



United States Department of the Interior

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BUREAU OF LAND MANAGEMENT  
DENVER SERVICE CENTER  
DENVER FEDERAL CENTER, BUILDING 50  
DENVER, COLORADO 80225

Carson City Dist  
Flanigan HMA

2/1975  
IN REPLY REFER TO

Memorandum

To: Director 330

From: Director, DSC

Subject: Flanigan Wild Horse Herd Management Area Plan, Carson City District

In response to recent telephone conversations between Robert Springer, WO and Milton Frei of this office, the following comments are submitted relative to the subject HMAP. Review comments are categorized by page no. and section.

Page 1, (A. Background Information - Brief History)

For the most part, the material contained on this page is immaterial to development of a management plan. In addition, the information is presented in a negative manner. With the exception of the third and fourth paragraphs on this page, we suggest the information be eliminated entirely. The third and fourth paragraphs should be moved to the "Coordination" section of the plan.

It might be a good idea to substitute a short narrative on this page which discusses the purpose for the plan, and/or outlines what an interested reader can expect to find contained within the plan.

Page 4, Second paragraph (3. Resource Data)

We seriously question the validity of the statement that the Flanigan Herd has increased 17% per year from 1973 to 1975. This rate of increase was based on the total animals counted as summarized in Tables 2 and 3. This is an erroneous computation as can be seen from the following summary of aerial counts:

<u>Year</u>	<u>Adults</u>	<u>Yearlings</u>	<u>Young of Year</u>
1973	66	8	22
1975	94	31	5

This shows that during the 1975 count, only 5 young animals had been produced. Obviously more young were yet to come as the summer months approached. Therefore, the two counts using total animals cannot be compared to one another. Comparisons of such counts are only possible when the counts are





conducted at a time of year when populations are at maximum or minimum levels i.e. after majority of foals have been produced or prior to foaling season.

The proper way to compare the two counts is to use total adults plus total yearlings and exclude the foals. If this is done, the annual increase between 1973 and 1975 would be computed at 30% per year. However, we believe this is an impossible rate of increase because it does not recognize any mortality in wild horses. This is an unacceptable situation when dealing with any animal population. It is apparent that mortality is a factor in the Flanigan Herd as evidenced by the 1973 count in which only 8 yearlings were observed and the fact that in 1962 there were as many as 40 animals in the HMA. (See page 1.)

In our opinion, a large portion of the 30% annual increase in counted wild horse numbers can be directly related to an inherent bias in the aerial counts. Numerous scientific studies have been conducted on the accuracy of aerial surveys and all of these studies identify two basic problems associated with aerial counts; 1. large degrees of error and 2. inflated increases in counted animal numbers. Aerial counts invariably underestimate numbers and as experience is gained, accuracy increases, resulting in more and more animals being counted. Similar results have been observed in certain aerial surveys conducted by BLM, in which the projected rate of increase has far exceeded the biological potential of the animals.

The primary point of the above discussion is that the data contained in the HMAP is not sufficient to provide a realistic determination of a specific rate of increase. This would be true even if additional counts were available as long as quality supporting data on population dynamics are not included e.g. age structure, sex-ratio, young/adult ratio, yearling/adult ratio. In the vast majority of situations, aerial counts contain such large errors that they cannot be used as the sole basis for quantifying rates of increase. They are however, extremely useful as trend indicators.

As a final and separate comment, it appears that something is wrong with the figures contained in Tables 2 and 3. In 1973 there were 8 yearlings and 22 young while in 1975 there were 31 yearlings and only 5 young. Our initial reaction to this is that the figures in one of the counts somehow became reversed.

At first glance, it would appear that the number of yearlings and young animals in the 1975 count, are inserted in the wrong columns. This should be checked and the figures reanalyzed. On the other hand, it may be that the two counts merely reflect an error in classification of animals, e.g. yearlings classified as foals and 2-year olds classified as yearlings in one count and young of year classified as foals and yearlings classified as yearlings in the other count. Such classification problems can occur when counts are conducted near the beginning of the foaling season.



If none of the above problems are involved with these tables, it appears that the Flanigan horse population may be extremely susceptible to variation in environmental conditions. Such susceptibility would surely provide a significant basis for establishing future management direction.

Page 4 Second to Last Paragraph. (3. Resource Data)

This paragraph is negative and adds absolutely nothing to the plan. It is obvious that wild horses are familiar with their habitat and are difficult to capture. Horses are no different from any other wild animal in terms of difficulty of live capture.

Page 4, (Resource Data) General Comment

This section should contain additional information which can be analyzed to establish the objectives of the plan. For example, a discussion relative to the seasons during which various herbivores use particular areas would serve as a basis for formulating objectives or coordination requirements needed to minimize competition for forage i.e., utilization limits, population numbers, seasons of use etc.

If insufficient data are available, the HMAP should identify the information which is lacking and include a schedule of specific studies to be conducted to collect the required data e.g., age structure, young/adult ratios etc.

Page 4 & 5 (Coordination) General Comment

This entire section should come after the "Existing Projects" section. In order for the thought process to be complete, "Existing Projects" must be presented first so the projects can be analyzed under the "Coordination" section to determine needs for change or improvement.

In addition, we believe that this section is totally inadequate. As alluded to in the above paragraph, this section should contain a discussion of the coordination needed to resolve the resource problems identified under all previous sections i.e., "Location and Area, Resource Data and Existing Projects". This has not been done. Much of the information presented here is irrelevant to the management of the Flanigan wild horses. For example, cooperative agreements for fence maintenance would be maintained regardless of whether wild horses occurred in the area or not.

