



# United States Department of the Interior

BUREAU OF LAND MANAGEMENT  
Nevada State Office  
850 Harvard Way, P O Box 12000  
Reno, Nevada 89520-0006

IN REPLY REFER TO:

1784/4180 (NV-910)  
4100

February 12, 1997

The Honorable Robert J. Miller  
Executive Chamber  
State Capitol Building  
Capitol Complex  
Carson City, Nevada 89710


Dear Governor Miller:

Secretary of the Interior, Bruce Babbitt, approved the Standards and Guidelines today. They were recently developed in consultation with the three Resource Advisory Councils for the Bureau of Land Management in Nevada. Enclosed for your information is the Final Land Use Plan Conformance Determination which includes these Standards and Guidelines. Standards for rangeland health and Guidelines for management of livestock are the result of the Bureau's grazing administration regulations, which became effective August 21, 1995. The determination of the Bureau is that these Standards and Guidelines and the existing land use plans are in conformance and the impacts of implementation have been analyzed under the requirements of the National Environmental Policy Act.

In addition to the enclosed document, supporting documents are available in the Elko, Winnemucca, Carson City, Ely, Las Vegas and Battle Mountain District Offices, the Tonopah and Caliente Field Stations and the Nevada State Office in Reno. These supporting documents specifically provide a list of each objective, management direction and decision which specifically provides for the Standard and Guidelines in the land use plan or if not specifically mentioned, are clearly consistent with the terms, conditions and decisions of the land use plan. These supporting documents are available for review in the Field Office having jurisdiction over the public lands effected by the Standards and Guidelines.

If you would like additional information please contact this office or any of the Field Offices on the enclosed list.

Sincerely yours,



Ann J. Morgan  
State Director, Nevada

2 Attachments

- 1 - Final Land Use Plan Conformance Determination (31 pp)
- 2 - List of Field Offices (1 pp)

Letters sent to the following:

The Honorable Richard H. Bryan  
United States Senate  
364 Russell Senate Office Building  
Washington, D.C. 20510

Glenn H. Clemmer, Program Manager  
Nevada Natural Heritage Program  
123 West Nye Lane  
Carson City, Nevada 89710

Barbara Curti, President  
Nevada Farm Bureau  
1300 Marietta Way  
Sparks, Nevada 89431

~~The Honorable Frankie Sue Del Papa  
Heroes Memorial Building  
498 S. Carson Street  
Carson City, Nevada 89710~~

Claudia K. Cormier, Director  
Department of Business and Industry  
1665 Hot Springs Road  
Carson City, Nevada 89710

Alex Dufurrena, Chairman  
State Grazing Boards  
P.O. Box 10800  
Reno, Nevada 89510

The Honorable John Ensign  
United States House of Representatives  
414 Cannon House Office Building  
Washington, D.C. 20515

Daryl Crawford, Executive Director  
Inter-Tribal Council  
P.O. Box 7440  
Reno, Nevada 89510

Bernard Jones, Dean  
College of Agriculture  
University of Nevada  
Reno, Nevada 89557

Dawn Lappin  
Wild Horse Organized Assistance  
15640 Sylvester  
Reno, Nevada 89511

Richard Arnold, Executive Director  
Las Vegas Indian Center  
2300 West Bonanza  
Las Vegas, Nevada 89106

Mendoza, State Supervisor  
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Reno, Nevada 89502

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National Mustang Association  
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Newcastle, Utah 84756

Stephanie Slyter  
Sierra Club  
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Henderson, Nevada 89015

Rose Strickland  
Toiyable Chapter of the Sierra Club  
P.O. Box 8996  
Reno, Nevada 89507

University of Nevada, Las Vegas  
4505 Maryland Parkway  
Box 454004  
Las Vegas, Nevada 89154-4004

The Honorable Jim Gibbons  
United States House of Representatives  
2202 Rayburn House Office Building  
Washington, D.C. 20515

Raymond Yowell  
Western Shoshone National Council  
c/o P.O. Box 68  
Duckwater, Nevada 89314

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State Lands Division  
123 West Nye Lane  
Carson City, Nevada 89710

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Nevada Cattleman's Association  
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Elko, Nevada 89803

Back Country Horsemen of America  
P.O. Box 22021  
Carson City, Nevada 89721

Betty Burge  
Tortoise Group  
5157 Poncho Circle  
Las Vegas, Nevada 89119

Joseph Crowley, President  
University of Nevada  
Reno, Nevada 89557

Mojave Native Plant Society  
8180 Placid Street  
Las Vegas, Nevada 89123

National Wild Horse Association  
P.O. Box 12207  
Las Vegas, Nevada 89112

Western Mustang and Burro Assoc.  
P.O. Box 121  
Blue Diamond, Nevada 89004

Gerald Allen, Acting Director  
Indian Commission  
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Catherine A. Barcomb  
Nevada Commission for the  
Preservation of Wild Horses  
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Reno, Nevada 89502

William Goddard, State Conservationist  
Natural Resource Conservation Service  
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Reno, Nevada 89511

Robert Hunter, Superintendent  
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1677 Hot Springs Road  
Carson City, Nevada 89710

Paul Iverson, Administrator  
Agriculture Division  
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Reno, Nevada 89510

The Honorable Robert J. Miller  
Executive Chamber  
State Capitol Building, Capitol  
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Carson City, Nevada 89710

Willie Molini, Administrator  
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Dept of Conservation & Nat. Resources  
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Tim Nelson, Forest Supervisor  
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Great Basin National Park  
Lehman Caves Visitor Center  
Highway 488  
Baker, Nevada 89311

Bryon Donaldson  
Rocky Mountain Elk Foundation  
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Reno, Nevada 98511

Dan Heinz  
American Wildlands  
16575 Callaghan Ranch Road  
Reno, Nevada 89436

Julie Butler  
Clearinghouse Advocate  
State Clearinghouse  
Blasdell Building, Room 200  
Carson City, Nevada 89701

W. S. Howell  
Memorial Building  
190 S. Carson Street  
Carson City, Nevada 89710

**BUREAU OF LAND MANAGEMENT  
STANDARDS AND GUIDELINES FOR NEVADA**

**LAND USE PLAN CONFORMANCE DETERMINATION  
AND  
NATIONAL ENVIRONMENTAL POLICY ACT ANALYSIS**

**FINAL**

**I. INTRODUCTION**

**A. Purpose and Need**

The purpose of developing Standards and Guidelines is to ensure that the Bureau of Land Management's (BLM) administration of grazing helps preserve currently healthy rangelands and restore healthy conditions to those areas that are not functioning properly. Standards and Guidelines will provide specific measures of rangeland health and will identify acceptable or best management practices.

The Standards and Guidelines would meet these needs through developing consensus among the BLM, the public and special interest groups on what values should be assigned to measure healthy rangeland and what methods and practices are needed to help achieve a healthy rangeland.

**B. Background Leading to Development of Standards & Guidelines**

**Public Scoping Meetings**

The Notice of Intent to prepare an Environmental Impact Statement (EIS) under the National Environmental Policy Act (NEPA) and associated land use plan amendment(s), if determined to be necessary, were published in the Federal Register on February 6, 1996. The Notice of Intent invited scoping comments to be sent to the BLM until April 30, 1996. BLM mailed individual notifications to a comprehensive list of interested persons, agencies, or groups, for each Resource Advisory Council (RAC) area.

A combination of public scoping meetings, RAC meetings and field trips were held in each of the three geographic areas in Nevada covered by a RAC. Individual notifications were mailed prior to each public meeting. The mailings included the RAC meeting agenda, notification of public meetings and information on scheduled field trips, as well as pertinent rangeland information. News releases were issued to newspapers, radio and television stations, and major interest groups. Notices were also placed in the Federal Register prior to each meeting or field trip.

The following Resource Advisory Council meetings were held:

**Mojave- Southern Great Basin Area**

Las Vegas	September 21-22, 1995
Las Vegas	December 07-08, 1995
Las Vegas	January 18-19, 1996
Las Vegas (w/field trip)	February 14-15, 1996
Caliente (w/field trip)	March 21-22, 1996
Tonopah (w/field trip)	April 18-19, 1996
Las Vegas	May 09-10, 1996
Las Vegas	June 10-11, 1996
Las Vegas	September 12, 1996
Las Vegas	November 06, 1997
Las Vegas	January 08, 1997

**Sierra Front-Northwestern Great Basin Area**

Reno	September 21-22, 1995
Reno (w/field trip)	October 16, 1995
Reno	January 25-26, 1996
Carson City	February 29-March 1, 1996
Reno	March 14-15, 1996
Carson City	March 28-29, 1996
Reno	April 22-23, 1996
Winnemucca (w/field trip)	May 9-10, 1996
Reno	June 12-13, 1996
Reno	January 24, 1997

**Northeastern Great Basin Area**

Elko	September 21-22, 1995
Ely	February 21-22, 1996
Battle Mountain	March 22-23, 1996
Elko	April 12-13, 1996
Elko	May 03-04, 1996
Elko	June 01, 1996
Ely	September 07, 1996
Battle Mountain	October 04, 1996
Elko	January 10, 1997

Two additional outreach meetings were conducted as follows:

Ely, White Pine County Public Forum	March 18, 1996
Eureka Public Input Meeting	April 27, 1996

### C. Geographical Area Covered by the Standards and Guidelines

The area covered by the Standards and Guidelines is as follows. Adjustments will be made for grazing allotments that overlap the boundaries between the RAC areas.

1. Mojave-Southern Great Basin Resource Advisory Council recommends actions to the Nevada BLM State Director for all or portions of Clark, Nye, Esmeralda, and Lincoln Counties. This includes all or portions of the Ely, Las Vegas, Carson City and Battle Mountain Districts. The Standards and Guidelines would apply to lands within the Southern Nevada Basin and Range and Sonoran Basin and Range major land resource areas as defined by the Natural Resource Conservation Service.
2. Sierra Front-Northwestern Great Basin Resource Advisory Council recommends actions to the Nevada BLM State Director for all or portions of Humboldt, Pershing, Washoe, Carson City, Douglas, Lyon, Mineral, Storey and Churchill Counties in Nevada and Lassen, Plumas, Sierra and Alpine Counties in California. This includes all or portions of the Winnemucca and Carson City Districts. The Standards and Guidelines would apply to lands within the Sierra Nevada, Malheur High Plateau, Humboldt-Fallon-Lovelock and Carson Basin major land resource areas as defined by the Natural Resource Conservation Service.
3. The Northeastern Great Basin Resource Advisory Council recommends actions to the Nevada BLM State Director for all or portions of Elko, White Pine, Eureka, and Lander Counties. This includes all of the Elko District and portions of the Ely and Battle Mountain Districts. The Standards and Guidelines would apply to lands within the Owyhee High Plateau and Central Nevada Basin and Range major land resource areas as defined by the Natural Resource Conservation Service.

### D. Relevant Existing Documents

Land Use Plans	Year**
Clark County Management Framework Plan (MFP)*	1984
Caliente MFP*	1982
Tonopah MFP*	1980
Schell MFP*	1983
Egan Resource Management Plan (RMP)	1987
Nellis Resource Plan	1992
Esmeralda/Southern Nye RMP, Area A & B	1987
Stateline RMP	Released as a Draft Plan; 1992, 1994
Tonopah RMP	Released as a Proposed Plan; 1994
Caliente MFP Amendment	Draft Plan Amendment being prepared
Sonoma-Gerlach MFP*	1982
Paradise-Denio MFP*	1982
Reno MFP*	1982
Lahontan RMP	1985
Walker RMP	1986

Elko RMP	1987
Shoshone/Eureka RMP	1988
Wells RMP	1985

\* Includes associated Grazing Environmental Impact Statements

\*\* Year of the original Record of Decision - amendment years not shown

#### **E. Alternatives Considered**

The range of six alternatives outlined below were developed from the 25 versions received during Scoping. The BLM team looked at the several different styles of Standards and Guidelines, the intent of the different versions of the Standards and Guidelines and the specific wording. The team identified three broad ranges of Standards and Guidelines and adopted the representative set of Standards and Guidelines as the alternative. In addition, the team adopted the Standards and Guidelines established by the three Resource Advisory Councils in the State of Nevada. This established six alternatives to be reviewed in any environmental document. These alternatives include:

1. Alternative A, Fall Back Standards and Guidelines outlined in the Grazing Regulations.
2. Alternative B, Standards and Guidelines developed in consultation with the Sierra Front-Northwest Great Basin RAC.
3. Alternative C, Standards and Guidelines developed in consultation with the Northeastern Great Basin RAC.
4. Alternative D, Standards and Guidelines developed in consultation with the Mojave-Southern Great Basin RAC.
5. Alternative E, Standards and Guidelines developed by the Wildlife Federation and based on the Standards and Guidelines developed by the Nevada BLM.
6. Alternative F, Standards and Guidelines developed by Western Range Services and presented by Lamar Smith of the Arizona RAC.

