SUGGESTED MEMORANDUM (September 2, 1975)

IN REPLY REFER TO:

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
WASHINGTON, D.C. 20240

Memorandum

To: State Directors (Idaho, Montana, Oregon, Wyoming)

From:

Subject: Multiple-use management demonstration area program

The NRDC suit is effecting the demonstration area program by prohibiting implementation of management plans not in force June 30, 1975, and by curtailing manpower and funds that might have been used in the effort. However, the suit does not rule out preparation of management plans for areas outside the BLM-NRDC agreement such as the demonstration areas.

Six areas in four states are currently involved in the demonstration program

1. Herd Creek, Salmon District, Idaho
2. West Bellevue, Shoshone District, Idaho
3. Matador, Dillon District, Montana
4. Pryor Mt.-Mystic Billing District, Montana
5. Juniper Mountain, Lakeview District, Oregon
6. Hall Creek, Rawlins District, Wyoming.

First steps in the preparation of multiple use plans for these areas have been taken. The main features of a livestock grazing plan has been prepared for each area. Grazing management was started on some areas prior to June 30, 1975. But the overall multiple use plans still have to be developed. The target date for completion is September 30, 1976.

Some districts are proceeding with planning but are uncertain about how much time or resources they will have to do the job. One district does not think it can get with planning for a few years.

To clarify the situation please notify Gus Hormay through the Denver Service Center whether or not the district or districts in your state will be going ahead with planning at this time. Gus will then contact them and guide the effort.

IN REPLY REFER TO:

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
WASHINGTON, D.C. 20240

Sept 8, 1975

To: State Director, Idaho
From: Range Conservationist, DSC
Subject: Management Indian Jake Allotment

Jens Jensen phoned me this spring that the Boise District and Dave Little, permittee, wanted further suggestions from me on management of the Indian Jake allotment near Emmett. I have offered suggestions on this allotment before at the request of the District and Dave.

I got to visit the allotment September 8. I was accompanied by

Jens Jensen, Range Specialist, your office
Malcom Schnitker, Cascade Resource Area Manager
Gary Hall, Range, Cascade RA
Jim Little, Dave Little's son

Dave was away on a trip to Europe so could not be present. He left questions on the allotment with Jim.

I visited the allotment first on August 2, 1968, with Idaho State Office and Boise District personnel, Don Pendleton (then with the Portland Service Center) Idaho Fish and Game representatives, and Dave and Jim Little. I made return trips with Bureau people and usually the permittee each year to date except 1970. I looked closely at the allotment for the first time in 1969 and offered suggestions on its management in a memorandum to the Boise District Manager on October 21 of that year.

The Indian Jake allotment covers approximately 89,000 acres north and south of Emmett. Land ownership breaks down about as follows:

Ownership	Acres	%
National Resource Lands	51,040	57
State	8,120	9
Private		
Dave Little (range land)	26,980	30
Dave Little (cultivated land)	1,500	2
Other	1,370	2
	89,010	100

The permittee runs cattle on this area in fall, winter, and spring and takes them elsewhere in summer.

The allotment is heavily clothed with medusahead and cheatgrass and other rather undesirable summer growing annuals. The main management problem on the allotment is replacement of these annuals with desirable perennials--plants that are valuable not only for livestock grazing but for wildlife, watershed, recreation and for maintaining an esthetically pleasing, high quality environment. I believe this problem can be solved with rest-rotation management of livestock grazing supplemented by artificial seeding and weed control and have offered suggestions on how this might be done.

The allotment is subdivided into more than 50-fields, many of them fenced. Prior to about 1968 these fields were used mainly to expedite cattle production.

In February of 1968, Dave Little took one of my longer rest-rotation grazing training courses and soon thereafter pressed for application of rest-rotation management on the allotment. He attended two more sessions thereafter one in February and the other in December 1969. Jim Little also attended the February session.

My recommendations in 1969 for management of the allotment were based on information from the area manager and permittee and on my own observations. I suggested setting up 10 management areas on the allotment--five to be managed under 3-pasture rest-rotation grazing systems and five under 4-pasture systems. These areas covered most of the allotment and encompassed 38 or so of the larger fields. I wrote grazing formulas for each of the areas. Portland Service Center personnel suggested activating a 2-pasture system on one of these areas (Willow Creek) for comparison. Management of the allotment got under way in 1970 on this basis. I did not have an opportunity to take a close look at results until this year. Actual use figures supplied me by the area manager were very helpful in understanding what had transpired.

