
ML-R-1714	Day Cattleguard	SWSE	18	24	38	Mont. F. & G.
ML-R-1042	Pines Cattleguard #6	NESE	32	24	39	C. Eide
ML-R-1038	Pines Cattleguard #2	NWSE	1	25	38	Wittmayer Assn.

Wildlife Studies

ML-R-1512	Pine Ridge Enclosure	SWNW	4	23	38	BLM
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II. Objectives

The following objectives will be accomplished through a rest rotational grazing system of livestock based on the growth requirements of three key species - western wheatgrass, green needlegrass, and saltbush:

- (1.) To increase the productivity of these units by increasing the density of western wheatgrass from 10% of the vegetative cover to 20% and to increase the vigor of saltbush by increasing its leader growth from 2 inches to 6 to 8 inches.
- (2.) To improve the vegetative composition of the waterspreaders by decreasing the amount of Foxtail Barley (Hordeum jubatum) and increasing western wheatgrass.
- (3.) To reduce soil erosion and sedimentation in each unit by increasing vegetation density, plant litter, and desirable plant species.
- (4.) To maintain the present vegetative cover of grass - forb - shrub ratio on the grassland types as important wildlife habitat and to increase the density of grasses and forbs within the interspaces of the sagebrush types.
- (5.) To provide additional habitat for big game animals by establishing willows and other desirable browse species throughout the units.
- (6.) To increase nesting cover along reservoir shorelines for waterfowl.
- (7.) To reduce sedimentation in fishery ponds and to provide shoreline vegetation for spawning of northern pike.
- (8.) To prevent further infestation and reduce the present infestations of undesirable plant species (example - Canada thistle).
- (9.) To increase the percent calf crop and produce higher weaning weights.

III. Grazing Administration

A. Grazing Management System

Private Unit

The Wittmayer Grazing Association, in cooperation with the Soil Conservation Service, plans to seed the private pastures to crested wheatgrass and alfalfa. After the seedings become established they will be used for early spring grazing. The Soil Conservation Service will write a Great Plains Contract for this portion. When the seedings become established, this plan will be updated to change the turn-out date on Federal range May 1 to reach a date as close as possible to June 1.

When the Soil Conservation Service completes the plan for the private lands, that plan should become an attachment to this management plan to provide the complete picture of the livestock operation for this allotment.

Lone Tree Unit

The livestock will graze this allotment under a five pasture rest-rotation system. This system was selected because resting the key species during its critical growth period is essential in restoring plant vigor, insuring the development of seeds, and insuring the establishment of seedlings. Each pasture will receive the following treatments over a five year period (refer to form 4112-2, Appendix 2): (G) Graze for maximum livestock production 5/1 to 10/31; (RV) Rest for vigor - then graze 7/1 to 10/31; (RS) Rest until seed disseminates - then graze for seed trampling 8/16 to 10/31; (RR) Rest for reproduction and seedling establishment. (Table III outlines a 5 year sequence for each pasture.)

Table III

<u>Year</u>	<u>Pasture 1</u>	<u>Pasture 2</u>	<u>Pasture 3</u>	<u>Pasture 4</u>	<u>Pasture 5</u>
1973	G	RV	RS	RR	RR
1974	RV	RS	RR	RR	G
1975	RS	RR	RR	G	RV
1976	RR	RR	G	RV	RS
1977	RR	G	RV	RS	RR

September 1970

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South Little Beaver Unit and Fort Peck Unit

The livestock will graze these two allotments under a three pasture rest-rotation system. Each pasture will receive the following treatments over a three year period: (G) Graze for maximum livestock production 5/1 to 10/31; (RV) Rest for plant vigor - then graze for seed trampling 8/1 to 10/31; (RR) Rest for plant reproduction and seedling establishment (see Appendix 2). Table IV outlines a 3 year sequence for each pasture.

Table IV

<u>Year</u>	<u>Pasture 1</u>	<u>Pasture 2</u>	<u>Pasture 3</u>
1973	G	RV	RR
1974	RV	RR	G
1975	RR	G	RV

The rest-rotational grazing systems in these three units will provide the necessary rest from grazing to restore plant vigor, to increase reproduction, and to provide seedling establishment of the key species. Plant density and litter accumulation will increase under these grazing systems, thus reducing soil erosion and silt accumulation in stock ponds. The present wildlife habitat in good condition will be maintained and poor condition habitat will be improved.

Higher percentage calf crop and weaning weight will result through additional and better quality forage being provided, better condition of livestock, and smaller pastures for breeding purposes.

Livestock movements through five years of the grazing cycle are depicted in Appendix 3.