#### **F. BLM Nevada Alternative**

Although each alternative version of the Standards and Guidelines were reviewed individually against the existing body of NEPA compliance documentation, BLM Nevada proposes to implement, upon approval by the Secretary of Interior, the three sets of Standards and Guidelines developed in consultation with the Resource Advisory Councils for the geographic area to which they apply. Thus the aggregation of Alternatives B, C and D, outlined above, comprise the BLM Nevada Alternative.

## **II. RECOMMENDED STANDARDS & GUIDELINES**

### **Standards and Guidelines**

1. See Appendix A for the Mojave-Southern Great Basin Standards and Guidelines.
2. See Appendix B for the Sierra Front-Northwestern Great Basin Standards and Guidelines.
3. See Appendix C for the Northeastern Great Basin Standards and Guidelines.

## **III. LAND USE PLAN CONFORMANCE/NON-CONFORMANCE STATEMENT AND RATIONALE**

### **A. Conformance Review Summary**

The proposed Standards and Guidelines (Appendices A, B, and C) have been reviewed by the BLM for conformance with the land use plans listed under section I. D. above, as outlined by 43 Code of Federal Regulations (CFR) 1610.5 and BLM Manual Section 1617.3. The land use plans, including amendments, were reviewed in detail to determine if the proposed Standards and Guidelines and the objectives, management directions or decisions contained therein are in conformance. The Standards and Guidelines were analyzed based on whether they were 1) specifically provided for in the land use plans, or 2) if not specifically mentioned, were clearly consistent with the terms, conditions and decisions of the land use plans.

In addition, available county plans were reviewed. The county plans contain many policies aimed at promoting clean water, sound management practices, good land stewardship, as well as protection and recovery of sensitive wildlife species. The concepts contained in the Standards and Guidelines parallel the policies found in the county plans.

### **B. Conformance Review Summary Statement**

A detailed report which outlines the Standards and Guidelines and provides a list of each objective, management direction and decision which either specifically provides for the Standards and Guidelines in the land use plan or if not specifically mentioned, were clearly consistent with the terms, conditions and decisions of the land use plan, is available in the Elko, Winnemucca, Carson City, Ely, Las Vegas and Battle Mountain District Offices, the Tonopah and Caliente Field Stations and the BLM Nevada State Office.

The determination of the BLM review team is the Standards and Guidelines are in conformance with the land use plans listed under Section I. D. above.



## IV. NEPA ANALYSIS AND RATIONALE

### A. NEPA Analysis Review

The NEPA documents listed under References (Appendix D) were reviewed against the following criteria to determine if any further NEPA analysis was necessary:

1. The proposed Standards and Guidelines are a feature of, or essentially the same as, the alternative selected and analyzed in the existing documents.
2. A reasonable range of alternatives was analyzed in the existing documents.
3. There has been no significant change to circumstances or significant new information germane to the proposed Standards and Guidelines.
4. The methodology/analytical approach previously used is appropriate for the proposed Standards and Guidelines.
5. The direct and indirect impacts of the proposed Standards and Guidelines are not significantly different than those identified in the existing document.
6. The proposed Standards and Guidelines would not change the previous analysis of cumulative impacts.
7. Public involvement in the previous analysis provides appropriate coverage for the proposed Standards and Guidelines.

After review of the listed NEPA documents based on the above criteria, it was determined that the potential impacts associated with adoption of the Standards and Guidelines has been analyzed. The scope of the Standards and Guidelines are such that further analysis would not accomplish further refinement of the impacts analyzed in the existing documents. The plan conformance and NEPA compliance record have been reviewed and it has been determined that the proposed Standards and Guidelines are in conformance with the approved land use plans and comply with NEPA environmental documentation; therefore, no further environmental analysis is required.

### B. Standard and Guidelines Implementation Process

Upon approval of the Standards and Guidelines by the Secretary of the Interior, permits and leases shall contain terms and conditions that insure conformance with the approved Standards and Guidelines.

The implementation process for Standards and Guidelines will occur under two separate processes as described below:

1. During the supervision and/or monitoring of an allotment, if it is determined that the existing terms and conditions of a grazing permit are not in conformance with the approved

Standards and Guidelines and that livestock grazing was determined to be a significant factor in the non-attainment of a standard, then as soon as possible or no later than the start of the next grazing year, the terms and conditions of the permit/lease will be modified to ensure that the grazing management practices or the levels of the grazing use will be in conformance with the Standards and/or Guidelines.

The modification of the terms and conditions of the permit/lease will be implemented by agreement and/or by decision.

2. The allotment evaluation process will continue to be the process used to determine if existing multiple uses for allotments are meeting or making progress towards meeting land use plan objectives, allotment specific objectives, Rangeland Program Summary objectives and land use plan decisions, in addition to the Standards and Guidelines for grazing administration.

Additionally, allotment specific objectives may have to be developed or amended objectives in the land use plans further quantified at the allotment specific level and, terms and conditions of permits changed or revised to reflect the Standards and Guidelines. Allotment evaluations will continue to be completed based on district priorities.

- a. The allotment evaluation consists of or involves:
  - 1.) The evaluation of current grazing use by all users (livestock, wild horses, wildlife) based on monitoring data analysis and interpretation;
  - 2.) Recommendations to change or adjust grazing systems;
  - 3.) Recommendations to change or adjust stocking levels; and
  - 4.) Establishment of stocking levels for wild horses.
- b. The allotment evaluation also serves as the basis for either issuing multiple use decisions, agreements, or a no change determination. Multiple use decisions are prepared subsequent to completion of land use plans and are based on the attainment or non-attainment of objectives established in the land use plans and allotment evaluations.

During the evaluation process, the existing terms and conditions of a permit will be evaluated to determine if they are in conformance with the approved Standards and Guidelines. If it is determined that the existing terms and conditions are not in conformance with the Standards and Guidelines and livestock grazing was a significant factor in the non-attainment then as soon as possible or no later than the start of the next grazing year, the terms and conditions of the permit/lease will be modified to ensure that the grazing management practices or the levels of grazing use will be in conformance with the Standards and Guidelines.

At the conclusion of the evaluation process, the multiple use decision process will continue to be used to establish:

- 1.) The terms and conditions of the grazing permits;
- 2.) The appropriate management level for wild horses and burros that occur within the allotment; and
- 3.) Any recommendations for wildlife populations or habitat management actions required if it is determined that these actions are necessary.

### **C. Activity Level Plan Conformance/NEPA Compliance**

When the multiple use decision becomes final, the selected management actions are further reviewed to determine conformance with the land use plans and NEPA documentation completed for the decisions. Implementation of the Guidelines on an allotment basis could require additional site-specific NEPA analyses. Any projects such as land treatments, water development or fencing projects will have specific analyses completed.

## **V. SUPPORTING DOCUMENTATION**

In addition to this document, supporting documentation as described under Section III B above, for each RAC area, is available in the Elko, Winnemucca, Carson City, Ely, Las Vegas, and Battle Mountain BLM District Offices, the Tonopah and Caliente Field Stations, as well as the Nevada State Office. The supporting document includes a list of the Standards and the Guidelines and a map indicating the geographic extent of land use plan decisions or NEPA analyses used. The supporting documentation outlines the Standards and Guidelines and provides a list of each objective, management direction and decision which provides for the Standard and Guidelines in the land use plan or if not specifically mentioned, are clearly consistent with the terms, conditions and decisions of the land use plan.

## **VI. PUBLIC COMMENT**

Between September 18 and October 18, 1996, the public was encouraged to comment on the draft conformance determination. Sixteen letters were received during this period. Additional information was provided through telephone calls, attendance at County Commission and county public land committee meetings and follow-up conversations with commentors. The sixteen letters have been added to the supporting documentation available for review in the BLM Field Offices and Nevada State Office in Reno. A summary of the comments and responses appears as Appendix E in this document.

Comments were also provided by a technical team composed of Department of the Interior (Department) and non-Nevada BLM specialists. The intent of this review was to obtain outside comments from subject matter specialists regarding the clarity and legal sufficiency of the Standards and Guidelines. This technical team recommended approval of the Standards and Guidelines subject to additions or revisions to improve clarity and to bring the Standards and Guidelines in more explicit conformance with the requirements of the regulations.

## **CHANGES TO STANDARDS AND GUIDELINES**

### **A. Mojave-Southern Great Basin Area**

The Standards and Guidelines for the Mojave-Southern Great Basin Area (Appendix A) have been revised to include the glossary recommended during that RAC's meeting on September 12, 1996. The preamble for the Mojave-Southern Great Basin Area Standards and Guidelines, which was inadvertently omitted from some copies, is now included.

Based on comments from the technical review team, Standard 2 was modified to specifically include attainment of State water quality criteria. Standard 2 was also modified to incorporate maintenance of ecological processes which include the hydrologic cycle, the nutrient cycle and energy flow. Standard 3 was modified to improve clarity by emphasizing BLM's role relative to special status species habitat, rather than imply a role relative to the animal themselves. These changes were reviewed and endorsed by the Mojave-Southern Great Basin RAC during their meeting on January 8, 1997.

### **B. Sierra Front-Northwestern Great Basin Area**

Based on comments from the technical review team the parenthetical portion of the definition of a Standards in the preamble was deleted. This was removed because of the possible interpretation that could allow failure to achieve a Standard to be ignored. To address implementation concerns expressed by the Sierra Front-Northwestern RAC text from the preamble to the regulations was incorporated into the introductory material for the Nevada Standards and Guidelines package.

Other revisions were made either to improve clarity or bring the text into more explicit alignment with regulatory language. These changes were presented to the Sierra Front-Northwestern Great Basin RAC during their meeting on January 24, 1997. In that meeting they concurred with the change which added reference to California water law. They did not reach consensus on other changes, but did provide comments as individuals.

### **C. Northeastern Great Basin Area**

Based on discussions and recommendations made during the September 7 and October 4, 1996, meetings of the Northeastern Great Basin RAC the recommended Standards and Guidelines for that area were revised to delete the words "making progress toward" from the text of the Standard and to include the concept in the supporting language in the preamble section and in selected Guidelines.

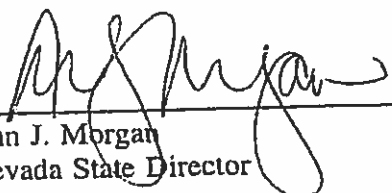
Based on comments from the technical review team attainment of State water quality criteria was added to Standard 2 with a supporting Guideline (2.4). Standard 3 was edited to explicitly recognize the regulatory requirement to maintain ecological processes. Also, mention of threatened and endangered species was added to Standard 3 to explicitly address special status species in the Standards. These changes were presented to the Northeastern Great Basin RAC during their meeting of January 10, 1997. Because review of the changes were not on their agenda for that meeting the RAC was not able to act on them.

## VII. ADMINISTRATIVE DETERMINATION

The Standards and Guidelines shown as Appendices A, B and C of this document have been reviewed for land use plan conformance and National Environmental Policy Act compliance. It has been determined that these Standards and Guidelines and the approved land use plans are in conformance and that no further environmental analysis is required.