Page 5 & 6 (Existing Projects) General Comment

The most important portion of this section has not been included, i.e., a narrative which discusses the relation of these projects to wild horses.



Page 6 (B. Objectives, 1. Habitat)

Objectives in a HMAP must be stated with the same amount of specificity as they are in AMPs i.e., they must be quantitative, capable of being obtained and capable of being measured. The majority of objectives listed here do not meet these requirements.

Specific habitat objectives should be included for all habitat requirements of wild horses; food, cover, water and living space. Specific habitat objectives not directly related to wild horses should be included under "other" objectives, e.g., watershed objectives, range condition objectives, etc.

An example of an acceptable objective for improving living space conditions could be as follows: "Improve living space conditions for wild horses by removing 5% of the existing fences in the Herd Management Area". This objective is capable of being measured and the details as to which fences, or portions of fences that are to be removed can be identified in the "Management Methods" section of the HMAP.

Page 6 (B. Objectives, 2. Animal)

a. This objective says absolutely nothing. It is a requirement of 43 CFR 4730.2. This is like having an objective of "stabilize the livestock industry" in an AMP. We recommend that this objective be eliminated from the Flanigan HMAP.

Page 6 (B. Objectives, 3. Other)

a. According to our calculations, the achievement of this objective is impossible. For example on page 2, the grazing capacity of the herd area is 3206 AUMS. However, 395 cows will get 1907 AUMS, 100 wild horses will get 1200 AUMS and 150 deer will get 225 AUMS. This adds to a total of 3332 AUMS which is 126 AUMS over the stated grazing capacity.

b. This objective needs additional quantification i.e., the kind of forage and season during which it is needed by deer should be included.

Page 6 (B. Objectives) General Comment

We believe that this section of the HMAP is totally inadequate. There are no positive objectives for wild horses. This is unacceptable from a public standpoint as well as being unacceptable from BLM's standpoint of carrying out our responsibilities under PL 92-195. Also, additional objectives are needed in order to assure proper coordination is achieved when an AMP is developed as discussed on page 12 of the Flanigan HMAP.



Page 7 (C. Management Methods, 1. Habitat)

We strongly disagree with the last sentence in this section; concerning the reservation of forage to meet the biological requirements of wild horses. In the first place, the statement conflicts with the last paragraph on page 12 which indicates that the biological requirements are unknown. In the second place it is unrealistic to assume that adequate forage will meet the biological requirements of any animal species. Biological requirements include, but are not limited to, the habitat requirements of food, cover, water, and living space. Other factors which contribute to the biological requirements include, adequate numbers and ratios of age and sex classes which are biologically sound for a given population.

Page 7 (C. Management Methods, 2. Animal)

a. Initial Gathering (First paragraph). In view of the lack of manual guidance concerning trespass animals it is difficult to criticize this section. However, we would like to recommend that the following course of action be pursued:

First, the district should evaluate the anticipated claim identified on page 1. If it is determined that the claim is valid, the claimant should be given a reasonable period of time to remove the claimed animals. If the animals are not removed within this time period, or if the claim is not valid, the district should close the Flanigan HMA to grazing by domestic horses. The next step would be to gather and impound excess animals in accordance with normal population reduction programs i.e., no mass effort to gather all animals. This would be done until the number of animals which are determined to be privately owned, is equal to the number of animals claimed.

a. Initial Gathering, (Third paragraph). We disagree with the consecutive order in which excess animals will be removed. In accordance with 43CFR 4740.3, the correct order of priority would be, 1. relocate to other areas, 2. cooperative agreement to private individuals and 3. destroyed in a humane manner.

Page 8, First Half of Page (C. Management Methods)

We have several comments concerning this page. First, we question the validity of the decision to cull out old animals and in some instances sick animals. This is not a requirement of PL 92-195 as long as sound healthy animals are predominant in the herd. By leaving these animals on the range, the productivity of a herd will be reduced due to the fact that they are mostly non-productive animals. This will reduce the efforts required to remove excess animals. Also, old animals have a much shorter life expectancy and will contribute to natural mortality, again reducing removal efforts.



Next, we are unable to find any basis for the number of horses by sex and age class which are proposed to be returned to the HMA. No data was presented under "Resource Data" or "Objectives" to justify the proposed return of animals to the range. In addition, it is obvious that the workings of population dynamics are completely misunderstood. For example, the proposed sex ratio to be released onto the range is 73% female and 27% male. If 40 to 50% of these females produce young each year, 30 to 37 young/100 adults will be added to the population each year. However, if it is assumed that the data in Table 1 and 2 is correct, and that between 59% and 66% of the females produce young each year, 33 to 48 young/100 adults would be added to the population each year. This is both unnecessary and excessive. For example, if 27% females and 73% males were returned to the range and 50% of the females produced young each year, only 14 young/100 adults would be added annually.

As a final note, this page identifies a proposed release of adult animals at a 5 to 1 sex ratio and a release of yearling and young animals at a 1 to 1 sex ratio. This is completely irrational since the yearling and young sex ratio would be working against the adult sex ratio i.e., bringing the total sex ratio closer to 1:1. Natural recruitment will accomplish the same thing over-time but the process will be much slower.

In view of the above, we would like to recommend that wild horses in the Flanigan HMA be returned to the range in accordance with the following age and sex ratios:

<u>Age Class</u>	<u>No. Animals</u>		<u>Total</u>	<u>Percent by Age Class</u>
	<u>Male</u>	<u>Female</u>		
1	8	5	13	18%
2-3	8	5	13	18%
4-9	19	13	32	42%
10-14	10	6	16	21%
15+	1	--	1	1%
TOTALS	46	29	75	100%

If this is done, annual recruitment of young animals will be approximately 20% and average annual mortality resulting from old age alone, (as computed from a life table) will be approximately 17%. Thus, the annual rate of increase should be somewhere in the neighborhood of 3% annually.