B. Normal Grazing Operation

South Little Beaver Unit	414 cattle 5/1 to 10/31	2484 AUMs
Lone Tree Unit	1425 cattle 5/1 to 10/31	8550 AUMs
Fort Peck Unit	848 cattle 5/1 to 10/31	5088 AUMs
		16122 AUMs

Badlands Cooperative State Grazing District Certification

UNIT	P. D.		L. U.		CPAL		District	Self	TOTAL
	AUMs	%	AUMs	%	AUMs	%	Furnished	Furnished	AUMs
Lone Tree	7,156	83.7	131	1.5	000	000	569	692	8,548
So. Little Beaver	2,076	83.7	246	9.9	000	000	114	44	2,480
F. R. w/Base	12	100.0	000	0.0	000	000	000	000	12
Fort Peck	3,908	76.9	157	3.1	30	0.6	219	770	5,084
F. R. w/Base	186	100.0	000	0.0	000	000	000	000	186
	<u>13,338</u>		<u>534</u>		<u>30</u>		<u>902</u>	<u>1,506</u>	<u>16,310</u>

C. Flexibility

Flexibility in management will increase through the implementation of rest-rotation grazing systems. The grazing sequence may need to be changed to utilize the vegetation in the rested pastures during drought periods when forage production and stock-water is below normal. By coordinating with the rest cycles, artificial reseeding, weed and brush control, and other cultural practices can be applied without interfering with the normal grazing schedule nor making it necessary to fence treatment areas.

The livestock operator will be allowed seven days either side of the date specified in this management plan to allow livestock movements to the next pasture. Both the beginning turn-in dates and fall gathering dates will be strictly adhered to. The closing of gates between the grazed pastures within each unit will be left to the discretion of the range users. However, it might be necessary to hold the livestock in a pasture to achieve the desired amount of livestock trampling of seed. Only under abnormal or extreme conditions, may use be authorized on the rested pastures. Any such authorization will have to be requested by the livestock operators and approved in advance by the area manager and when use in the Wildlife Range is different than approved in this management plan, the Area Manager will consult the Refuge Manager prior to authorizing variations in use.

If the Wittmayer Grazing Association desires to graze yearlings in any of the three grazing units, the cow/calf animal units will be multiplied by 1.33 to convert to yearling units. However, in determining grazing fees, one yearling will be considered as one animal unit.

D. Grazing Applications and Authorizations

This Allotment Management Plan is the grazing authorization and certification for the Badlands Cooperative State Grazing District for the public lands included.

E. Billing Procedures

Accurate actual use information on numbers and class of livestock and periods of use will be maintained by the Wittmayer Grazing Association on forms provided by the Bureau of Land Management. The forms will be returned to the Malta District Bureau of Land Management office by November 15 each year.

Following receipt of the actual use figures, the Bureau of Land Management will issue a fee notice to the Badlands Cooperative State Grazing District for the amount of actual grazing use made. The bill is payable within 30 days of the date of issuance. No further grazing of public land in the allotment is authorized until the grazing fees are paid for the previous grazing season.

Under the above grazing systems, the percentage of Federal range use will vary by pasture and year as one or more pastures are rested. For billing purposes, the average total unit Federal range percentages will be used for calculating fees. Upon completion of each grazing cycle, the actual use will equal the billed use.

IV. Evaluation

Data from the primary range studies will be carefully considered in the evaluation of these grazing systems. Accurate and complete information will need to be kept both by the Wittmayer Grazing Association and the Bureau of Land Management to determine the effectiveness of the grazing system in meeting the objectives of the plan.

Utilization studies will be conducted by the Bureau of Land Management in each pasture grazed no later than 10 days following removal of livestock from that particular pasture. Personnel from the Charles M. Russell Wildlife Range will cooperate and assist the Bureau of Land Management in conducting utilization studies within the Wildlife Range. The key forage plant method will be used for obtaining utilization data.

Two trend study plots will be established in each key area of each pasture. These plots will be read and photos taken each year near the end of the grazing season. These studies will be conducted the same time each year once they have been established. After the trend of the vegetation has become stabilized, each plot may only have to be read once each cycle.

Climatic information will be obtained from Glasgow and Fort Peck weather stations. Yearly temperatures and precipitation totals during the growing season will be used to aid in determining the apparent trend.

V. Needed Improvement Practices

The following tabulated management practices are needed in these units to implement the above grazing systems. For the location of these projects refer to Overlay B, Appendix I.

Practice	UNITS		
	Lone Tree	South Little Beaver	Fort Peck
Pasture Fences	20 miles	8 miles	4 miles
Reservoirs	30 each	10 each	18 each
Furrowing & Seeding*	1500 acres	1500 acres	0 acres
Cattleguards	3 each	-	-

* Contour furrowing and seeding are not needed to implement the grazing systems but will aid in the accomplishment of this plan's objectives.