## VIII. PROTEST AND APPEAL

This conformance determination is not subject to protest or appeal. However, in accordance with 43 CFR 1610.5-3(b) anyone who believes that they are adversely affected by a specific action being proposed to implement some portion of a resource management plan or plan amendment may appeal such action pursuant to 43 CFR 4.400. Additionally, when proposed grazing decisions are being issued, any applicant, permittee, lessee or other interested public may protest the proposed decision under 43 CFR 4160.1 and appeal under 43 CFR 4160.4 and 4.470.

  
\_\_\_\_\_  
Ann J. Morgan  
Nevada State Director

2/12/97  
Date

# **BUREAU OF LAND MANAGEMENT STANDARDS AND GUIDELINES FOR NEVADA**

## **INTRODUCTION**

The purpose of these Standards and Guidelines is to ensure that the Bureau of Land Management's (BLM) administration of grazing helps preserve currently healthy rangelands and restore healthy conditions to those areas that are not functioning properly. Standards and Guidelines provide specific measures of rangeland health and will identify acceptable or best management practices. The authority for these Standards and Guidelines is found in 43 CFR 4180.

## **STANDARD AND GUIDELINES IMPLEMENTATION PROCESS**

Upon approval of the Standards and Guidelines by the Secretary of the Interior, permits and leases shall contain terms and conditions that ensure conformance with the approved Standards and Guidelines.

The implementation process for Standards and Guidelines will occur under two separate processes as described below:

1. During the supervision and/or monitoring of an allotment, if it is determined that the existing terms and conditions of a grazing permit are not in conformance with the approved Standards and Guidelines and that livestock grazing was determined to be a significant factor in the non-attainment of a standard, then as soon as possible, or no later than the start of the next grazing year, the terms and conditions of the permit/lease will be modified to ensure that the grazing management practices or the levels of the grazing use will be in conformance with the Standards and/or Guidelines.

The modification of the terms and conditions of the permit/lease will be implemented by agreement and/or by decision.

2. The allotment evaluation process will continue to be the process used to determine if existing multiple uses for allotments are meeting or making progress towards meeting land use plan objectives, allotment specific objectives, Rangeland Program Summary objectives and land use plan decisions, in addition to the Standards and Guidelines for grazing administration.

Additionally, allotment specific objectives may have to be developed or amended, objectives in the land use plans further quantified at the allotment specific level, and terms and conditions of permits changed or revised to reflect the Standards and Guidelines. Allotment evaluations will continue to be completed based on district priorities.

a. The allotment evaluation consists of or involves:

- 1) The evaluation of current grazing use by all users (livestock, wild horses, wildlife) based on monitoring data analysis and interpretation;
- 2) Recommendations to change or adjust grazing systems;
- 3) Recommendations to change or adjust stocking levels; and
- 4) Establishment of stocking levels for wild horses.

b. The allotment evaluation also serves as the basis for either issuing multiple use decisions, agreements, or a no-change determination. Multiple use decisions are prepared subsequent to completion of land use plans and are based on the attainment or non-attainment of objectives established in the land use plans and allotment evaluations.

During the evaluation process, the existing terms and conditions of a permit will be evaluated to determine if they are in conformance with the approved Standards and Guidelines. If it is determined that the existing terms and conditions are not in conformance and that livestock grazing was a significant factor in the non-attainment, then as soon as possible or no later than the start of the next grazing year, the terms and conditions of the permit/lease will be modified to ensure that the grazing management practices or the levels of grazing use will be in conformance.

At the conclusion of the evaluation process, the multiple use decision process will continue to be used to establish:

- 1) The terms and conditions of the grazing permits;
- 2) The appropriate management level for wild horses and burros that occur within the allotment; and
- 3) Any recommendations for wildlife populations or habitat management actions required if it is determined that these actions are necessary.

The preamble to the final regulations contains additional information regarding what action BLM would take upon becoming aware that a standard is not being met. The following preamble language is found on page 9956 of the Federal Register notice:

"... The Department intends that failing to comply with a standard in an isolated area would not necessarily result in corrective action.

"The Department recognizes that it will sometimes be a long-term process to restore rangelands to proper functioning condition. The Department intends that Standards and Guidelines will result in a balance of sustainable development and multiple use along with progress towards attaining healthy, properly functioning rangelands. For that reason,

wording has been adopted in the final rule that will require the authorized officer to take appropriate action upon determining that existing grazing management practices are failing to ensure appropriate progress toward the fulfillment of standards....

"In some areas, it may take many years to achieve healthy rangelands, as evidenced by the fundamentals, established standards, and guidelines. The Department recognizes, that in some cases, trends may be hard to even document in the first year. The Department will use a variety of data, including monitoring records, assessments, and knowledge of the locale to assist in making the "significant progress" determination."

The acceptance of progress toward reaching the desired end state is also addressed in the regulatory text in 43 CFR 4180.1 Fundamentals of Rangeland Health which includes the "making significant progress toward" language in each of the four fundamentals.

The concept of "making progress toward" is a specific consideration when determining a course of action during implementation. Determining whether a standard is being met is a distinctly different concept from determining whether progress is being made toward or away from the standard. Determining a course of action is then dependent on a variety of factors, one of which is whether progress is being made toward the standard.

With regard to actions, it is the BLM's policy and intent to work in a collaborative manner to achieve or maintain the Standards necessary for healthy, productive rangelands. It is not the policy or intent of the BLM to arbitrarily and immediately remove all livestock from an entire allotment based solely on finding a range site that is not meeting a standard. As a practical matter, the BLM has neither policy, intent, desire nor capability to arbitrarily remove all livestock where acceptable progress is being made toward meeting the Standards.

## **GEOGRAPHICAL AREA COVERED BY THE STANDARDS AND GUIDELINES**

As shown below the three Resource Advisory Council (RAC) areas in Nevada are based on combinations of major land resource areas as developed by the Natural Resource Conservation Service for Nevada. This land classification system is recognized by the Bureau of Land Management, the Forest Service and other agencies as a basis for ecosystem data collection and analysis. The soil, vegetal and geophysical characteristics of each of the three areas are different and the text offered by the three RACs incorporates their understanding of the differing physical and biological needs of the rangeland ecosystems.

Recognition of these differences is critical to the successful protection of rangelands in Nevada. As a result of basing the RAC boundaries according to an ecosystem approach as opposed to strictly an administrative or jurisdictional approach, the RAC's advice and recommendations are more relevant to the on-the-ground management of natural resources. The area covered by the Standards and Guidelines is as follows. Adjustments will be made for grazing allotments that overlap the boundaries between the RAC areas.

1. Mojave-Southern Great Basin Resource Advisory Council recommends actions to the Nevada BLM State Director for all or portions of Clark, Nye, Esmeralda, and Lincoln



for grazing allotments that overlap the boundaries between the RAC areas.

1. Mojave-Southern Great Basin Resource Advisory Council recommends actions to the Nevada BLM State Director for all or portions of Clark, Nye, Esmeralda, and Lincoln Counties. This includes portions of the Ely, Las Vegas and Battle Mountain Districts. The Standards and Guidelines would apply to lands within the Southern Nevada Basin and Range and Sonoran Basin and Range major land resource areas as defined by the Natural Resource Conservation Service.
2. Sierra Front-Northwestern Great Basin Resource Advisory Council recommends actions to the Nevada BLM State Director for all or portions of Humboldt, Pershing, Washoe, Carson City, Douglas, Lyon, Mineral, Storey and Churchill Counties in Nevada and Lassen, Plumas, Sierra and Alpine Counties in California. This includes the Winnemucca and Carson City Districts. The Standards and Guidelines would apply to lands within the Sierra Nevada, Malheur High Plateau, Humboldt Fallon-Lovelock and Carson Basin major land resource areas as defined by the Natural Resource Conservation Service.
3. The Northeastern Great Basin Resource Advisory Council recommends actions to the Nevada BLM State Director for all or portions of Elko, White Pine, Eureka, and Lander Counties. This includes all of the Elko District and portions of the Ely and Battle Mountain Districts. The Standards and Guidelines would apply to lands within the Owyhee High Plateau and Central Nevada Basin and Range major land resource areas as defined by the Natural Resource Conservation Service.

#### STANDARDS AND GUIDELINES

1. See Appendix A for the Mojave-Southern Great Basin recommended Standards and Guidelines.
2. See Appendix B for the Sierra Front-Northwestern Great Basin recommended Standards and Guidelines.
3. See Appendix C for the Northeastern Great Basin recommended Standards and Guidelines.

#### APPROVAL

Recommended for Approval



Sylvia Baca  
Interim Director

2/10/97  
Date

Approved for Implementation



Bruce Babbitt  
Secretary of the Interior

FEB 12 1997  
Date

## APPENDIX A

### MOJAVE-SOUTHERN GREAT BASIN AREA

#### PREAMBLE

The Standards and Guidelines for grazing administration on BLM lands in southern Nevada apply to livestock grazing. The Mojave-Southern Great Basin Resource Advisory Council (RAC) intends that the Standards and Guidelines will result in a balance of sustainable development and multiple use along with progress, over time, toward attaining desired rangeland conditions. Standards are expressions of physical and biological conditions required for sustaining rangelands for multiple uses. Guidelines point to management actions related to livestock grazing for achieving the Standards. Guidelines are options that move rangeland conditions toward the multiple use Standards. Guidelines are based on science, best rangeland management practices, and public input. Guidelines indicate the types of grazing methods and practices for achieving the Standards for multiple use, are developed for functional watersheds and implemented at the allotment level.

The Mojave-Southern Great Basin Resource Advisory Council recognizes that it will sometimes be a long-term process to restore rangelands to proper functioning condition. In some areas, it may take many years to achieve healthy rangelands.

The Resource Advisory Council may be requested by any party to assist reaching agreement in resolving disputes.

#### STANDARDS AND GUIDELINES

##### STANDARD 1. SOILS:

Watershed soils and stream banks should have adequate stability to resist accelerated erosion, maintain soil productivity, and sustain the hydrologic cycle.

Soil indicators:

- Ground cover (vegetation, litter, rock, bare ground);
- Surfaces (e.g., biological crusts, pavement); and
- Compaction/infiltration.

Riparian soil indicators:

- Stream bank stability.

All of the above indicators are appropriate to the potential of the ecological site.

#### GUIDELINES:

- 1.1 Upland management practices should maintain or promote adequate vegetative ground cover to achieve the Standards.
- 1.2 Riparian-wetland management practices should maintain or promote sufficient residual vegetation to maintain, improve, or restore functions such as stream flow energy dissipation, sediment capture, groundwater recharge, and streambank stability.
- 1.3 When proper grazing practices alone are not likely to restore areas, land management practices may be designed and implemented where appropriate.
- 1.4 Rangeland management practices should address improvement beyond this Standard, significant progress toward achieving Standards, time necessary for recovery, and time necessary for predicting trends.

#### STANDARD 2. ECOSYSTEM COMPONENTS:

Watersheds should possess the necessary ecological components to achieve State water quality criteria, maintain ecological processes, and sustain appropriate uses.

Riparian and wetlands vegetation should have structural and species diversity characteristic of the stage of stream channel succession in order to provide forage and cover, capture sediment, and capture, retain, and safely release water (watershed function).

#### Upland Indicators:

- Canopy and ground cover, including litter, live vegetation, biological crust, and rock appropriate to the potential of the ecological site.
- Ecological processes are adequate for the vegetative communities.

#### Riparian Indicators:

- Stream side riparian areas are functioning properly when adequate vegetation, large woody debris, or rock is present to dissipate stream energy associated with high water flows.
- Elements indicating proper functioning condition such as avoiding accelerating erosion, capturing sediment, and providing for groundwater recharge and release are determined by the following measurements as appropriate to the site characteristics:
  - Width/Depth ratio;

- Channel roughness;
  - Sinuosity of stream channel;
  - Bank stability;
  - Vegetative cover (amount, spacing, life form); and
  - Other cover (large woody debris, rock).
- Natural springs, seeps, and marsh areas are functioning properly when adequate vegetation is present to facilitate water retention, filtering, and release as indicated by plant species and cover appropriate to the site characteristics.