Page 8, Third paragraph (C. Management Methods)

This paragraph discusses the non-use of aircraft to capture wild horses. This is a mute question and adds nothing to the plan. We suggest that this paragraph be substituted with a narrative explaining how, where and when animals will be captured.



Page 9, Second Paragraph (b. Maintenance of the Herd)

We disagree with this paragraph. There is no data presented in the plan which supports the conclusion that an annual increase of 15% can be expected.

Page 9, Fourth Paragraph (b. Maintenance of the Herd)

We suggest that the last sentence in this paragraph be eliminated. It adds nothing to the plan and when included, causes the reader to question why all other equipment which may be used to capture horses has not been mentioned also.

Page 9, Fifth paragraph (b. Maintenance of the Herd)

We seriously question the conclusions reached in this paragraph. In our opinion, there are three primary reasons why wild horses expand their habitat area. These are: 1. increased population numbers, 2. harassment away from the original habitat and 3. lack of suitable habitat in the original herd area.

Since none of these reasons have been discussed in the plan, we must assume that the writers of the Flanigan HMAP, attribute the expansion to increased numbers. We question this possibility, but regardless, it would appear that reductions in herd numbers would correct the situation. This would be particularly true if those animals which frequent the new habitat area are removed. If the situation is not corrected by herd reduction, then some other factor must be causing the expansion and fencing the area will only compound the situation. Regardless, since population reduction must be conducted anyway, it would seem more reasonable to conduct this activity and evaluate the results before the fence is constructed.

As an additional comment, we don't understand the logic of fencing directly on the west boundary of the HMA to confine horses while on the east side of the HMA the proposed fence is as much as 4 miles from the HMA boundary. Does this mean that west boundaries come under the provisions of PL 92-195 and east boundaries do not? If this is a livestock management fence, lets call it one and leave it out of the HMAP.

Page 11 & 12 (F. Studies)

This section needs to be quantified in greater detail. For example, what kind of studies will be conducted to determine the biological requirements of wild horses. The studies should be described in sufficient detail so that someone new can pick up the study effort. Study schedules and descriptions of techniques are extremely important e.g., time of year, type of aircraft and design of flight patterns should be identified for aerial surveys.



In addition, we question the advisability of conducting an autopsy on animals that are destroyed. Autopsies are generally conducted to determine the cause of death. This is known where destroyed animals are concerned. However, if autopsies are desired, the plan should identify the data to be collected from the effort.

In conclusion, we believe that the Flanigan Herd Management Area Plan is extremely deficient in terms of establishing management direction for wild horses. Similar problems have been common in the Bureau's AMP effort, and the consequences are haunting us now. Therefore, we recommend that the Flanigan HMAP not be approved until it has been upgraded to an acceptable level, preferably in accordance with the suggestions contained in this memorandum.



FLANIGAN WILD HORSE HERD  
MANAGEMENT AREA PLAN



ADDENDUM

Flanigan Wild Horse Herd Management Area Plan  
and  
Environmental Analysis Record

The Flanigan Wild Horse Herd Management Area Plan proposes permanent management facilities in the herd area.

It is the decision of the District Manager to use temporary facilities until such time as the United States Supreme Court rules on the constitutionality of Public Law 92-195.

Permanent facilities affected are:

Upper adobe water trap  
East Virginia Peak wing trap  
Cottonwood Canyon wing trap  
13½ miles fence construction  
Marl Holding and Sorting corral

An interdisciplinary team has assessed the environmental impacts of the proposed action which includes the herd management area plan and the horse removal in the Pyramid Planning Unit. It is the decision of the interdisciplinary team that the substitution of temporary facilities for permanent facilities will not create any additional environmental impact.



## Table of Contents

- A. Background Information
  - Flanigan Herd History
  - 1. Map ( $\frac{1}{2}$ " / mile,  $2\frac{1}{2}$ " / mile)
  - 2. Location and Area
  - 3. Resource Data
  - 4. Coordination
  - 5. Existing Projects
- B. Objectives
  - 1. Habitat
  - 2. Animal
  - 3. Other
- C. Management Methods
  - 1. Habitat
  - 2. Animal
    - a. Initial Gathering
    - b. Maintenance of the Herd
  - 3. Other
- D. Cooperative Agreements
- E. Management Facilities and Equipment
  - 1. Permanent Facilities
  - 2. Temporary Expenditures
- F. Studies
  - 1. Standard BIM Studies
  - 2. Other Studies
- G. Modification
- H. Support
  - 1. Fire Protection
  - 2. Lands



Table of Contents (condt.)

H. 3. Emergency Feeding

I. Signatures

Tables

Table 2. Flanigan Herd Composition, 1973

Table 3. Flanigan Herd Composition, 1975

Table 4. Flanigan Herd Color Composition, 1975



A. Background Information

The Flanigan Wild Horse Herd - A Brief History

It is generally assumed by local ranchers that these horses originated from ranch stock that was turned out in the area. These horses ranged on the north end of the Virginia Mountain until the construction of the Red Light Fence in 1952 and the Fort Sage - Mud Springs Fence in 1955. These two fences restricted what is now the Flanigan Herd to the summer range within Flanigan Grazing Allotment which is licensed by the Fish Springs Ranch. A few horses remained in the Winnemucca Ranch and Big Canyon Allotments. Occasional drift of the horses would occur into the Winnemucca Ranch and Big Canyon Allotments when snows or the horses would knock down these fences.

