US Department of the Interior
Bureau of Land Management
Battle Mountain District Office, Nevada

Resource Management Plan and
Environmental Impact Statement

SCOPING SUMMARY REPORT
JULY 2011

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ACRONYMS AND ABBREVIATIONS

	Full Phrase
ACEC	Area of Critical Environmental Concern
BLM	United States Department of the Interior, Bureau of Land Management
BMD	Battle Mountain District
BMDO	Battle Mountain District Office
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
EIS	environmental impact statement
FLPMA	Federal Land Policy and Management Act of 1976
NCA	National Conservation Area
NEPA	National Environmental Policy Act
planning area	all lands, regardless of ownership, within the United States Department of the Interior, Bureau of Land Management, Battle Mountain District Office, Nevada
public lands	lands administered by the United States Department of the Interior, Bureau of Land Management
RAC	Resource Advisory Council
RMP	resource management plan
US	United States

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SUMMARY

The United States (US) Department of the Interior, Bureau of Land Management (BLM), Battle Mountain District Office (BMDO) is preparing a resource management plan (RMP) and associated environmental impact statement (EIS) to guide management of BLM administered public lands (surface lands and federal minerals) within the Battle Mountain District. The RMP/EIS will be prepared as a dynamic and flexible plan to allow management to reflect the changing needs of the planning area and will replace the existing 1997 Tonopah RMP and 1986 Shoshone-Eureka RMP, as amended. The planning area is comprised of federal, state, and private lands as well as Federal Indian Reservations within Lander, Eureka, Nye, and Esmeralda Counties in Nevada. There are about 13.5 million acres in the planning area. The decision area for the RMP/EIS includes only BLM-administered lands and is comprised of approximately 10.5 million acres of BLM surface lands.

Public involvement is a vital component of an effective RMP/EIS process. Public involvement for the Battle Mountain RMP includes public scoping; collaboration with federal, state, local, and tribal governments, some of which may be Cooperating Agencies, and a Resource Advisory Council (RAC); and public review of and comment on the Draft RMP/EIS. This report documents the results of the public and agency scoping and outreach process.

Public Scoping Activities

The formal public comment period as required by the National Environmental Policy Act (NEPA) of 1969 (Public Law 91-190) began on December 13, 2010, with the publication of a Notice of Intent in the *Federal Register*, and ended on February 11, 2011. Public outreach for the Battle Mountain RMP/EIS since publication of the Notice of Intent has included:

1) a newsletter mailed in December 2010 to over 660 agency officials, tribes, organizations, and members of the public;

2) eight scoping open houses held in January and February 2011 in Reno, Battle Mountain, Eureka, Austin, Carvers/Hadley, Tonopah, Beatty, and Dyer, Nevada; and

3) a public Web site that provides access to materials distributed at scoping meetings as well as information on the public involvement process.

Public Scoping Results

The BLM received 50 unique written submissions and 3 different form letters including a total of 621 unique comments during the public scoping period. Comments were categorized, coded, entered into a database, tallied, and analyzed. Categories included RMP planning process categories (e.g., how the comment relates to the RMP process), planning issues, and commenter affiliation.

Members of the general public provided 29 written submissions (58.0 percent) during the scoping period, organizations or non-profit groups submitted 11 comments (22.0 percent), and businesses submitted 3 comments (6.0 percent). Federal agencies submitted 1 written submission (2.0 percent), state agencies submitted 2 written submissions (4.0 percent), and local governmental agencies submitted 4 written submissions (8.0 percent), for a total of 14.0 percent of the submissions from government. No written submissions were received from tribal governments, educational organizations or elected officials.

Issue Summary

Based on internal (within the BMDO staff) and external scoping, the following planning issues have been identified. Comments received were classified into the planning issues below and into subcategories where applicable.

- Issue No. 1: Restoring Ecological Health
- Issue No. 2: Air and Atmospheric Values
- Issue No. 3: Water
- Issue No. 4: Cultural Resources, Native American Concerns and Paleontology Resources
- Issue No. 5: Visual Resource Management
- Issue No. 6: Special Status Species
- Issue No. 7: Fish and Wildlife
- Issue No. 8: Wild Horses and Burros
- Issue No. 9: Fire Management
- Issue No. 10: Livestock Grazing
- Issue No. 11: Recreation and Visitor Services
- Issue No. 12: Lands and Realty

- Issue No. 13: Mineral Resources (includes oil, gas, geothermal, coal, saleable, solid leasable except coal, and locatable)
- Issue No. 14: Hazardous Materials
- Issue No. 15: Special Designations (e.g., Areas of Critical Environmental Concern, Wilderness Study Areas, Wild and Scenic Rivers)
- Issue No. 16: Renewable Resources
- Issue No. 17: Socio-Economics
- Issue No. 18: Environmental Justice
- Issue No. 19: Sustainable Development
- Issue No. 20: Transportation Facilities
- Issue No. 21: Comprehensive Travel and Transportation Management
- Issue No. 22: Cave and Karst Resources

The BLM will use the planning issues to help guide the development of a reasonable range of alternative management strategies for the RMP. In addition to planning issues, comments also addressed issues that are policy or administrative actions and issues that have been or will be addressed by the Battle Mountain District Office outside of the RMP, either because they are implementation-level decisions or otherwise beyond the scope of this RMP revision.

Future Steps

Scoping is the first opportunity for public involvement in the RMP process. The BMDO will use the information collected during the scoping period to formulate alternatives and prepare the Draft RMP/EIS, which is anticipated to be published in 2013. Release of the Draft RMP/EIS will be announced in a Notice of Availability in the *Federal Register* and in the local media as well as posted on the RMP Web site. Additional public meetings will be held to solicit public comment on the draft document, likely in the same locations as the scoping meetings. Public comments will be analyzed and used to update alternatives and impacts where applicable. At the conclusion of the public comment period, the Draft RMP/EIS will be revised, and a Proposed RMP/Final EIS will be published and made available for public review. While these are the specific opportunities for public involvement during the RMP process, the BLM will consider input from the public throughout the RMP process.

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SECTION 1
INTRODUCTION

The United States (US) Department of the Interior, Bureau of Land Management (BLM), Battle Mountain District Office (BMDO) is preparing a resource management plan (RMP) and associated environmental impact statement (EIS) to guide management of BLM administered public lands (surface lands and federal minerals) within the Battle Mountain District. The RMP/EIS will be prepared as a dynamic and flexible plan to allow management to reflect the changing needs of the planning area and will replace the existing 1997 Tonopah RMP and 1986 Shoshone-Eureka RMP, as amended. The planning area is comprised of federal, state, and private lands as well as Federal Indian Reservations within Lander, Eureka, Nye, and Esmeralda Counties in Nevada. There are about 13.5 million acres in the planning area. The decision area for the RMP/EIS is limited to BLM-administered lands, which comprise approximately 10.5 million acres.

Under the National Environmental Policy Act (NEPA) of 1969 (Public Law 91-190) and the Council on Environmental Quality's (CEQ) regulations implementing NEPA (40 Code of Federal Regulations [CFR] 1500-1501), federal agencies are required to consider the environmental effects of their actions prior to taking such actions. Actions that are subject to NEPA include projects and programs that are entirely or partially financed, assisted, conducted, regulated, or approved by federal agencies; new and revised agency rules, regulations, plans, policies, or procedures; and legislative procedures (40 CFR 1508.18). The actions proposed by the BLM as part of the Battle Mountain RMP are subject to the requirements of NEPA.

1.1 Purpose of and Need for the Resource Management Plan

The BLM land use planning process yields a dual-functioning document: an RMP and an EIS. An RMP is a land use plan that describes broad multiple-use direction for managing public lands administered by the BLM. The Federal Land Policy and Management Act of 1976 (FLPMA) directs the BLM to develop such

land use plans to provide for appropriate uses of public land. Decisions in land use plans guide future land management actions and subsequent site-specific implementation decisions. These decisions establish goals and objectives (desired outcomes) for resource management and the measures needed to achieve them. These measures are expressed as actions and allowable uses (i.e., lands that are open or available for certain uses, including any applicable restrictions, and lands that are closed to certain uses). The EIS portion of the document identifies the environmental consequences of achieving the goals and objectives set forth in the RMP.

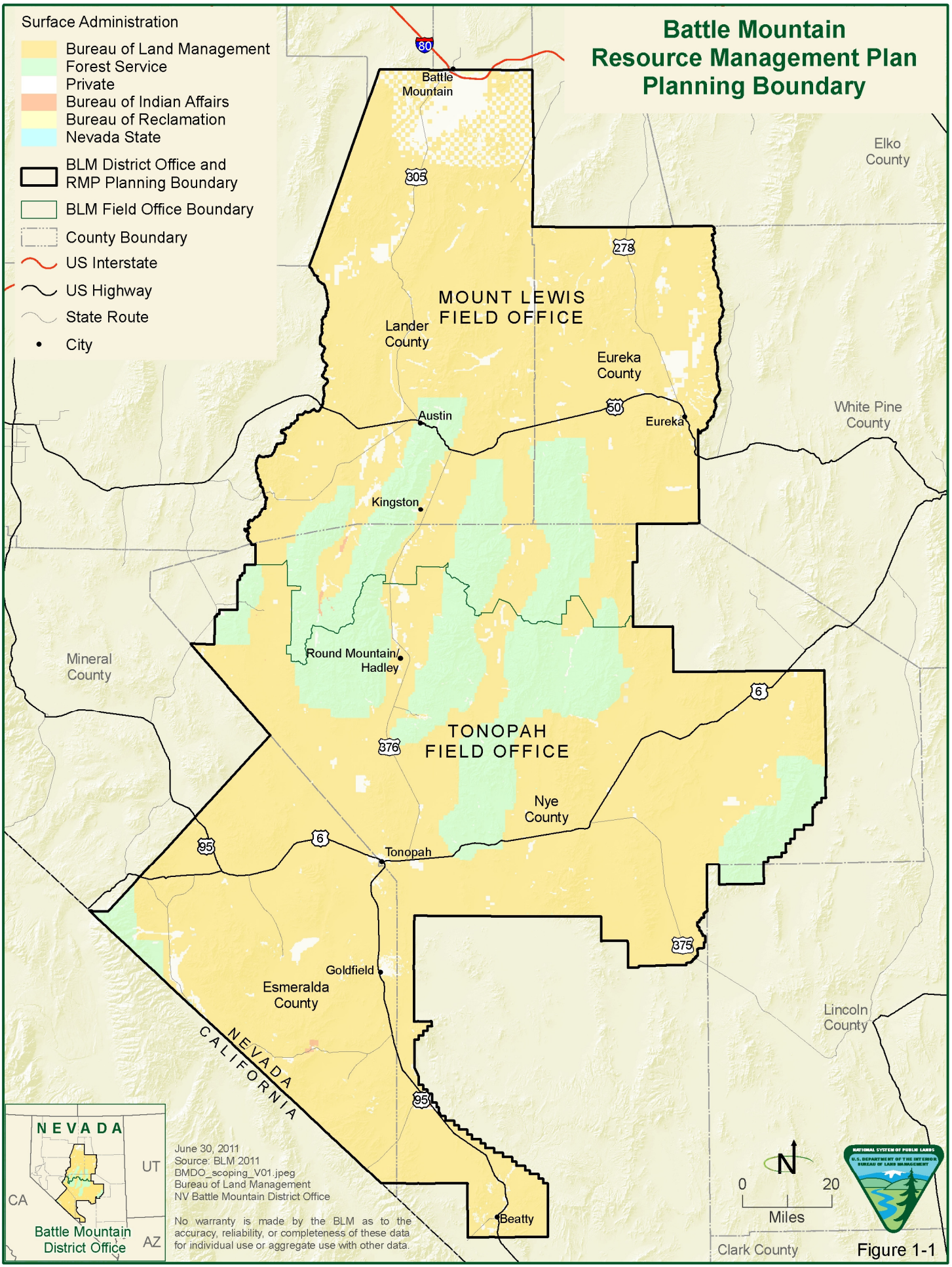
The BLM-administered lands within the Battle Mountain RMP planning area are currently managed in accordance with the decisions in the 1997 Tonopah RMP (BLM 1997) and the 1986 Shoshone-Eureka RMP (BLM 1986).

The need for the Battle Mountain RMP is to respond to new policies including, but not limited to, energy, demand for limited resources, appropriate protection of sensitive resources, changing ecological conditions, increases in conflict between competing resource values and land uses, and other issues that have surfaced since approval of the existing RMPs. One of the primary objective of the Battle Mountain RMP planning effort is to provide a collaborative planning approach that assists BLM in updating the management decisions of the current RMPs. The final RMP will identify desired outcomes, future conditions to be maintained or achieved, and specify uses or resource allocations that are allowable, restricted, or prohibited, including any restrictions needed to meet desired outcomes.

To support the RMP preparation, the BLM will prepare an EIS that provides a comprehensive evaluation of the environmental issues and impacts. NEPA requires the BLM to consider a range of alternatives in its planning process and to analyze and disclose the potential environmental impacts of proposed RMP decisions. The alternatives and impact analysis are documented in the EIS. The EIS process also provides opportunities for participation by the public; other federal agencies, state, and local governments; and tribal governments in RMP development. The RMP and EIS will be combined into one document.

1.2 Description of the RMP Planning Area

The planning area encompasses approximately 13.5 million acres of federal, state, and private lands as well as Federal Indian Reservations within Lander, Eureka, Nye and Esmeralda Counties in Nevada (Refer to **Figure 1-1**, Battle Mountain RMP Planning Area). Management direction outlined in the RMP will apply to approximately 10.5 million surface acres of public lands administered by the BLM.


Battle Mountain
Resource Management Plan
Planning Boundary
Surface Administration
Bureau of Land Management
Forest Service
Private
Bureau of Indian Affairs
Bureau of Reclamation
Nevada State
BLM District Office and RMP Planning Boundary
BLM Field Office Boundary
County Boundary
US Interstate
US Highway
State Route
City
Battle Mountain
Elko County
MOUNT LEWIS FIELD OFFICE
Lander County
Eureka County
Austin
Eureka
White Pine County
Kingston
Round Mountain/ Hadley
Mineral County
TONOPAH FIELD OFFICE
Nye County
Tonopah
Goldfield
Esmeralda County
Lincoln County
NEVADA
CALIFORNIA
Beatty
Clark County
NEVADA
UT
CA
AZ
Battle Mountain District Office
June 30, 2011
Source: BLM 2011
BMDO_scoping_V01.jpeg
Bureau of Land Management
NV Battle Mountain District Office
No warranty is made by the BLM as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data.
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20
Miles

Figure 1-1

1.3 Overview of Public Involvement Process

Public involvement is a vital and legal component of both the RMP and EIS processes. Public involvement vests the public in the decision-making process and allows for full environmental disclosure. Guidance for implementing public involvement under NEPA is codified in 40 CFR Section 1506.6, thereby ensuring that federal agencies make a diligent effort to involve the public in the NEPA process. Section 202 of FLPMA directs the Secretary of the Interior to establish procedures for public involvement during land use planning actions on public lands. Guidance for implementing public involvement during land use planning actions on public lands can be found in the BLM Land Use Planning Handbook H-1601-1 (BLM 2005) and BLM NEPA Handbook H-1790-1 (BLM 2008). Public involvement requirements of both NEPA and FLPMA will be satisfied through this joint RMP/EIS process.

Public involvement for the Battle Mountain RMP/EIS is being conducted in the following four phases:

- Prior to NEPA analysis, public scoping helps to determine the scope of issues and alternatives to be addressed in the RMP/EIS;
- Public outreach via newsletters, news releases, newspaper advertisements, and Web site postings;
- Collaboration with federal, state, local, and tribal governments; the Resource Advisory Councils (RACs); and cooperating agencies;
- Public review of and comment on the Draft RMP/EIS, which analyzes likely environmental effects and identifies the BLM's preferred alternative; and
- Public review and opportunity for protest of Final RMP/EIS.

This scoping summary report documents the results of the first three phases of the public involvement process, beginning with public scoping, and provides information about the ongoing collaboration process.

Scoping is an early and open process for determining the scope of issues to be addressed and identifying the significant issues related to a proposed action. Information collected during scoping may also be used to develop the alternatives to be addressed in a NEPA document. The process has two components: internal scoping and external scoping. Internal scoping is conducted within an agency or cooperating agencies to determine preliminary and anticipated issues and concerns. An interdisciplinary team of BMDO resource specialists held internal scoping meetings to identify the anticipated planning issues and the methods, procedures, and data to be used in compiling the RMP/EIS.

External scoping is a public process designed to reach beyond the BLM and attempts to identify the concerns of high importance to the public. External

scoping helps ensure that planning issues are identified early and properly studied, that issues of no concern do not consume time and effort, and that the proposed action and alternatives are balanced, thorough, and able to be implemented.