Some of the fields on the allotment were used differently than planned originally resulting in the formation of two additional management areas. The twelve management areas are shown in figure 1. Here they are also called grazing systems. The fields and number of pastures used in each grazing system on each area are shown in table 1.

Management on these twelve areas has been rather loose to date. Two areas Sand Hollow and Boehm were used much as in the past. Only one area Black Canyon was grazed reasonably close to

Table 1 Grazing management areas and systems on Indian Jake Allotment 1975

Area or system No.	Name	Fields in Area Nos.	Pastures in system No.
		South of Payette River	
1.	Tunnel	1,2,4	3
2.	Black Canyon	3,5.8,9	4
3.	Sand Hollow	13,14,(15,16,17,18)	3
4.	Boehm	12	1
		North of Payette River	
5.	Long Hollow	26,26A,33,34	4
6.	Little Butte	36,37,38,39	4
7.	Square Butte	14,15,16,25	4
8.	Willow Creek	20,21	2
9.	Top Squaw Butte	17,18,19	3
10.	Cinnebar Jake	3,4,5	3
11.	Coonrod	1,2,6	3
12.	Eastside	7,(8,10) 12,13	4
		Total	38

1/ Pastures=grazing management units

formula. The permittee made a genuine effort to carry out plans and apply rest-rotation management principles but fell considerably short because of lack of sufficient understanding of the formulas. About as much rest was incorporated in each grazing system as was called for in the grazing formula (table 2). However, it was not applied at the right time so its effectiveness was greatly reduced or nullified. Management of a type that promises a solution to the main problems on the allotment, therefore, has not been obtained yet on any of the management areas with the possible exception of Black Canyon.

On the basis of my latest appraisal I offer the following suggestions.

Grazing management

Put all areas on the allotment under 4-treatment (4-pasture) rest-rotation grazing systems.

Two basic grazing formulas are needed, one for areas used in winter and spring and the other for areas used in spring, summer and fall. (figure 2)

Formula 1 does not differ greatly from an adjusted formula I suggested for the Black Canyon area in 1971. One more year of rest (treatment B) was added to the 3-treatment formula proposed in 1969 to form Formula 2. These formulas provide adequately for vigor and seed production in perennials. They are designed to create conditions favoring seedling establishment.

Use under treatments A and C should be heavy. Needed changes in grazing pressure with these treatments will be judged by results. The position of treatment C in formula 1 is subject to change and also is determined by results.

The beginning and ending dates of the grazing season under treatment A in both formulas can vary appreciably. They are not critical.

With formula 1 the grazing season in treatment C should end as spring growth starts to surge.

In formula 2 seed-ripe time is determined by the key perennial plant species--in most cases this will probably be bottlebrush squirreltail (Sitanion hystrix).

There is no call for moving animals from one pasture to another under formula 1. The permittee may do so if he wishes. Under formula 2, moving may be necessary if the source of livestock

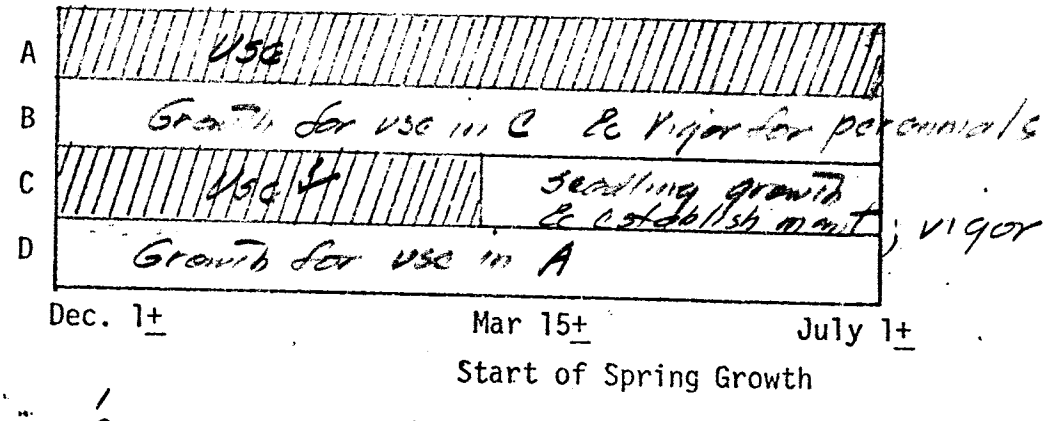
Table 2 Comparison of amount of rest in grazing formulas with that obtained in use on 10 management areas

