2/12/76-

# TAPE-ERASE ACUMULEUNIAL

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.

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#### 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. Occassional 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 Hord. 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.

#### A. Background Information

#### 1. Maps

See Attached Maps (2"/mile, 22"/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:

| Federal<br>Private | Year 1<br>1975<br>1975 | Acres <sup>1</sup><br>19,945<br>1,590 | AUM (Animal Unit Month) 1<br>2963<br> |
|--------------------|------------------------|---------------------------------------|---------------------------------------|
| Federal            | 1973                   | 21,535<br>17,095                      | 3206<br>2465                          |
| Private            | 1973                   | $\frac{1,380}{18,475}$                | <u>201</u><br>2666                    |

Herd area increased from 1973 to 1975.

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           |

Step III MFP Decision

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

| Active Use          | 5062  |
|---------------------|-------|
| Suspended Non-Use1  | 2306  |
| Cal-Nev Unit Active | 185   |
| TOTAL               | 7,553 |

<sup>2306</sup> AUMs suspended non-use is the difference between the grazing demand and the grazing capacity in the 1967 ajudication 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 (<u>Juniperus osteosperma</u>) 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). 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 AUM'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               | 1,200 |
| 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). 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 accessable 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).

#### 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:

| Active Use (livestock) Reservation of Forage for |   | 1<br>1,907          | 1 <u>Acres</u><br>23,770 (Fed.) |
|--|---|---------------------|---------------------------------|
| Wild Horses                                      | · | 1,200               |                                 |
| 1&2<br>Private Lands<br>TOTAL                    |   | $\frac{201}{3,308}$ | 1,380 (Private)<br>25,150       |

<sup>1</sup> 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.

#### 2. Animal

#### a. Initial Gathering

Currently there are 130 horses (both estrays and wild) in the herd management area. All of the animals <u>must</u> 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.

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<br>Studs<br>Studs | 50 <sup>1</sup><br>10 <sup>1</sup><br>5 <sup>2</sup> | 65 .<br>14<br>7 | 56<br>35     | 43<br>27 |
| Yearlings and<br>Colts  | $5 \text{ male}^3$ $5 \text{ fem.}^3$                | 7               | 36 .         | 28       |
| Unknown                 |  | . *             | 3            | 2        |
|                         |  |                 |              |          |
|                         | 75   | 100             | 130          | 100      |

<sup>1</sup> Stud to 5 mares

3 1 to 1 ratio

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.

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

Table 1. Trap Site and Type (See Map)

| Location           | Type           | Temp or Permanent |
|--------------------|----------------|-------------------|
| 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

For replacement and competition

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 mazimum 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  $10\frac{1}{2}$  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 ( $8\frac{1}{2}$  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

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.

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. | Per | manent Facilities   | Estimated Cost |                             |
|----|-----|---|----------------|-----------------------------|
|    | a.  | Water trap Adobe Sp. 40 man days @ 25.00/day  | Material       | \$1,800<br>1,000<br>\$2,800 |
|    | b.  | 3 miles of road (stock trail) to<br>haul material and animals to Adobe<br>Spring and East Virginia Peak Trap<br>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<br>Material, Labor  | \$ 4,000             |
|    | f.  | 13½ miles fence on east and west sides of<br>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   | \$33,000             |
| 2. | Tem | porary Expenditures   |                      |
|    | a.  | Contract to catch horses in above traps and<br>deliver to Fred True Well Holding Corral<br>130 horses @ \$200/Horse | \$26,000             |
|    | ъ.  | Veterinary fees for injured horses and shots when given to owners for adoption.                                     | \$ 1,000             |
|    | c.  | 10 tons of hay for holding area Sub-Total   | \$ 6,000<br>\$33,000 |
|    |     |   | , , , , , , , , ,    |
|    |     | 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."

#### 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

#### 2. Other Studies

#### a. Habitat

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.

#### b. Animal

Annual herd increase will be studies through a annual aerial survey.