Due to the highly erodibility of the soils in this area, water impoundments silt full over a short period of years. Several wells may have to be drilled to aid in supplying the necessary stock water required.

The range users will be expected to maintain all allotment interior fences in a good condition. The maintenance responsibility of all allotment exterior boundary fences are listed under the Existing Project section of this plan and are shown on Overlay A., Appendix I.

The locations of water developments are tentative, and specific sites will have to be located on the ground. Water development sites within the Wildlife Range will be approved by BSF&W.

If, upon the implementation of this plan, it is found that there is no need for the Browning-Wittmayer Fence, Project Number M1-771 (Refer to Overlay A, Appendix I), located within Pasture 3 of the Fort Peck Unit, the Wittmayer Grazing Association will remove this fence.

VI. Agreement

The three pasture rest-rotation of management proposed for these lands within the Charles M. Russell Wildlife Range and included in the Fort Peck Unit may be changed or altered in favor of other management systems pending critical evaluations of the effects of rest-rotation management on wildlife habitat.

We, the undersigned parties, concur with the management objectives set forth in this plan. We will, to the best of our abilities, carry out the provisions of this plan.

Revisions in this plan may be made by the concurrence of the Wittmayer Grazing Association, Wildlife Refuge Manager, and the District Manager as indicated by initialling, dating, and numbering of pages containing revisions.

APPROVED:

Lenora Erickson 9/22/70
Wittmayer Grazing Association Date

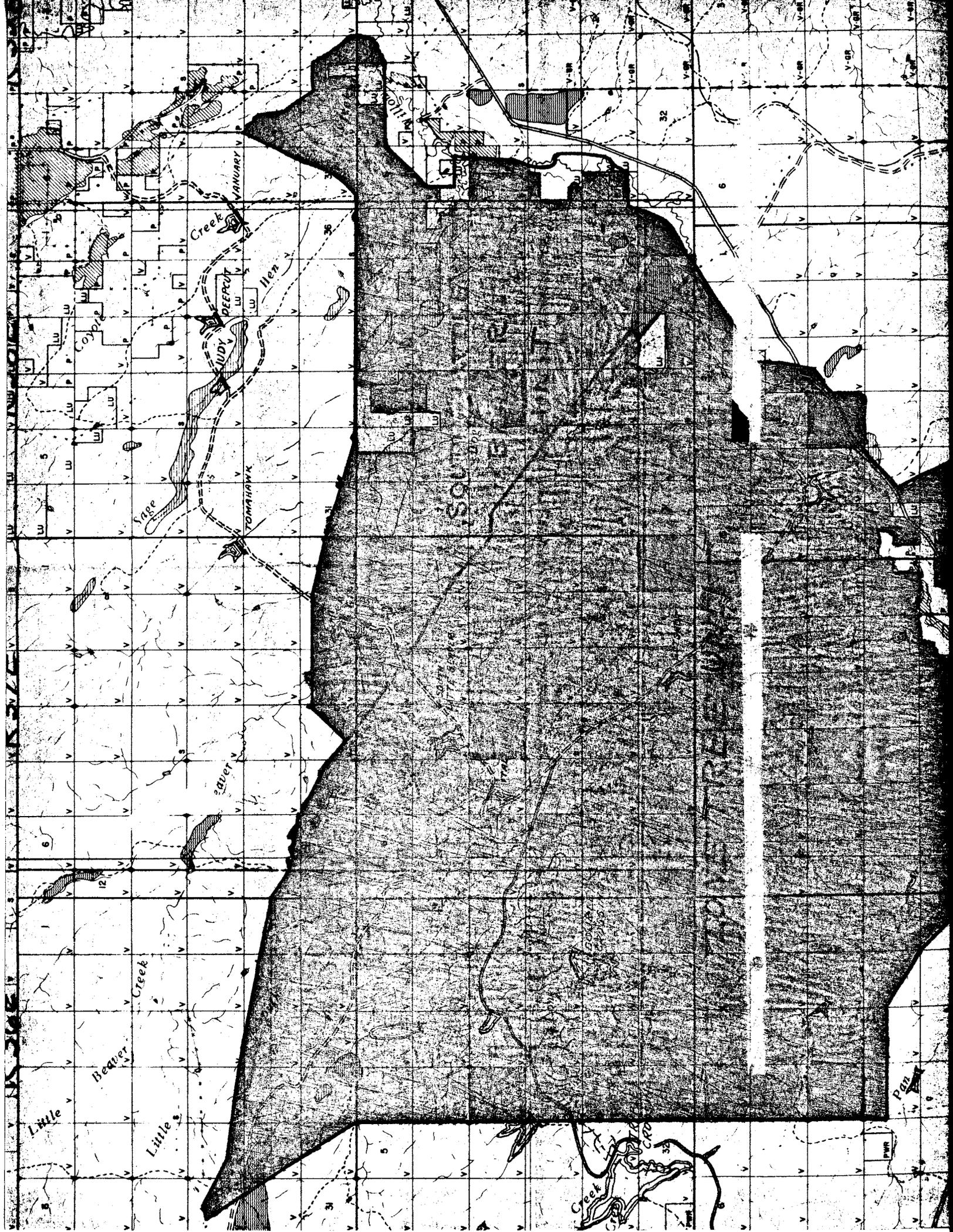
M. Mc Intyre 9/24/70
Badlands Cooperative State Date
Grazing District