**Water Quality Indicators:**

- Chemical, physical and biological constituents do not exceed the State water quality Standards.

The above indicators shall be applied to the potential of the ecological site.

**GUIDELINES:**

- 2.1 Management practices should maintain or promote appropriate stream channel morphology and structure consistent with the watershed.
- 2.2 Watershed management practices should maintain, restore or enhance water quality and flow rate to support desired ecological conditions.
- 2.3 Management practices should maintain or promote the physical and biological conditions necessary for achieving surface characteristics and desired natural plant community.
- 2.4 Grazing management practices will consider both the economic and physical environment, and will address all multiple uses including, but not limited to, (i) recreation, (ii) minerals, (iii) cultural resources and values, and (iv) designated wilderness and wilderness study areas.
- 2.5 New livestock facilities will be located away from riparian and wetland areas if they conflict with achieving or maintaining riparian and wetland functions. Existing facilities will be used in a way that does not conflict with achieving or maintaining riparian and wetland functions, or they will be relocated or modified when necessary to mitigate adverse impacts on riparian and wetland functions. The location, relocation, design and use of livestock facilities will consider economic feasibility and benefits to be gained for management of lands outside the riparian area along with the effects on riparian functions.
- 2.6 Subject to all valid existing rights, the design of spring and seep developments shall include provisions to protect ecological functions and processes.
- 2.7 When proper grazing practices alone are not likely to restore areas of low infiltration or

permeability, land management practices may be designed and implemented where appropriate. Grazing on designated ephemeral rangeland watersheds should be allowed only if (i) reliable estimates of production have been made, (ii) an identified level of annual growth or residue to remain on site at the end of the grazing season has been established, and (iii) adverse effects on perennial species and ecosystem processes are avoided.

- 2.8 Rangeland management practices should address improvement beyond these Standards, significant progress toward achieving Standards, time necessary for recovery, and time necessary for predicting trends.

### STANDARD 3. HABITAT AND BIOTA:

Habitats and watersheds should sustain a level of biodiversity appropriate for the area and conducive to appropriate uses. Habitats of special status species should be able to sustain viable populations of those species.

#### Habitat Indicators:

- Vegetation composition (relative abundance of species);
- Vegetation structure (life forms, cover, height, and age classes);
- Vegetation distribution (patchiness, corridors);
- Vegetation productivity; and
- Vegetation nutritional value.

#### Wildlife Indicators:

- Escape terrain;
- Relative abundance;
- Composition;
- Distribution;
- Nutritional value; and
- Edge-patch snags.

The above Indicators shall be applied to the potential of the ecological site.

## GUIDELINES:

- 3.1 Mosaics of plant and animal communities that foster diverse and productive ecosystems should be maintained or achieved.
- 3.2 Management practices should emphasize native species except when others would serve better for attaining desired communities.
- 3.3 Intensity, frequency, season of use and distribution of grazing use should provide for growth, reproduction, and, when environmental conditions permit, seedling establishment of those plant species needed to reach long-term land use plan objectives. Measurements of ecological condition, trend, and utilization will be in accordance with techniques identified in the Nevada Rangeland Handbook.
- 3.4 Grazing management practices should be planned and implemented to provide for integrated use by domestic livestock and wildlife, as well as wild horses and burros inside Herd Management Areas.
- 3.5 Management practices will promote the conservation, restoration and maintenance of habitat for special status species.
- 3.6 Livestock grazing practices will be designed to protect fragile ecosystems of limited distribution and size that support unique sensitive/endemic species or communities. Where these practices are not successful, grazing will be excluded from these areas.
- 3.7 Where grazing practices alone are not likely to achieve habitat objectives, land management practices may be designed and implemented as appropriate.
- 3.8 Vegetation manipulation treatments may be implemented to improve native plant communities, consistent with appropriate land use plans, in areas where identified Standards cannot be achieved through proper grazing management practices alone. Fire is the preferred vegetation manipulation practice on areas historically adapted to fire; treatment of native vegetation with herbicides or through mechanical means will be used only when other management techniques are not effective.
- 3.9 Rangeland management practices should address improvement beyond these Standards, significant progress toward achieving Standards, time necessary for recovery, and time necessary for predicting trends.

## GLOSSARY

Definitions are taken from "A Glossary of Terms Used in Range Management" developed through the Society for Range Management or Bureau of Land Management Technical Reference or from the Dictionary of Ecology, Evolution and Systematics except where noted. Other definitions are from Grazing Administration Regulations Code of Federal Regulations, Chapter 43 Sec. 4100.0-5. Definitions also include meanings that were developed by the Mojave Southern Resource Advisory Council to understand their intent in the Standards and Guidelines.

### -A-

**Annual Growth.** The amount of production of new above ground plant biomass for a given site during a given year.

### -B-

**Biodiversity.** The diversity of organisms in a region; made up of species diversity in individual community-types and the turnover of species across different community-types.

**Biological (Cryptogamic) Crust.** Community of non-vascular primary producers that occur as a "crust" on the surface of soils; made up of a mixture of algae, lichens, mosses, and cyanobacteria (bluegreen algae).

**Biotic.** Refers to living components of an ecosystem, e.g., plants and animals and micro-organisms.

### -C-

**Canopy.** (1) The vertical projection downward of the aerial portion of vegetation, usually expressed as a percent of the ground so occupied; (2) the aerial portion of the overstory vegetation.

**Canopy Cover.** The percentage of ground covered by a vertical projection of the outermost perimeter of the natural spread of foliage of plants. Small openings within the canopy are included. (BLM Technical Reference 4400-7)

**Climate.** The average or prevailing weather conditions of a place over a period of years. (BLM Technical Reference 4400-7)

**Conservation.** The planned management of natural resources; the retention of natural balance, diversity and evolutionary change in the environment.

The use and management of natural resources according to principles that assure their sustained economic and/or social benefits without impairment of environmental quality.

**Cover.** A. (1) The plants or plant parts, living or dead, on the surface of the ground. Vegetative cover or herbage cover is composed of living plants and litter cover of dead parts of plants; (2) The area of ground cover by plants of one or more species.

B. (1) The combined aerial parts of plants and mulch, and (2) shelter and protection for animals and birds. (BLM Manual 4400)

C. (1) Plant material, living (vegetative cover) and dead (litter cover) on the soil surface; (2) the area of ground covered by the canopy projections of a particular plant species, expressed as a scale or as a percentage of total ground surface area.

**Cultural Resources.** A broad, general term meaning any cultural property and any traditional lifeway value. (BLM Manual 8100)

**Cultural property.** A definite location of past human activity, occupation, or use identifiable through field inventory (survey), historical documentation, or oral evidence. (Manual 8100)

**-D-**

**Desert Pavement.** A cemented, hydrophobic layer of rocks or small pebbles that occurs over time on desert soil surfaces; prevents water infiltration into soils and wind/water erosion of the soil; often covered with a chemical varnish layer.

**Desired Natural Plant Community.** The type of plant community which is desired for a particular ecological site. This could include native and non-native species depending on the desired land use, but as a natural plant community it must have native species adapted to the climate and soil type as dominants or co-dominants in the community.

**Desired Plant Community.** Of the several plant communities that may occupy a site, the one that has been identified through a management plan to best meet the plan's objectives for the site. It must protect the site as a minimum.

**Diversity.** (1) The absolute number of species in a community; species richness; (2) A measure of the number of species and their relative abundance in a community; low diversity refers to few species or unequal abundances, high diversity to many species or equal abundances.

**-E-**

**Ecological Processes.** Natural functions including the hydrologic cycle, the nutrient cycle, and energy flow. (see also 43 CFR 4180.1(b))

**Ecological Site.** The kind of land with a specific potential natural community and specific physical site characteristics, differing from other kinds of land in its ability to produce vegetation and to respond to management. (BLM Manual 4400)

**Edaphic.** Refers to the soil.

**Endemic Species.** Native to, and restricted to, a particular geographical region, community type, or specific habitat.

**Ephemeral Rangelands.** Rangelands characterized by low, highly seasonal and often episodic



rainfall, resulting in annual plants comprising a significant proportion of annual primary production.

**Erosion.** (v.) Detachment and movement of soil or rock fragments by the action of water, wind, ice or gravity. (n.) The land surface worn away by running water, wind, ice, or other geologic agents, including such processes as gravitational creep.

**Exotic.** An organism or species which is not native to the region in which it is found. Synonym *non-native*: Not native; alien; a species that has been introduced into an area.

-F-

**Forage.** The plant material actually consumed by (or available to) grazing animals.

**Fragile Ecosystems.** Uncommon ecosystems of limited distribution and size that support unique sensitive/endemic species or communities; ecosystems that have low resilience to environmental stress or to disturbance.

**Frequency.** The ratio between the number of sample units that contain a species and the total number of sample units.

A quantitative expression of the presence or absence of individuals of a species in a population. It is defined as the percentage of occurrence of a species in a series of samples of uniform size. (BLM Technical Reference 4400-4)

-G-

**Grazing Distribution.** Dispersion of livestock grazing within a management unit or area.

**Ground Cover.** The percentage of material, other than bare ground, covering the land surface. It may include live and standing dead vegetation, litter, cobble, gravel, stones and bedrock. Ground cover plus bare ground would total 100 percent. (BLM Technical Reference 4400-4)

**Ground Water.** Subsurface water that is in the zone of saturation. The top surface of the ground water is the "water table." Source of water for wells, seepage, springs.

-H-

**Habitat.** The natural abode of a plant or animal, including all biotic, climatic, and edaphic factors affecting life.

**Hydrologic Balance.** The balance between hydrological inputs (infiltration of incident precipitation, run-on) and hydrological outputs (run-off, deep drainage) for an ecological site.

-I-

**Infiltration.** The flow of a fluid into a substance through pores or small openings. It connotes flow into a substance in contradistinction to the word *percolation*. The process by which water seeps into a soil, as influenced by soil texture, aspect and vegetation cover.

**Infiltration Rate.** Maximum rate at which soil under specified conditions can absorb rain or shallow impounded water, expressed in quantity of water absorbed by the soil per unit of time, e.g., inches/hour.

**Integrated Use.** To merge the use of each type of public land use through a series of land management practices.

-L-

**Land Use Plan.** Land use plan means a resource management plan, developed under the provisions of 43 CFR part 1600, or management framework plan. These plans are developed through public participation in accordance with the provisions of the Federal Land Policy and Management Act of 1976 and establish management direction for resource uses of public lands. (43 CFR 4100)

**Litter.** The uppermost layer of organic debris on the soil surface; essentially the freshly fallen or slightly decomposed vegetal material. (BLM Technical Reference 4400-4)

-M-

**Management Objective.** The objectives for which rangeland and rangeland resources are managed which includes specified users accompanied by a description of the desired vegetation and the expected products and/or values.

**Management Plan.** A program of action designed to reach a given set of objectives.

**Marsh.** Flat, wet, treeless areas usually covered by standing water and supporting a native growth of grasses and grasslike plants.

**Monitoring.** The orderly collection, analysis, and interpretation of resource data to evaluate progress toward meeting management objectives. (BLM Technical Reference 4400-7)

**Monitoring.** Monitoring means the periodic observation and orderly collection of data to evaluate: (1) Effects of management actions; and (2) Effectiveness of actions in meeting management objectives. (43 CFR 4100.0.5)

**Morphology.** The form and structure of an organism, with special emphasis on external features.

**Multiple Use.** The management of the public lands and their various resource values so that they are utilized in the combination that will best meet the present and future needs of the American people; making the most judicious use of the land for some or all of these resources

or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions; the use of some land for less than uses that takes into account the long-term needs of future generations for renewable and nonrenewable resources, including, but not limited to, recreation, range, timber, minerals watershed, wildlife and fish, natural scenic, scientific and historical values; and harmonious and coordinated management of the various resources without permanent impairment of the productivity of the land and the quality of the environment with consideration being given to the relative values of the resources and not necessarily to the combination of uses that will give the greatest economic return of the greatest unit output. (Federal Land Policy and Management Act)

-N-

**Native Species.** A species which is a part of the original fauna or flora of the area in question. Indigenous; living naturally within a given area and was part of the areas flora or fauna prior to human settlement of the region.