In 1962 there were approximately 140 horses in the Flanigan Herd. These horses were causing damage to water developments and fences as well as consuming a large amount of forage. In 1962 approximately 100 horses were gathered leaving 40 animals in the Flanigan Allotment.

In 1973 Earl Batteate claimed the majority of the Flanigan Herd (estimated at 96 animals). This claim was rejected (11/21/73) by the District Manager for lack of adequate proof of ownership.

Earl Batteate at this time contends that the horses (130-1975 estimate) are from the former Heller stock (previous owner of the Fish Springs Ranch). He will submit another claim with affidavits from witnesses stating that these horses are former Heller Stock.

At this time it is believed a reservation of forage for wild horses (1200 AUM's) and not allowing the permittee to be on the Federal range during the critical growing season of the forage species will make the Fish Springs Ranch a marginal livestock operation.

Since when do we not allow permittees to be on Federal Range - I thought we regulated his livestock not his person!

One Nif pick for wild Horses



A. Background Information

1. Maps

See Attached Maps ( $\frac{1}{2}$ " / mile,  $2\frac{1}{2}$ " / mile)

2. Location and Area

The herd area is located at the north end of the Pyramid Planning Unit, approximately 50 miles north of Reno, Nevada. The herd ranges on the extreme north end of the Virginia Mountains within the summer range of the Flanigan Grazing Allotment. The herd area includes 19,945 Federal acres and 1,590 private acres totaling 21,534 acres.

3. Resource Data

The Management Framework Plan for the Pyramid Planning Unit has been completed. Resource data may be obtained in the Step 3 of the Unit Resource Analysis.

The erosion condition for the herd area varies from slight (Big Sage) to moderate (Pinyon-Juniper type). The average soil surface factor is 27 (stable). Generally there appears to be no erosion problem.

The grazing capacity is as follows within the herd area:

	<u>Year</u> <sup>1</sup>	<u>Acres</u> <sup>1</sup>	<u>AUM(Animal Unit Month)</u> <sup>1</sup>
Federal	1975	19,945	2963
Private	1975	<u>1,590</u>	<u>243</u>
		21,535	3206
Federal	1973	17,095	2465
Private	1973	<u>1,380</u>	<u>201</u>
		18,475	2666

<sup>1</sup> Herd area increased from 1973 to 1975. ←

*I question this*  
*If true what are they going to do?*



Condition and trend data (completed 1964) for the Flanigan Allotment is as follows:

Condition:

Satisfactory	90%
Unsatisfactory	10%

Trend:

Up	33%
Static	67%
Down	0%

Recent condition data is not available. Condition data will be completed in the Flanigan Allotment by the end of FY 76.

Big game species habitat found within the herd area include deer winter, deer yearlong range, and antelope yearlong range. Upland game species includes sage grouse, chukar and mourning dove. No critical habitat has been identified for any of the above mentioned species. No threatened species habitat has been identified in the Flanigan Allotment.

The Flanigan Herd forage requirements are as follows:

Year	Herd Total	Forage Requirement
1973	96	1152 AUM
1975	130	1560 AUM
1974	100 <sup>1</sup>	1200 AUM

<sup>1</sup> Step III MFP Decision

Qualifications for the Flanigan Allotment which includes the horse area are as follows:

Active Use	5062
Suspended Non-Use <sup>1</sup>	2306
Cal-Neu Unit Active	<u>185</u>
TOTAL	7,553

<sup>1</sup> 2306 AUMs suspended non-use is the difference between the grazing demand and the grazing capacity in the 1967 adjudication of grazing privileges.



No forage has been reserved for wild horses or wildlife in the Flanigan Allotment.

A break down of Flanigan Herd numbers, colors, and sex is shown in Tables 3 and 4. The Flanigan Herd has increased 17%/year from 1973 to 1975.

Color slides of the herd are maintained in the district files.

Forage species include big sage (Artemisia tridentata) black sage (Artemisia nova), needle and thread (Stipa comata), blue bunch wheatgrass (Agropyron spicatum), cheat grass (Bromus tectorum), and meadow grass species in the low depressions and drainages.

Scattered junipers (Juniperus osteosperma) exist throughout the area. These trees provide shelter from the winter winds as well as escape cover.

Water is plentiful throughout the area with East and West Cottonwood Canyons having available live water their entire length year round. A number of the waters in the area have been developed (See Existing Projects). A total of 18 springs are present. These include developed and undeveloped springs on private lands.

The horses within the herd show little movement from east to west (laterally along the slope of the mountain).

There is movement up down the slope with the winter snows. However, only severe snow will move the animals to the extreme lower elevations.

The horses are familiar with escape routes and capture in this rugged terrain will be extremely difficult in a major portion of area.

#### 4. Coordination

The Management Framework Plan Step III Decision is as follows:

1. Establish an intensive wild horse management area in the Flanigan Area. Maintain in that area the current population of about 100 horses (1973 estimate).

*What about reasons of use, utilization etc for livestock, WH, wildlife*

*This says nothing*



2. Conduct studies to determine the biological requirement of this herd. Based on these studies, determine the optimum number of wild horses that can be maintained in this intensive management area and adjust numbers accordingly.

Maintenance of 100 horses will require a reduction in active use of 1200 AJUM's for Fish Springs Ranch (licensed in the Flanigan Allotment). Qualifications for Fish Springs Ranch with consideration for maintenance of the wild horse herd would be:

Active Use	3,862
Suspended Non-Use	2,306
Cal-Nev Unit Active	185
Reservation of Forage for Wild Horses	<u>1,200</u>
TOTAL	7,553

A cooperative agreement with Nevada Department of Agriculture will be negotiated to assure that both federal and state responsibilities are adequately identified.