In accordance with 43 CFR 1610.2(d), the BLM must document the scoping results. The BLM Land Use Planning Handbook H-1601-1 (BLM 2005) requires the preparation of a Scoping Summary Report to capture public input in one document. This report must summarize the separate comments received during the formal external scoping period. It also must describe the issues and management concerns from public and internal scoping meetings, and the pre-plan analysis and must include a discussion of how these comments will be incorporated into the RMP.

1.4 Description of the Scoping Process

The BLM follows the public involvement requirements documented in CEQ regulations implementing NEPA (40 CFR 1501.7 for scoping and 1506.6 for public involvement). The BLM also follows public involvement requirements described in the BLM's planning regulations (43 CFR 1601-1610). The BLM solicits comments from relevant agencies and the public, organizes and analyzes all comments received, and then distills them to identify issues that will be addressed during the planning process. These issues help define the scope of analysis for the RMP and are used to develop the project alternatives.

1.4.1 Newsletter and Mailing List

In December 2010, the BLM mailed a newsletter announcing the start of the public scoping period for the Battle Mountain RMP/EIS to more than 660 individuals from the public, agencies, tribes, and organizations who had participated in past BMDO activities, had been included on past BMDO distribution lists, or had expressed an interest in BLM land management decisions. The newsletter provided the dates and venues for the eight scoping open houses (Reno, Battle Mountain, Eureka, Austin, Carvers/Hadley, Tonopah, Beatty, and Dyer) (see **Section 1.4.6**, Scoping Open Houses), and described the various methods for submitting comments, including dedicated e-mail and postal addresses. The BLM will publish future newsletters at major project milestones and will mail them to individuals and organizations that have requested to remain on or be added to the project mailing list. All newsletters will be posted on the project Web site. Participants may request to receive newsletters and other project information through electronic or postal mail. The newsletter is included in **Appendix A**, Scoping Materials.

1.4.2 Press Release

A press release was posted on the BMDO Web site on December 16, 2010, announcing the publication of the Notice of Intent and the initiation of the public scoping period for the Battle Mountain RMP/EIS process. A second press release, posted on the BMDO Web site on January 6, 2011, provided

information on the eight scoping open houses (see **Section 1.4.6**, Scoping Open Houses) and described the various methods for submitting comments.

1.4.3 Project Website

A public Web site was launched and is regularly updated to provide the public with the latest information about the RMP/EIS process. The Web site, available on the Internet at http://www.blm.gov/nv/st/en/fo/battle_mountain_field/blm_information/rmp.html, provides background information about the project, a public involvement timeline and calendar, maps and photos of the planning area, and copies of public information documents such as the newsletter and Notice of Intent. The site also provides a link to the scoping comment form for submitting comments about the RMP process. The dates and locations of all eight scoping open houses were announced on the Web site.

1.4.4 Scoping Open Houses

The BLM hosted eight open houses to provide the public with opportunities to become involved, learn about the project and the planning process, meet the Battle Mountain RMP team members, and offer comments. The Notice of Intent announced that the BLM would hold local public scoping meetings. The actual dates, meeting locations and times, and instructions for providing comments were announced via a press release, the project newsletter, and the project Web site. The details of the open houses are provided in **Table 1-1**, Scoping Open Houses.

Table 1-1
Scoping Open Houses

Location (Nevada)	Venue	Date	Number of Attendees	Number of Completed Comment Forms Received
Reno	John Ascuaga's The Nugget Hotel	January 20, 2011	34	0
Battle Mountain	Civic Center	January 24, 2011	7	0
Eureka	Opera House	January 25, 2011	12	4
Austin	Chamber of Commerce	January 26, 2011	11	0
Carvers/Hadley	Donald L. Simpson Community Center	January 31, 2011	7	0
Tonopah	Civic/Convention Center	February 1, 2011	12	0
Beatty	Community Center	February 2, 2011	21	1
Dyer	Fish Lake Valley Community Center	February 3, 2011	13	2
Total			**117**	**7**

Note: Meetings were from 6 to 8 pm.

Scoping meetings were held in an open house format to encourage participants to discuss concerns and questions with BLM staff representatives. Copies of the

first issue of the project newsletter, a glossary of terms, blank scoping comment forms, and a guide to providing substantive comments were available at the sign-in station. A Microsoft PowerPoint presentation provided an overview of the RMP process and presented information about public involvement opportunities and was played continuously on a large screen. BLM personnel staffed ten resource stations displaying resource maps and information to illustrate the current situation and management techniques practiced among different resources and land areas. At those stations, 20 fact sheets for various resources provided an overview of current management practices and issues. Some stations provided additional information in the form of brochures and related documents. The resource fact sheets were also posted on the RMP Web site for public review. As shown in **Table 1-1**, Scoping Open Houses, a total of 117 people attended the open houses.

1.4.5 Notice of Intent

The Notice of Intent notifies the public of the BLM's intent to develop the Battle Mountain RMP. It also initiates the formal scoping public comment period as required by NEPA, which extends 60 days following publication in the *Federal Register*. The Notice of Intent was published on December 13, 2010, and the official scoping comment period ended on February 11, 2011. Comments received on or before March 23, 2011, are included in this report. The BLM will consider all comments received during the planning process, both before the publication of the Notice of Intent and after the end of the official scoping comment period. The Notice of Intent is posted on the project Web site.

1.5 Collaborative Involvement Process

In addition to formal scoping, the BLM has implemented a collaborative outreach and public involvement process that will include working closely with cooperating agencies and the Northeastern Great Basin and Mojave-Southern Great Basin RAC via a specially created subgroup of the RMP. These efforts are summarized below. The BLM will continue to meet with interested agencies and organizations throughout the planning process, as appropriate, and will coordinate closely with cooperating partners.

1.5.1 Cooperating Agencies

A cooperating agency is any federal, state, or local government agency or Indian tribe that enters into a formal agreement with the lead federal agency to help develop an environmental analysis. More specifically, cooperating agencies "work with the BLM, sharing knowledge and resources, to achieve desired outcomes for public lands and communities within statutory and regulatory frameworks" (BLM 2005). The benefits of enhanced collaboration among agencies in preparing NEPA analyses are:

- Disclosing relevant information early in the analytical process;
- Obtaining relevant information from local communities, including social conditions;

- Applying available technical expertise and staff support;
- Avoiding duplication with other federal, state, tribal, and local procedures; and
- Establishing a mechanism for addressing intergovernmental issues.

On December 17, 2010, the BLM wrote to 35 local, state, federal, and tribal representatives, inviting them to participate as cooperating agencies for the Battle Mountain RMP. As of April 2011, nine agencies have agreed to participate in the RMP as designated cooperating agencies (**Table 1-2**, Cooperating Agency Participation). The BLM has signed a Memorandum of Understanding with Nevada Department of Wildlife and is working on Memoranda of Understanding with the other agencies, tribes, and counties.

The BLM anticipates up to twelve Cooperating Agency meetings (more if warranted) over the first twelve to fifteen months of the planning process, with an additional three to four meetings over the following year. Cooperating agencies are also encouraged to attend the scoping meetings and provide comments during the scoping period. These agencies will be engaged throughout the planning process, including during alternatives development.

Table 1-2
Cooperating Agency Participation

Agencies and Tribes Invited to be Cooperators	Accepted as of June 2011	Declined as of June 2011
United States Environmental Protection Agency		✓
United States Geological Survey		
Bureau of Indian Affairs, Eastern NV Agency		
Bureau of Indian Affairs, Western NV Agency		
Duckwater Shoshone Tribe	✓	
Ely Shoshone Tribe		
Fallon Paiute Shoshone Tribe		
Loveland Paiute Tribe		
Shoshone-Paiute Tribes of Duck Valley Reservation		
Summit Lake Paiute Tribe		
Te-Moak Tribal Council		
Timbusha Shoshone Tribe		
Winnemucca Paiute Tribe		
Yomba Shoshone Tribe		
US Department of Agriculture, National Forest Service, Humboldt-Toiyabe National Forest		
US Department of the Interior, Fish and Wildlife Service-Northern Nevada		✓
US Department of the Interior, Fish and Wildlife Service-Southern Nevada		✓
Nellis Air Force Base	✓	
Fallon Naval Air Station	✓	

Table 1-2 *(continued)*
Cooperating Agency Participation

Agencies and Tribes Invited to be Cooperators	Accepted as of June 2011	Declined as of June 2011
National Park Service- Death Valley National Park	✓	
National Park Service - National Trails Intermountain Region		✓
National Park Service Superintendent		
Nevada Department of Agriculture		
Nevada Division of Forestry		
Nevada Division of Minerals, Carson City Office		
Nevada Division of Water Resources		✓
Nevada Department of Wildlife	✓	
Nevada Natural Resources Conservation Service, Elko Service Center		✓
Nevada State Historic Preservation Office		
Nevada Department of Environmental Protection		
University of Nevada Reno		
Esmeralda Board of County Commission	✓	
Nye Board of County Commissioners	✓	
Lander County Board of Commissioners	✓	
Board of Eureka County Commissioners	✓	

1.5.1 Resource Advisory Council

A RAC is a committee established by the Secretary of the Interior to provide advice or recommendations to BLM management (BLM 2005). Each RAC consists of a 15-member advisory panel that provides advice and recommendations to the BLM on resource and land management issues. Each RAC member represents a different area of expertise. The Battle Mountain District is covered by two RACs: the Northeastern Great Basin RAC and the Mojave-Southern Great Basin RAC.

A Battle Mountain RMP RAC Subgroup, comprised of members from both RACs, was selected at the January 20 and 21, 2011, Nevada Tri-RAC meeting. The Subgroup will be involved in the development of the range of alternatives for the RMP/EIS and will aim to ensure that the alternatives adequately reflect public concern. The Subgroup members will report back to their respective RACs. Subgroup members will also re-examine the alternatives between the Draft and Final EIS phases to ensure that the alternatives adequately reflect public comment from the Draft EIS review period.

1.5.2 Collaboration and Consultation with Tribes

The BMDO has initiated consultation with the 10 Native American tribes identified as having interests or Traditional Cultural Properties in the planning area. Consultation will be conducted as required by the National Historic Preservation Act and the American Indian Religious Freedom Act. During scoping, the first project newsletter was mailed to the 10 tribes. Since scoping

ended, the consultation process was formerly initiated through the distribution of consultation letters mailed to the following 10 tribes on April 8, 2011:

- Timbisha Shoshone;
- Yomba Shoshone;
- Winnemucca Paiute;
- Summit Lake Paiute;
- Shoshone-Paiute Duck Valley;
- Lovelock Paiute;
- Fallon Paiute-Shoshone;
- Ely Shoshone;
- Duckwater Shoshone; and
- Te-Moak Tribe of Western Shoshone.

No written comments were received from tribal agencies during the scoping period; tribal concerns or issues have been typically presented in oral format. However some individual tribal members did provide comments during scoping. Government-to-government consultation will continue throughout the RMP process to ensure that the concerns of tribal groups are considered in development of the RMP.

CHAPTER 2
COMMENT SUMMARY

2.1 Method of Comment Collection and Analysis

All written submissions received on or before March 23, 2011, were evaluated and are documented in this Scoping Summary Report. All comments received during the RMP process will be considered in alternative formulation and project planning.

A total of 50 unique written submissions, resulting in 621 unique comments, were received during the public scoping period. The most common format used for submissions was e-mail. Submissions were also mailed via US Mail, or faxed to the BMDO. In addition, comment forms were completed at the public scoping meetings.

In addition to unique submissions, letter campaigns from non-profit organizations and individuals resulted in form letter submissions for a number of topics. Details of form letter submission are included in **Appendix B** (List of Commenters), **Table B-2**, Form Letter Submissions. Letters that represented slight variations of the form letter without significant additional information were treated as form letters. When significant unique comments were added to the form letter, these comments were entered into the comment-tracking database. In total, three different form letters were received. One of the form letters was written by Craig C. Downer, a Wildlife Ecologist, which then was re-submitted by three additional people. A letter campaign by the Cloud Foundation resulted in approximately 24 electronic submissions. One additional letter was submitted electronically by more than 2,150 people, however, the origin of this particular letter campaign has not been identified. Form letters are not included in the calculations of affiliation and geographic location percentages.

A list of commenters and the dates of submittal are provided in **Appendix B**, List of Commenters. Most written submissions included more than one comment, so the 50 submissions and form letters yielded 621 discrete

comments. The comment forms provided instructions for requesting confidentiality and for withholding individual names or addresses from public review or from disclosure under the Freedom of Information Act. One comment was submitted anonymously.

To ensure that public comments were properly registered and that none were overlooked, a multi-phase management and tracking system was used. First, written submissions were logged and numbered. Once all comments were received and documented, the BLM assigned a planning classification to each issue. These classifications detail which issues raised will be resolved through the current planning effort. Planning classifications are as follows:

1: Issues that will be resolved in the RMP;

2: Issues that will be addressed through BLM policy or administrative action (National and BLM policy); and

3: Issues that are beyond the scope of this RMP that will be considered but not addressed.

To assist with the analysis, the BLM entered comments into the Public Input and Comment Tracking database and organized comments by planning issue categories and affiliation of the commenter. Finally, these identifiers were queried and tallied to provide information on planning and other issue categories. Details of comments received by planning issue are included in **Section 2.2.4**, Number of Comments by Planning Issue Category.

2.2 Summary of Public Comments Received

2.2.1 Oral Comments at Scoping Meetings

The following is a summary of meeting comments that were noted by BLM and contractor staff from each scoping meeting.

Reno (January 20, 2011) –Registered Attendance: 34

Several people from various wilderness organizations (e.g., Friends of Nevada Wilderness) stopped by to discuss wilderness. Two main issues were discussed:

1. Friends of Nevada Wilderness asked questions about the new Wild Lands policy and how that would impact wilderness. They were concerned that the new policy would diminish protections for wilderness that are provided for in the Wilderness Act. They would like the BLM to continue to evaluate and bring forward new wilderness areas in the Battle Mountain District. They noted that they would be nominating some additional new areas in addition to those in the current RMP.
2. A specific area that was mentioned for additional investigation for wilderness is an area called Goblin Knobs that is north of the South Reveille WSA (NV060-112). Access to the area would be gained by

taking NV 375 south from Warm Springs approximately 15 miles and turning west onto a primitive road and traveling about 4 miles into the Goblin area. This area was described as remote with spectacular spires and hoodoos (geologic formations). A review of the Warm Springs, Nevada 1:100,000 scale map does show the area, and it would appear to contain a minimal 5,000 road-less acres.

Battle Mountain (January 24, 2011) – Registered Attendance: 7
No substantive comments were noted.

Eureka (January 25, 2011) – Registered Attendance: 12
No substantive comments were noted.

Austin (January 26, 2011) – Registered Attendance: 11
One substantive comment involved whether the BLM could designate Spencer Hot Springs as a possible Area of Critical Environmental Concern (ACEC) or Special Recreation Management Area and thus provide a mechanism for management in cooperation with Lander County. The designation as an ACEC or Special Recreation Management Area may provide a source for focusing management attention and some funding. Trash is already picked up by the county, and there are some potential issues regarding public safety, littering, and sanitation. Closing Spencer Hot Springs would have some socio-economic impacts for Austin as it is a tourism feature and attracts visitors to the area. Both Hickison Special Recreation Management Area (BLM) and Toquima Cave (National Forest System) are very near Spencer Hot Springs and may be managed to provide socio-economic synergy for tourism along the US 50 corridor.

Carvers/Hadley (January 31, 2011) – Registered Attendance: 7
No substantive comments were noted.

Tonopah (February 1, 2011) – Registered Attendance: 12
Staff from the Nevada Division of Wildlife commented about the difficulty of accessing wilderness or Wilderness Study Areas for water developments or other habitat enhancements for wildlife. They would like to work out some strategies to provide easier and more cost-effective access to wilderness while not impairing wilderness characteristics.

One ranch citizen discussed issues of access to water sources located at the edge or near the edge of wilderness or Wilderness Study Areas. The designation hampered their ability to access, improve, and maintain water sources. Also mentioned was the possibility that some improvements in the water sources would enhance wildlife in the Wilderness Study Area.

Beatty (February 2, 2011) – Registered Attendance: 21
The current BLM spring rehabilitation EA that is underway in the Tonopah Field Office was discussed. The effort focuses on some new ideas and

designs for spring rehabilitation to benefit wildlife in the Beatty area. Some of the techniques that David Spicer is utilizing in cooperation with the Nature Conservancy and on his own property are proving to benefit wildlife and human safety, specifically highway collisions with burros. Spicer's design efforts and methods may have applications to other development work on springs throughout the Battle Mountain District that have a shared need between wildlife and grazing.

Dyer (February 3, 2011) – Registered Attendance: 13

Concerns were expressed regarding water allocation in many parts of Esmeralda County and the potential for impact on ground water by renewable energy projects such as solar and geothermal. Attendees also commented that they did not want any more ACECs or WSAs.