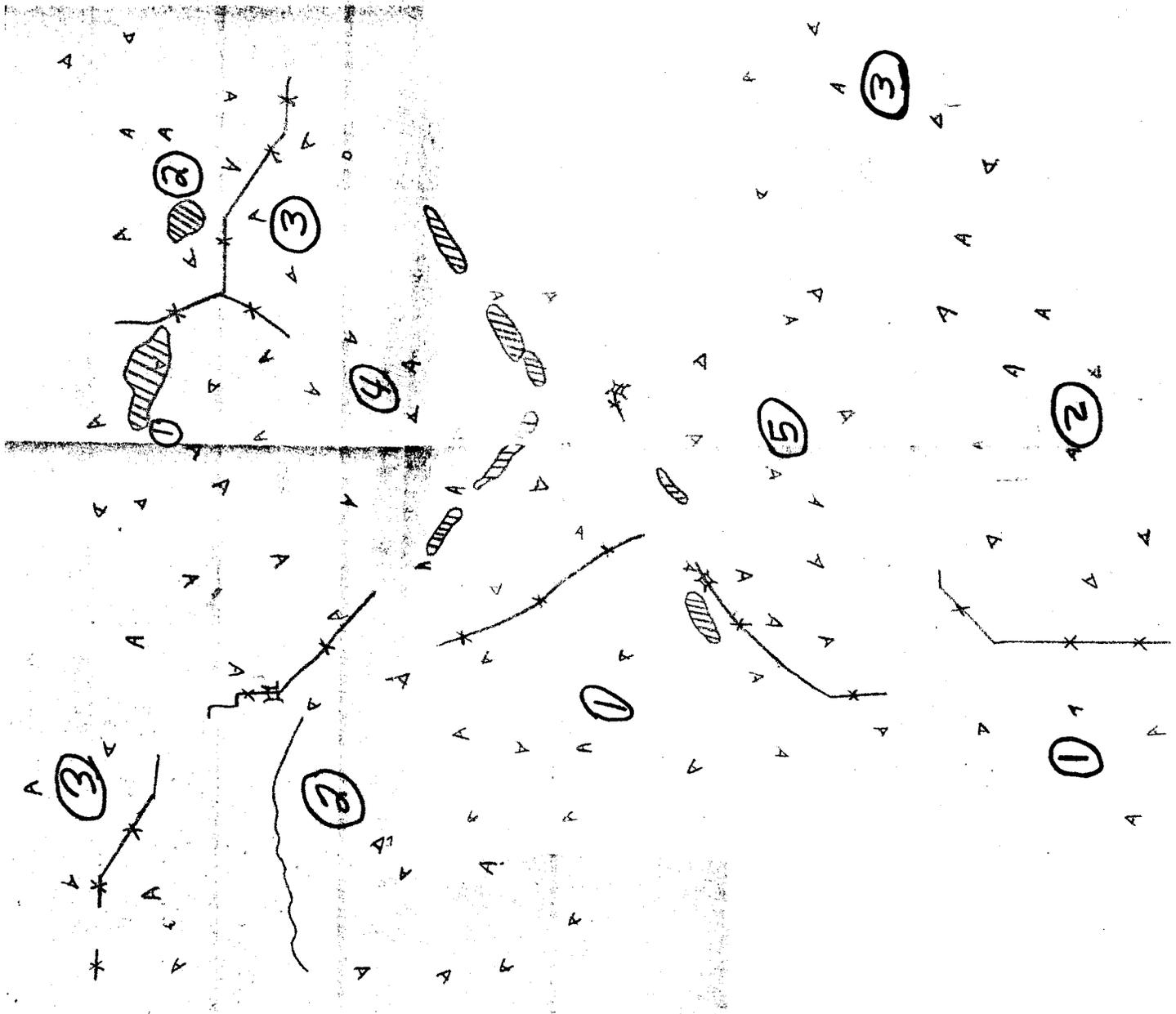
Frank R. Martin 9/21/70
Bureau of Sport Fisheries and Date
Wildlife