The Flanigan herd area is within one mile of the fenced boundary of the Pyramid Indian Reservation. Cooperative relations will be maintained with the tribal leaders for the maintenance of the reservation fence.

Fence cooperative agreements will continue between Joe, Pete Capurro and Sons, W. Dalton La Rue, Fish Springs Ranch and the Bureau of Land Management for existing projects.

Cooperative relations will be maintained with the organized wild horse groups for the disposal of excess horses.

The Bureau of Land Management is the only land management agency involved. Patented lands within the area are owned by Earl N. Batteate (1270 Acres) and Helen M. Garboe (320 Acres).

5. Existing Projects

At this time the herd area is partially enclosed on the north by the Fort Sage Cottonwood Drift Fence (Job 4263), on the east by the Red Light Drift Fence (Job 0210) and on the south by the Fort Sage-Mud Spring Fence (Job 5005).

*This should come before record in manual*

*What are the...  
3000-4000...  
How many horses?*

*responsibilities  
for what?*

*immaterial*

*immaterial*

*Meeting  
Manual Requirement*



All of these fences are over 20 years old.

The Cottonwood Stock Trail (Job 4004) provides access through the center of the herd area. The remainder of the herd area is rugged and is generally accessible by four wheel drive jeep trails.

Spring developments include: 1) Sheep Trough Springs (Job 4325); 2) Rock Spring (Job 4326); 3) Lower Salt Cabin Spring (Job 5032); 4) Lower Adobe Spring (Job 5019) and 5) Upper Adobe Spring and Pipeline (No job no.).

Ten other undeveloped springs exist on federal land. Five private spring developments exist in the area.

B. Objectives

1. Habitat

- a. Maintain the watershed in a slight erosion condition.
- b. Maintain the range condition at 90% satisfactory level and allow no downward trend.
- c. Reserve adequate forage in the Flanigan Allotment to meet the biological requirement of 100 wild and free roaming horses (1200 AUMs) on a continuing basis.

2. Animal

- a. Management practices shall be at the minimal feasible level and shall be consistent to the extent possible and practical with the maintenance of their free roaming behavior.
- b. The Flanigan Wild Horse Herd will be maintained at a maximum of 100 animals through disposal to private individuals, removal to other herd management areas or destruction of the animals.

3. Other

- a. Provide adequate forage for 365 cows from 6/15 to 11/31 (1907 AUMs - 95% F.R.) within the herd management area (Fish Springs Ranch Permit).
- b. Provide forage for a reasonable population of deer (estimated to be 150).

*How do these relate to WH?*

*They should put constraints on AMP here - see p. 2* ←

*How, How much How do you measure?*

*Living space*

*What about fence removal don't waters etc. our nice fences?*

*What the hell is this? Crap? Well - those lucky wild horses*

*Sure are doing a lot for horses.*

*What kind of forage? What season?*

	365 cows	1907 aums	
	100 horses	1200 aums	6
p.10	150 deer	225 aums	see p
		<u>3332 aums</u>	

Carrying capacity 3206 aums



C. Management Methods

1. Habitat

Maintaining the slight erosion condition, 90% satisfactory condition and static or improving trend can be accomplished through a proper stocking rate within the herd management area as follows:

	<u>1</u> <u>AUM</u>	<u>1</u> <u>Acres</u>
<u>1</u> Active Use (livestock)	1,907	23,770 (Fed.)
Reservation of Forage for Wild Horses	1,200	
<u>1&amp;2</u> Private Lands	<u>201</u>	<u>1,380 (Private)</u>
TOTAL	<u>3,308</u>	<u>25,150</u>

- 1 Within proposed fenced Wild Horse Area  
2 138 AUM - Batteatte, 63 AUM Garboe

Reservation of 1,200 AUM's will meet the biological requirements of 100 wild horses while maintaining and/or improving the habitat.

*how do they know they said to conduct studies on this see p 11*

2. Animal

a. Initial Gathering

Currently there are 130 horses (both estrays and wild) in the herd management area. All of the animals must be gathered to determine which are wild and which are estrays.

The Management Framework Plan Step III Decision provides for the maintenance of 100 wild horses. Therefore:

- a. If more than 100 wild horses are gathered then only 75 will be returned to the herd management area and the remaining animals will be disposed of through 1) cooperative agreement to private individuals; 2) relocated to other areas or 3) destroyed.
- b. If fewer than 75 wild horses are returned to the Flanigan Herd Management Area then horses gathered from other herds may be placed in this area to make up total herd of 75 animals.

*Coordination - what about closure & impoundment*

*wrong order - if they have potential relocation areas*

The herd will not be managed for color, conformation or "Native Barb" characteristics.



The initial turn out figure of 75 animals will allow for a 1 to 2 years annual increase in the herd, while allowing a thorough culling of the sick, old, injured and excess studs.

Turn out of the 75 horses will be broken down by sex as follows:

Sex	Proposed Numbers	Percent	1975 Numbers	Percent
Mares	50 <sup>1</sup>	65	56	43
Studs	10 <sup>1</sup>	14	35	27
Studs	5 <sup>2</sup>	7		
Yearlings and Colts	5 male <sup>3</sup> 5 fem. <sup>3</sup>	7 7	36	28
Unknown			3	2
	<u>75</u>	<u>100</u>	<u>130</u>	<u>100</u>

*What basis for this?  
No objective completely  
don't understand population 5.*

*This is working against adult sex ratio*

- 1 1 Stud to 5 mares
- 2 For replacement and competition
- 3 1 to 1 ratio

*sex ratio 27% ♂ / 73% ♀*

Total gathering of the Flanigan Herd without the use of aircraft is going to be exceedingly difficult if not, impossible due to the availability of water and the rugged terrain.