2.2.2 Written Submissions by Affiliation

Table 2-1, Comments by Commenter Affiliation, and **Figure 2-1**, Comments by Commenter Affiliation, show the number and proportion of written submissions received from each type of affiliation. Letters on business, agency, or organization letterhead, or where the commenter signed using their official agency title, were considered to represent that organization. All other letters were considered to represent individuals. Members of the general public provided 58.0 percent of the comments received during the scoping period, representatives from businesses submitted 6.0 percent, and non-profit or citizen groups submitted 22.0 percent. Federal agencies submitted 1 written submission (2.0 percent), state agencies submitted 2 written submissions (4.0 percent), and local governmental agencies submitted 4 written submissions (8.0 percent), for a total of 14.0 percent of the submissions from government. No written submissions were received from tribal governments, educational organizations or elected officials. A list of commenters, their affiliations, and the submittal date of their comments are listed in **Appendix B**, List of Commenters.

2.2.3 Written Submissions by Geographical Area

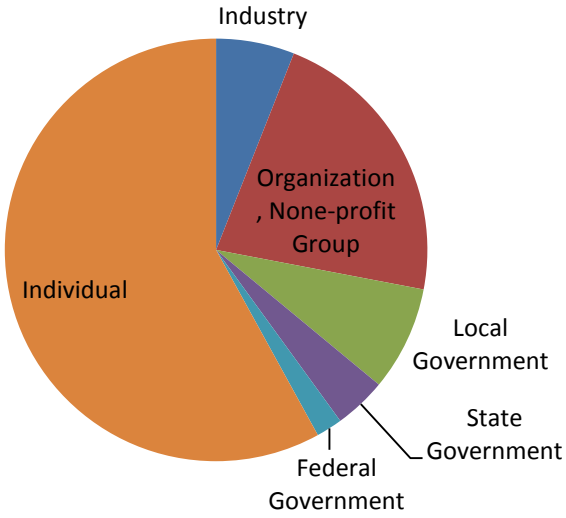
Table 2-2, Commenters by Geographic Area, and **Figure 2-2**, Commenters by Geographic Area, show the number and proportion of written submissions received by the geographic location of the sender. A total of 9 commenters (18.0 percent) were from counties within the planning area. Of the remaining submissions, 16 (32.0 percent) were from commenters in other counties in Nevada, primarily from cities of Las Vegas and Reno in Clark and Washoe counties. Nineteen commenters (38.0 percent) were from other states. Six (12.0 percent) of the written submissions received did not indicate a geographic origin. Note that these calculations do not include form letter submissions. In addition, some commenters made multiple submissions and some letters had more than one signatory, therefore the total for commenters by geographic area is not equal to the total letter submissions.

Table 2-1
Comments by Commenter Affiliation[1]

Affiliation	Number of Comment Letters	Percentage of Total Comment Letters
Government	7	14.0
Federal	*1*	*2.0*
State	*2*	*4.0*
Local	*4*	*8.0*
Businesses	3	6.0
Organizations/Non-profits	11	22.0
Individuals	29	58.0
Total	**50**	**100**

[1]Calculations do not include form letters submissions.

Figure 2-1
Comments by Commenter Affiliation[1]



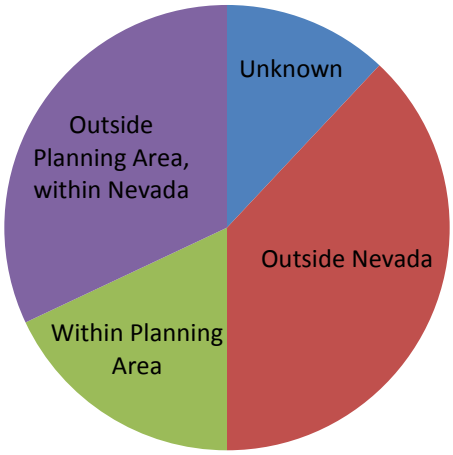
[1]Calculations do not include form letters submissions.

Table 2-2
Commenters by Geographic Area[1]

Location	Number of Commenters	Percentage of Total Commenters
Within Planning Area	9	18.0
Outside Planning Area, within Nevada	16	32.0
Outside Nevada	19	38.0
Unknown	6	12.0
Total	**50**	**100**

[1]Calculations do not include form letters submissions.

Figure 2-2
Commenters by Geographic Area[1]



[1]Calculations do not include form letters submissions.

Commenter location within the planning area was further examined by city of commenter. In the planning area, Dyer with three commenters (33.3 percent), and Beatty with two commenters (22.2 percent) had the highest number of commenters. Refer to **Table 2-3**, Commenter Location within the Planning Area.

Table 2-3
Commenter Location within the Planning Area[1]

Location	Number of Commenters	Percentage of Total Commenters
Dyer	3	33.3
Battle Mountain	1	11.1
Silverpeak	1	11.1
Beatty	2	22.2
Eureka	1	11.1
Austin	1	11.1
Total	**9**	**100**

[1]Calculations do not include form letters submissions.

2.2.4 Number of Comments by Process Category

Table 2-4, Comments by Process Category, shows the number of issues raised that will or will not be addressed in the RMP. Of the 621 comments received, 572 (92.1 percent) were related to a planning issue that will be addressed in the RMP. While some comments addressed multiple planning issues, one primary category was selected for analysis. These comments are discussed in detail below and in **Section 3**, Issue Summary. In addition, 37 comments (6.0 percent) were related to issues that will be addressed in the RMP but do not fall within a specific planning issue category. These comments included general comments on the RMP planning process, alternatives development, collaboration, and requirements of NEPA and other regulations (see **Section 3.3.7**, Other Issues to Be Addressed in the RMP). The remaining 1.9 percent of the comments were: 1) issues beyond the scope of the RMP (1.4 percent); or 2) issues that will be resolved through national policy or administrative action (0.5 percent). See **Section 3.4**, Issues That Will Not Be Addressed in the RMP, for more detail.

Comments are provided in **Appendix C**, Comments by Resource Planning Issue. Comment letters can be viewed in their entirety at the BMDO in Battle Mountain, Nevada.

Table 2-4
Comments by Process Category

Process Category Code	Percent of Comments	Number of Comments
General comment related to project	6.0	37
Planning issue	92.1	572
General issue beyond the scope of the RMP	1.4	9
Issue resolved through national policy	0.5	3
Total	**100**	**621**

2.2.5 Number of Comments by Planning Issue Category

Table 2-5, Comments by Planning Issue, show the number and proportion of comments received by planning issue category. The BLM received 572 planning issue comments and categorized them into the 22 planning issue categories. **Section 3**, Issue Summary, provides a detailed analysis of the comments received for each planning issue category and subcategory.

Of the planning issue comments, wild horses and burros received the highest number of comments (142 comments and 24.8 percent of planning issue comments). Restoring Ecological Health received the next highest number of comments (56 comments and 9.8 percent), followed by Special designations (53 comments and 9.3 percent), travel management (43 comments and 7.5 percent), lands and realty (37 comments and 6.5 percent, and livestock grazing (34 comments and 5.9 percent).

Table 2-5
Comments by Planning Issue

Planning Issue and Subcategory	Number of Comments	Percent of Comments
Issue 1. Restoring Ecological Health	**56**	**9.8**
General. Ecological Health	*7*	*1.2*
Soils	*3*	*0.5*
General Vegetation	*22*	*3.8*
Noxious Weeds	*7*	*1.2*
Wetland and riparian vegetation	*8*	*1.4*
Forestry	*9*	*1.6*
Issue 2. Air and Atmospheric Values	**15**	**2.6**
Air Quality	*3*	*0.5*
Climate Change	*12*	*2.1*
Issue 3. Water	**19**	**3.3**
Issue 4. Cultural Resources, Native American Concerns and Paleontology Resources	**22**	**3.8**
Cultural Resources	*20*	*3.5*
Paleontology Resources	*2*	*0.3*
Issue 5. Visual Resource Management	**11**	**1.9**
Issue 6. Special Status Species	**16**	**2.8**
Issue 7. Fish and Wildlife	**31**	**5.4**
Issue 8. Wild Horses and Burros	**142**	**24.8**
Issue 9. Fire Management	**8**	**1.4**
Issue 10. Livestock Grazing	**34**	**5.9**
Issue 11. Recreation and Visitor Services	**20**	**3.5**
Issue 12. Lands and Realty	**37**	**6.5**
Issue 13. Mineral Resources (includes oil, gas, geothermal, coal, saleable, solid leasable except coal, and locatable)	**19**	**3.3**
Issue 14. Hazardous Materials	**0**	**0**

Table 2-5 *(continued)*
Comments by Planning Issue

Planning Issue and Subcategory	Number of Comments	Percent of Comments
Issue 15. Special Designation	**53**	**9.3**
General. Special Designation	*10*	*1.7*
Areas of Critical Environmental Concern	*23*	*4.0*
WSA and Wilderness	*6*	*1.0*
Wilderness Characteristics	*9*	*1.6*
Wild and Scenic River	*5*	*0.9*
Issue 16. Renewable Resources	**18**	**3.1**
Issue 17. Socio-Economic	**12**	**2.1**
Issue 18. Environmental Justice	**1**	**0.2**
Issue 19. Sustainable Development	**8**	**1.4**
Issue 20. Transportation Facilities	**7**	**1.2**
Issue 21. Comprehensive Travel and Transportation Management	**43**	**7.5**
Issue 22. Cave and Karst Resources	**0**	**0**
Total	***572***	***100***

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CHAPTER 3
ISSUE SUMMARY

Issue identification is the first of the nine-step BLM planning process. As defined in the BLM Land Use Planning Handbook H-1601-1 (BLM 2005), planning issues include concerns or controversies about existing and potential land and resource allocations, levels of resource use, production, and related management practices. Issues include concerns, needs, and opportunities for resource use, development, and protection to consider in RMP preparation. These issues may stem from new information, changed circumstances, or from the need to reassess the appropriate mix of allowable uses.

3.1 Planning Issue Development

The BLM enacted a multi-step issue identification process for the Battle Mountain RMP planning effort. The process began with the creation of a Project Management Plan for the Battle Mountain RMP/EIS in November 2010. This plan, used by the interdisciplinary team as a guide for developing the RMP/EIS, established responsibilities, schedules, and procedures for the project team. It included a description of the project team, contact information, project tasks, and an estimated schedule. It also highlighted anticipated planning issues, management concerns, and preliminary planning criteria developed by the BLM interdisciplinary team during internal scoping.

In December 2010, the BLM issued the Notice of Intent to prepare the RMP, which initiated the formal scoping period, as required by NEPA, and solicited written comments from the public (further discussed in **Section 1.4**, Description of the Scoping Process). Public outreach for scoping continued with the release of the first project newsletter in December 2010, followed by scoping meetings in January and February 2011. Scoping is a collaborative public involvement process implemented to identify and refine planning issues to address in the planning process. During the scoping period, the BLM also engaged cooperating agencies, as discussed in **Section 1.5**, Collaborative Involvement Process. Formal tribal consultation began after completion of the

scoping period. During scoping, tribes were sent the project newsletter. The BLM hosted eight open houses and solicited written comments from the public during the scoping period. The scoping period provided the BLM additional information on the public's concerns and suggestions regarding the planning area.

Information accepted during internal and external scoping was compiled to develop discrete planning issue statements; these are discussed in **Section 3.2**, Planning Issue Statements. The purpose of these planning issue statements is to highlight the key issues distilled from these initial planning and scoping processes. The issues are also discussed in **Section 3.3**, Summary of Public Comments by Resource Planning Issue Category, according to the various issue categories and associated comments received from interested individuals, agencies, elected officials, businesses, and organizations. The BLM will use the planning issues and associated statements, planning criteria, and other information collected in the early planning and scoping phases of the RMP process to help formulate a reasonable range of alternative management strategies that will be analyzed during the RMP/EIS process.

3.2 Planning Issue Statements

A planning issue is a conflict or dispute over resource management activities, allocations, or land use that is well defined or topically discrete and entails alternatives between which to choose.

The planning issue statements presented below are preliminary and are based on the best information gathered to date. The process of developing this RMP will afford many opportunities for collaboration with local, state, federal, and tribal governments; land-management agencies; public interest groups; and public land users. As a result, these issues and concerns may need to be modified and refined to reflect public comments and concerns. Some of the overarching planning issues the BMDO will address are listed below. Each overarching issue, in turn, has several sub-topics, issue questions, and management concerns that address more specific uses and resources. As applicable, items listed in Appendix C of the Land Use Planning Handbook (BLM 2005) will be addressed and decisions will be made. Planning issue statements include the following:

- Issue No. 1: Restoring Ecological Health
- Issue No. 2: Air and Atmospheric Values
- Issue No. 3: Water
- Issue No. 4: Cultural Resources, Native American Concerns and Paleontology Resources
- Issue No. 5: Visual Resource Management
- Issue No. 6: Special Status Species

- Issue No. 7: Fish and Wildlife
- Issue No. 8: Wild Horses and Burros
- Issue No. 9: Fire Management
- Issue No. 10: Livestock Grazing
- Issue No. 11: Recreation and Visitor Services
- Issue No. 12: Lands and Realty
- Issue No. 13: Mineral Resources (includes oil, gas, geothermal, coal, saleable, solid leasable except coal, and locatable)
- Issue No. 14: Hazardous Materials
- Issue No. 15: Special Designations (e.g., Areas of Critical Environmental Concern, Wilderness Study Areas, Wild and Scenic Rivers)
- Issue No. 16: Renewable Resources
- Issue No. 17: Socio-Economics
- Issue No. 18: Environmental Justice
- Issue No. 19: Sustainable Development
- Issue No. 20: Transportation Facilities
- Issue No. 21: Comprehensive Travel and Transportation Management
- Issue No. 22: Cave and Karst Resources

These issues will be presented as questions that will be addressed through the RMP. These issues will likely be modified, new issues will be added, and others will be deleted as a result of the public scoping process. Preliminary management concerns for each of the issues were developed by the BLM during internal scoping are included below.

Issue No. 1: Restoring Ecological Health

Watershed

- What management considerations for watersheds are necessary to ensure watershed health, properly functioning aquatic ecosystems, or to provide for other public uses?
- How will BLM ensure that federal actions on public lands are completed in a manner that maintains, improves, or restores stream morphology; provides beneficial uses of riparian vegetative areas for aquatic and wildlife communities; benefits or enhances water quality/quantity; ensures public health; and promotes safety and economic stability?

Rangeland Vegetation

- Under what conditions, if any, should BLM use non-native plants in place of native plants for restoration activities?
- What criteria will BLM use to develop Desired Plant Communities?
- Should BLM designate annual or ephemeral vegetation areas and if so, how would they be managed?
- What criteria should BLM use to determine the type and amount of rangeland vegetation that will be deemed forage for use by livestock, wildlife, and wild horses and burros as compared with the type and amount that will be maintained for other values such as wildlife habitat and watershed protection?
- What criteria should BLM use to apportion the forage allocated among wildlife, livestock, and wild horses and burros?
- What criteria should be BLM use to decide when, if, and to what degree the forage allocations should be modified in the future?

Soils

- What are the solutions or treatments needed to reduce erosion and stabilize soils?
- How will soils be managed to protect biological crusts?
- What actions would BLM authorize to protect and stabilize soils?

Forestry Management

- What are the characteristics (desired future conditions and historic range of variability) of a healthy forest/woodland within the planning units?
- What management tools and practices should be used to maintain healthy forest and woodlands (e.g., pinyon, juniper, aspen, mountain mahogany, etc.) conditions?
- How will pinyon-juniper woodlands be managed, including old growth, to enhance watersheds, reduce surface erosion, improve water quality, and meet public demands?
- How will BLM manage forest and woodland areas such as aspen, mountain mahogany, and bristlecone/limber pine?
- How would BLM pursue a program of promoting an increase in both commercial and non-commercial utilization, sustainable allowable harvest and subsequent thinning of pinyon/juniper woodlands (i.e., biomass fuels, particle-board production, building materials, meeting community needs, etc.)?
- Should additional areas be designated for greenwood fuel cutting locations, and, if so, where should the areas be?

- What criteria will be used to define and harvest deadwood?
- How will BLM address access to designated greenwood cutting areas?
- How will pinyon-juniper forest and woodlands be managed to enhance and protect habitat for wildlife and to include Special Status Species?
- How should BLM manage public and commercial collection of native plants and materials (wildings, seeds, cuttings, etc.)?
- Should BLM allow commercial harvesting of woodland products after a fire?

Noxious Weeds/Invasive Species/Pests

- How will BLM manage areas occupied by invasive species to prevent their dominance and provide for desired plan communities?
- What criteria will BLM use to select the most appropriate Integrated Weed Management approach for the treatment of noxious weeds and/or invasive species?
- What criteria will BLM use to determine if areas need seeding or restoration activities following a weed treatment?
- Where will BLM restore areas with infestations of cheat grass, red brome, and other invasive/nonnative plant species?

Wetlands and Riparian Areas

- How should riparian/wetland areas be managed to maintain and achieve Proper Functioning Conditions?
- Which riparian areas within the Battle Mountain District require restoration?
- How will BLM manage ephemeral and intermittent streams?
- What measurable criteria are appropriate to ensure grazing use results in proper functioning riparian/wetlands?
- How will riparian wetlands be managed to meet priority aquatic resource needs?