Dante Holari 9-23-70
District Manager, BLM Date

REVIEWED:

David A. Harrison 9-22-70
District Conservationist Date
United States Department of
Agriculture, Soil Conservation
Service





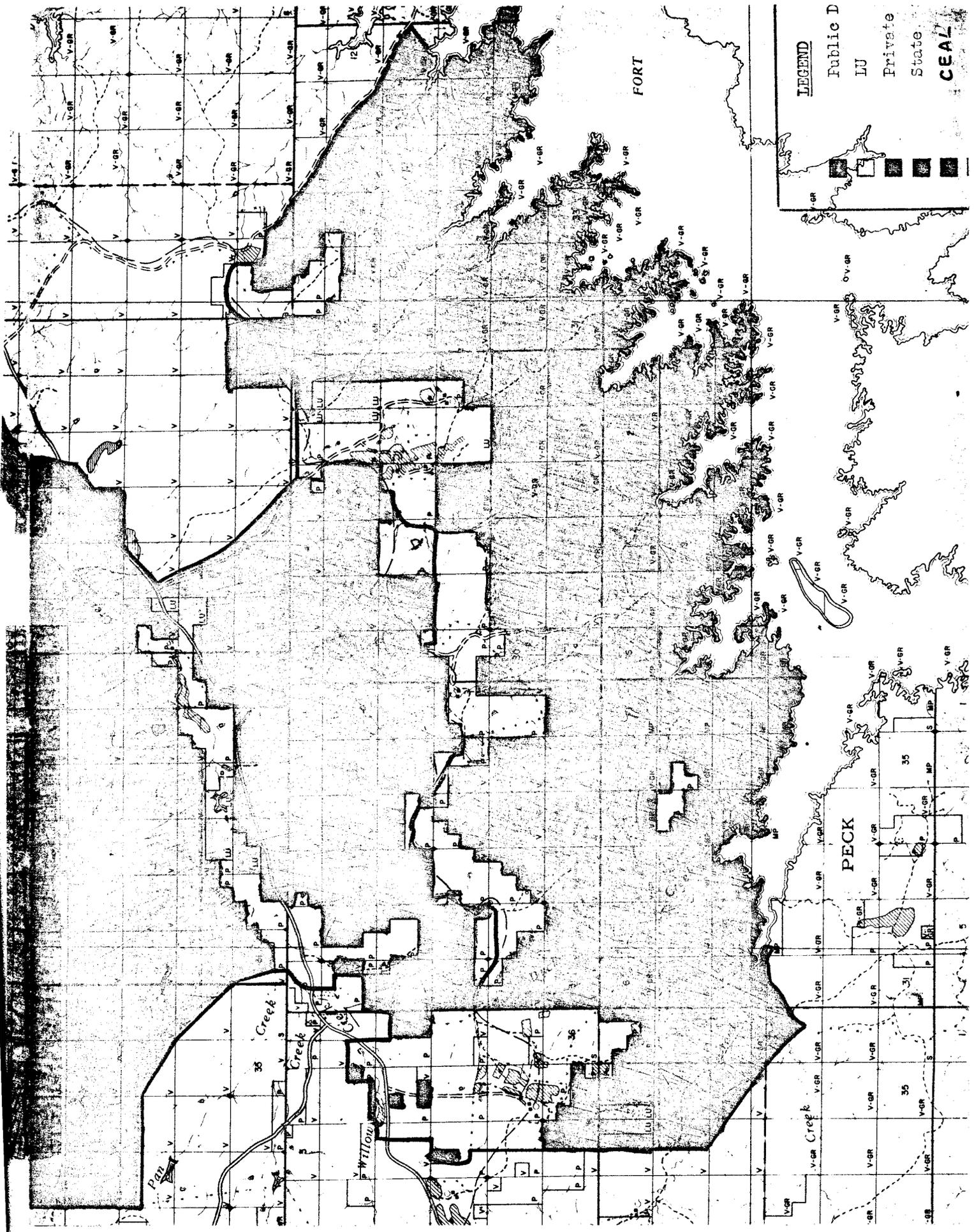
LEGEND

Proposed Developments

- △ Reservoirs
- ✖✖ Fences
- ▣ Cattleguards
- ▨ Contour Furrowing

Existing Developments

- △ Reservoirs



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