Management Area		Rest obtained in use	Basis
No.	Name	%	Years[1/]
	2-treatment formulas (50% rest)		
6	Little Butte	38	4
7	Squaw Butte	63	4
8	Willow Creek	50	5
		Ave 50	
	3-treatment formulas (66% rest)		
1	Tunnel	47	5
9	Top Square Butte	73	5
10	Cinnebar Jake	66	5
11	Coonrod	66	5
		Ave 63	
	4-treatment formulas (50% rest)		
2	Black Canyon	45	5
5	Long Hollow	42	4
12	Eastside	55	4
		Ave 47	

[1/] Period of records

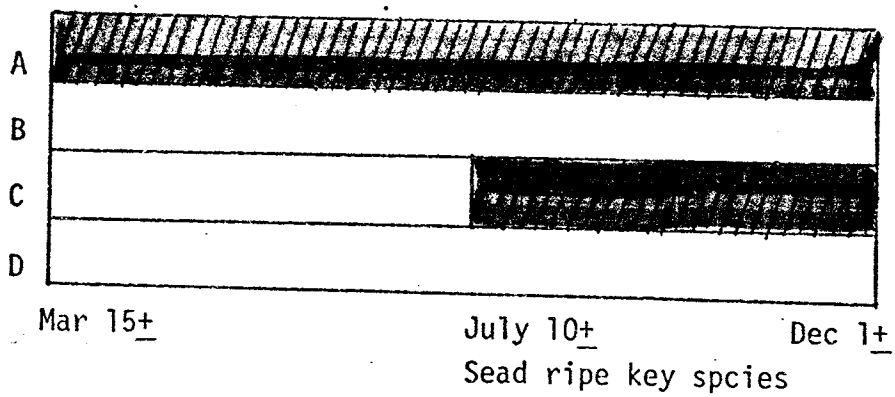
Figure 2 Grazing formulas for Indian Jake Allotment

Formula 1 Winter-Spring areas



Reduce Bt Medusae competition

Formula 2 Spring, Summer, Fall areas



is the pasture receiving treatment A. In all cases in the future pastures should be layed out if possible so animals can move or be moved from one pasture to another without crossing an intervening pasture.

Reasonably practical 4-pasture layouts now exist on three areas--Black Canyon, Long Hollow and Eastside. With some fencing 4-pasture systems could be set up on two other areas--Tunnel and Willow Creek. How best to combine the remaining fields into 4-pasture systems will require considerable thought and discussion with the permittee. Small set ups are preferable to large for controlling grazing pressure.

The suggested grazing formulas should be applied to the extent possible this coming grazing season starting in November or December. Even though all the pasture layouts are not finalized, start the season in pastures that have been rested or grazed the least this year. Prepare a map for the permittee showing these areas and when they are to be used. Attach a sheet showing the two basic grazing formulas. Work all this out with the permittee. See figure 2 for the kind of map that might be used. Management according to formulas can be applied immediately on at least three sizable areas Black Canyon, Long Hollow and Eastside.

Artificial seeding and weed control.

Desirable perennial plants have been killed out on many bottom land sites on the Indian Jake Allotment and will have to be introduced by artificial seeding. Practical methods for doing this on such sites have not been developed yet although experiments have provided some ideas on possible approaches.

In 1971 I suggested seeding trials on the Black Canyon area for leads on methods. The seeding was undertaken but was unsuccessful and yielded little helpful information. A report by Hugh Harper, Denver Service Center, indicates some of the reasons for shortcomings of the effort.