Issue No. 2: Air and Atmospheric Values

- How will BLM minimize fugitive dust from ground disturbing activities?
- What actions are required for improving or maintaining air quality in the Battle Mountain District and meeting standards established through the Clean Air Act?
- How will BLM address the effects climate change has on the natural resources?

- How do BLM authorized/permitted activities contribute to the effects of climate change?

Issue No. 3: Water

- What management actions need to be taken to comply with the objectives of the Clean Water Act and state water quality standards?
- What measures should be employed to improve, protect, enhance, and increase water sources necessary for multiple use management?
- How will BLM protect, maintain, or enhance water quality and quantity?
- How will surface subsidence caused by dewatering of the aquifer be prevented and/or mitigated?
- What measures will be taken by BLM on public lands for well head protection?
- How can BLM ensure that in-stream flow is maintained for stream resources?

Issue No. 4: Cultural Resources, Native American Concerns and Paleontology

- How will the BLM develop sufficient baseline information to assist in identifying the location, nature, importance, and appropriate use of all cultural resources, Native American traditional use areas, and paleontological resources known or expected to be present in the Battle Mountain District?
- How will BLM ensure that it will continue to manage cultural and paleontological resources for present and future generations in ways consistent with their scientific, educational, recreational, and traditional uses?
- How should cultural and paleontological sites, especially those open to interpretation and/or recreation, be monitored, preserved, and protected?
- How will aspen groves and other forest types be managed to protect and conserve historic ethnic narratives?

Issue No. 5: Visual Resource Management

- Based on a visual resource inventory and management considerations for other public land uses and allocations, such as renewable energy considerations, how should current Visual Resource Management classes be revised throughout the Battle Mountain District?
- What are current and potential conflicts with managing Visual Resource Management values, and how can they be mitigated?

Issue No. 6: Special Status Species (includes Threatened, Endangered and Sensitive Status Species)

- How will BLM manage habitat of listed, candidate, and sensitive species found on public lands to ensure the continued existence of these species?
- What areas should be identified as important habitat for Special Status Species?
- How should BLM manage historic Lahontan Cutthroat Trout streams not identified in the Lahontan Cutthroat Trout Recovery Plan, dated 1995?
- What guidance criteria can be developed for threatened and endangered species to ensure that federal undertakings result in habitat and species protection?

Issue No. 7: Fish and Wildlife

- What are the criteria to be used in considering historical bighorn sheep areas for reintroductions and management?
- Fish and wildlife are considered a major use in FLPMA, how will fish and wildlife be proactively managed?
- How will BLM address wildlife species that pioneer into new areas?
- When would BLM authorize introductions, reintroductions, or augmentations of wildlife and plant species?
- Should BLM continue to allow domestic sheep grazing in areas of historic or high-potential bighorn sheep habitat?
- How will bat species and land use conflicts be managed?
- Should some or all streams capable or historically capable of supporting a fishery be managed primarily for that purpose?
- How should riparian and wetland areas be managed to maintain or enhance resource and habitat values in systems containing native fishes and/or introduced sport fishes and other aquatic species?
- How will BLM implement the State of Nevada Wildlife Strategy and Conservation Plan?
- Which existing planning decisions for fish, wildlife, and plants will be carried forward into the new RMP?
- What measureable goals and objectives for priority wildlife, fish, and rare plant species will be developed for the planning area?

Issue No. 8: Wild Horses and Burros

- Should Herd Management Area boundaries be adjusted or combined, or should any Herd Management Areas be returned to

herd area status and no longer managed for wild horse and burro maintenance?

- Which Herd Management Areas are suitable for the long-term management of wild horses and burros?
- What criteria should be used to make habitat and population suitability and viability determinations?
- What methods other than removal through gathers should be considered to achieve and maintain Appropriate Management Levels?
- Where are habitat improvement projects appropriate? What kinds of improvement projects are feasible? When is it appropriate to develop or augment water for wild horses and burros within Herd Management Areas?
- How should BLM address wild horse and burro urban interface issues?

Issue No. 9: Fire Management

- What is the Appropriate Management Response for all Public Lands and adjacent areas of the Battle Mountain District with respect to resource protection and protection of life and property?
- Which areas of the Battle Mountain District should be identified for managing natural-caused fire to meet resource objectives?
- What damage or impact to resources may result from fire suppression activities?
- How do changes in fire regimes, fire return intervals, and increased severity of wildland fires affect emergency stabilization and restoration?
- Can fire be identified as a potential management tool in the RMP to reduce fire hazard/risk?
- What vegetation conditions and fire prescriptions are necessary for fire to perform its historic role in fire adapted ecosystems?
- What is the desired vegetative structure (horizontal continuity and vertical arrangement) for the pinyon-juniper, sagebrush steppe and cheat grass fuel types that would result in:
  - A low crown fire potential;
  - Reduced rates of spread;
  - Reduced spotting potential;
  - Reduced fire line intensities;
  - Fewer acres burned; and

  - Reduced fire severity?
- Which vegetative communities are fire-dependent and which are fire-intolerant?
- How can fuels management activities support biomass utilization and green energy?

Issue No. 10: Livestock Grazing

- How will BLM determine which areas are and are not available for livestock grazing? For areas that are deemed available to livestock grazing:
  - What livestock grazing management practices will be used to maintain and/or make progress towards achieving rangeland health standards?
  - What criteria should BLM use to determine the livestock carrying capacity and season of use and other grazing management practices to be employed on grazing allotments now and in the future?
  - How will vacant allotments be managed?
- What management objectives should BLM use to determine if forage for livestock is annually or seasonally available for non-renewable use permitting?
- What criteria should BLM use to determine if a request for temporary change to the terms and conditions of a preference-based permit has merit?
- What considerations should BLM take into account when evaluating a proposal to change the kind of livestock authorized to graze an allotment from cattle to sheep or vice versa?
- What criteria should BLM use to determine appropriate triggers and end-point indicators for incorporation into the terms and conditions of grazing permits?
- How will BLM manage livestock grazing if invasive plant species or noxious weeds are present?
- How will BLM address grazing management needs that involve lands administered by more than one field office?

Issue No. 11: Recreation and Visitor Services

- What Recreation Opportunity Spectrum classes should be identified for the Battle Mountain District?
- Which areas will be identified as Special Recreation Management Areas?

- What types of uses are occurring in each potential Special Recreation Management Area?
- What are the Recreation Management Zones for each Special Recreation Management Area?
- What is the corresponding recreation niche to be served by each Recreation Management Zone?
- What are the recreation management objectives for the specific recreation opportunities to be produced and the outcomes to be attained (activities, experiences and benefits)?
- What are the recreation setting character conditions required to produce recreation opportunities?
- What are the recreation objectives for the Extensive Recreation Management Areas?
- Where should new recreation facilities be developed? As public demand increases, what are appropriate criteria for designation/development of new Recreation Areas? Are there areas that should be specified for more intensive management?
- Should areas be designated for specific recreation use (e.g., paragliding, recreational shooting areas, and windsailing), and what criteria would be employed?
- How can historic linear features (trails, historically significant roads, railroad grades, etc.) be developed and maintained for recreational use while retaining the historical value of the features?

Issue No. 12: Lands and Realty

- What lands should be withdrawn from operation of the public land laws (e.g. saleable, locatable, and leasable minerals)? What criteria should be applied to determine when a protective withdrawal would be appropriate?
- Should the existing utility and right-of-way corridors be revised to provide for anticipated future needs? If so, what changes are needed?
- What areas, if any, should be designated as right-of-way use areas? What types of uses would be permitted in such areas?
- What areas should be identified for potential new communication site locations?
- How will issuance of permits and leases be managed?
- What criteria will BLM use to identify right-of-way avoidance and/or exclusion areas?
- What criteria will BLM use to acquire conservation easements?

- Which areas should be open to development (mining, mineral leasing, rights-of-way, etc.) only with special constraints to protect unique values? What areas should be identified as right-of-way avoidance areas or right-of-way exclusion areas?
- To improve land tenure distribution, which lands or interests in lands should be acquired if the acquisition would be economically prudent, and the owner was agreeable? Which private parcels within the "railroad checkerboard" should be identified for acquisition? Interests that might be acquired include:
  - Land (with or without mineral interest);
  - Mineral or sub-surface estate;
  - Water rights;
  - Interest in land, including easements for purposes such as access, conservation, and open space; and
  - Land with threatened and endangered species habitat or other desirable resource values.
- To improve land tenure distribution, which lands or interests in lands would be appropriate for disposal? Which public lands within the "railroad checkerboard" should be identified for disposal?
- Which lands should be identified for disposal for community expansion purposes?
- What criteria will be used to determine lands suitable for disposal? Should guidelines be established to dispose of lands not identified as disposable to meet unique management considerations?
- Should lands currently subject to intentional trespass be excluded from disposal consideration?
- Should lands where Desert Land Entries or other agricultural entries have been allowed and subsequently failed not be considered for these uses in the future?
- Should new permits for advertising signs or bill boards be allowed?
- How will BLM address the issue of "trespass town sites"?

Issue No. 13: Mineral Resources (includes Oil, Gas, Geothermal, Coal, Saleable, Solid Leasable (except coal) and Locatable)

- Where should protective constraints be included as a condition of land use authorizations? Possible constraints include, but are not limited to:
  - No Surface Occupancy (To protect existing rights or fragile resources);

- Controlled Surface Use & Timing Limitation (To protect wildlife habitat, grazing allotments, Herd Management Areas, etc.);
- Controlled Surface Use (To protect areas with erosive and fragile soils, watershed areas, special status species habitat, visually sensitive areas, nominated ACECs, etc.); and
- Timing Limitation (To protect off-highway vehicle areas, sage grouse leks, deer winter ranges, etc.).

- Should any areas be closed to oil, gas and geothermal leasing?

Issue No. 14: Hazardous Materials

No planning issues statements were identified for this category.

Issue No. 15: Special Designations (e.g., Areas of Critical Environmental Concern, Wilderness Study Areas, Wild and Scenic Rivers)

- What areas warrant special designation?
- What citizen-proposed areas contain wilderness characteristics?
- Excluding Wilderness Study Areas, what other areas within Battle Mountain District jurisdiction exhibit wilderness characteristics?
- What water courses or segments or water courses within the Battle Mountain District may be "eligible" for wild and scenic river designation?
- For any water courses determined "eligible", what water courses within the Battle Mountain District should be determined "suitable" for wild and scenic river designation?
- Possible special designations include, but are not limited to:
  - ACECs;
  - Wild Horse Ranges;
  - Back Country Byways;
  - National Historic Landmarks;
  - National Historic Trails;
  - Natural Areas;
  - Wilderness/Wilderness Study Area(s);
  - Wild and Scenic Rivers; and
  - National Landscape Conservation System Units; and
  - Properties of Cultural and Religious Importance/Traditional Cultural Properties

Issue No. 16: Renewable Energy

- How can BLM accommodate development of renewable energy resources such as solar power, wind energy, and geothermal energy?
- What suitability criteria may be used for solar and wind generation locations?

Issue No. 17: Socio-Economics

- What can BLM and collaborators do to enhance positive impacts that special land designations or recreational use and development might have on local communities?
- How will designated communication sites be maintained to aid community economic development and improvement as well as customer satisfaction, confidence, and public safety?
- What are the economic benefits to be derived from maintaining public lands on a sustainable level?
- What are the existing social and economic conditions of the communities and local or regional governments affected by this plan and how will they be affected by the RMP?

Issue No. 18: Environmental Justice

- How can BLM use information revealed through Environmental Justice analysis to assist in the development and consideration of planning alternatives that respond to Environmental Justice issues and problems facing minority and low-income populations living near public land or working with and/or utilizing public land resources in accordance with Executive Order 12898?
- How will BLM promote and provide opportunities for full involvement of minority populations, low-income communities and Tribes in BLM decisions that affect their lives, livelihoods, and health?

Issue No. 19: Sustainable Development

- How can BLM ensure coordination, consultation, and cooperation processes are in place and working effectively with partnerships and stakeholders?
- Will citizen's well-being be maintained or improved during the development and implementation of RMP decisions?
- Will the integrity of the environment be ensured in the long term?
- Are the RMP decisions economically viable, and is the community and regional economy adequately considered?

- Will the viability of traditional and non-market activities in the community and surrounding area be maintained or improved with the RMP decisions?
- Will the RMP decisions adequately address Sustainable Development?
- Does a synthesis show the RMP decisions to be net positive or negative for people and ecosystems?

Issue No. 20: Transportation Facilities

- Where does BLM need to acquire easements across private lands to allow legal access to public lands?
- What guidelines may be developed for a District Transportation Plan?
- How many miles of road are maintained and how are maintenance priorities determined?
- How will road re-alignment and new construction be identified?
- What agreements are in place with counties and other government agencies for road maintenance? Do they need re-negotiation to address new concerns?

Issue No. 21: Comprehensive Travel and Transportation Management

- Which areas will be identified as open/closed/limited to special recreation (i.e. Shoshone Range Off-Highway Vehicle Management Area, Hickison Petroglyph Recreation Area, Copper Basin Mountain Bike Trail Area) as a management tool to keep pace with the growing demand for such available opportunities?
- How will BLM determine area designations for the management of motorized vehicles (including off-highway vehicles)?

Access is multi-faceted, including everything from foot trails to paved highways. With the growth in Nevada, use of public lands has increased. This Plan needs to ensure that appropriate public access is identified and ensured. Access questions include:

- Where will motorized access be allowed, limited, prohibited?
- Should separate motorbike trails be designated?
- How should off-highway vehicles be managed? What criteria would be used to designate off-highway vehicle use areas (routes) and the uses permitted on each?
- How will public access be provided and maintained for uses such as bike trails, horseback riding trails, hiking trails, All Terrain Vehicle,

and mountain bicycle use? What criteria would be used to designate these trails and the uses permitted on each?

- Which roads in the Battle Mountain District are needed to provide adequate access? How will these roads, additional needed access, and the trails system be incorporated into the Battle Mountain District Transportation Plan?
- BLM will coordinate and consult with the counties and other holders of RS 2477 roads in accordance with Washington Office policy to obtain BLM's administrative non-binding determinations.

Issue No. 22 Cave and Karst Resources

- What are the criteria for identification and designation for significant cave resources?

These preliminary issue categories were expected to encompass most public issues and concerns and to serve as a starting point to spark public consideration; they were not meant to be all inclusive.

3.3 Summary of Public Comments by Resource Planning Issue Category

Each comment received during public scoping was reviewed and coded. Of the 621 comments received, 572 comments (92.1 percent) were related to one of the planning issues defined above. In addition, 37 comments (6.0 percent) were related to issues that will be addressed in the RMP but do not fall within a specific planning issue category. See **Table 2-5**, Comments by Planning Issue, for a breakdown of the number of comments received for each planning issue and subcategory. Summaries of the scoping comments received for each planning issue category, as well as general RMP comments, are provided in **Sections 3.3.1**, Issue 1, through **3.3.23**, Other Issues to Be Addressed in the RMP. These summaries provide details only on comments related to issues that will be resolved in the RMP. Tables with all comments for each planning issue, as well as tables for issues that will not be addressed in the RMP, are included in **Appendix C**, Comments by Resource Planning Issue. Adjustments or additions may be made to the planning issues as the planning process proceeds and the BLM continues to review information, meet with the interdisciplinary team, and talk with the public.

3.3.1 Issue No. 1: Restoring Ecological Health

Fifty-six of the planning issue comments (9.8 percent) were received on issues related to restoring ecological health. Of these, seven (1.2 percent) addressed general issues related to ecological health and habitat restoration. Three comments (0.5 percent) were specifically related to soil issues, which primarily discussed soil erosion and compaction. Twenty-two comments (3.8 percent) were received regarding general vegetation concerns, seven comments (1.2 percent) were received for noxious weeds and eight comments (1.4 percent of planning issue comments) for riparian and wetland areas. An additional of e comments (1.6 percent) were related to forestry management. Comments are

included in **Appendix C**, Comments by Resource Planning Issue, **Table C-4**, Restoring Ecological Health. Commenters included individuals, environmental groups, and the Nevada Department of Wildlife. Comments included concerns over the spread of noxious weeds, specifically through livestock grazing and road proliferation. Several comments were related to protection and restoration of native vegetation communities, including sage brush and pinyon-juniper communities as well as the importance of forestry management for forest health and wildfire control. In addition, commenters requested that riparian and wetland areas be given special protections in the RMP. Suggested protection measures included limitations on livestock grazing, trail and road development, and energy development.

3.3.2 Issue No. 2: Air and Atmospheric Values

Three of the planning issue comments (0.5 percent) were received about air quality in the planning area. In addition twelve comments (2.1 percent) were received related to climate change. Comments are included in **Appendix C**, Comments by Resource Planning Issue, **Table C-5**, Air and Atmospheric Values. Commenters included individuals and non-profit organizations. Commenters were concerned with the contribution of groundwater withdrawal projects and ORV and road improvement projects to air pollution. Most of the climate change comments were general in scope and asked that the BLM take climate change into consideration in the RMP revision and consider the impacts of climate change for resources and resource uses such as water resources, fish and wildlife, vegetation management, wildland fire management, and livestock grazing.