**Naturalized Species.** An exotic or introduced species that has become established and exhibits successful reproduction in an ecosystem.

-P-

**Percolation.** The flow of a liquid through a porous substance.

**Productivity.** The potential rate of incorporation or generation of energy or organic matter (biomass) by an organism, population or trophic unit per unit time per unit area; plant productivity is termed primary production, and animal productivity is termed secondary production.

**Proper Functioning Condition.** Riparian-wetland areas are functioning properly when adequate vegetation, landform, or large woody debris is present to dissipate stream energy associated with high waterflows, thereby reducing erosion and improving water quality; filter sediment, capture bedload, and aid floodplain development; improve flood-water retention and ground-water recharge; develop root masses that stabilized streambank against cutting action; develop diverse ponding and channel characteristics to provide the habitat and the water depth, duration, and temperature necessary for fish production, waterfowl breeding, and other uses; and support greater biodiversity. (BLM Technical Reference 1737-9)

-R-

**Range Improvement.** Range improvement means an authorized physical modification or treatment which is designed to improve production of forage; change vegetation composition; control patterns of use; provide water; stabilize soil and water conditions; restore, protect and improve the condition of rangeland ecosystems to benefit livestock, wild horses and burros, and fish and wildlife. The term includes but is not limited to, structures, treatment projects, and use of mechanical devices or modifications achieved through mechanical means.

**Residual Vegetation.** Amount, cover, and species composition of the vegetation on a site after it has been grazed for a period of time.

**Resource.** Any component of the environment that can be utilized by an organism.

**Riparian.** Pertaining to, living or situated on, the banks of rivers and streams. 'Xeroriparian' refers to being situated on dry washes (ephemeral streams).

-S-

**Seep.** Wet areas, normally not flowing, arising from an underground water source.

**Soil.** (1) The unconsolidated mineral and organic material on the immediate surface of the earth that serves as a natural medium for the growth of land plants. (2) The unconsolidated mineral matter on the surface of the earth that has been subjected to and influenced by genetic and environmental factors of parent material, climate (including moisture and temperature effects), macro- and micro-organisms, and topography, all acting over a period of time and producing a product -soil- that differs from the material it was derived in many physical, chemical, biological, and morphological properties and characteristics.

**Soil Productivity.** The organic fertility or capacity of a given area or habitat.

**Species.** A taxon of the rank species; which is the basic unit, and lowest principal category, of biological classification; in the hierarchy of biological classification, the category below genus; a group of organisms formally recognized as distinct from other groups.

**Species Composition.** The proportions of various plant species in relation to the total on a given area. It may be expressed in terms of cover, density, weight, etc. Synonym *Vegetative composition*.

**Surface Characteristics.** The amount of bare ground, litter, rock and basal cover of live vegetation, which may include cryptograms. (Nevada Rangeland Monitoring Handbook)

**Sustained yield.** The achievement and maintenance in perpetuity of a high level annual or regular periodic output of the various renewable resources of the public lands consistent with multiple use. (FLPMA)

-T-

**Traditional lifeway values.** The quality of being useful in or important to the maintenance of a specified social and/or cultural group's traditional systems of (a) religious belief, (b) cultural practice, or (c) social interaction, not closely identified with definite locations. Another group's shared values are abstract, nonmaterial, ascribed ideas that one cannot know about without being told. (BLM Manual 8100)

**Trend.** The direction of change in ecological status or resource value rating observed over time. Trend in ecological status should be described as *toward*, or *away from* the potential natural community, or as not apparent. (BLM Technical Reference 4400-4)

-U-

**Upland.** Terrestrial ecosystems located away from riparian zones, wetlands, springs, seeps and dry washes; ecosystems made up of vegetation not in contact with groundwater or other permanent water sources.

-V-

**Vegetative Life Form.** The characteristic structural features and method of perennation of a plant species, e.g., annuals, perennial forbs, shrubs, trees and succulents.

-W-

**Watershed.** (1) A total area of land above a given point on a waterway that contributes runoff water to the flow at that point. (2) A major subdivision of a drainage basin.

**Wetlands.** Areas characterized by soils that are usually saturated or ponded, i.e., hydric soils, that support mostly water-loving plants (hydrophytic plants).

In areas of arid low lying land that is submerged or inundated periodically by water, and is characterized by hydric soils that support mostly water-loving (hydrophytic) plants.

## APPENDIX B

### SIERRA FRONT-NORTHWESTERN GREAT BASIN AREA

#### PREAMBLE

The Standards and Guidelines for livestock grazing on Bureau of Land Management lands are written to accomplish the four fundamentals of rangeland health, insofar as they are affected by livestock grazing practices. Those fundamentals are:

- Watersheds are properly functioning;
- Ecological processes are in order;
- Water quality complies with State Standards; and
- Habitats of protected species are in order.

Other uses can affect the health of the land, and Guidelines for these currently exist or will be developed as needed. In addition, implementation of livestock grazing guidelines must be coordinated with other uses of the land, and collectively these uses should not detract from the goal of achieving public land health.

Standards, Indicators and Guidelines will be implemented through Standard public land management practices as defined in the Nevada Rangeland Monitoring Handbook and the other documents listed in Appendix A [of this appendix].

**Standards:** The goal to be achieved.

**Indicators:** Indicators are observations or measurements of physical, chemical or biological factors that should be used to evaluate site conditions or trends, appropriate to the potential of the site. Indicators assist in determining whether Standards are met or Guidelines followed.

**Guidelines:** Guidelines are livestock management practices (e.g., tools, methods, strategies and techniques) designed to achieve healthy public lands as defined by Standards and portrayed by Indicators. Guidelines are designed to provide direction, yet offer flexibility for local implementation through activity plans and grazing permits. Activity plans may add specificity to the Guidelines based on local goals and objectives as provided for in adopted manuals, handbooks and policy. Not all Guidelines fit all circumstances. Monitoring and site specific evaluation will determine if the Standards are being met or the trend on a particular site is toward desired objectives, and if the correct Guidelines are being applied. The BLM Authorized Officer, in consultation with public land users, will identify and document acceptable or unavoidable exceptions on a case-by-case basis.

## **STANDARDS FOR RANGELAND HEALTH**

### **STANDARD 1. SOILS:**

Soil processes will be appropriate to soil types, climate and land form.

As indicated by:

- Surface litter is appropriate to the potential of the site;
- Soil crusting formations in shrub interspaces, and soil compaction are minimal or not in evidence, allowing for appropriate infiltration of water;
- Hydrologic cycle, nutrient cycle and energy flow are adequate for the vegetative communities;
- Plant communities are diverse and vigorous, and there is evidence of recruitment; and
- Basal and canopy cover (vegetative) is appropriate for site potential.

### **STANDARD 2. RIPARIAN/WETLANDS:**

Riparian/Wetland systems are in properly functioning condition.

As indicated by:

- Sinuosity, width/depth ratio and gradient are adequate to dissipate streamflow without excessive erosion or deposition;
- Riparian vegetation is adequate to dissipate high flow energy and protect banks from excessive erosion; and
- Plant species diversity is appropriate to riparian-wetland systems.

### **STANDARD 3. WATER QUALITY:**

Water quality criteria in Nevada or California State Law shall be achieved or maintained.

As indicated by:

- Chemical constituents do not exceed the water quality Standards;
- Physical constituents do not exceed the water quality Standards;
- Biological constituents do not exceed the water quality Standards; and

- The water quality of all water bodies, including ground water located on or influenced by BLM lands will meet or exceed the applicable Nevada or California water quality Standards. Water quality Standards for surface and ground waters include the designated beneficial uses, numeric criteria, narrative criteria, and antidegradation requirements set forth under State law, and as found in Section 303(c) of the Clean Water Act.

#### STANDARD 4. PLANT AND ANIMAL HABITAT:

Populations and communities of native plant species and habitats for native animal species are healthy, productive and diverse.

As indicated by:

- Good representation of life forms and numbers of species;
- Good diversity of height, size, and distribution of plants;
- Number of wood stalks, seed stalks, and seed production adequate for stand maintenance; and
- Vegetative mosaic, vegetative corridors for wildlife, and minimal habitat fragmentation.

#### STANDARD 5. SPECIAL STATUS SPECIES HABITAT:

Habitat conditions meet the life cycle requirements of special status species.

As indicated by:

- Habitat areas are large enough to support viable populations of special status species;
- Special status plant and animal numbers and ages appear to ensure stable populations;
- Good diversity of height, size, and distribution of plants;
- Number of wood stalks, seed stalks, and seed production adequate for stand maintenance; and
- Vegetative mosaic, vegetative corridors for wildlife, and minimal habitat fragmentation.



## **GUIDELINES FOR GRAZING MANAGEMENT:**

1. Waters must be free from high temperature, biocides, organisms pathogenic to human beings, toxic, corrosive or other deleterious substances attributable to domestic or industrial waste or other controllable sources at levels or combinations to interfere with any beneficial use of the water. Compliance with the provisions of this subsection may be determined in accordance with methods of testing prescribed by the State. If used as an Indicator, survival of test organisms must not be significantly less in test water than in control water.
2. Grazing management practices should be planned and implemented to meet water quality provisions in either California State water law or Nevada Administrative Code Section 445A.120-121 as applicable.
3. Management practices within allotments will maintain or promote stream channel morphology, appropriate soil organisms; adequate amounts of ground cover to support infiltration, maintain soil moisture storage, and stabilize soils; and the hydrologic cycle, nutrient cycle and energy flow.
4. After a range fire or other natural catastrophic event, vegetation should be returned to the native species as rapidly as possible, to afford forage and habitat for native animals. If a nurse crop is needed to protect the land from erosion, all native nurse crops should be used first.
5. Treated areas will be rested from livestock grazing for two growing seasons or until seedlings are established or the vegetative response has achieved objective levels. Wild horse and burros removed from Herd Management Areas will be restored after rehabilitation objectives have been met.
6. Alternative solutions (e.g., reseeding, funding, labor, equipment use or rental) to facilitate fire rehabilitation may be included in cooperative agreements involving qualified groups and individuals who want to participate.
7. Appropriate livestock grazing treatments will be implemented to control the frequency, duration, and level of grazing use. Where livestock grazing is authorized, grazing systems will provide within any one grazing year one or more of the following treatments:
  - a. Rest or deferment from livestock grazing on a specified area as appropriate to meet Standards.
  - b. Systematic rotation of deferred use and/or rest from livestock grazing among two or more units.
  - c. Continuous, season-long use where it has been demonstrated to be consistent with achieving identified Standards. Once season long use is determined to be unacceptable, an alternative system will be developed and implemented before termination of season

long use, prior to the next grazing season.

- d. Excluding further livestock grazing within the affected use area through appropriate techniques when utilization objectives are reached.
8. Conservation of Federal threatened or endangered, proposed, species of concern (formally Category One and Two) and other special status species is promoted by the restoration and maintenance of their habitats.
9. Salt and/or supplements will be placed at least ¼ mile from live waters (springs/streams) and outside of associated riparian areas, permanent livestock watering facilities, wet or dry meadows, and aspen stands. Also salt should not be placed in known historic properties.
10. Night bedding of sheep will be located at least ¼ mile from live waters, streams, springs, seeps, associated riparian areas, wet or dry meadows, and aspen stands.
11. Encourage the use of prescribed and natural fires, meeting prescription objectives, for the restoration and maintenance of healthy rangelands.
12. Departure from traditional grazing management practices may be authorized by BLM to achieve Standards on a case by case experimental basis for rangeland restoration and rehabilitation.
13. The best available science and technology will be utilized in monitoring and assessing the condition of rangelands from the pasture to the BLM District level.
14. Recognizing State Water Law requirements, wildlife and wild horses/burros within their Herd Management Areas will have access to surface water they customarily use.
15. Design of water facilities will incorporate features to ensure safe access and escape for small animals and birds.
16. The development of springs and seeps or other projects affecting water and associated resources shall be designed to maintain the associated riparian area and assure the attainment of Standards.
17. Grazing management practices shall be planned and implemented to allow for habitat requirements of wildlife and wild horses and burros within Herd Management Areas.
18. Implement aggressive action to reduce the invasion of exotic plant species into native plant communities. Control the spread of noxious weeds through various methods such as, grazing management, fire management and other vegetative management practices.
19. Riparian structural developments (i.e., gabions, dams, etc.) designed to achieve improvement in riparian and wetland conditions shall only be implemented in conjunction

with changes in existing grazing management practices, where grazing is a significant factor contributing to a riparian condition needing such attention. Where grazing is not a significant factor causing a riparian condition needing attention, structural developments designed to achieve improvement in riparian and wetland conditions may be implemented independent of changes in existing grazing management practices.