*immaterial*

Two wing traps sites, one water trap site and one holding corral are proposed.

Table 1. Trap Site and Type (See Map)

<u>Location</u>	<u>Type</u>	<u>Temp or Permanent</u>
East Virginia Peak	Wing Trap	Permanent
Cottonwood Canyon	Wing Trap	Permanent
Upper Adobe Spring	Water Trap	Permanent
Marl Corral	Holding and Sorting Corral	Permanent

Three miles of trail construction is necessary to provide access for equipment and horse removal to the Adobe water

*100 animals, 73% female x 50% young/female ratio (existing)  
= 37 young produced each yr. If 50% die during first year of life recruitment will be 15% (see next page)  
However, increase data on Table 3 assumes zero mortality. If zero mortality is true however the population will increase by 37% each yr*



trap and the East Virginia wing trap. Access is available to the Cottonwood Canyon wing trap. A small pipeline (1/8 mile) is required to water the Marl Holding Corral.

b. Maintenance of the Herd

The herd will be maintained at a maximum of 100 animals, an annual increase of 15% is expected.

The three traps constructed for the initial gathering will be permanent and will be used as a part of the maintenance of the herd.

If a particular animal cannot be captured through the use of the permanent traps then the animal will be destroyed. Equipment is now maintained in the district office for this purpose.

The herd area increased 2 miles to the west from the years 1973 to 1975. Three miles of fence construction (see map) on the 1973 herd boundary is necessary to maintain the herd in its present geographic range on the west side of the area. On the eastern perimeter of the area 10½ miles of fence is proposed to maintain the horses within the area and facilitate livestock management within the horse area. The proposed fence is adjacent to the county road and will allow the horses to drop to the lower elevations for additional public viewing. The fence will also allow horse movement 2 miles to the east. This eastern area in addition to lower elevational area provided will allow winter use under severe conditions.

Fencing the herd boundary (8½ miles) on the east as opposed to a fence along the county road would be difficult to construct and would not allow the additional public viewing and winter range.

3. Others

With the reservation of forage for 100 wild horse (1200 AUM), 1907 AUM's are available for livestock use. The present operation by the Fish Springs Ranch is as follows:

	100 C	3/1 to 3/31	90% F.R.	90 AUM
(Horse area-	750 C	4/1 to 10/31	90% F.R.	4725 AUM
included in)	50 C	11/1 to 2/28	90% F.R.	180 AUM

The following turn-in date for cattle in the wild horse area

*Big wow! what does this add? why is this necessary? If habitat expanded to population reduction, increase in solve problem. If not there is some unadministered habitat need not being met by 1973 habitat. If the fences are for livestock lets say so.*



will give the proper stocking rate and proper season of use:

Defer to Peak of Flowering of Agsp 365 C 6/15 to 11/31  
95% F.R. 1907 AUMs.

A small number of deer may be found in the area. The present estimate is 95 animals. A herd of antelope (15 animals) move into the area occasionally. *142 aums*

The future deer number has been anticipated to be 150 animals. The required forage necessary to support this population is 225 AUMs.

D. Cooperative Agreements

E. Management Facilities and Equipment

1. Permanent Facilities

Estimated Cost

a. Water trap Adobe Sp.	Material	\$1,800
40 man days @ 25.00/day		<u>1,000</u>
		\$2,800
b. 3 miles of road (stock trail) to haul material and animals to Adobe Spring and East Virginia Peak Trap		
3 miles @ \$600/mi.		\$1,800



c.	1 Permanent wing trap on east of Virginia Peak	\$ 2,800
d.	1 Permanent wing trap at mouth of East Cottonwood Canyon	\$ 2,800
e.	Marl Holding and Sorting Corral Material, Labor	\$ 4,000
f.	13½ miles fence on east and west sides of Herd Area @ 1300/mile	\$17,550
g.	Marl Pipeline and Trough (1/8 Mi.) to service Marl Holding and Sorting Corral	\$ 1,000
h.	Annual aerial inventory - 2 helicopter hours @ \$125.00/Hr.	\$ 250
	Sub-Total	<u>\$33,000</u>

2. Temporary Expenditures

a.	Contract to catch horses in above traps and deliver to Fred True Well Holding Corral 130 horses @ \$200/Horse	\$26,000
b.	Veterinary fees for injured horses and shots when given to owners for adoption.	\$ 1,000
c.	10 tons of hay for holding area	<u>\$ 6,000</u>
	Sub-Total	<u>\$33,000</u>
	GRAND TOTAL	\$66,000

F. Studies

Studies are an integral part of the Flanigan Herd Management Area Plan as provided for in the MFP Step III Decision:

"Conduct studies to determine the biological requirement of this herd. Based on these studies, determine the optimum number of wild horses that can be maintained in this intensive management area and adjust numbers accordingly."

*Why - see page 7*



see P. 11  
for relation to EIS

1. Standard BLM studies

The Flanigan Allotment is scheduled fourth in the Pyramid Planning Unit for an Allotment Management Plan. Standard BLM studies prior to the AMP will include:

- Range Survey
- Actual Use
- Utilization
- Condition and Trend
- Climatological Data
- Phenology

When schedule

2. Other Studies

a. Habitat

Why should  
do it!

Studies should be initiated to determine horse forage preference and season of use by plant species.