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

#### 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.

#### Support н.

#### 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).

#### I. Signatures

Prepared by:

Pardee Bardwell, Wildlife Biologist, Lahontan R.A. Chris Erb, Range Conservationist, Lahontan R.A.

Date

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

| concurred by: 1/17/1671 X 1/1677169 | × - 11. 10. |
|-------------------------------------|-------------|
| Norman L. Murray                    | Date        |
| Area Manager, Lahontan R.A.         |             |
| Approved by: Tout and and and       | 2-12-76     |
| L. Paul Applegate, District Manager |             |
| Carson City District                | Date        |
|                                     |             |
|                                     |             |
| E. I. Rowland                       | Date        |

State Director, Nevada

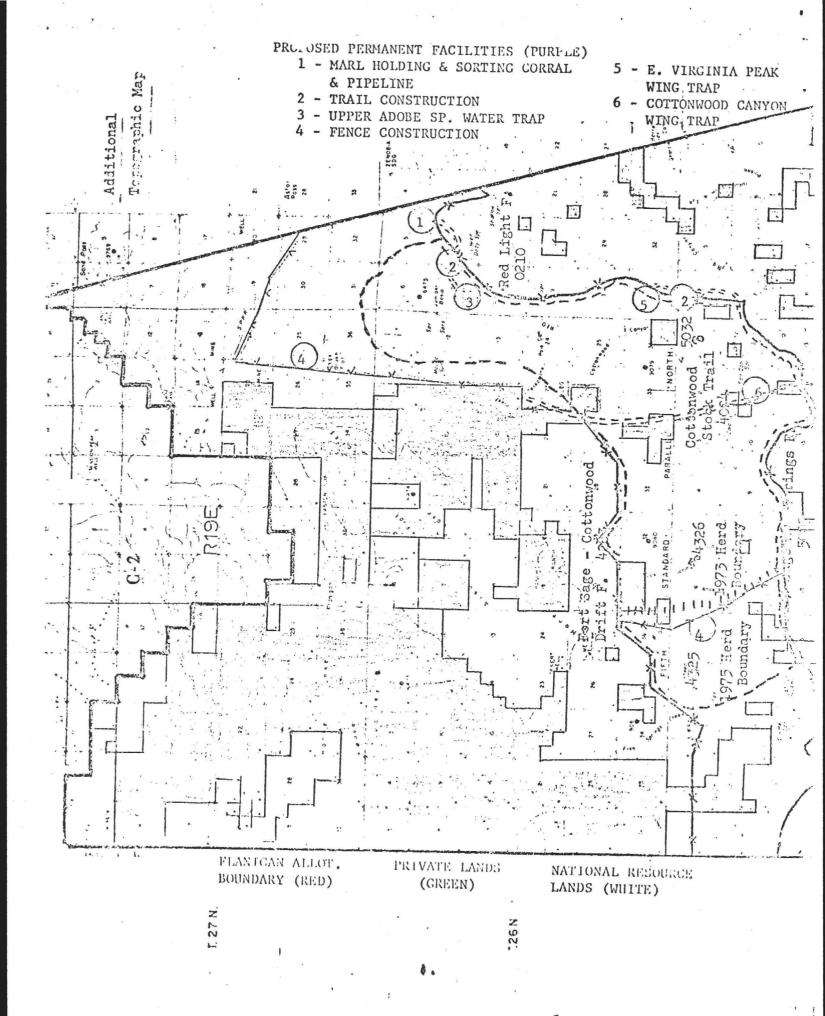


Table 2. Flanigan Herd Composition
Adapted from aerial survey - 2/1973

| <b>\$</b> |       |       |       |       |           |         |
|-----------|-------|-------|-------|-------|-----------|---------|
| Band No.  | Total | Studs | Colts | Mares | Yearlings | Unknown |
| i         | 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       |

<sup>\*</sup>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(o1d) |       |       |           | *       |
| . 9      | 2-    | 2      |       |       |           |         |
| 10       | 5-    | 1 .    |       | 2     | 2         |         |
| 11       | 6-    | 1      |       | 3     | 2         |         |
| 12       | 1-    | 1(old) |       |       |           | y.      |
| 13       | 5-    | 1      | 1     | 2     | 1         | 7       |
| 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.