20. The utilization, monitoring and evaluation process will be used as a tool to promote healthy rangelands and achieve Standards.
21. Implement grazing management practices that sustain biological diversity across the landscape.
22. To prevent transmission of disease between domestic and bighorn sheep, adopt and implement the "Guidelines for Domestic Sheep Management in Bighorn Sheep Habitats" contained in Mountain Sheep Ecosystem Management Strategy in the 11 Western States and Alaska.
23. Rangeland management plans will consider listings of known historic properties and new eligible properties as they become known.

#### APPENDIX A

Nevada Rangeland Monitoring Handbook, 1984

Mountain Sheep Ecosystem Management Strategy in 11 Western States and Alaska, 1995

Riparian Area Management Technical Reference 1737-9, 1993

BLM Riparian-Wetland Initiative for the 1990's

Riparian Area Management Technical Reference 1737-11, 1994

"National Environmental Policy Act Quarterly Update", Volume 1, Number 2

"Programmatic Agreement Among BLM, SHPO and ACHP", August 24, 1990

## APPENDIX C

### NORTHEASTERN GREAT BASIN AREA

#### PREAMBLE

The Nevada Northeastern Great Basin Resource Advisory Council (RAC), as chartered by the Department of the Interior to promote healthy rangelands, has developed Standards and Guidelines for grazing administration on about 16.2 million acres of public lands administered by the Bureau of Land Management within the designated geographic area of the Northeastern Great Basin. The RAC in developing these Standards and Guidelines, understands and agrees that grazing is only one of the multiple uses recognized under the Federal Land Policy and Management Act (FLPMA) of 1976 (43 U.S.C. 1739, 1740). These recommended Standards and Guidelines reflect the stated goals of improving rangeland health while providing for the viability of the livestock industry in the Northeastern Great Basin.

#### NE RAC'S INTENDED USE OF STANDARDS AND GUIDELINES

Standards and Guidelines will be implemented through terms and conditions of grazing permits, leases, and other authorizations, grazing-related portions of activity plans (including Allotment Management Plans), and through range improvement-related activities.

The RAC anticipates that in most cases the Standards and Guidelines themselves will not be terms and conditions of various authorizations but that the terms and conditions will reflect the Standards and Guidelines.

The RAC intends that the Standards and Guidelines will result in a balance of sustainable development and multiple use along with progress towards attaining healthy, properly functioning rangelands. For that reason, wording has been adopted in this final rule that will require the authorized officer to take appropriate action upon determining the existing grazing management practices are failing to ensure significant progress toward the fulfillment of the Standards and toward conformance with the Guidelines.

The RAC intends that assessments and corrective actions will be undertaken in priority order as determined by BLM.

The BLM will use a variety of data including monitoring records, assessments, and knowledge of the locale to assist in making the "significant progress" determination. It is anticipated that in many cases it will take numerous grazing seasons to determine direction and magnitude of trend. However, actions will be taken to establish significant progress toward conformance as soon as sufficient data are available to make informed changes in grazing practices.

## STANDARDS AND GUIDELINES

### STANDARD 1. UPLAND SITES:

Upland soils exhibit infiltration and permeability rates that are appropriate to soil type, climate and land form.

As indicated by:

- Indicators are canopy and ground cover, including litter, live vegetation and rock, appropriate to the potential of the site.

### GUIDELINES:

- 1.1 Management practices will maintain or promote upland vegetation and other organisms and provide for infiltration and permeability rates, soil moisture storage, and soil stability appropriate to the ecological site within management units.
- 1.2 When grazing practices alone are not likely to restore areas of low infiltration or permeability, land management treatments should be designed and implemented where appropriate.
- 1.3 Management practices are adequate when significant progress is being made toward this Standard.

### STANDARD 2. RIPARIAN AND WETLAND SITES:

Riparian and wetland areas exhibit a properly functioning condition and achieve State water quality criteria.

As indicated by:

- Stream side riparian areas are functioning properly when adequate vegetation, large woody debris, or rock is present to dissipate stream energy associated with high water flows. Elements indicating proper functioning condition such as avoiding accelerating erosion, capturing sediment, and providing for groundwater recharge and release are determined by the following measurements as appropriate to the site characteristics:
  - Width/Depth ratio;
  - Channel roughness;
  - Sinuosity of stream channel;
  - Bank stability;
  - Vegetative cover (amount, spacing, life form); and
  - Other cover (large woody debris, rock).

- Natural springs, seeps, and marsh areas are functioning properly when adequate vegetation is present to facilitate water retention, filtering, and release as indicated by plant species and cover appropriate to the site characteristics.
- Chemical, physical and biological water constituents are not exceeding the State water quality Standards.

#### GUIDELINES:

- 2.1 Management practices will maintain or promote sufficient vegetation cover, large woody debris, or rock to achieve proper functioning condition in riparian and wetland areas. Supporting the processes of energy dissipation, sediment capture, groundwater recharge, and stream bank stability will thus promote stream channel morphology (e.g., width/depth ratio, channel roughness, and sinuosity) appropriate to climate, landform, gradient, and erosional history.
- 2.2 Where grazing management practices are not likely to restore riparian and wetland sites, land management treatments should be designed and implemented where appropriate to the site.
- 2.3 Management practices are adequate when significant progress is being made toward this Standard.
- 2.4 Grazing management practices will maintain, restore or enhance water quality and ensure the attainment of water quality that meets or exceeds State Standards.

#### STANDARD 3. HABITAT:

Habitats exhibit a healthy, productive, and diverse population of native and/or desirable plant species, appropriate to the site characteristics, to provide suitable feed, water, cover and living space for animal species and maintain ecological processes. Habitat conditions meet the life cycle requirements of threatened and endangered species.

As indicated by:

- Vegetation composition (relative abundance of species);
- Vegetation structure (life forms, cover, height, or age classes);
- Vegetation distribution (patchiness, corridors);
- Vegetation productivity; and
- Vegetation nutritional value.

#### GUIDELINES:

- 3.1 Management practices will promote the conservation, restoration and maintenance of habitat for threatened and endangered species, and other special status species as may be appropriate.
- 3.2 Intensity, frequency, season of use and distribution of grazing should provide for growth and reproduction of those plant species needed to reach long-term land use plan objectives. Measurements of ecological condition and trend/utilization will be in accordance with techniques identified in the Nevada Rangeland Monitoring Handbook.
- 3.3 Grazing management practices should be planned and implemented to allow for integrated use by domestic livestock, wildlife, and wild horses consistent with land use plan objectives.
- 3.4 Where grazing practices alone are not likely to achieve habitat objectives, land treatments may be designed and implemented as appropriate.
- 3.5 When native plant species adapted to the site are available in sufficient quantities, and it is economically and biologically feasible to establish or increase them to meet management objectives, they will be emphasized over non-native species.
- 3.6 Management practices are adequate when significant progress is being made toward this Standard.

#### STANDARD 4. CULTURAL RESOURCES:

Land use plans will recognize cultural resources within the context of multiple use.

#### GUIDELINES:

- 4.1 Rangeland management plans will consider listings of known sites that are National Historic Register eligible or considered to be of cultural significance and new eligible sites as they become known.

## GLOSSARY

Most Definitions are taken from "A Glossary of Terms Used in Range Management" developed through the Society for Range Management. If a definition has been slightly modified it is marked with an \*. Other definitions are from Grazing Administration Regulations Code of Federal Regulations, Chapter 43, Sec. 4100.0-5 or Bureau of Land Management Technical Reference. Definitions also include meanings that were developed by the Northeastern Great Basin Resource Advisory Council to understand their intent in the Standards and Guidelines.

### -B-

**Biotic** - Refers to living components of an ecosystem, e.g., plants and animals.

### -C-

**Canopy** - (1) The vertical projection downward of the aerial portion of vegetation, usually expressed as a percent of the ground so occupied. (2) The aerial portion of the overstory vegetation.

**Canopy Cover** - The percentage of ground covered by a vertical projection of the outermost perimeter of the natural spread of foliage of plants. Small openings within the canopy are included.

**Climate** - The average or prevailing weather conditions of a place over a period of years.

**Conservation** - The use and management of natural resources according to principles that assure their sustained economic and/or social benefits without impairment of environmental quality.

### -D-

**Distribution (Grazing)** - Dispersion of grazing animals within a management unit or area.

### -E-

**Ecological Site** - The kind of land with a specific potential natural community and specific physical site characteristics, differing from other kinds of land in its ability to produce vegetation and to respond to management.

**Edaphic** - Refers to the soil.

**Erosion** - (v.) Detachment and movement of soil or rock fragments by water, wind, ice or gravity. (n.) The land surface worn away by running water, wind, ice, or other geologic agents, including such processes as gravitational creep.

**Exotic** - An organism or species which is not native to the region in which it is found.  
*Synonym non-native.*



**-G-**

**Ground Cover** - The percentage of material, other than bare ground, covering the land surface. It may include live and standing dead vegetation, litter, cobble, gravel, stones and bedrock. Ground cover plus bare ground would total 100 percent.

**Ground Water** - Subsurface water that is in the zone of saturation. The top surface of the ground water is the "water table". Source of water for wells, seepage, springs.

**Guidelines:** Guidelines are livestock management practices (e.g. tools, methods, strategies and techniques) designed to achieve healthy public lands as defined by Standards and portrayed by Indicators. Guidelines are designed to provide direction, yet offer flexibility for local implementation through activity plans and grazing permits. Activity plans may add specificity to the Guidelines based on local goals and objectives as provided for in adopted manuals, handbooks and policy. Not all Guidelines fit all circumstances. Monitoring or site specific evaluation will determine if significant progress is being made towards achieving the Standards, and if the appropriate Guidelines are being applied.

**-H-**

**Habitat** - The natural abode of a plant or animal, including all biotic, climatic, and edaphic factors affecting life.

**-I-**

**Indicators:** Indicators are observations or measurements of physical, chemical or biological factors used to evaluate site conditions or trends, appropriate to the potential of the site. Indicators will be used to determine whether or not Standards are being met.

**Infiltration** - The flow of a fluid into a substance through pores or small openings. It connotes flow into a substance in contradistinction to the word percolation.

**Infiltration Rate** - Maximum rate at which soil under specified conditions can absorb rain or shallow impounded water, expressed in quantity of water absorbed by the soil per unit of time, e.g., inches/hour.

**Intensity (Grazing)** - A reference to grazing density per unit of time.

**-L-**

**Land Use Plan** - Land use plan means a resource management plan, developed under the provisions of 43 CFR part 1600, or management framework plan. These plans are developed through public participation in accordance with the provisions of the Federal Land Policy and Management Act of 1976 and establish management direction for resource uses of public lands. (43 CFR 4100.0.5)

**Litter** - The uppermost layer of organic debris on the soil surface; essentially the freshly fallen or slightly decomposed vegetal material.

-M-

**Management Objective** - The objectives for which rangeland and rangeland resources are managed which includes specified uses accompanied by a description of the desired vegetation and the expected products and/or values.

**Management Plan** - A program of action designed to reach a given set of objectives.

**Marsh** - Flat, wet, treeless areas usually covered by standing water and supporting a native growth of grasses and grasslike plants.

