



United States Department of the Interior

BUREAU OF LAND MANAGEMENT
WASHINGTON, D.C. 20240Berkeley, California
February 10, 1976Miss Claudia Meents
Route 1, Box 275A
Corning, CA 96021

Dear Miss Meents,

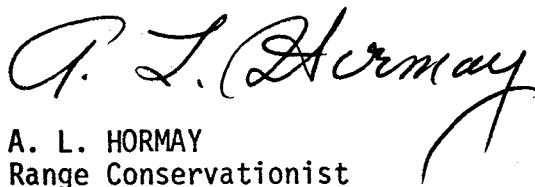
I'm sorry about my late reply to your letter of January 30, 1976. Your questions on the chemistry of allelopathy in seed germination gave me pause. I have not dealt with the subject in my limited seed germination studies. Nor am I a chemist.

Perhaps I can be of some help to you, however, by referring you to the following, rather recent, publication which contains a chapter on allelopathy by R. H. Whittaker and a long list of references on the subject.

Chemical Ecology (1970) Sondheimer, Ernest, and Simone, John B., Academic Press, Inc.,
111 Fifth Avenue, New York, New York 10003.

I wish you luck in inquiring into a rather complex subject.

Sincerely yours,



A. L. HORMAY
Range Conservationist

Natural Resources Defense Council, Inc.

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February 13, 1976

Mr. Rex Clary
District Manager
Susanville District Office
Bureau of Land Management
P. O. Box 1090
Susanville, California 96130

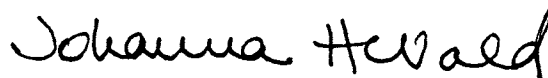
Dear Mr. Clary:

Thanks again for offering to meet with Roger Beers and myself to discuss matters relating to the EIS on live-stock grazing in the Tuledad-Homecamp area. We are both looking forward to your visit on Tuesday, March 9th.

As promised, I have enclosed a copy of the outline prepared by us which sets forth our views regarding the contents of grazing EIS's in general. I hope that it will serve as a basis for discussion when we meet.

See you on the 9th.

Sincerely,



Johanna H. Wald
Attorney

JHW:krc

Enclosure

CONTENTS OF SITE-SPECIFIC EIS'S PREPARED
IN CONNECTION WITH LIVESTOCK GRAZING

I. AREAS OF PRIMARY CONCERN RELATING TO THE SCOPE OF EACH EIS

A. Each EIS should address three general questions which are involved in the issuance of every AMP:

1. Whether livestock grazing should be permitted at all;

2. The extent to which it will be permitted -- e.g., total number of AUM's available, the number of AUM's which will be allocated to livestock, the numbers and types of livestock, and the locations of permitted grazing use;

3. The management practices which will be followed to achieve maximum environmental protection and/or mitigation of adverse environmental impacts.

B. Each EIS should analyze the relationship of the proposed AMP to the specific MFP which preceded its development.

C. Each EIS should analyze site-specific alternatives to the proposed management practices in detail.

1. Alternatives to basic assumptions of the MFP relating to grazing should also be explored, including, for example, reducing grazing privileges in the event base-properties are transferred and possible shifts in areas of grazing use. Management of areas for non-grazing values should be explored to determine

a. whether other uses are available which would result in fewer adverse environmental effects, and

b. whether management emphasis of such uses would make up the dollar dependency of the area on grazing.

D. Data Base

The preparation of an adequate EIS presupposes the existence, inclusion, and use of comprehensive, accurate, up-to-date data for decision-making. Data contained in the EIS should be accompanied by a description of the methodology used, date of its collection, and analysis of its accuracy. Incomplete or out-of-date data should be specifically identified. Ordinarily, no decisions should be proposed in the absence of critical data. Any decisions proposed in the absence of critical data should be identified, the assumptions on which they are made should be revealed, and the accuracy of such assumptions should be evaluated. Decisions proposed despite evidence contained in the EIS

showing significant adverse environmental effects are likely to result should be specifically identified.