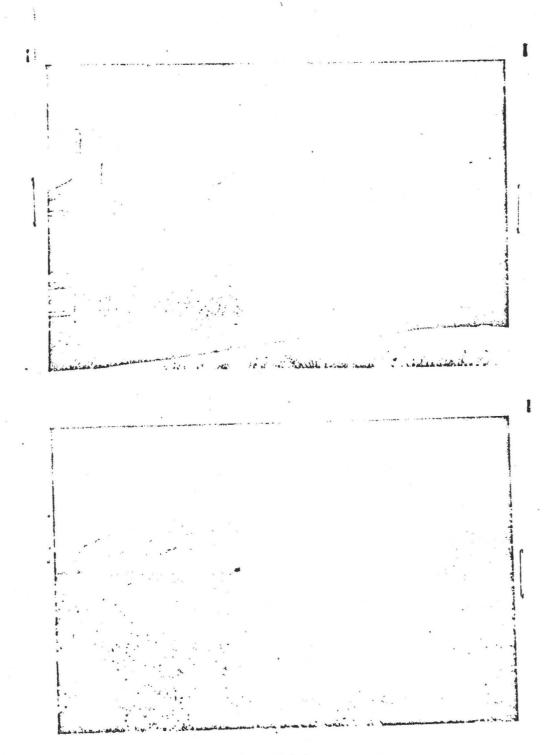
| Band No. | Total | Studs  | Colts        | Mares | Yearlings | Unknown |
|----------|-------|--------|--------------|-------|-----------|---------|
| 22       | 7-    | 1      | · 1          | 4     | 1         |         |
| 23       | 3-    | 3      |              |       |           |         |
| 24       | . 1-  | 1(o1d) |              |       |           |         |
| 25       | 10-   | 1      |              | 5     | 4         |         |
| 26       | 7 –   | 1      |              | 4     | 2         |         |
|          | 130   | 35.    | 5            | 56    | 31        | . 3     |
| 1973     | 96    | 23     | 22           | 43    | 8         | 0       |
| Data     |       | :      |              |       |           |         |
|          |       |        |              |       | ,         | **      |
|          |       |        |              |       |           |         |
|          |       |        |              |       |           |         |
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|          |       |        |              |       |           |         |
| :        |       |        |              |       |           |         |
|          |       | *      |              |       |           |         |
| , ,      |       |        |              |       |           |         |

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

| Band No. | Total | Color  |
|----------|-------|--|
| 1        | 8     | 1 black stud, 1 black mare, 1 buckskin mare, 1 buckskin yr.<br>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.,<br>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  $\frac{\mathcal{H}}{2}$ . Flanigan Herd Color Composition Adopted from aerial survey 2/7/75.

| Band No. | Total | Color '  |
|----------|-------|--|
| 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.                         |
|          |       |  |

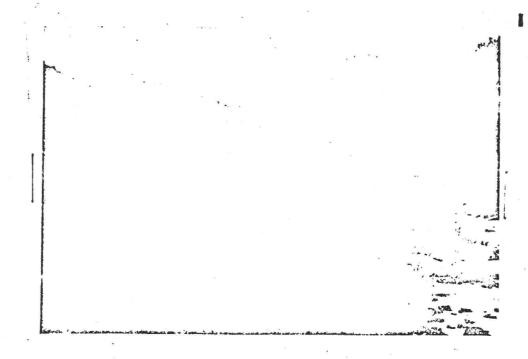


Typical slopes within the wild horse area Grass present is <u>Acropyron spicetum</u>
Note the rockiness of the slope

Fort Sage - Mud Springs Fence

Viewing into wild horse

Fort Sage - Cottonwood
Drift Fence
Viewing into wild horse
area





Cottonwood Stock Trail