**Monitoring** - The orderly collection, analysis, and interpretation of resource data to evaluate progress toward meeting management objectives.

**Morphology** - The form and structure of an organism, with special emphasis on external features.

-N-

**\*Native Species** - A species which is a part of the indigenous fauna or flora of the area in question.

-O-

**Overstory** - The upper canopy or canopies of plants. Usually refers to trees, tall shrubs and vines.

-P-

**Percolation** - The flow of a liquid through a porous substance.

**Plant Cover** - (1) The plants or plant parts, living or dead, on the surface of the ground. Vegetative cover or herbage cover is composed of living plants and litter cover of dead parts of plants. (2) The area of ground cover by plants of one or more species.

**Proper Functioning Condition** - Riparian-Wetland areas are functioning properly when adequate vegetation, landform, or large woody debris is present to dissipate stream energy associated with high waterflows, thereby reducing erosion and improving water quality; filter sediment, capture bedload, and aid floodplain development; improve flood-water retention and ground-water recharge; develop diverse ponding and channel characteristics to provide the habitat and the water depth, duration, and temperature necessary for fish production, waterfowl breeding, and other uses; and support greater biodiversity. (BLM Technical Reference 1737-9)

-R-

**Range Improvement** - Range improvement means an authorized physical modification or treatment which is designed to improve production of forage; change vegetation composition; control patterns of use; provide water; stabilize soil and water conditions; restore, protect and improve the condition of rangeland ecosystems to benefit livestock, wild horses and burros, and fish and wildlife. The term includes but is not limited to, structures, treatment projects, and use

of mechanical devices or modifications achieved through mechanical means.

**Riparian** - Referring to or relating to areas adjacent to water or influenced by free water associated with streams or rivers on geologic surfaces occupying the lowest position of a watershed.

-S-

**Seep** - Wet areas, normally not flowing, arising from an underground water source.

**Soil** - (1) The unconsolidated mineral and organic material on the immediate surface of the earth that serves as a natural medium for the growth of land plants. (2) The unconsolidated mineral matter on the surface of the earth that has been subjected to and influenced by genetic and environmental factors of parent material, climate (including moisture and temperature effects), macro- and micro-organisms, and topography, all acting over a period of time and producing a product - soil - that differs from the material it was derived in many physical, chemical, biological, and morphological properties and characteristics.

**Species** - A taxon or rank species; in the hierarchy or biological classification, the category below genus.

**Species Composition** - The proportions of various plant species in relation to the total on a given area. It may be expressed in terms of cover, density, weight, etc. Synonym *Vegetative composition*.

**Spring** - Flowing water originating from an underground source.

**Standards:** The goal to be strived for.

-T-

**Trend** - The direction of change in ecological status or resource value rating observed over time. Trend in ecological status should be described as *toward*, or *away from* the potential natural community, or as *not apparent*. Trend in a resource value rating for a specific use should be described as *up*, *down* or *not apparent*. Trends in resource value ratings for several uses on the same site at a given time may be in different directions, and there is no necessary correlation between trends in resource value ratings and trend in ecological status. Some agencies use *trend* only in the context of *ecological status*. Synonym *range condition trend*.

-U-

**Utilization** - The proportion of current year's forage production that is consumed or destroyed by grazing animals. May refer either to a single species or to the vegetation as a whole.

-W-

**Watershed** - (1) A total area of land above a given point on a waterway that contributes runoff water to the flow at that point. (2) A major subdivision of a drainage basin.

**Wetlands** - Areas characterized by soils that are usually saturated or ponded, i.e., hydric soils that support mostly water loving plants (hydrophytic plants).



# BLM Addresses

## N E V A D A

### NEVADA STATE OFFICE

State Director: Ann J. Morgan  
Associate State Director: Jean Rivers-Council  
P.O. Box 12000 (89520-0006)  
850 Harvard Way (89502-2055)  
Reno, Nevada  
7:30 am to 4:15pm weekdays  
PHONE: 702-785-6500 (Public Room)  
FAX: 702-785-No Main Fax Number,  
By Office/Division

### National WH&B Center Palomino Valley

17800 Pyramid Highway, Reno, Nevada  
P.O. Box 3270  
Sparks, Nevada 89432-3272  
PHONE: 702-475-2222  
FAX: 702-475-2053

### BATTLE MOUNTAIN FIELD OFFICE

District Manager: Gerald M. Smith  
50 Bastian Road  
Box 1420  
Battle Mountain, Nevada 89820-1420  
7:30 am to 4:30 pm weekdays  
PHONE: 702-635-4000  
FAX: 702-635-4034

### Tonopah Field Station

Field Station Manager:  
Ronald G. Huntsinger  
Building 102, Military Circle  
P.O. Box 911  
Tonopah, Nevada 89049-0911  
7:30 am to 4:30 pm weekdays  
PHONE: 702-482-7800  
FAX: 702-482-7810

### CARSON CITY FIELD OFFICE

District Manager: John O. Singlaub  
1535 Hot Springs Road  
Carson City, Nevada 89706-0638  
7:30 am to 5:00 pm weekdays  
PHONE: 702-885-6000  
FAX: 702-885-6147

### ELKO FIELD OFFICE

District Manager: Helen M. Hankins  
100 East Idaho Street  
Elko, Nevada 89801  
7:30 am to 4:30 pm weekdays  
PHONE: 702-753-0200  
FAX: 702-753-0255

### ELY FIELD OFFICE

District Manager:  
Gene A. Kolkman  
702 North Industrial Way  
HC33 Box 33500  
Ely, Nevada 89301-9408  
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PHONE: 702-289-1800  
FAX 702-289-1910

### Caliente Field Station

Field Station Manager:  
VACANT  
P.O. Box 237  
U.S. Highway 93  
Caliente, Nevada 89008-0237  
7:30 am to 4:15 pm weekdays  
PHONE: 702-726-8100  
FAX: 702-726-8111

### LAS VEGAS FIELD OFFICE

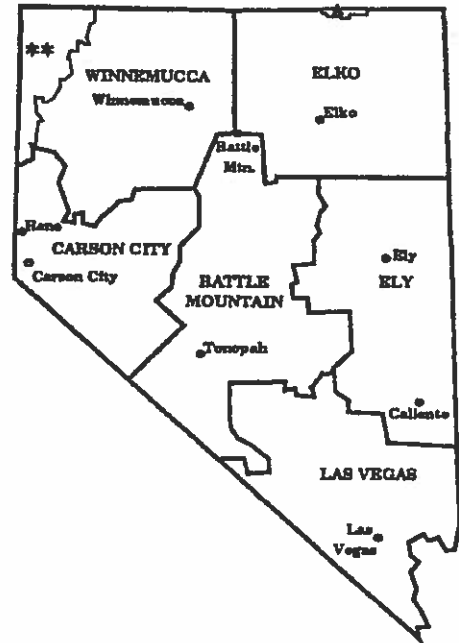
District Manager: Mike F. Dwyer  
4765 West Vegas Drive  
Las Vegas, Nevada 89108  
7:30 am to 4:15 pm weekdays  
PHONE: 702-647-5000  
FAX: 702-647-5023

### Red Rock Canyon NCA

PHONE: 702-363-1921  
FAX: 702-363-6779

### WINNEMUCCA FIELD OFFICE

District Manager: Ron B. Wenker  
5100 East Winnemucca Boulevard  
Winnemucca, Nevada 89445  
7:30 am to 4:30 pm weekdays  
PHONE: 702-623-1500  
FAX: 702-623-1503



### LANDS ADMINISTERED BY CALIFORNIA \*\*

California State Office  
State Director: Ed L. Hasty  
2135 Butano Drive  
Sacramento, California  
95825-0451  
7:30 am to 4:00 pm weekdays  
PHONE: 916-979-2800  
FAX: 916-979-2807

### LANDS ADMINISTERED BY IDAHO \*

Idaho State Office  
State Director: Martha G. Hahn  
3380 Americana Terrace  
Boise, Idaho 83706  
7:45 am to 4:15 pm weekdays  
PHONE: 208-384-3000  
FAX: 208-384-3200

January 1997

**This information was inadvertently left out of the package mailed to you on Thursday, February 13, 1997 regarding the: BUREAU OF LAND MANAGEMENT STANDARDS AND GUIDELINES FOR NEVADA, LAND USE PLAN CONFORMANCE DETERMINATION AND NATIONAL ENVIRONMENTAL POLICY ACT ANALYSIS. Please attach to the back of that package. I hope this has not caused you any inconvenience.**

## APPENDIX D

### REFERENCES

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## APPENDIX E

### PUBLIC COMMENTS AND RESPONSES

Written comments on the Draft Conformance Determination were received from sixteen organizations or individuals. Additional information was provided through telephone calls, attendance at County Commission and public land committee meetings and follow-up conversations with commentors. The sixteen letters have been added to the supporting documentation available for review in the BLM field offices and Nevada State Office in Reno. The sixteen letters were received from:

1. Commission for the Preservation of Wild Horses
2. Division of Agriculture
3. Division of Environmental Protection
4. Division of Minerals
5. Division of Wildlife
6. Board of County Commissioners, Esmeralda County
7. Eureka County Public Land Advisory Commission
8. Lincoln County Public Lands Commission
9. Nye County Planning Department
10. Central Committee of the Nevada State Grazing Boards
11. Nevada Cattlemen's Association
12. Nevada Cattlemen's Association - Winnemucca Unit
13. Nevada Wildlife Federation, Inc.
14. People for the Constitution
15. Jack N. Vogt and Ben Colvin
16. Ira H. Kent

Several comments were received that were outside the scope of the conformance determination and the Standards and Guidelines. They included such subjects as the manner in which the BLM conducts business; the role or relationship of interest groups; the composition of the RAC membership; cooperation in management; emphasis of adhering to appropriate management levels in wild horse herd management areas; use of scientific technical information in decision making and a variety of other subjects.

Because these comments and the positions they represent are important to the BLM, copies of all sixteen letters are being sent to the BLM field offices. The comments increase BLM's understanding of concerns and will help balance courses of action for future decisions. Such information will help guide and prioritize the efforts of the BLM in managing the natural resources on the public lands.

The following is a summary of the comments which pertained directly to the conformance progress toward" as a specific part of the Standard. The concern centers around what action the BLM would take upon becoming aware that a Standard is not being met.

Response: Paragraph IV. B. of this document discusses what actions the BLM would take upon becoming aware that a Standard is not being met. In addition, page 9956 of the Federal

Register notice issuing the final regulations answers this question as follows:

"... The Department intends that failing to comply with a Standard in an isolated area would not necessarily result in corrective action.

"The Department recognizes that it will sometimes be a long-term process to restore rangelands to proper functioning condition. The Department intends that Standards and Guidelines will result in a balance of sustainable development and multiple use along with progress towards attaining healthy, properly functioning rangelands. For that reason, wording has been adopted in the final rule that will require the authorized officer to take appropriate action upon determining that existing grazing management practices are failing to ensure appropriate progress toward the fulfillment of Standards..."

"In some areas, it may take many years to achieve healthy rangelands, as evidenced by the fundamentals, established Standards, and Guidelines. The Department recognizes, that in some cases, trends may be hard to even document in the first year. The Department will use a variety of data, including monitoring records, assessments, and knowledge of the locale to assist in making the "significant progress" determination."

The acceptance of progress toward reaching the desired end state is also addressed in the regulatory text in 43 CFR 4180.1 Fundamentals of rangeland health which includes the "making significant progress toward" in each of the four fundamentals.

BLM's interpretation of the concept of "making progress toward" is a specific consideration when determining a course of action. It is not a consideration in setting the Standard. Determining whether a Standard is being met is a distinctly different concept from determining whether progress is being made toward or away from the Standard. Determining a course of action is then dependent on a variety of factors, one of which is whether progress is being made toward the Standard.

With regard to actions, it is the BLM's policy and intent to work in a collaborative manner to achieve or maintain the Standards necessary for healthy, productive rangelands. It is not the policy or intent of the BLM to arbitrarily and immediately remove all livestock from an entire allotment based solely on finding a range site that is not meeting a Standard. As a practical matter the BLM has neither policy, intent, desire nor capability to arbitrarily remove all livestock where acceptable progress is not being made toward meeting the Standards.