II. DEPTH OF ANALYSIS OF AREAS OF CONCERN, ¶s A-C supra

A. Re Grazing

1. The kinds and conditions of the particular resources of a given area are the natural determinants of the amount and type of grazing, if any, which should be permitted therein. In order to determine whether grazing should be permitted at all, the EIS should analyze resources in specific areas as follows:

a. Soil types, distribution, and the capability of each type to accommodate livestock grazing and all other actual and potential land uses, over time, should be described, including

1) the capacity of each soil type for water infiltration and retention;

2) the amounts of compaction and other types of soil disturbance; and

3) the erodability of soil types.

b. Current watershed values and conditions should be described and quantified, including kind and severity of current erosional activity and potential erosion hazard, sediment loads, quality and quantity of surface and ground waters, etc.

1) Areas of particular concern because of riparian values and/or erosional activity should be identified;

2) All existing federal, state or local standards should be set forth and compared to current quantified watershed conditions; and

3) Utilization limits necessary for adequate protection of watershed values, as determined by vegetative density and stubble and litter requirements, should be established.

c. Topographical conditions including degree of slope and elevation of particular lands should be described.

d. Climactic conditions and precipitation, etc., should be described.

e. The kinds, extent and location of vegetation should be identified. Plant vigor, potential plant density and productivity should be evaluated. Undesirable or encroaching

plants as well as any which are endangered or threatened should be defined and identified. "Key management species" for wildlife, fish and livestock should be identified and their physiological growth requirements described.

f. The EIS should identify, enumerate and locate habitat areas and known locations of all wildlife and fish species dependent on lands in question. It should establish the degree of dependence of each type -- e.g., season of year, length of time spent on Public Lands -- and describe habitat needs in terms of specific locations and AUM's (where appropriate) and kinds of specific vegetation required. Although all wildlife and fish species do not consume vegetation, the description of the habitat needs of such species should include a computation of their vegetative requirements in AUM's. Use of AUM's as a common denominator throughout the EIS will facilitate comparison of the demands or requirements of different uses and proposed allocations among them. Current and potential values of wildlife and fish species to the area which is the subject of the EIS, as well as wider areas (e.g., region, state) where applicable, should be quantified.

1) Any currently endangered or threatened species, and potentially eligible species should be identified. Critical habitat areas for each should be established;

2) Opportunities to return any species to former abundance or viability should be identified; and

3) The effects and impacts of state wildlife programs re wildlife inhabiting Public Lands where applicable should be described. Conflicts, if any, as well as joint goals and programs should be identified.

g. Recreational, geological, archeological and historic sites and values should be identified, located and quantified. The EIS should set forth criteria designed to ensure that all actions necessary to inventory, recover, protect, and otherwise conserve these uses and values are accomplished prior to the implementation of any decision that would destroy or impair such values.

h. The EIS should identify areas currently grazed and describe amount in AUM's, kind, time, etc., of such use. Current range conditions should be described in terms of vegetative types.

2. To determine the extent to which grazing should be permitted, the EIS should objectively evaluate the impacts of grazing on each of the above resources in order to establish criteria to govern the management of such use.

a. The actual and potential impacts of grazing on the resources of areas proposed for such use should be systematically and rationally assessed and quantified. Where quantification is impossible to perform because necessary data is unavailable, the EIS should identify the missing information and the studies necessary to obtain it. Such studies should be initiated by the agency.

1) Generalizations, such as "management actions . . . will minimize soil compaction" and increase ground cover (BLM, Livestock Grazing Management on National Resource Lands, p. III-2) standing alone are unacceptable. They should be replaced with, or accompanied by a discussion of, the data used to arrive at such conclusions and reasoned, quantified, specific estimates of impacts.