3.3.3 Issue No. 3: Water

Nineteen of the planning issue comments (3.3 percent) were received regarding water resources issues. Concerns included impacts on surface and ground water quality and quantity from development activities, including mining and renewable energy development as well as livestock grazing. In addition, commenters urged the BLM to improve water resources for wildlife and wild horses and burros within the planning area.

3.3.4 Issue No. 4: Cultural Resources, Native American Concerns and Paleontology Resources

Twenty of the planning issue comments were received on cultural and heritage resources, and two comments were received on paleontological resources, representing 3.8 percent, combined. Comments are included in **Appendix C**, Comments by Resource Planning Issue, **Tables C-7**, Cultural and Heritage Resources, and Paleontological Resources. Commenters recommended that the RMP preserve areas with cultural significance. Suggested protections include interpretive signs, limitations on development, and restrictions on motorized vehicle use and livestock grazing.

3.3.5 Issue No. 5: Visual Resource Management

Eleven of the planning issue comments (1.9 percent) were related to visual resources. Refer to **Appendix C**, Comments by Resource Planning Issue, **Table C-8**, Visual Resources. Comments from individuals and non-profit groups asked that the BLM recognize the importance of viewsheds when making land management decisions in the RMP revision, including the impacts of energy development and recreation on viewsheds. The Nevada State Clearinghouse asked the BLM to utilize the Dark Sky Lighting practices for all new development projects.

3.3.6 Issue No. 6: Special Status Species

Individuals, environmental groups, the Nevada Department of Wildlife, and one local agency commented on the management of listed species or candidates for listing at the agency, state, or federal level. Sixteen comments were received, about 2.8 percent of the total planning issue comments. Comments are included in **Appendix C**, Comments by Resource Planning Issue, **Table C-9**, Special Status Species. The majority of commenters expressed concern for the continued existence or preservation of habitat for a particular species or group of species. The sage grouse was a species of concern for many commenters; comments included suggestions of management practices, such as the adoption of the Nevada Sage Grouse Conservation Plan, as well as development of grazing and wild horse management strategies intended to protect and preserve these populations. Other species mentioned included big-horn sheep and aquatic species. Commenters also asked that ACECs and other special management areas and tools be utilized to protect rare plant and animal habitat.

3.3.7 Issue No. 7: Fish and Wildlife

Thirty-one of the planning issue comments (5.4 percent) received regarded fish and wildlife. See **Appendix C**, Comments by Resource Planning Issue, **Table C-10**, Fish and Wildlife, for representative comments. Individuals, environmental organizations, and Nevada Department of Wildlife expressed support for the protection of wildlife habitat. Commenters asked that the BLM consider management at the landscape scale. Commenters also asked that the BLM utilize the best available science to determine essential habitat areas to protect and best management practices that should be incorporated. These respondents also expressed concerns about conflicts between protection for wildlife and other land uses, such as recreation, oil and gas development, renewable energy, and livestock grazing.

3.3.8 Issue No. 8: Wild Horses and Burros

One-hundred and forty-two comments (24.8 percent) were received related to wild horses and burros. Comments are included in **Appendix C**, Comments by Resource Planning Issue, **Table C-11**, Wild Horses and Burros. In addition, all three of the form letter submissions were on topics related to wild horses and burros. Comments centered on how to determine the appropriate management level for the Herd Management Areas. Some commenters were in favor of

adjusting the appropriate management levels for current conditions, stressing that inventories and assessments are necessary to determine appropriate levels. Some of the public felt that wild horses and burros should be left alone and discussed the problems associated with gathering animals.

3.3.9 Issue No. 9: Fire Management

Eight of the planning issue comments (1.4 percent) related to wildland fire management. Comments are included in **Appendix C**, Comments by Resource Planning Issue, **Table C-12**, Wildland Fire Management. Comments included support as well as opposition to use of fire as a restoration technique and concerns regarding loss of wildlife habitat due to wildfire.

3.3.10 Issue No. 10: Livestock Grazing

Thirty-four of the planning issue comments (5.9 percent) were received regarding livestock grazing, range health, or upland management. Comments are included in **Appendix C**, Comments by Resource Planning Issue, **Table C-13**, Livestock Grazing. Commenters included individuals and ranch owners as well as government agencies and non-profit organizations. Many comments supported the continuation of livestock grazing in the planning area. Commenters noted the importance of grazing for the local economies and the historic presence of grazing in the area. Individuals and non-profit groups requested that riparian areas and special designation areas have limitations on livestock grazing and utilize best management practices to protect sensitive resources. Western Watersheds Project comments provided specific concerns about livestock grazing impacts and recommended methods of analysis to utilize in the EIS to determine the impacts of management decision on land health.

3.3.11 Issue No. 11: Recreation and Visitor Services

A total of twenty planning issue comments (3.5 percent) were received regarding recreation issues. Refer to **Appendix C**, Comments by Resource Planning Issue, **Table C-14**, Recreation Management. Commenters included individuals, representatives of recreational user groups, and environmental organizations. Numerous commenters expressed the importance of opportunities for quiet recreation on BLM-administered lands and concern for resource degradation from recreational activities. A related issue was conflict between different types of recreational users, especially motorized and non-motorized uses. Additionally non-profit groups provided suggestions for management and regulations to reduce resource damage and user conflicts. Standards for issuance of special recreation permits were also discussed. The Wilderness Society iterated the importance of designation of Special Recreation Management Areas in order to provide adequate opportunities for non-motorized or quiet recreational experiences.

3.3.12 Issue No. 12: Lands and Realty

Thirty-seven of the planning issue comments (6.5 percent) pertained to lands and realty. Representative comments are included in **Appendix C**, Comments

by Resource Planning Issue, **Table C-15**, Lands and Realty. Many comments discussed particular parcels for disposal, for retention under BLM ownership, or for transfer to BLM ownership. The Wilderness Society and others recommended that the BLM should only pursue land tenure decisions if they support key values and resources, such as protecting ecologically important areas and providing open space. Additional commenters urged the BLM to recognize the valid exiting rights of area landowners. Several comments discussed specific measures to reduce impacts form right-of-way projects.

3.3.13 Issue No. 13: Mineral Resources *(includes Oil, Gas, Geothermal, Coal, Saleable, Solid Leasable (except coal) and Locatable)*

The BLM received 19 planning issue comments (3.3 percent) related to mineral resources, including oil, gas and geothermal. Comments are included in **Appendix C**, Comments by Resource Planning Issue, **Table C-16**, Minerals Resources. Comments related to mining on public lands stated the importance of careful consideration of mining operations in the RMP.

Most of the comments about mining on BLM-administered lands were from mining operations companies supporting such operations. These companies and some individuals urged the BLM to allow for extraction of mineral resources in the project area. In addition, companies stated the importance of recognizing valid existing rights and the role of mining in the local economy.

Nevada Department of Wildlife and Western Watershed Project expressed concerns about the environmental effects of mining and asked the BLM to place limits on mining to protect water and air quality, fish and wildlife, and special designation areas.

3.3.14 Issue No. 14: Hazardous Materials

No comments related to hazardous materials were received during the scoping period.

3.3.15 Issue No. 15: Special Designations *(e.g., Areas of Critical Environmental Concern, Wilderness Study Areas, Wild and Scenic Rivers)*

Fifty-three of the planning issue comments (9.3 percent) were about special designations; see **Appendix C**, Comments by Resource Planning Issue, **Tables C-17** Special Designation Areas. Special designation area comments pertained to ACECs, wild and scenic rivers, and Wilderness Study Areas and wilderness comments, including those on areas with wilderness characteristics. In total 10 comments were received for non-specific special management area concerns. In general individuals requested more protection to preserve wild places and areas with sensitive resources. In one comment, the Sierra Club nominated the "Heart of the Great Basin, Nevada" as a national monument.

A total of 23 planning issue comments (4.0 percent) were received on ACEC issues. Multiple commenters urged the BMDO to offer maximum protection for all ACECs and to continue to identify and protect other imperiled areas. The

Center for Biological Diversity proposed twelve new ACECs within the BMDO planning area. The Sierra Club and The Wilderness Society stated support for re-affirmation proposed by the Center of Biological Diversity. The Western Watershed Project and Nevada Department of Wildlife expressed desired to participate in the delineation of ACECs.

The wild and scenic rivers study process was mentioned in 9 comments. Overall, commenters supported management of eligible or suitable segments.

Six planning issue comments (1.0 percent) were received about Wilderness Study Areas and wilderness. An additional 9 planning issue comments (1.6 percent) were received for lands with wilderness characteristics. Non-Profit organizations, some individuals, and the Nevada Department of Wildlife expressed the desire for the BLM to appropriately protect existing Wilderness Study Areas and lands with wilderness characteristics and to consider and evaluate additional lands for wilderness characteristics. The Wilderness Society stated that the current regulations prohibiting the addition of Wilderness Study Areas do not preclude the BLM from an obligation to protect lands and provided management suggestions for these areas, including the limitation of energy development, transmission lines, and motorized recreational use. In addition, they included specific areas with wilderness characteristics that to be designated as Wild Lands. Some individuals and the Board of County Commissioners expressed the desire to restrict the management of lands with wilderness characteristics to the currently specified areas. Others asked how the BLM's Wild Lands Policy would be implemented in the Battle Mountain District.

3.3.16 Issue No. 16: Renewable Resources

The BLM received 18 planning issue comments (3.1 percent) on renewable energy development. Comments are included in **Appendix C**, Comments by Resource Planning Issue, **Table C-18**, Renewable Energy Development. Commenters were primarily concerned with impacts from renewable energy development to resources such as wildlife habitat, water resources, and visual resources. Some commenters requested that renewable energy development receive close examination and that stipulations and limitations should be employed as needed. In addition, commenters recommended that zones for renewable energy projects should be developed and that renewable energy development should be limited to those zones. One comment discussed the possibility of distributed generation as a viable alternative.

3.3.17 Issue No. 17: Socio-Economics

Twelve planning issue comments (2.1 percent) were received regarding social and economic considerations. Comments are included in **Appendix C**, Comments by Resource Planning Issue, **Table C-19**, Social and Economic Considerations. Commenters include individuals, one non-profit organization, and representatives of the mining industry. Many comments were general in

nature and requested that the BLM consider the impacts of the RMP on the local community. Numerous commenters stated the importance of energy development and extractive resources for local communities. Others mentioned the importance of tourism and recreation as well as livestock grazing and wild horses and burros. The Wilderness Society set out a detailed recommended approach for socioeconomic analysis.

3.3.18 Issue No. 18: Environmental Justice

One planning issue comment (0.2 percent) pertaining to Environmental Justice was received. Comments are included in **Appendix C**, Comments by Resource Planning Issue, **Table C-20**, Environmental Justice. This comment submitted by a non-profit organization asked that the BLM conduct environmental justice analysis on issues faced by sheepherders in the area.

3.3.19 Issue No. 19: Sustainable Development

Eight planning issue comments (1.4 percent) related to sustainable development were received. Comments are included in **Appendix C**, Comments by Resource Planning Issue, **Table C-21**, Sustainable Development. Most such comments were concerned with proper siting of renewable energy projects and transmission lines.

3.3.20 Issue No. 20: Transportation facilities

Seven planning issue comments (1.2 percent) on transportation facilities were received. Comments are included in **Appendix C**, Comments by Resource Planning Issue, **Table C-22**, Transportation facilities. Comments were related to road maintenance, the need for new roads in support of renewable energy development projects, impacts of roads on wilderness characteristics of wild lands in the planning area, and effects of habitat fragmentation from new roads.

3.3.21 Issue No. 21: Comprehensive Travel and Transportation Management

The BLM received 43 planning issue comments (7.5 percent) on travel management and transportation issues. Comments are included in **Appendix C**, Comments by Resource Planning Issue, **Table C-23**, Travel Management. Commenters included numerous individuals, environmental organizations, and state and local government agencies. The Wilderness Society suggested that the RMP should include a discussion of the criteria to be utilized in travel management planning decision.

Multiple commenters noted the importance of establishing a true and accurate inventory of existing trails, roads, and pathways to aid in future travel management planning decisions. Conflicts between motorized and nonmotorized users for particular trails or areas were also discussed. Some respondents were concerned about the BLM limiting access to public lands. Comments stated that closing trails would limit recreational opportunities or access for development. Conversely, other commenters noted the importance of roadless areas and requested limits on roads and trail development.

Another primary issue was habitat degradation and fragmentation due to unregulated use of trails and roads, redundant routes, and user-created routes. Concerns included the impacts on wildlife and sensitive plant and animal species and water quality. Other resource concerns include the spread of noxious weeds and erosion. Commenters also asked that sensitive areas be examined and closed to motorized, mechanized, or all uses as needed to protect resources. In addition, commenters stated specific concerns about road density and urged the BLM to include an analysis of road and trail density in travel management analysis.

3.3.22 Issue No. 21: Cave and Karst Resources

No comments related to Cave and karst resources were received during the scoping period.

3.3.23 Other Issues to Be Addressed in the RMP

Of the 621 comments received, 92.1 percent were related to planning issues that will be addressed in the RMP (as discussed above). Another 37 comments (6.0 percent) focused on other topics, such as the planning process in general, alternatives, or the public involvement process. These topics will be addressed in the RMP but do not fit within any particular planning issue category. Comments are displayed in **Appendix C**, Comments by Resource Planning Issue, **Table C-3**, General Comments Related to the RMP.

3.4 Issues That Will Not Be Addressed in the RMP

Approximately 1.9 percent of the comments related to issues that will not be addressed in the RMP. These include issues resolved through policy or administrative action and issues beyond the scope of the RMP that have been considered but will not be included. These comments are represented in **Appendix C**, Comments by Resource Planning Issue, **Table C-1**, General Comments Outside the Scope of the RMP, and **Table C-2**, Comments Related to Issues to Be Solved by National Policy.

Administrative or policy issue comments included issues pertaining to national BLM policy that will not be addressed during the Battle Mountain RMP process. Comments include the BLM standards used to classify recreational areas, as well as policies for management of lands with wilderness characteristics.

Issues outside the scope of the RMP include comments about land management on areas outside the planning area. This category included comments on issues in which the BLM has limited or no administrative authority.

3.5 Anticipated Decisions

The FLPMA requires the BLM to manage public lands using the principles of multiple use and sustained yield. Management direction resulting from the planning process for the RMP needs to be adaptable to changing conditions and demands over the life of the RMP. The RMP will provide management direction and guide decision making for determining appropriate multiple uses and

allocation of resources. It will also include strategies to manage and protect resources and systems to monitor and evaluate the status of resources and the effectiveness of management practices. The BLM is reviewing the condition of the environment and the current management situation to identify which management directions should be continued, which should be modified, and which should be developed and added.

This scoping report does not make any decisions, nor does it change current management direction set forth in the 1997 and 1986 RMPs. Instead it summarizes those issues identified during the scoping period. The BLM will use planning issues summarized in this scoping report, along with subsequently identified issues, planning criteria, special studies (e.g., Wild and Scenic Rivers eligibility and suitability study, socioeconomic workshops, visual resource inventory, wilderness characteristics inventory, cultural resource inventory), and other information (such as occurrence and development potential for minerals), to help formulate a reasonable range of alternatives during the next phase of the RMP process. Each identified alternative (including continuation of existing management practices) will represent a complete and reasonable plan for managing the BMDO. Future decisions will occur at two levels: the RMP (or land use plan) level, and the implementation level. These decision types are described below. In general, only land use plan-level decisions will be made as part of the RMP process. The BLM's evaluation of identified alternatives will be documented in an EIS prepared as part of the RMP process, as required under NEPA.

3.5.1 Future Land Use Plan-level Decisions

Future RMP-level decisions will be made on a broad scale. These decisions will identify management direction and guide actions for the coming decades within the planning area. The RMP will provide a comprehensive yet flexible framework for managing the numerous demands on resources located on public lands.

The vision for the BMDO will be described in the RMP in terms of two categories of RMP-level decisions: 1) desired outcomes; and 2) allowable uses and actions to achieve desired outcomes. Desired outcomes will be expressed in terms of specific goals, standards, and objectives. Goals are broad statements of desired outcomes, such as ensuring sustainable development. Standards are descriptions of conditions or the degree of function required, such as land health standards. Objectives are specific, quantifiable, and measurable desired conditions for resources, such as managing sagebrush communities to achieve a certain canopy cover by 2020.

Allowable uses and actions to achieve desired outcomes will be expressed in the RMP as allowable uses, actions needed, and land tenure decisions. Livestock grazing, administrative designations (e.g., ACECs), and land disposal are examples of some RMP-level decisions in this category.