2. Several comments were received supporting the concept of the three sets of Standards and Guidelines for the three RAC geographical areas.

Response: As part of the approval process, the BLM in Nevada plans to forward the three separate sets of Standards and Guidelines based on the geographic areas of the three RACs.

3. Comments were received both for and against preparation of an EIS or EA prior to implementation of the Standards and Guidelines. Some commentors concurred with BLM's conclusion that further NEPA analysis was unnecessary, while two commentors believed that

further analysis of impacts was appropriate. During follow-up meetings one of these two commentors revised their position to agree that no further NEPA analysis was necessary on the Standards and Guidelines. A specific concern was expressed over analysis of future social and economic impacts.

Two commentors believed that BLM should prepare an environmental analysis in conjunction with allotment evaluations and multiple use decisions. Comments were also received indicating BLM should reference other planning documents and NEPA analyses such as the Reno MFP/EIS and various Oil and Gas Amendments that have been prepared and which provide additional support for the conformance conclusion.

Response: 43 CFR 1601.0-5 (b) defines conformity and conformance to mean "... that a resource management action shall be specifically provided for in the [land use] plan, or if not specifically mentioned, shall be clearly consistent with the terms, conditions, and decisions of the approved plan or plan amendment."

To test for compliance with this requirement the land use plans and accompanying environmental impact statements were reviewed to determine if each Standard and each Guideline was specifically provided for or was clearly consistent. The supporting documentation contains quotations from the appropriate land use plan which support the conformance conclusion. Given that all of the Standards parallel statements in the existing land use and the Guidelines generally reflect the good management practices that commonly existed at the time the land use plans were developed no further NEPA analysis is necessary.

With regard to analysis of future social and economic impacts, the BLM shares the concern in the comment. The purpose of NEPA analyses (EISs and EAs) is to insure that high quality environmental information, including social and economic information, is available to the public and officials before decisions are made and actions are taken. At the regional level economic and social information is generally available and impacts were analyzed in the Rangeland Reform '94 EIS. In addition, land use plans also contain analysis of social and economic impacts for the planning area involved. Within Nevada plan amendments and accompanying NEPA analyses for oil and gas leasing and mine plans have provided some updated social and economic information in selected areas within Nevada.

The next level of detail greater than these analyses involves individual operations. The BLM recognizes the potential for impacting individual operations. However, information on specific operations within a region does not exist in a usable form. The cost of obtaining accurate information is exorbitant. To prepare analysis based on assumptions and speculation is not appropriate and can easily lead to inaccurate conclusions. (Please also see comment and response 6. below.)

With regard to preparation of an environmental analysis in conjunction with each allotment evaluation and multiple use decision the BLM will continue to monitor procedures. In this context BLM's fundamental goals include; compliance with the requirements of laws and regulations (including NEPA); efficient collection and analysis of appropriate information regarding accomplishment of resource objectives; presentation of a reasonable range of alternatives for public review and comment; making decisions that promote healthy

rangelands and provide for proper use of the public land resources and providing adequate opportunity for administrative review through protest or appeal where there is disagreement. A NEPA compliance determination is prepared for each multiple use decision which proposes changes in livestock, wildlife or wild horse management. The BLM has consistently found that the impacts of changes resulting from multiple use decisions are not significantly different from the impacts that were analyzed at the land use plan/EIS level. Therefore the multiple use decisions are in conformance and no further NEPA analysis is necessary.

Other planning documents and NEPA analyses have been reviewed and are added to the list of references found in Appendix D.

4. Comments were made emphasizing the jurisdiction of the State of Nevada over water. One comment requested deletion of all references to water quality, spring development, etc. from the Standards and Guidelines.

Response: BLM recognizes the jurisdiction of the State of Nevada over water rights and many other water matters. Many of the actions the BLM authorizes have the potential to impact water quality and quantity. In authorizing these uses BLM has a responsibility to meet the requirements of State law. To ignore our responsibilities relative to water is not appropriate. The Standards and Guidelines associated with water are a recognition of BLM's responsibility to meet requirements of State and federal water laws.

5. The Nevada Division of Environmental Protection, Bureau of Water Quality Planning made the following comments (paraphrased):

- a. Mojave-Southern Great Basin Guideline 2.2 should add "... and achieve or maintain State water quality Standards wherever practicable."
- b. Sierra Front-Northwestern Great Basin Guidelines number 1 and 2 should refer to the full body of the water quality Standards contained in NAC 445A.120-225 (not just NAC 445A.120-121).
- c. Northeastern Great Basin Guideline 3.6 should add the words "or maintenance" after "attainment".

Response: Achieving State water quality criteria has been added to Standard 2 in the Mojave-Southern Great Basin Standards and Guidelines and to Standard 2 of the Northeastern Great basin Standards and Guidelines. Northeastern Great Basin Guideline 3.6 has been renumbered as Guideline 2.4. Comments a. and c. support the concept of achieving water quality Standards where they are not being met and maintaining the water quality level where State Standards are being met. In their advice to the BLM the RACs also supported this concept. They used the word "achieve" to include the concept of maintaining water at a desired level of quality; that is if we have failed to maintain the desired quality, we have also failed to achieve the desired Standard.

In addition, it is important to note that discussions during RAC meetings recognize that water from some seeps and springs emerges from the ground at less than the desired quality. In

such situations achieving a higher Standard may not be possible. For example, desirable water temperature to meet certain fishery objectives may be much lower than the temperature of the water emerging from the ground. Another example may be where water emerges from a seep or spring with natural levels of chemicals that exceed State Standards. Where these natural phenomenon occur it is not appropriate to require the permittee to meet the State Standard.

With regard to comment b., there was discussion about including the entire NAC 445.120-225. An alternative of merely citing "NAC 445" was also discussed. In order to provide emphasis and maintain a focus on the specific State water quality criteria, the Sierra Front-Northwestern RAC chose to only cite that portion of NAC 445 that contains the empirical and narrative water quality criteria. This is not to say the BLM will not acknowledge and comply with other sections of State water law, but rather to emphasize the specific water quality criteria.

6. Several comments were received highlighting the economic status of the livestock industry in Nevada. In addition, comments were received urging the BLM to consider and minimize adverse economic effects during implementation of the Standards and Guidelines.

Response: The BLM has a responsibility of maintaining the long-term productivity of the renewable resources (see also response number 3.). In carrying out this responsibility both long- and short-term economic impacts are considered. The BLM recognizes that the majority of public land grazing permittees and lessees are conscientious stewards. Existing land use plans and the Rangeland Reform '94 EIS generally conclude that these good stewards will not be adversely affected by the implementation of the proposed Standards and Guidelines. The opportunity exists to work cooperatively to sustain the economic vigor of the industry while maintaining the ecological health of the rangeland. It is in the long term best interest of the livestock operators, the interested publics and the BLM to cooperate in achieving or maintaining the Standards.

7. Some comments identified that the Standards and Guidelines were not in conformance with county interim land use plans.

Response: 43 CFR 1610.3-2 (a) provides that guidance and resource management plans to the maximum extent practical shall be consistent with resource related plans of local governments. This applies so long as the local plans are consistent with Federal laws and regulations. In this context it is the BLM's intent to work cooperatively with local governments in formulating long range plans for management of the public lands. This was the case when the current land use plans were developed and still applies today. During preparation (or amendment) of the current BLM land use plans all of the terms, conditions and decisions were reviewed for consistency with State and local plans. The proposed Standards and Guidelines do not change the land use plans and do not effect this consistency.

Available county plans have been reviewed and no inconsistencies were identified with any of the Standards. None of the comments identified specific Standards or Guidelines that were inconsistent with county plans. Many of the concepts in county plans are designed to promote healthy, productive rangelands. The Standards and Guidelines share this

characteristic and even have strong, if not exact, parallels with the intent and concepts in the county plans.

8. Some comments were received opposing the use of native species for rehabilitation of burned range sites. One comment opposed the inclusion of sagebrush seeds in the fire rehabilitation seed mix. In the same general subject area, one comment expressed support for the Sierra Front-Northwestern Great Basin Guideline 18 regarding control of noxious weeds. The comment indicated a concern that some treatments could do more damage than good.

Response: Where resource values are high and there is no reasonable hope for natural restoration of the previous native plant community, it has been the practice of BLM to reseed the site. Prior to prescribing a reseeding, each site is evaluated on a case by case basis. Land use plan decisions and objectives, combined with the potential of the site provide the underlying theme for the character of the site rehabilitation including the seed mix. Historically, the BLM has taken a variety of approaches including both green stripping as well as mixtures of native species.

In a general sense, native range sites which support diverse plant communities provide greater flexibility for management than mono-cultures of such species as crestedwheat grass. The intent of the Guidelines which call for restoration of native species following fire is to recognize the value of these diverse plant communities in reaching multiple use objectives.

Factors affecting the decision to include or not include sagebrush include consistency with land use plan objectives, resource values, the likelihood of a natural return of sage brush, economics and in some cases willingness by an external interest group to assist with costs of the seed.

9. Comments were received opposing the inflexibility of the Guideline restricting placement of salt closer than 1/4 mile from live water (springs and streams).

Response: In the Great Basin, springs and streams play a critical role in the life cycle of nearly all wildlife species. In addition, springs and streams are often an integral part of many livestock operations. Furthermore, livestock are also attracted to salt and supplements in the same manner that they are attracted to water. Placement of salt and supplements away from water sources usually influences livestock distribution and utilization patterns by spreading out the use. On the other hand, combining these two major attractions (water and salt) concentrates livestock use in a manner that leads to over use of the surrounding vegetation, sloughing of stream bank and trampling in springs and seeps. A distance of 1/4 mile is the minimum separation that should be allowed to reduce the concentration of livestock near springs and streams.

10. Some commentators expressed a concern for the apparent lack of use of scientific information including soil survey data and for the lack of reference to available scientific information in developing the Standards and Guidelines.

Response: During development of the Standards and Guidelines presentations were made to each of the RACs by university faculty, range consultants, agency personnel and other



individuals with experience or formal training in natural resource sciences. In addition, many of the RAC members have direct experience or academic training in natural resource science. The diverse background of RAC members resulted in a mix of text in the Standards and Guidelines that includes both scientific and common terminology. The result is clearly stated intent, objectives and practices that should be easily understood by most users of the public lands. During application of these Standards and Guidelines scientific principles and the best available data will be used to form the background for the management decisions on the public lands. This includes soil surveys, range site descriptions, ecological status information and a variety of other data.

11. A comment was received indicating that Standards and Guidelines should be developed for other uses that impact the resources on public land such as recreation, mining and logging. In addition, a comment stated that the Standards and Guidelines should also apply to wild horse Herd Management Areas.

Response: The regulation (43 CFR 4180) that provides for development of the Standards and Guidelines contained in this document pertains only to livestock grazing. However, the concept of having goals and objectives for rangeland health, as well as defining management practices for other activities is appropriate. Under various other authorities in the regulations many other activities are required to have the equivalent of Standards and Guidelines. Uses of public lands that involve significant disturbance of the land surface usually require an authorization from BLM. These authorizations routinely include general and site specific stipulations designed to protect the resources in the same manner as the Standards and Guidelines for livestock grazing.

Other activities on public lands that do not require authorizations (e.g. management of wild horses and burros and management of wildlife habitat) also involve development of goals and objectives for rangeland health and also prescribe definite management practices. These goals and objectives and management practices involve the same concepts as the Standards and Guidelines contained in this document. From a legal stand point, the Standards in this document only apply to livestock grazing. However, from a practical stand point the Standards are fundamentally the same for both livestock and wild horse management. In addition, many of the management practices have the same practical effect in both programs.

12. A concern was expressed that the supporting documents referred to Section III of the Draft were not made available in BLM's Tonopah office.

Response: Copies of the supporting documents are now available in the Tonopah and Caliente offices of the BLM.