A study to determine range suitability for horses should also be considered.

how, when

b. Animal

No! ↓

Annual herd increase will be studied through an annual aerial survey.

A mortality study should also be considered (i.e., autopsy on the animals found dead and those destroyed).

when conducted  
how, type of aircraft  
why destroyed?  
cause of death known

G. Modification

This plan may be modified if data from studies and experience gained indicate that changes are desirable. Modification will be based on the results of the animal and habitat studies, inspections and/or operational problems.

Modification may also be initiated in conjunction with the Environmental Impact Statement scheduled to be completed in 1980.



H. Support

1. Fire Protection

Fire protection is critical. Loss of forage due to fire may require a reduction of the herd in order to maintain the condition and trend of the area.

2. Lands

Land exchanges should be considered when lands are offered by either Earl Batteate or Helen Garboe (present land owners).

3. Emergency Feeding

Emergency feeding of horses has been considered when the winter forage situation for herds throughout the west becomes critical. Emergency feeding for the Flanigan Herd should not be considered unless the survival of the entire herd appears to be in jeopardy (possibly below 20 animals).

*Good!*

*Only positive paragraph understandable though since possibility is highly remote.*

I. Signatures

Prepared by:

Pardee Bardwell, Wildlife Biologist, Lahontan R.A.

Chris Erb, Range Conservationist, Lahontan R.A.

Bill R. Stewart, Range Technician, Lahontan R.A.

Concurred by: *Norman L. Murray* *2-11-76*  
Norman L. Murray Date  
Area Manager, Lahontan R.A.

Approved by: *L. Paul Applegate* *2-12-76*  
L. Paul Applegate, District Manager Date  
Carson City District

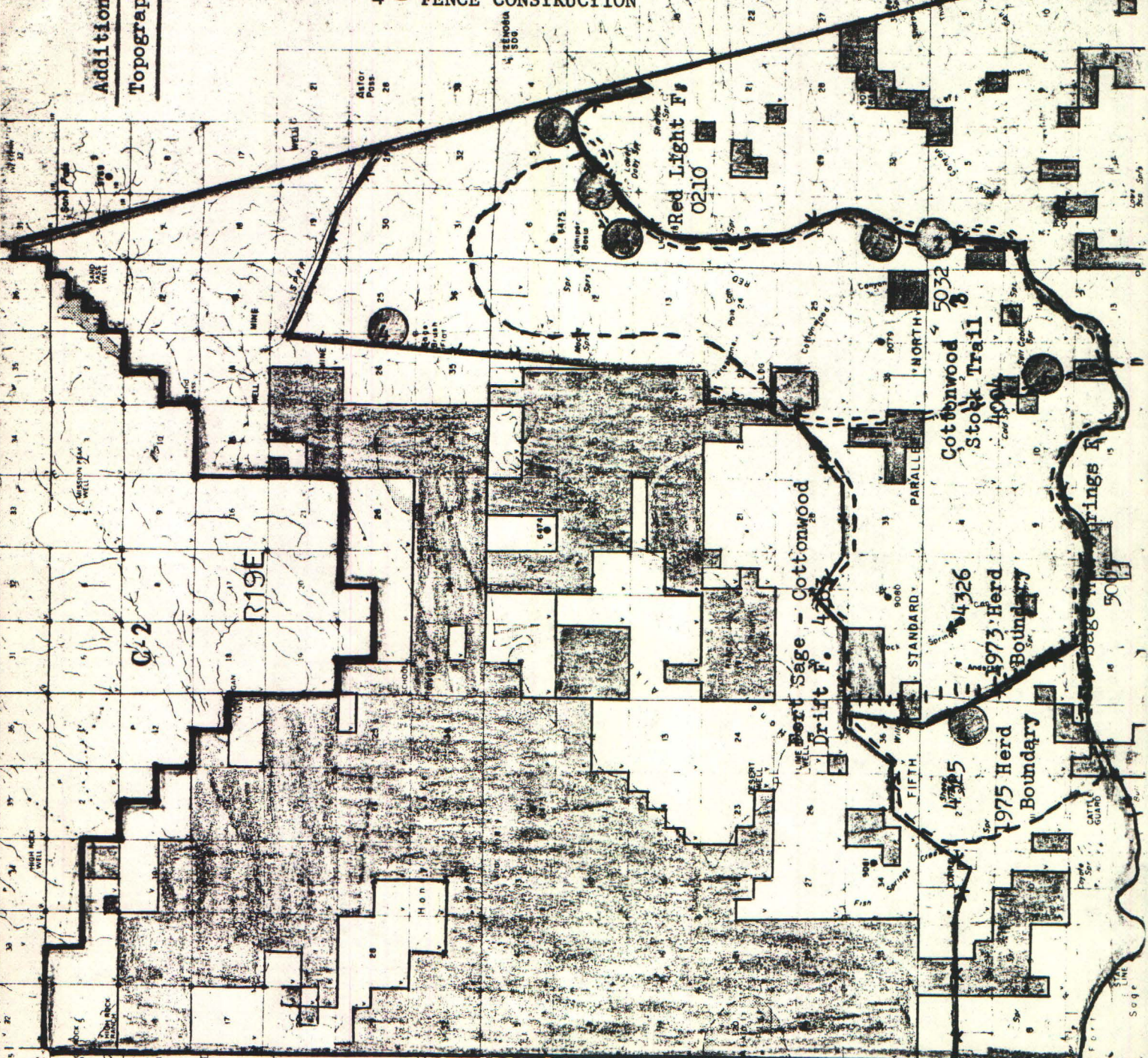
*E. I. Rowland* *4-27-76*  
E. I. Rowland Date  
State Director, Nevada