3.5.2 Future Implementation-level Decisions

The RMP will contain broad-scale decisions that guide future land management actions. Subsequent site-specific implementation, often characterized as project-level or activity-level decisions, will require the BLM's final approval of on-the-ground actions. Implementation decisions require a more-detailed, site-specific environmental analysis that tiers off of the EIS prepared for the RMP. These decisions generally constitute final approval of on-the-ground actions to proceed (BLM 2005). An example of an implementation decision is the development and management of a recreation site. They may be incorporated into implementation plans (activity or project plans) or may exist as stand-alone decisions.

These types of decisions require site-specific planning and NEPA analysis. Where implementation decisions are made as part of the land use planning process, they are still subject to the appeals process or other administrative review as prescribed by specific resource program regulations after the BLM resolves the protests to land use plan decisions and makes a decision to adopt or amend the RMP (High Desert Multiple Use Coalition, Inc. et al. Keith Collins, 142 IBLA 285 [1998]).

3.6 Valid Existing Management

The BLM-administered public lands in the planning area are managed with direction from the 1997 Tonopah RMP (BLM 1997) and the 1986 Shoshone-Eureka RMP (BLM 1986) and subsequent amendments. Preparation of an updated RMP is necessary to respond to changing resource conditions and to respond to new issues and federal policies. The RMP will establish new land use planning decisions to address issues identified through public scoping and, where appropriate, may incorporate decisions from the 1997 and 1986 RMPs, as amended. Determining which existing management decisions to carry forward is part of the planning process. The BLM will review the existing management situation to determine which decisions to carry forward and will identify where new management guidance should be developed. This review will be documented in the Analysis of the Management Situation.

3.7 Special Designations, Including Nominations

The RMP will include a discussion of special designation areas including ACECs, Wilderness Study Areas, and national trails and byways. There are no designated ACECs within the Battle Mountain planning area. There are 21 Wilderness Study Areas or Instant Study Areas that the BMDO administers, as well as portions of the Pony Express National Historic Trail that crosses BLM-administered land in the planning area.

In addition, the RMP will address new special management areas designations. As part of the RMP effort, BMDO will determine eligibility and potential classification and suitability of stream segments for inclusion in the National Wild and Scenic Rivers System.

New ACEC designations and management of lands with wilderness characteristics will also be considered in the development of the RMP. An ACEC report is currently being prepared by the BMDO and will document the relevance and importance criteria findings of nominated ACECs. Its findings will be incorporated into the RMP alternatives. A report of lands with wilderness characteristics will also be prepared as part of this RMP and will document the public lands within the planning area outside of Wilderness Study Areas that contain wilderness characteristics. Its findings will be incorporated into the RMP alternatives.

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CHAPTER 4
PLANNING CRITERIA

During its initial planning sessions, the BMDO staff developed preliminary planning criteria. Planning criteria establish constraints, guidelines, and standards for the planning process. They help planners define the scope of the process and estimate the extent of data collection and analysis. Planning criteria are based on standards prescribed by applicable laws and regulations; agency guidance; results of consultation and coordination with the public, other federal, state, and local agencies, and Indian tribes; analysis of information pertinent to the planning area; and professional judgment. The plan will be completed in compliance with the FLPMA, NEPA, and all other applicable laws, regulations, and policies. Impacts from the management alternatives considered in the revised RMP will be analyzed in an EIS developed in accordance with regulations at 43 CFR 1610 and 40 CFR 1500.

The following preliminary criteria were developed internally for the BMDO and presented for public comment. After public input is analyzed, the criteria become proposed criteria and can be added to or changed as the issues are addressed or as new information is presented. The BMDO managers will approve the issues and criteria, along with any changes.

4.1 Preliminary Planning Criteria

- The RMPs will be in compliance with the FLPMA and all other applicable laws, regulations, and policy.
- Impacts of the RMP will be analyzed in an EIS, developed in accordance with regulations at 43 CFR Part 1600 and 40 CFR Part 1500.
- BLM will use a collaborative public process and multi-jurisdictional approach, where possible, to jointly determine the desired future condition of public lands.

- Other federal, state, and local agencies, including military departments, with jurisdiction by law or special expertise will be invited to participate in the planning process as cooperating agencies.
- Lifestyles, concern, safety, and health of area residents will be recognized in the RMP.
- The RMP will recognize the State's responsibility to manage wildlife.
- The RMP will recognize the State's authority to regulate air quality and adjudicate water rights.
- The RMP will recognize the existence of valid existing rights.
- Lands covered in the RMP will be public lands, including split estate, managed by BLM. Management decisions on lands not managed by BLM will not be made in the RMP.
- BLM will strive to ensure that decisions in the RMP are as consistent as possible with plans and policies of adjacent local, state, tribal, and federal agencies, within the parameters set by federal law, regulations, and policy.
- The RMP/EIS will incorporate management decisions that are brought forward from the existing RMPs and amendments if appropriate.
- Native Americans will be consulted with in the development of the RMP and to develop strategies for the protection of recognized Native American traditional and cultural uses.
- BLM, collaborative partners, and the Contractor, will jointly develop alternatives for resolution of resource management issues.
- The planning process will incorporate by reference the appropriate Standards and Guidelines (developed by the RACs) as approved by the State Director.
- The State Historic Preservation Office will be consulted and involved throughout the RMP/EIS process under provisions in the National Programmatic Agreement and the State [of Nevada] Protocol Agreement between BLM and State Historic Preservation Office.
- Endangered species recovery plan goals, including plans for the reintroduction of endangered species and other species, will be addressed. In accordance with the Memorandum of Agreement on the Endangered Species Act Section 7 Consultations and Coordination, dated August 30, 2000, BLM and US Fish and Wildlife Service will jointly prepare a programmatic consultation agreement.

- Areas potentially suitable for ACEC or other special management designations will be identified and analyzed in the RMP/EIS.
- The mineral development scenario will be based on mineral potential within the Battle Mountain District, projected demand from the mineral industries, and the National Energy Plan. The planning process will address areas closed to mining, constraints to surface use, and post-mining land use.
- BLM Handbook H-1624-1, Planning for Fluid Minerals (BLM 1990), will be followed in the development of fluid minerals determinations. Leasing stipulations requirements for exceptions, modifications and waivers will follow Washington Office Instruction Memorandum 2008-032.
- Baseline Reasonably Foreseeable Management/Development scenarios will be developed based on historical, existing, and projected levels for all programs.
- Lands identified for disposal prior to July 25, 2000, will be identified for disposal under the Federal Land Transaction Facilitation Act.
- The RMP will address transportation and access per guidance outlined in Washington Office Instruction Memorandum 2008-014.
- Soil/vegetation correlations from Natural Resource Conservation Service Soil Surveys will be used to determine ecological site potentials. Ecological Site Inventory will be used to establish and document current vegetation conditions.
- The Natural Resource Conservation Service Major Land Resource Areas will be used to describe ecological or range site vegetative potential.
- Fire and fuels management strategies will be consistent with the 2009 Federal Wildland Fire Policy, and other handbooks, manuals, and instruction memoranda in effect.
- The RMP/EIS will be consistent with Homeland Security policies to the extent practicable.
- For NEPA analysis purposes, the short-term will be 5 years, and the long-term will be 50 years. The RMP will be evaluated every 5 years to determine if amendments or revisions are necessary.
- All data used in this RMP will be in electronic format or converted to electronic format. All graphic material will be in geographic information systems format.
- Geographic information systems and metadata information will meet Federal Geographic Data Committee standards, as required by Executive Order 12906, signed April 11, 1994.

- Other applicable BLM data standards will be followed. The goal is to develop a plan with spatial data that can be easily accessed for use in subsequent NEPA analyses.
- The requirements to address sage-grouse, habitat and conservation as outlined in the National Sage-Grouse Habitat Conservation Strategy and Washington Office Instruction Memorandum 2005-024, or most current guidance will be followed.
- BLM will consider airspace use as well as military use of public lands in developing allocations and management guidance in the RMP.
- The RMP will consider the guidance for rights-of-way and corridors contained in Washington Office Instruction Memorandum 2002-196 or the most current guidance available. The plan will also consider setting resource management objectives (e.g. vegetation and wildlife) within designated corridors.
- The plan will provide for management of renewable energy resources and oil/gas in accordance with current guidance.
- BMPs for all BLM management activities will be incorporated into the Plan.

CHAPTER 5
DATA SUMMARY/DATA GAPS

As part of the RMP planning, evaluation, and data-collection process, the BLM has inventoried available information and has identified data needs for socioeconomics, mineral extraction and energy development, air quality modeling, Class I cultural data, ethnographic information, wild and scenic rivers, and ACECs. A summary is as follows:

- An assessment of various social and economic parameters will be conducted with local governments; the results will be documented in a socioeconomic report and incorporated into the RMP/EIS.
- A mineral potential report will be developed in cooperation with BLM and cooperating state and federal agencies. The report will assess the mineral resource occurrence and development potential of the area defined for the RMP.
- A wild and scenic rivers eligibility and suitability study will be conducted; the results will be documented in a report and incorporated into alternatives and analyzed in the RMP/EIS.
- Air quality modeling and impact analysis will be conducted, which will form the baseline of the impact analysis in the EIS.
- A Class I cultural resources survey is underway. Issues and management considerations provided in this survey will be included in the RMP.
- An ethnohistory study would be undertaken, and with the addition of tribal consultation, the results of this study will be used in formation of management alternatives in the RMP.
- Officially nominated areas would be assessed for designation as ACECs, and the results would inform the Special Designations section of the RMP/EIS.

Both new data and existing resource information will be used in formulating resource objectives and management alternatives in the RMP. To facilitate this process, information is being compiled and put into digital format for use in analysis and map production using geographic information systems. Because this information is imperative to quantify resources, to update maps, and to manipulate information during alternative formulation, this process must be completed before actual analysis can begin. New data generated during the RMP process will be used to address planning issues and will meet applicable established standards.

CHAPTER 6
FUTURE STEPS

6.1 Future Steps and Public Participation Opportunities

The next phase of the BLM's planning process is to develop draft management alternatives based on the issues presented in **Sections 3.2,** Planning Issue Statements, and **3.3,** Summary of Public Comments by Resource Planning Issue Category, of this scoping report. These alternatives will address planning issues identified during scoping and will meet goals and objectives to be developed by the BLM's interdisciplinary team. In compliance with NEPA, CEQ regulations, and BLM planning regulations and guidance, alternatives should be reasonable and capable of implementation. The BLM will also meet with cooperating agencies, interested tribes, the RAC subgroup, and community groups and individuals. A detailed analysis of the alternatives will be completed, and the BLM's preferred alternative will then be identified. The preferred alternative is often made up of a combination of management option components from various alternatives to provide the best mix and balance of multiple land and resource uses to resolve the issues.

The analysis of the alternatives will be documented in a Draft RMP/EIS. Although the BLM welcomes public input at any time during the planning process, the next official public comment period will begin when the Draft RMP/EIS is published, which is anticipated in 2013. The draft document will be widely distributed to elected officials, regulatory agencies, and members of the public, and it will be available on the project Web site. The availability of the draft document will be announced via a Notice of Availability in the *Federal Register*, and a 90-day public comment period will follow. Public meetings will be held throughout the project area during the 90-day comment period.

At the conclusion of the public comment period, the Draft RMP/EIS may be revised. A Proposed RMP/Final EIS will then be published. The availability of the proposed document will be announced in the *Federal Register*, and a 30-day public protest period will follow regarding the proposed planning level decisions

(43 CFR Part 1610.5.2). If necessary, a notice will be published in the *Federal Register* requesting comments on significant changes made as a result of protest. Concurrently, the Governor of Nevada will review the document for consistency with approved state and local plans, policies, and programs.

At the conclusion of the public protest period and the 60-day Governor's consistency review, the BLM will resolve all protests and any inconsistencies, and the approved RMP and Record of Decision will be published. The availability of these documents will be announced in the *Federal Register*. Any implementation-level decisions in the RMP are not subject to the protest process but instead are subject to administrative remedies set forth in regulations applicable to the specific resource management program. These remedies generally take the form of appeals to the Office of Hearings and Appeals within 30 days of the effective date of the Record of Decision or in accordance with the provisions of 43 CFR 4.4.

All publications, including this report, newsletters, the Draft RMP/EIS, and the Notice of Availability, will be published on the Battle Mountain RMP Web site. In addition, pertinent dates regarding solicitation of public comments will be published on the Web site.

6.2 Contact Information

The public is invited and encouraged to participate throughout the planning process for the RMP. Some ways to participate include:

- Reviewing the progress of the RMP at the Battle Mountain RMP project Web site, which will be updated with information, documents, and announcements throughout the duration of the RMP preparation; and
- Requesting to be added to or to remain on the official Battle Mountain RMP project mailing list in order to receive future mailings and information.

Anyone wishing to be added to or deleted from the distribution list, wishing to change their contact information, or requesting further information are directed on the Web site and in project newsletters to email a request to BattleMountainRMP@blm.gov or contact Mr. Christopher Worthington at the BLM.

CHAPTER 7
REFERENCES

BLM (US Department of the Interior, Bureau of Land Management). 1986. Shoshone-Eureka Resource Management Plan/Environmental Impact Statement. BLM, Battle Mount District, Nevada.

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High Desert Multiple Use Coalition, Inc. et al. Keith Collins, 142 IBLA 285 [1998]). Appeals challenging the final Rand Mountains-Fremont Valley Management Plan. CA Plan 8320. Decided January 28, 1998. Website: http://www.oha.doi.gov:8080/isysquery/7d32276d-4df1-44ec-ad9b-721d36600e2a/1/doc/142IBLA285%20HIGH%20DESERT%20MULTIPLE-USE%20COALITION%2C%20INC.%201-28-1998.pdf#xml=http://www.oha.doi.gov:8080/isysquery/7d32276d-4df1-44ec-ad9b-721d36600e2a/1/hilite/. Website accessed on April 19, 2011.

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Appendix A
Scoping Materials

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APPENDIX A
SCOPING MATERIALS

Public scoping for the Battle Mountain RMP/EIS has included a newsletter, eight scoping open houses, press releases, and a public Web site (http://www.blm.gov/nv/st/en/fo/battle_mountain_field/blm_information/rmp.html). The formal public comment period as required by NEPA began on December 13, 2010, with the publication of a Notice of Intent in the *Federal Register*, and ended on February 11, 2011. However comments received until March 23, 2011 are considered in this report

Information provided to the public during the public scoping period and a record of attendees at public meetings is included in this appendix. Material includes the following:

1. Notice of Intent
2. Project Newsletter 1
3. Press Releases
4. Scoping Comment Form

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Appendix B
List of Commenters

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APPENDIX B
LIST OF COMMENTERS

The formal public comment period as required by NEPA began on December 13, 2011, with the publication of a Notice of Intent in the *Federal Register*, and ended on February 11, 2011. **Table B-1**, Commenters, lists the commenters who submitted written submissions to the BLM for the Battle Mountain RMP/EIS as part of the public scoping process. All comments received on or before March 23, 2011, were included in this scoping report. The commenters are listed in chronological order of when their comments were received. Form letters submissions are not included in **Table B-1**, Commenters. **Table B-2**, Form Letter Submissions, includes a brief description of the form letters received, including number of letters received.