"On Tuesday, March 21,1972, the Boise BLM District in cooperation with Dave Little, Emmett, planted some grass and bitterbush seed on a portion of the Indian Jake Allotment (Black Canyon Area) used by Dave Little ---- the drill seed mechanism fed too rapidly and most of the bitterbush seed was gone by the time the drill reach the top of the slope. In addition, the drill was not opening a planting furrow very well. Much of the grass seed and most of the bitterbush seed ended up on top of the ground. ---- The plantings that were supposed to have been done in the fall of 1971 were not done."

Part of the reseeding problem centers in reducing weed competition to seedlings of planted species. There are several species of late growing undesirable annuals such as annual sunflower, other composites, prickly lettuce, Russian thistle, mustards, and ragweeds in addition to medusa head, cheatgrass and other annual grasses that provide severe competition to seedlings. Not all of this competition can be controlled by grazing. Cultural measures are also needed. Various methods have been suggested including discing, plowing, burning, and herbicides. Experiments indicate some effectiveness. But there are drawbacks to these from an environment standpoint-adverse impacts on soil and wildlife. I suggest trying mowing, at one time a common practice for controlling weeds.

A better planned, more serious, approach to developing reseeding methods for medusa head-cheatgrass sites is needed. Such methods have application on a large area in Idaho and elsewhere.

Answers to questions

Dave Little raised questions on the management of the Black Canyon area. The answer to these questions is formula 1.

He said the 2-pasture grazing system on the Willow Creek area is not working. What to do? The answer is formula 1 or formula 2 depending on time of year the area is used.

He asked about the advisability of spraying a stand of big sagebrush on a steep hillside in the Top Squaw Butte area. I recommend against it. There is a good stand of forage under the sagebrush now. Some additional forage would be produced by spraying but that amount and many times more would be produced on the whole top Squaw Butte area with proper management of grazing. Furthermore, spraying would increase the chance of soil erosion, would deteriorate game and other wildlife habitat, and would leave a blemish on the landscape that would last several years.

The first need is to review and revise the AMP and to delineate and finalize all the management areas. Grazing management, artificial seeding and weed control work should be carried on simultaneously on at least one area. Black Canyon appears most suitable. Evaluation procedures should be applied immediately on suitable areas.

With all the shortcomings of management to date the allotment has shown improvement mainly in plant vigor.

CC: DSC -300

P.S. I am sending you extra copies of the allotment base map under separate cover.

G. T. Harmon

Figure 3 Pastures to be grazed in 1978
Indian Jake Allotment

NOTE: This is just an illustration. Ten 4-pasture grazing systems are shown. Two of the twelve original systems were eliminated, No (4) Boehm by inclusion in system (3) and No (10) by inclusion of field 5 in system (9) and fields 3 and 4 in system (11). The 4-pasture systems thus formed (9) and (11) are outlined in red. A map of this kind together with the grazing formulas should be provided the permittee each grazing season.

Dave Little, Van Deusen Ranch
Grazing Management Areas

GRAZING SYSTEMS

South of Payette River
1. Tunnel
2. Black Canyon
3. Sand Hollow
4. Boehm

North of Payette River
5. Long Hollow
6. Little Butte
7. Square Butte (two units)
8. Willow Creek
9. Top of Squaw Butte
10. Cinnabar Jake
11. Cosnrod
12. Eastside

FIELDS
North of Payette River
1. Cosnrod
2. Jake Allotment
3. Jake Dry
4. Jake
5. Cinnabar
6. East of Jake
7. Webb Creek
8. Red Baste
9. Hold Over
10. Lower Cottonwood
11. Albert
12. Cottonwood Jake
13. Walker
14. Blaser North
15. Blaser South
16. Long Hollow
17. James Creek
18. Cherry Gulch
19. Shearer
20. Corbin
21. Nipper
22. Regan
23. J. F. Hill
24. Reservoir
25. Roullard
26. Haw Creek
27. Horse Pasture
28. June Yard
29. Little Hill
30. Lower Horse Pasture
31. Upper Johnson
32. Texas
33. Bissel Creek
34. Crapston
35. Hackett
36. School Section
37. Bishop
38. "320"
39. Brick Cellar

Ranch Hdqrs

Black Canyon Reservoir

Payette River

EMMETT

LEGEND
- Grazing system boundary
- Fence

FIELDS
South of Payette River
1. Tunnel
2. Crested Wheat Grass
3. North Winter
4. North Mud Lake Canyon
5. South Winter
6. Mud Lake Pasture West
7. Mud Lake Pasture East
8. Station Gulch North
9. Station Gulch South
10. Harvey West
11. Harvey East
12. Boehm
13. Sand Hollow West
14. Sand Hollow East
15. Little Pond
16. McGregor
17. Ricky Hill
18. McConnell