PROPOSED PERMANENT FACILITIES (PURPLE)

- 1 - MARL HOLDING & SORTING CORRAL & PIPELINE
- 2 - TRAIL CONSTRUCTION
- 3 - UPPER ADOBE SP. WATER TRAP
- 4 - FENCE CONSTRUCTION
- 5 - E. VIRGINIA PEAK WING TRAP
- 6 - COTTONWOOD CANYON WING TRAP

Additional  
Topographic Map



FLANIGAN ALLOT.  
BOUNDARY (RED)

PRIVATE LANDS  
(GREEN)

NATIONAL RESOURCE  
LANDS (WHITE)

T. 27 N.

R. 26 N.



Table 2. Flanigan Herd Composition  
 Adapted from aerial survey - 2/1973

Band No.	Total	Studs	Colts	Mares	Yearlings	Unknown
1	14	1	4	9	0	
2	3	3	0	0	0	
3	9	1	2	6	0	
4	12	1	2	6	3	
5	10	1	3	4	2	
6	2	2*	0	0	0	
7	3	3	0	0	0	
8	12	1	2	6	3	
9	4	1	1	2	0	
10	4	4	0	0	0	
11	8	1	3	4	0	
12	5	1	2	2	0	
13	8	1	3	4	0	
14	2	2	0	0	0	
	96	23	22	43	8	0

\*Located on East side of Division Fence between Flanigan and Big Canyon Allotments



Table 3. Flanigan Herd Composition  
 Adapted from aerial survey - 2/7/75.

Band No.	Total	Studs	Colts	Mares	Yearlings	Unknown
1	8-	1		4	2	1
2	8-	1	1	4	2	
3	3-	1		1	1	
4	11-	1	1	5	4	
5	4-	1		2	1	
6	3-	1		1	1	
7	5-	1		3	1	
8	2-	2(old)				
9	2-	2				
10	5-	1		2	2	
11	6-	1		3	2	
12	1-	1(old)				
13	5-	1	1	2	1	
14	4-	1		2	1	
15	7-	1	1	3		2
16	6-	1		4	1	
17	5-	5				
18	3-	1		1	1	
19	4-	1		2	1	
20	2-	2				
21	8-	1		4	3	



Table 3. Flanigan Herd Composition  
Adapted from aerial survey - 2/7/75.

Band No.	Total	Studs	Colts	Mares	Yearlings	Unknown
22	7-	1	1	4	1	
23	3-	3				
24	1-	1(old)				
25	10-	1		5	4	
26	7-	1		4	2	
	130	35	5	56	31	3
1973 Data	96	23	22	43	8	0

sex ratio  
62% ♂  
38% ♀

65% ♂  
35% ♀

1973  
young/adult = 33%

1975  
young/adult = 34%

1973  
young/female = 51%

1975  
young/female = 55%



Table 4. Flanigan Herd Color Composition  
 Adapted from aerial survey - 2/7/75.

<u>Band No.</u>	<u>Total</u>	<u>Color</u>
1	8	1 black stud, 1 black mare, 1 buckskin mare, 1 buckskin yr. 2 bay mares, 1 bay yr., 1 unknown
2	8	1 brown stud, 1 black mare, 1 black colt, 3 bay mares, 2 bay yr.
3	3	1 bay stud, 1 bay mare, 1 bay yr.
4	11	1 black stud, 1 bay mare, 1 bay yr., 4 black mares, 1 black colt, 3 black yr.
5	4	1 bay stud, 1 brown mare, 1 bay mare, 1 bay yr.
6	3	1 bay stud, 1 brown mare, 1 brown yr.
7	5	1 brown stud, 1 black mare, 1 black yr., 2 bay mares
8	2	1 bay stud, 1 brown stud (both old)
9	2	1 palmino stud, 1 bay stud (bald face)
10	5	1 black stud, 1 black mare, 1 black yr., 1 bay mare, 1 bay yr.
11	6	1 black stud, 1 bay mare, 1 sorrel mare, 1 sorrel yr., 1 black mare, 1 black yr.
12	1	1 bay stud (old)
13	5	1 sorrel stud, 1 brown mare, 1 sorrel yr., 1 sorrel mare, 1 sorrel colt
14	4	1 sorrel stud, 1 pinto mare, 1 bay mare, 1 bay yr.
15	7	1 bay stud, 1 pinto mare, 1 black mare, 1 sorrel mare, 1 sorrel colt, 2 unknown
16	6	1 black stud, 3 sorrel mares, 1 black mare, 1 black yr.
17	5	2 sorrel studs, 2 black studs, 1 brown stud
18	3	1 pinto stud, 1 brown mare, 1 brown yr.
19	4	1 sorrel stud, 1 sorrel mare, 1 sorrel yr., 1 buckskin mare



Table 4. Flanigan Herd Color Composition  
 Adopted from aerial survey 2/7/75.

<u>Band No.</u>	<u>Total</u>	<u>Color</u>
20	2	2 sorrel studs
21	8	1 sorrel stud, 2 bay mare, 1 sorrel yr., 1 Bay yr., 2 brown mares, 1 brown yr.
22	7	1 sorrel stud, 2 pinto mares, 1 pinto colt, 2 black mares, 1 balck yr.
23	3	1 bay stud, 1 sorrel stud, 1 black stud
24	1	1 sorrel stud (old)
25	10	1 sorrel stud, 2 grey mares, 1 grey yr., 2 sorrel mares, 2 sorrel yr., 1 bay mare, 1 bay yr.
26	7	1 roan stud, 3 sorrel mares, 1 grula mare, 1 sorrel yr., 1 grulo yr.