Table B-1
Commenters

	Commenter Name[1]	Affiliation	Date Received (Month/Day/Year)
		Federal Government Agency	
1.	John R. Price Roger Schofield	Nellis AFB	2/4/2011
		State Government Agency	
1.	Reese Tietje Skip Canfield Rebecca Palmer	Nevada State Clearinghouse Nevada Division of State Lands State Historic Preservation Office	2/8/2011
2.	Rory Lamp	Nevada Department of Wildlife	2/16/2011
		Local Government Agency	
1.	David Sweetman	Esmeralda County Land Use Advisory Committee	1/6/2011
2.	Ed Rannells	Esmeralda County Road Department	2/3/2011
3.	Gary Hollis	Nye County Board of County Commissioners	2/9/2011
4.	Shar Peterson	Lander Economic Development Authority	3/8/2011
		Business/Commercial Sector (if applicable)	
1.	Jeff White	Newmont USA Limited	2/7/2011
2.	Kevin E. Kinsella	General Moly, Inc	2/10/2011

Table B-1 *(continued)*
Commenters

	Commenter Name[1]	Affiliation	Date Received (Month/Day/Year)
3.	Steve Schoen	Barrick Gold of North America	2/11/2011
		Organization (non-profit, citizen's group)	
1.	Rose Strickland	The Sierra Club	2/4/2011
2.	Katie Fite	Western Watershed Process	2/8/2011
3.	Ginger Kathrens LaurynWachs	The Cloud Foundation Inc.	2/9/2011
4.	Randy McNatt	Backcountry Hunters & Anglers	2/10/2011
5.	Rob Mrowka	Center for Biological Diversity	2/10/2011
6.	Kevin Emmerich Laura Cunningham	Basin and Range Watch	2/11/2011
7.	Shaaron Netherton	Friends of Nevada Wilderness	2/11/2011
8.	Suzanne Roy	American Wild Horse Preservation Campaign	2/11/2011
9.	Greg Tanner	Nevada Wilderness Project	2/11/2011
10.	Nada Culver Juli Slivka	The Wilderness Society	3/4/2011
11.	Phil Hanceford	The Wilderness Society	3/23/2011
		Individual	
1.	Ken Freeman		12/28/10
2.	Marilyn Wilson		1/22/11
3.	Julie Rydberg		1/29/11
4.	Lnda Burgiss		1/29/11
5.	Linda Manning		2/2/11
6.	Carol Allie		2/3/11
7.	Stacy Broser		2/3/11
8.	Dyer Citizen		2/3/11
9.	Joan Kyler		2/3/11
10.	Stephe K. Lowe		2/3/11
11.	Lorna Moffat		2/3/11
12.	Vicki Th(?)		2/3/11
13.	Lynn Lofthouse		2/4/11
14.	Gail Bartholomay		2/9/11
15.	Pamela S. Kelly		2/9/11
16.	Mireya Landin-Erdei		2/9/11
17.	Jay C Winrod		2/9/11
18.	Penny Frazier		2/10/11
19.	Marjorie Sill		2/10/11
20.	Nancy Boland		2/10/11
21.	Dan Gilmore		2/10/11
22.	Daryl Lang		2/10/11
23.	Karen Boeger		2/11/11
24.	Marybeth Devlin		2/11/11
25.	Rene Hersey		2/11/11
26.	Cindy MacDonald		2/11/11
27.	Craig Downder		2/11/11

Table B-1 *(continued)*
Commenters

	Commenter Name[1]	Affiliation	Date Received (Month/Day/Year)
28.	Charles M Baker III		2/25/11
29.	Christine Smith		2/25/11

Table B-2
Form Letter Submissions

Organization Identified (if any)	Number of Form Letters Received	Description of Form Letter Contents
Cloud Foundation	24	Comments related to wild horse management
(none identified)	Over 2,150	Comments related to wild horse management
Craig C. Downer, Wildlife Ecologist (original author)	4	Comments related to wild horse management

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Appendix C

Comments by Resource Planning Issue

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APPENDIX C
COMMENTS BY RESOURCE PLANNING ISSUE

The BLM received 621 discrete comments during the Battle Mountain RMP scoping period. These comments were classified by RMP process category and by planning issue. Comments for each the RMP process categories and for planning issue categories are included in this appendix. Comments are included verbatim from the comment letters; however, information in letters that was not considered a comment is not included here. Comments are included for the following groups:

Comments by Process Category:

Table C-1 General Comments Outside the Scope of the RMP (p. C-3)

Table C-2 Comments Related to Issues to Be Solved by National Policy (p. C-4)

Comments by Planning Issue:

Table C-3 General Comments Related to the RMP (p. C-5)

Table C-4 Restoring Ecological Health (p. C-12)

Table C-5 Air and Atmospheric Values (p. C-25)

Table C-6 Water (p. C-31)

Table C-7 Cultural Resources, Native American Concerns and Paleontology Resources (p. C-34)

Table C-8 Visual Resource Management (p. C-37)

Table C-9 Special Status Species (p. C-39)

Table C-10 Fish and Wildlife (p. C-41)

Table C-11 Wild Horses and Burros (p. C-46)

Table C-12 Fire Management (p. C-63)

Table C-13 Livestock Grazing (p. C-64)

Table C-14 Recreation and Visitor Services (p. C-71)

Table C-15 Lands and Realty (p. C-75)

Table C-16 Mineral Resources (includes Oil, Gas, Geothermal, Coal, Saleable, Solid Leasable (except coal) and Locatable) (p. C-80)

Table C-17 Special Designations (p. C-85)

Table C-18 Renewable Resources (p. C-95)

Table C-19 Socio-Economics (p. C-99)

Table C-20 Environmental Justice (p. C-101)

Table C-21 Sustainable Development (p. C-102)

Table C-22 Transportation Facilities (p. C-104)

Table C-23 Comprehensive Travel and Transportation Management (p. C-105)

Table C-1
General Issues Outside the Scope of the RMP

I urge you to utilize the plan for Mustang Monument as set forth by Madeleine Pickens. It is a good plan, a workable plan that will benefit the eco-tourism industry and our wild horses.
There is a resolve on the table for this problem by the American Wild Horse Preservation Campaign (AWHPC); specifically Madeline Pickens. Politicians and citizens are demanding less government oversight and more cost control throughout our country. The AWHPC program is a prime example of decreasing costs while maintaing this important part of our American heritage.
I am writing to you in support of alternative plans in the management of wild horses and burros. As you know the American Wild Horse Preservation Campaign has offered new ideas for the welfare of these animals including a National Park. While there may be conflicts with some of their ideas I strongly encourage you to work with them to preserve these natural treasures for ALL Americans. Please realize that once these animals are gone from the wild, they are gone forever, there is no bringing them back.
As the most intelligent species it falls on us to treat our planet and resources responsibly. Land designated for cattle to graze is a waste of resources. Meat and dairy consumption is unhealthy. The use of land to grow vegetables and fruits would be more cost effective, use less land, stop animal cruelty for consumption, lower medical costs, and provide enough food to wipe out hunger. It's a win-win scenario. It would and should secure the well-being of these horses and burros. While a vegetarian nation is unlikely at present, protecting these wild horses is our responsibility. We can not opt for killing them and the cows that would replace them, when the safety of the horses, and a cut in the meat industry production is the short term and long term best answer for our four legged friends, our earth, and ourselves.
The ranching industry, just like the mining sector, has historically helped support Nevada and should be self regulated.
Other concern is law enforcement. The county sheriff is the law of the county along with the county district attorney. Armed Federal personnel are not needed and offensive to this contributor.
Support Madeleine Picken's proposal to create the eco- sanctuary for these horses that American's love.
Remove Bob Abbey as Director of the BLM and INVESTIGATE him and his affiliation with ranchers and other groups who would benefit if these symbols of the American West were destroyed.
I would like to request the Battle Mountain District to develop within its RMP a solid plan for managing pine nut harvests and recouping the proper amount of income under stewardship authority. My suggestion would be to make every picker (not contractor) but picker have a permit. Each picker will pick 100 lbs to 150 lbs per day. In managing the pickers, you have a much easier time monitoring the harvest and recouping the value. I would hope to see all pickers be required to show proper labor contracting documents and citizenship papers prior to obtaining a permit. Also, those whom have a history of abuse in their under reporting of harvest tonnage should be prohibited from picking / buying. If the Battle Mountain BLM were to follow the Special forest products models used in The Mushroom Harvest in the Pacific Northwest, there would be better accountability for this public resource.

Table C-2
Comments Related to Issues to Be Solved by National Policy

First and foremost, It is the federal government's role to protect the wild horses and burros on the ranges they roam freely on and to do that major changes must be made to the policies and procedures for the humane, ethical management of the wild horse and burro herds on the western public lands and it must be done in a minimal, non-invasive manner that gives them equitable use of the public lands.
Recommend repealing the Wild Free-Roaming Horse & Burro Act. Has been a failure and horribly costly.
Recommend repealing the Wilderness Study Area designations. Doing so in the! Battle Mountain District could be a model for other districts. Secretarial Order 3310 is a slap in the face and completely out of line.

Table C-3
General Comments Related to the RMP

Water hauling is associated with a great risk of weed infestation and spread (regular vehicle trips through weed-infested roads and roadsides, and then deposition of weed seeds in of livestock disturbance and ready dispersal). BLM should not continue allowing water hauling. Lands that are too arid to provide surface water to livestock should not be grazed. \ hauling leads to road damage and disturbance of wildlife, as well as ranchers clamoring for road improvement, which may lead to increased human use and disturbance of wildlife. A sites where water is hauled - even for one grazing season - will suffer permanent harm from trampling - soil compaction, loss of microbiotic crusts, and grazing -weakening or loss native grasses, structural damage to shrubs, depletion of desirable plants. Thus, allowing water hauling to new areas is particularly detrimental. Plus, water sources for hauling may weed-infested private lands (such as white top/hoary-cress infested lands in the South Fork), and water hauling may rapidly spread weeds into wild lands through seeds on vehicle t weed infestation and then subsequent cross-country spread by livestock.
Public Lands included in this RMP revision: The Federal Register Notice (Federal RegisterNol. 75, No. 238, December 13, 2010) announcing this proposed RMP states the new RM cover both the Mount Lewis Field Office and the Tonopah Field Office and will replace the existing Shoshone-Eureka and Tonopah RMPs. Nye County requests that the planning a the previously approved RMPs and proposed RMP for which comments are being sought remain the same.
Level of Analysis: The level of analysis provided by the Environmental hnpact Statement (EIS) and subsequent coverage afforded under the National Environmental Policy Act, or N should be adequate to allow for the issuance of agency categorical exclusion decisions for proposed actions that do not include new land disturbances. Such activities may include scientific data collection activities, paving/chip sealing of existing roads, and other no-, or very-low effect activities.
The revision to the RMP is timely and necessary and this agency strongly encourages the BLM to take a proactive stance in the development of the DEIS. A proactive stance is espe necessary due to the potential for a large number of renewable energy projects being proposed in the district.
It is very important for the RMP to be reader-friendly and useable. - It is presumed that numerous writers will be involved in the completion of the DEIS, and this is understandable is needed from the "central point of contact editor" to pull together the different written sources and ensure that there is compatibility and a big picture accuracy. Sections should be written in a semi vacuum so when they are compared to other section there are discrepancies.
Statements should not be made without back-up information provided for the reader to utilize to comprehend the statement and make an informed decision on support of the alternative. BLM would avoid many questions if statements were not made without supporting rationale.
- The Summary section should be Page One and should be written in a manner that enables The reader to understand The alternatives and more importantly, The differences betv The alternatives. - The Summary section should include a discussion on process. The reader is not assured of The merits of any alternative unless The process utilized to determin alternatives is understood.
All sections need a clear explanation and cross-referencing of what criteria were utilized to arrive at statements and actions.
All monitoring sections need a concise discussion on what parameters will be utilized to measure the results and success of any action. Without this, it will be unclear how manage practices will work.
There should be a clear discussion on timing of implementation of actions and the ownership of the implementation of proposed actions.
Another way to make the Draft more reader-friendly, which makes for better informed reviewers and potentially less confusion and questions directed at BLM, is to provide all maps in a consistent format and size. - Size should be 11x17. - Every map should include a very detailed legend that explains accurately what the map topics represent. Many legends need expanding. - Wherever possible for readability, all backgrounds should include GIS grey-shade topo or other consistent backgrounds (i.e. water bodies, roads, rail lines, peaks, etc.) to enable the reviewer to effectively locate listed impacts and points of discussion. - Every community in the district should be included on all maps. - Names for valleys and mountain ranges should be included on every map where practical. - US Forest Service Lands, Native American reservations, other federally-managed lands and specially designated areas, should be identified on all maps where practical. - Blow ups of certain key areas that are much too small to see on an 11x17 district-wide scale should be employed where practical. - Care should be practiced in choosing the most readable hatching and color combinations. - The preferred alternative maps should be placed first amongst all of the other alternatives, consistently, for each topic. - Cross referencing of maps should be carefully checked to avoid inconsistencies and discrepancies. Each map

Table C-3
General Comments Related to the RMP

may make sense on face value, but when compared to other maps, the rationale may fall apart. This is a concern, especially when one tries to comprehend cumulative impacts and incremental effects.
Hopefully the document will be prefaced with a mission statement. Some suggested elements I feel are important would include: • BLM lands are the last remaining vestiges of the American frontier. BLM's role is to provide large areas of minimally developed, minimally directed, or managed landscapes for the benefit of the American public. Safeguarding the remote and undeveloped frontier character of these lands is essential. (ie. Eliminate any "Build it and they will come" type of recreation management.) NV BLM lands are the largest remaining chunks of our fabled "wild west" in the lower 48 states. As such, the are important to our American historic pioneer legacy, as well as internationally. • Public lands are managed in the national interest for the entire American public. Mention should be made of the positive values of the landscape: clean air and water, native biodiversity, large blocks of contiguous, unfragmented habitat, etc.
Hopefully an Adaptive Ecosystem Management approach will be consistent throughout the document as a necessary element of landscape-scale and ecologically based land management. A preface with an explanation of AEM would be helpful.
I think you will find that many/most of my comments will come from the standpoint of the ideas listed above – ie. keep it primitive, do not develop or "improve" anything until a need to protect resources becomes evident.
Avoid any "weasel words" such as "consider, enhance, may, should, etc." (I realize I have a few of those in my comments – sigh.)
Shorter Validity. The new RMP should be valid for a much shorter period -- four to five years, maximum. Global (as well as political) climate change demands greater flexibility on the part of BLM to respond quickly to rapidly-developing conditions on the ground. An RMP needs to be up-to-date and -- as you say -- dynamic, because future actions and decisions will be guided by it.
Conditional Issuance Subject to Amendment. The new RMP should state that it is issued conditionally-in-part, depending on the findings of the report issued by the National Academy of Sciences (NAS) following its study of the Wild Horse and Burro Program. (The NAS review is expected to take two years.) The RMP should advise that it is subject to immediate amendment in regard to the Program, pursuant to the findings and corrective actions outlined in the NAS report.
The land may be managed by the BLM, but it is not owned by the Bureau of Land Management". The BLM should have no more right to the land than anyone. Will cases such as Dalton Wilson's become common place?
The planning process needs be more open to the local people and local governments. This RMP process was unknown to this interested party until just recently. More effort needs be made to involve the local parties. Has any or all of the 1988 RMP been implemented for statistical information?
Having reviewed a variety of recent RMPs produced by BLM local field offices, it has become more than apparent to me that the current format used to present Alternatives and describe the proposed plans must serve BLMs administrative convenience versus public understanding of the proposals. Awkward, confusing, and complex, the proposal information is scattered throughout two or three volumes and is almost impossible to accurately assess what is being planned for specific categories of interest. For example, the current format will have an introductory chapter that has categories of Air, Soils, Visual Resources, Wildlife, Livestock, etc. It will then go into another chapter that discusses these same categories in relation to the different alternatives being proposed. From here, the categories are then discussed under different chapter headings of environmental consequences, affected environment, etc. Each chapter requires the public to move from chapter to chapter to try and examine how the alternatives affect a specific category of interest instead of being able to review all elements of the proposal in a single, comprehensive format. Maps that illustrate the differences between each proposal are then located in a yet another area of the RMP, usually under Appendices. On top of that, each map is broken down by category only with no maps provided that clearly detail all multiple uses affecting the proposal area or how the alternatives look in relation to their affect on other uses. It is not clear to me whether the format previously used to publish RMPs is just a result of BLM failing to update their presentation styles because "that's the way we do it" or if they are purposely written to confuse the public. Whatever the reason, it should be changed to increase ease of use and clarity for the interested public during the decision making process. Recommendations: a) Comprehensive Category: Within each category included in the RMP, such as Air, Soils, Visual Resources, Wildlife, Livestock, etc., the total available information being presented in the RMP should be