T9N
T8N
T7N
T6N
T5N
R2W
R1W
R1W

Soil-plant relationships and grazing management

SCS Range Workshop Holiday Inn
Ketchum Idaho Sept. 9-11 1975
Presentation Sept. 10. 1:00-3:15PM

Presumptious talk soil-plant relationships to world authorities on subject

Value of knowing soil-plant relationships
- Judge
  - Range condition and trend
  - Soil fertility level
  - How doing with management
    - Effects of management
    - Site productivity potential

Basic soil-plant relations
- Soil formation
  - Parent materials
    - Rock
    - Sedimentary fines (silt, sand, gravel.
  - Horizons A, B, C.
  - Role of plants
    - Horizon A
    - Soil fertility } Organic matter
  - Rate of formation

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Bishop Area Office
Rt. 2, Box 26
Bishop, California 93514

IN REPLY REFER TO
4115
(C-163)
(C-160)

SEP 11 1975

A. L. Hormay
P. O. Box 245
Berkeley, CA 94701

Dear Gus:

Here's the latest on the Wells Meadow AMP evaluation. Based on the condition and trend studies there has been an overall deterioration of the range. There has, however, been success in changing bitterbrush growth form.

A management alternative, to prevent further range deterioration, is to reduce the livestock operators authorized use. I would like to reduce the bitterbrush utilization by cattle to 40-50%.

At any rate, take a look at the evaluation and give us any comments you may have. Also I would like to extend an open invitation to take a look at the AMP on the ground.

Sincerely yours,

Ben F. Collins

Ben F. Collins
Area Manager

Enclosure (1):
Encl. 1 - Wells Meadow Evaluation

IN REPLY REFER TO:
4115
(C-163)
(C-160)

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
WASHINGTON, D.C. 20240

Date?
Sept 23/75
approx.

Memorandum

To: Ben F. Collins, Area Manager

From: Range Conservationist

Subject: Wells Meadow Evaluation

I want to commend you for putting together the first evaluation report on the Wells Meadow Allotment, at least this is the first one I have seen. It was long overdue. The first assessment should have been made at the end of the first cycle of grazing treatments about 1970 but was not for many reasons. Early assessment is desirable to appraise the effectiveness both of management and monitoring procedures.

To me your report has brought out the need for:

1. Reworking the allotment management plan
2. Restating and clarifying management objectives
3. Strengthening and simplifying evaluation procedures so they are more reliable and practical
4. Making pressing needed adjustments in management

I am not offering suggestions on these points at this time because they can be developed adequately only during a face to face discussion with you and other interested parties at the planning table.

I would like to look at the allotment again yet this fall probably the week of October 20. Let me know if this can be fitted into your schedule. If not, give me an alternative date that would be suitable to you about that time. One or at most two days on the ground should suffice. Then sometime later this fall or early next spring I could discuss the allotment with you and others, if you wish.

As you are aware the Wells Meadow Allotment is a special case. It is a demonstration area. It was set up to demonstrate how cattle grazing under rest rotation management can be used to increase forage--browse, grasses and forbs--for big game, and other animals--for deer specifically in this case.

This project has been widely publicized by me and others and many people are anxiously looking forward to seeing the results. Management has been in effect about 10 years now, admittedly in less than ideal form. Yet, everything considered satisfactory results have been obtained. A field report by Kay Wilkes on June 27, 1972 and one by Don Dimock on June 14, 1973, and still another by me on July 18, 1973, all indicate that the allotment is improving and that the main objectives of management are being realized. Your conclusion that "there has been an overall deterioration of the range" I believe is due to short comings in evaluation procedures.

The Wells Meadow project has developed slowly and haltingly but is beginning to bloom. It can be put on sound footing with adequate attention to the four points listed earlier. With this the Bureau will be in a good position to explain results. Needed adjustments in management should be made before the next grazing season.

A. L. Hormay

cc:
DM Bakersfield
SD California
WO - 330
SD Nevada
DSC