2) Similarly, subjective judgments such as "low," "moderate" and "high" impacts (whether positive or negative) are unacceptable unless accompanied by meaningful, definitional standards and quantitative analysis of supporting data.

a) Matrix analyses or other techniques in which subjective assessments of impacts on resource components are added to arrive at an "overall" impact rating are equally unacceptable. Not only are the judgments subjective, but the impacts are not comparable since their severity and likelihood of occurrence differs for each component of a particular resource.

b. The EIS should establish livestock grazing capacity for specific areas (consistent with the capability of the various soils of each, the climate, slope, etc.) that provides for adequate watershed protection, game and non-game wildlife and fish species, vegetative growth requirements and protection of other associated resources.

c. The analysis of the proposed management:

1) The EIS should identify those specific areas for which grazing is proposed and indicate clearly which, if any, of such areas are unsuitable for such use or are currently in unsatisfactory conditions.

a) If grazing has been proposed for any unsuitable areas, the EIS should, at a minimum, recommend that it be terminated and should establish a timetable for termination;

b) Where grazing has been proposed for an area in currently unsatisfactory condition the EIS should set forth a time schedule for correction of such conditions so that progress may be measured; and

c) Where grazing in excess of optimum levels or grazing periods (see sub¶ 2b), supra), the EIS should set forth a timetable to make permitted use of the area equal to actual AUM's available.

2) For each area for which grazing is proposed, the EIS should establish specific, quantified goals for each resource which the proposed form of grazing management is designed to achieve (e.g., the numbers and types of wildlife which will be sustained and whether their numbers will be increased, decreased or stay the same) and a timetable for the realization of each goal. This information will enable the proposed form of grazing management and alternatives thereto to be evaluated, and will facilitate measurement of progress over time after actual decisions have been made and implemented.

a) The specific manner by which the growth requirements of "key management species" for livestock, wildlife and fish will be met should be described.

b) Each goal and timetable should be supported with relevant data.

c) Any goals which do not represent optimum environmental considerations should be identified, and their costs and benefits should be evaluated.

(i) Any goals which differ from those contained in the MFP should be identified.

3) The proposed form of management should be described in detail. Each of its components, including for example, fencing, brush control, water developments and grazing system should be specifically identified and located. The cost of each and their respective dates of implementation should be set forth. In addition, where long-term permits are proposed, the EIS should describe the schedule and the criteria by which such permits will be evaluated, modified, or terminated if adequate compliance and/or anticipated results do not occur. Finally, since the particular type of grazing management proposed for each area constitutes only one management alternative, the rationale for selecting the type proposed should be set forth in detail.

4) The environmental impacts of each component of the proposed management should be analysed in detail in terms of the resources of the specific area for which it is proposed. The cumulative impacts of all components proposed for a given area should also be analysed carefully and thoroughly. Environmental costs should be compared to estimated benefits of the proposed action as a whole and in terms of components. The EIS should determine whether anticipated benefits

can be reached by less expensive or environmentally damaging practices.'

a) Comparative data should be used where appropriate in analysing impacts and predicting benefits. For example, where a grazing system is proposed, the analysis of its expected impacts should include an analysis of the impacts which resulted from implementing the system in other areas. The resource conditions of those areas should be compared to those of the area for which it is proposed and the similarities and differences between them identified. The effect such factors are likely to have on expected results should be analyzed. Other management actions which should be subjected to this type of comparative analysis include seeding and herbicide projects.

5) The specific steps which will be undertaken to prevent or mitigate adverse environmental impacts should be described in terms of each associated resource. The net residual impacts should be specifically described and quantified.

B. The Analysis of the Relationship between the AMP's and the MFP:

1. The EIS should evaluate the MFP, in order to determine whether it is an adequate land use plan for the area and in order to determine whether revisions of its contents are necessary. This is necessary because of the MFP's direct relationship to grazing decisions -- e.g., the decision that grazing is an appropriate use of a given area. It is also necessary because of the interrelationship of express grazing decisions with other resource uses and values. Thus, the decision that grazing is an appropriate use of a given area unquestionably represents a decision that the resources of the area must bear the resultant environmental impacts of that use for its duration. Therefore, the EIS should evaluate generally:

- a. data base upon which the MFP was prepared;
- b. whether the MFP resolves use of resource conflicts adequately and provides adequate protection for the environment;
- c. whether alternative uses and practices were properly evaluated and correct choices made; and
- d. whether standards and guidelines established by the MFP are sufficiently precise to provide a basis for decision-making.

C. Analysis of Alternatives

Specific alternative management practices, including, for example, reduction in grazing, a different "grazing system," and elimination or modification of proposed support measures, should be analyzed in terms of each particular area for which grazing is proposed. Analysis of general alternatives, i.e., no grazing, continuation of present management practices, "intensive management" and grazing as dominant use, will not be sufficient on an area-wide basis or even on a site-specific basis in the absence of consideration of more precise, particularized alternatives.

The dollar environmental costs of each specific alternative should be compared to the expected benefits. The likelihood of alternative practices producing results similar to the proposed form of management but with fewer costs should be fully explored. Alternatives which are not explored should at least be identified and brief reasons for rejection should be supplied.

IV. RECOMMENDATIONS SECTION

A "recommendations section" should be included. The recommendations should be related to environmental considerations and should be site-specific. They should indicate whether the proposed action or any alternative should be adopted and should set forth any conditions that are necessary to avoid, mitigate, or compensate environmental damage. Inclusion of such a section will enable District Manager to receive the full benefit of the expertise of the EIS team members. Additionally, the recommendations will inform both the BLM and the public of the optimum conditions under which grazing should take place. The District Manager, in making the ultimate decision regarding future management of grazing in the area which is the subject of the EIS should then isolate, describe and weigh those factors not in the EIS which influenced his decision.

V. CONSULTATION

The EIS should reflect meaningful consultation to obtain necessary factual information and policy advice regarding the merits of proposed actions and alternatives thereto with appropriate federal state, and local agencies and organizations. In particular, the U.S. Fish and Wildlife Service should be consulted regarding the presence or absence of current and potentially endangered and threatened wildlife, fish and plant species. The Service should be requested to establish "critical habitats" for protected species and to review all proposals and alternatives to ensure that no action will be taken which violates

Section 7 of the Endangered Species Act. The State Fish and Game Department and state and private universities should be consulted regarding any species which may be listed on a state "endangered species list."

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

EMPLOYEE CERTIFICATE

I have been given a copy of Department of the Interior Regulations governing Responsibilities and Conduct of Employees (43 CFR 20.735). I have been advised of the name and location of the Deputy or Assistant Ethics Counselor for my office. I understand that I may discuss questions or concerns related to my responsibilities, conduct, and financial interests with this individual.

I CERTIFY That I understand and that I am in compliance with the statutory restrictions in Title 43 U.S.C. 11, which provides: The officers, clerks, and employees in the Bureau of Land Management are prohibited from directly or indirectly purchasing or becoming interested in the purchase of any of the public land; and any person

who violates this section shall forthwith be removed from office.

I ALSO CERTIFY That neither I nor my spouse has, nor is either of us in the process of acquiring, in violation of 43 CFR, Part 7, any interest, direct or indirect, in any lands or resources administered by the Bureau of Land Management.

I FURTHER CERTIFY I understand that if either I or my spouse acquires during my employment, interest in lands or resources administered by the Bureau of Land Management, by gift, devise, bequest or operation of law, that I am required to submit a statement of facts surrounding such acquisition promptly through channels to my bureau head for transmittal to the Secretary of the Interior for decision or other necessary action.

February 20 1976
(Date)

P. L. Hormay
(Signature of employee)

INSTRUCTIONS

1. All applicable employees of the Bureau of Land Management shall complete the certifications on this form.

2. Signed certificates shall be sent to and maintained

by the appropriate Ethics Counselor.

3. If an employee is unable to sign the certificate, he must submit a statement of facts to the appropriate Ethics Counselor for review and action.