Table C-3
General Comments Related to the RMP

compiled and available in one, single section instead of scattered throughout multiple volumes. The same descriptions and analysis can be incorporated that is currently being used, i.e., introductions, alternatives considered, environmental consequences, affected environment, etc., just placed in one, comprehensive section so the viewer may easily and clearly discern the proposals in their entirety without having to go back and forth from volume to volume. b) Map Inclusions: Maps should be located within each category and section so that the viewer can easily see the relationships of the alternatives and their impacts in a way that connects them directly to the category of review. For example, if reviewing a section on wildlife, maps that illustrate migration corridors, critical habitat, proposed protection locations, etc. should be included in the category discussions on wildlife and so on for each category within the planning area. 1 c) Cumulative Maps: Maps that provide a single analysis of a category are useful to the viewer. Such as, when discussing visual resource area classifications, maps that highlight the areas being proposed allows the viewer to directly see what the proposed action is. However, single category maps fail to provide the public with an understanding of overall impacts to other resources affected by the alternatives, how they overlap and what are the cumulative impacts to all multiple use categories affected. Therefore, in addition to site-specific maps illustrating individual impacts, the RMP should include maps that illustrate ALL activities affecting an area as well. For example, let's say an area has a mining operation on it, two livestock grazing allotments, a wild horse/burro herd management area, a OHV route through it, a energy corridor, six miles of fencing, four springs, two wells, one historic site, two Native American sacred sites, a migratory corridor for mule deer, a geothermal site and is being proposed for a visual resource reclassification. A detailed map that provides a comprehensive overview of each multiple use occurring in and affected throughout the entire planning area of the RMP should be incorporated and made available to allow the public to clearly see everything affecting the area, not just isolated categories that fail to give the reader a comprehensive overview of the total impacts of the plan. This can be accomplished by dividing the planning area up, section by section, until all of the affected area is covered.
Alternatives: Following the guidelines of the National Environmental Policy Act, the final EIS should present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decision maker and the public. In this section agencies shall: (a) Rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated. (b) Devote substantial treatment to each alternative considered in detail including the proposed action so that reviewers may evaluate their comparative merits. (c) Include reasonable alternatives not within the jurisdiction of the lead agency. (d) Include the alternative of no action. (e) Identify the agency's preferred alternative or alternatives, if one or more exists, in the draft statement and identify such alternative in the final statement unless another law prohibits the expression of such a preference. (f) Include appropriate mitigation measures not already included in the proposed action or alternatives. The BLM has failed to fully analyze the full scope of potential alternatives.
Land management planning affords the BLM the opportunity to step back and identify and analyze what has changed since the current RMPs were completed in 1986 and 1997, and to work with the public to identify what changes are needed to address today's and tomorrow's challenges and opportunities. Such an opportunity cannot be left to pass without giving it a concentrated and comprehensive effort.
THE RMP/EIS Must Meet the Requirements of the National Environmental Policy Act ("NEPA") NEPA requires federal agencies to prepare a detailed EIS for "all major actions significantly affecting the quality of the human environment." 42 U.S.C. § 4332(2)(C), "NEPA 'ensures that the agency . . . will have available and will carefully consider detailed information concerning significant environmental impacts; it also guarantees that the relevant information will be made available to the larger [public] audience." The BLM must gather and analyze baseline data that is needed to fully understand the direct, indirect, and cumulative effects of its decision. The NEPA requires BLM to "describe the environment of the areas to be affected or created by the alternatives under consideration." 510 (9th Cir. 1988), the Ninth Circuit stated that "without establishing . . . baseline conditions . . . there is simply no way to determine what effect [an action] will have on the environment, and consequently, no way to comply with NEPA." The analysis must include information regarding the current status, population trends, or effects of current management on species protected under the Endangered Species Act ("ESA"), candidates for listing, or species imperiled and protected by the State of Nevada or under the BLM's directives contained in Manual 6840.2 regarding BLM sensitive species. NEPA also requires that an EIS contain a detailed statement of alternatives to the proposed action. NEPA requires that the preparing agency "[r]igorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated." 40 C.F.R. § 1502.14. Failure to include a full range of alternatives renders an EIS legally inadequate. See Resources Ltd., Inc. v. Robertson, 35 F.3d 1300, 1307 (9 th Cir. 1993); Alaska Wilderness Recreation and Tourism Ass'n v. Morrison, 67 F.3d 723, 729 (9 th Cir. 1995). There must be an alternative that provides an environmental baseline, a description of the current existing environment in the planning area, against which to evaluate other alternatives. The BLM must conduct a thorough cumulative effects analysis. The CEQ regulations implementing NEPA clearly direct federal agencies to consider the direct, indirect, and cumulative effects of their actions on environmental resources. 40 C.F.R. §

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1508.8. The regulations define "cumulative effects" as: The impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. 40 C.F.R. § 1508.7 This analysis is required to consider the incremental impacts of actions in conjunction with the impacts of past, present, and future actions. Thus the agency must look beyond the life of the proposed action. In addition, these actions must include the ramifications of all actions. This includes state, federal, and private actions. The analysis of cumulative impacts should also focus on each affected resource, ecosystem, and human community, addressing the sustainability of all factors.
The RMP/EIS Must Meet the Requirements of the Federal Land Policy and Management Act ("FLPMA") All BLM actions must be consistent with FLPMA (P.L. 94-579, 90 Stat.2743, 43 U.S.C. 1701 et seq.) In accordance with FLPMA, public lands are to be managed on the basis of multiple use and sustainable yield. 43 U.S.C. § 1701(a)(7). Furthermore, land managers are to take into account the long-term needs of future generations for renewable and non-renewable resources, including fish and wildlife. (See 43 U.S.C. ss1702(c); 43 U.S.C. § 1711(a)(8)). The FLPMA requires the BLM to, "by regulation or otherwise, take any action necessary to prevent unnecessary and undue degradation of the lands." 43 U.S.C. § 1732(b). The term "unnecessary or undue degradation" is defined in the BLM's regulations pertaining to hardrock mining as activities that "[f]ail to comply with ... federal and state laws related to environmental protection and protection of cultural resources..." 43 C.F.R. § 3809.5. The IBLA has held that to prevent unnecessary or undue degradation, the BLM must consider the nature and extent of surface disturbances resulting from a proposed action as well as the environmental impacts on resources and lands outside the area of operations. In accordance with the FLPMA, the BLM must also "prepare and maintain on a continuing basis an inventory of all public lands and their resources and values," giving priority to areas of critical environmental concern. 43 U.S.C. § 1711 (a); see also State of Utah v. Babbitt, 137 F.3d 1193 (10th Cir. 1998). "This inventory shall be kept current so as to reflect changes in condition and to identify new and emerging resource and other values." 43 U.S.C. § 1711(a). This includes data on current population numbers or trends for many of the sensitive, rare, threatened and endangered species in the district.
Comprehensive and Integrated Planning with Adjacent Land Ownerships The BLM public lands in Nevada obviously do not exist in a vacuum. Quite frequently, there are interfaces between these lands and lands in other ownerships such as National Forest System lands, National Wildlife Refuges, and state parks and wildlife management areas. In this process of revising the existing RMPs and compiling a new RMP for the Battle Mountain District, the BLM should take all steps necessary to consider the pre-existing decisions found in the plans for neighboring lands and ensure any BLM decisions in the RMP are compatible. An obvious situation with respect to the Battle Mountain District is the fact that the Humboldt Toiyabe National Forest has just completed comprehensive travel management planning for its motorized transportation system. It would usually be incompatible to have a BLM motorized route lead users to the boundary of the national forest where the decision has been made that on the forest the route would be non-motorized. There are numerous other situations where the BLM must exercise care in developing a RMP that is compatible with its neighbors and which provides an ecosystem/landscape view irrespective of ownership boundaries.
I was however very disappointed at the lack of any of that handout information on the website. I hope as the planning process continues that more information will be available on line rather than just at meetings.
Esmeralda County has a draft Master Plan, which includes the draft public Land Polcity Plan. The Esmeralda County Public Land Policy Plan must be referenced and the policies recognized when formulating the BLM RMP for Esmeralada County. If you provide an appropriate e-mail address, I can email the responsible party a copy of the draft. Note, while the draft is a draft, i.e., not approved by the County Commissioners, the marjority of the Public Land Policy Plan is complete and will probably be approved with only minor changes. The Plan incorporates the desires of the majority of Esmeralda County citizens regardin gall the topics identified above.
We encourage BLM to maximize public involvement in preparation of the Battle Mountain Resource Management Plan (RMP). In addition to the public comment periods required by the National Environmental Policy Act (NEPA) and BLM's regulations, there are other opportunities throughout these planning processes for public involvement, which are used by many BLM offices. Public involvement allows the public to provide useful information and bring concerns to BLM's attention throughout the planning process. The Battle Mountain District Office has already shown a commitment to encouraging public participation by hosting scoping meetings, and we commend BLM on this approach. We would also encourage the BLM to provide for public input into the management situation analysis and identification of planning issues, and on a preliminary range of alternatives prior to preparing the draft RMP—all of which are steps other BLM offices have taken to expand opportunities for public comment. For instance, the Arizona Strip BLM Office provided preliminary management alternatives, giving the public a chance to submit comments and giving the BLM valuable insight into their management approaches

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(available on-line at: http://governor.utah.gov/rdcc/Y2003/03-2902.pdf). The Las Cruces Field Office (New Mexico) also held workshops and solicited public comments on preliminary alternatives for the Tri-County RMP (see RMP Newsletter 3, available at http://www.blm.gov/nm/st/en/fo/Las_Cruces_District_Office/tricounty_rmp.html). The BLM will need to ensure sufficient data is available in preparation of the various planning documents. In this context, we would also note that other BLM offices have made inventory data available to the public to assist in identifying new data needs and also made base data available for public use. By way of example, along with its release of the Draft RMP, the Arizona Strip Field Office also provided zipped GIS files for all data layers needed to create the maps contained in the Draft RMP (and can be viewed on-line at http://www.blm.gov/az/GIS/files.htm#strip). The server space required for this operation is minimal and without this information, effective public participation in this process is severely hampered. This type of public participation is also consistent with the BLM's Land Use Planning Handbook (H-1601-1), which states that, "Documentation supporting the AMS [analysis of the management situation] should be maintained in the field office for public review" (Section III.A.4) and that, "Alternatives should be developed in an open, collaborative manner, to the extent possible" (Section III.A.5). In another example, the St. George Field Office (Utah) employed GIS technology to assist commenters on the route inventory at open houses for its travel management planning process, which helped the public make substantive comments on routes. After the scoping meetings were concluded, BLM scheduled regular days and times that the public could visit the field office and work with GIS/Recreation staff with real-time GIS and aerial photos. We encourage the Battle Mountain District Office to similarly make GIS staff and data available to assist the public with comments on the route inventory and other resources. This process should involve more than simply asking the public to identify routes they use and want to remain open; but should also include asking the public to identify routes that are damaging, redundant or infrequently used and should be closed and/or restored. Making analyses available before issuing the draft RMP is another excellent way to increase public understanding of and participation in the planning process. The Kemmerer Field Office (Wyoming), for example, made their analysis of comments submitted on the Draft RMP and their ACEC evaluations public by posting them on their website months before they issued the Proposed RMP/FEIS 1http://www.blm.gov/co/st/en/fo/ufo/uncompahgre_rmp.html. The Uncompahgre Field Office (Colorado) made its draft evaluation of ACEC proposals available for public comment, and also posted its Visual Resource Inventory Scenic Quality Ratings online (). Making such analyses available to the public before the publication of the formal draft planning documents will better prepare participants to understand the complex analyses and large amounts of data in the drafts and increase the relevance and usefulness of comments and other public participation. We hope to see these types of opportunities provided to the many members of the public who are interested in the development of the Battle Mountain RMP. Recommendations: The BLM should make every attempt to seek public input and encourage the public to participate in the RMP, including holding workshops, making a preliminary range of alternatives available for public comment prior to issuing the draft planning documents, providing interim information regarding inventories of routes, lands with wilderness characteristics, and visual resources, posting GIS files, and posting analyses such as ACEC evaluations and analysis of comments submitted on the draft to the planning website.
Based on the BLM's current regulations governing cooperating agencies (43 C.F.R. § 1610), cooperating agencies will have a very strong presence throughout the planning process. In order to permit the public to better understand the roles of these agencies, we request that BLM identify those agencies and tribal and local government entities that have been granted cooperating agency status, and disclose the areas of expertise or other qualifications that form the basis of their cooperating agency status. Recommendation: The BLM should identify the agencies and tribal and local government entities granted cooperating agency status and post this information on the planning website.
The Federal Land Policy and Management Act ("FLPMA"), 43 U.S.C. § 1701 et seq., imposes a duty on BLM to identify and protect the many natural resources found in the public lands governed by the Battle Mountain RMP. FLPMA requires BLM to inventory its lands and their resource and values, "including outdoor recreation and scenic values." 43 U.S.C. § 1711(a). FLPMA also obligates BLM to take this inventory into account when preparing land use plans, using and observing the principles of multiple use and sustained yield. 43 U.S.C. § 1712(c)(4); 43 U.S.C. § 1712(c)(1). Through management plans, BLM can and should protect wildlife, scenic values, recreation opportunities and wilderness character in the public lands through various management decisions, including by excluding or limiting certain uses of the public lands. See 43 U.S.C. § 1712(e). This is necessary and consistent with the definition of multiple use, which identifies the importance of various aspects of wilderness characteristics (such as recreation, wildlife, natural scenic values) and requires BLM's consideration of the relative values of these resources but "not necessarily to the combination of uses that will give the greatest economic return." 43 U.S.C. § 1702(c).
The range of alternatives is "the heart of the environmental impact statement." 40 C.F.R. § 1502.14. NEPA requires BLM to "rigorously explore and objectively evaluate" a range of alternatives to proposed federal actions. See 40 C.F.R. §§ 1502.14(a) and 1508.25(c). NEPA's requirement that alternatives be studied, developed, and described both guides the substance of environmental decision-making and provides evidence that the mandated decision-making process has actually taken place. Informed and meaningful

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consideration of alternatives -- including the no action alternative -- is thus an integral part of the statutory scheme. Bob Marshall Alliance v. Hodel, 852 F.2d 1223, 1228 (9th Cir. 1988), cert. denied, 489 U.S. 1066 (1989) (citations and emphasis omitted). An agency violates NEPA by failing to "rigorously explore and objectively evaluate all reasonable alternatives" to the proposed action. City of Tenakee Springs v. Clough, 915 F.2d 1308, 1310 (9th Cir. 1990) (quoting 40 C.F.R. § 1502.14). This evaluation extends to considering more environmentally protective alternatives and mitigation measures. See, e.g., Kootenai Tribe of Idaho v. Veneman, 313 F.3d 1094,1122-1123 (9th Cir. 2002) (and cases cited therein); see also Envt'l Defense Fund., Inc. v. U.S. Army Corps. of Eng'rs, 492 F.2d 1123, 1135 (5th Cir. 1974); City of New York v. Dept. of Transp., 715 F.2d 732, 743 (2nd Cir. 1983) (NEPA's requirement for consideration of a range of alternatives is intended to prevent the EIS from becoming "a foreordained formality."); Utahns for Better Transportation v. U.S. Dept. of Transp., 305 F.3d 1152 (10th Cir. 2002), modified in part on other grounds, 319 F3d 1207 (2003); Or. Envtl. Council v. Kunzman, 614 F.Supp. 657, 659-660 (D. Or. 1985) (stating that the alternatives that must be considered under NEPA are those that would "avoid or minimize" adverse environmental effects). NEPA requires that an actual "range" of alternatives is considered, such that the Act will "preclude agencies from defining the objectives of their actions in terms so unreasonably narrow that they can be accomplished be only one alternative (i.e. the applicant's proposed project)." Colorado Environmental Coalition v. Dombeck, 185 F.3d 1162, 1174 (10th Cir. 1999), citing Simmons v. United States Corps of Engineers, 120 F.3d 664, 669 (7th Cir. 1997). This requirement prevents the EIS from becoming "a foreordained formality." City of New York v. Department of Transp., 715 F.2d 732, 743 (2nd Cir. 1983). See also, Davis v. Mineta, 302 F.3d 1104 (10th Cir. 2002). Given the broad purpose of the preparation of the Battle Mountain RMP and the information compiled by the public regarding natural and cultural values of these lands, the range of alternatives for these lands should include a number of alternatives to protect their conservation values. Through management plans, BLM can and should protect natural and cultural values through various management decisions, including by excluding or limiting certain uses of the public lands. See, 43 U.S.C. § 1712(e). This is necessary and consistent with the definition of multiple use, which identifies the importance of cultural resources, recreation, wildlife, and natural scenic values, and requires BLM's consideration of the relative values of these resources but "not necessarily to the combination of uses that will give the greatest economic return." 43 U.S.C. § 1702(c).
NEPA requires federal agencies to assess the direct, indirect and cumulative environmental impacts of proposed actions, taking a "hard look" at environmental consequences and performing an analysis commensurate with the scale of the action at issue. 42 U.S.C. § 4321 et seq; 40 C.F.R. § 1508.8; see also Metcalf v. Daley, 214 F.3d 1135, 1151 (9th Cir. 2000); Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 348 (1989). NEPA defines "cumulative impact" as: the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. 40 C.F.R. § 1508.7. (emphasis added). Throughout these comments, we have identified analyses required to evaluate the direct, indirect and cumulative impacts of decisions made in the RMP, such as health impact assessments and air quality modeling. Recommendation: The analyses discussed in these scoping comments must be completed prior to authorizing activities that will contribute to these impacts, such as oil and gas leasing, in order to determine whether and under what conditions they can be approved, such that significant impacts on the environment can be prevented. To the extent that the BLM defers any of the recommended analyses, we request that the RMP commit to a time period for completion and confirm that they will be completed prior to approval of contributing activities.
BLM is required under FLPMA to consider present and potential uses of the public lands, and take into account the relative scarcity of values involved. The sagebrush sea, pinyon-juniper forests, salt desert shrub, aspen pockets, mahogany thickets, playas, scarce streams, springbrooks and seeps, clear air, and wild roadless or undeveloped expanses of this landscape are important examples of the wide-open country that once characterized the American West. These values face unprecedented threats. In order to prepare a meaningful RMP, BLM must take strong action to address these threats, and turn around the continued unraveling and downward slide of ecosystems on the public lands. BLM must not just re-shuffle the deck chairs on the Titanic. It must collect and analyze current Baseline data on native species and ecological processes across Battle Mountain lands. BLM cannot merely consult databases, but must inventory lands for current and updated sensitive, rare, and imperiled species and critically evaluate the status of populations. BLM must take a critical, hard look at habitat degradation, threats, foreseeable losses and extinctions under management schemes. It must tailor an RMP to conserve what remains, and significantly expand and restore essential habitat components. A series of scientific assessments conducted under the Interior Columbia Basin Ecosystem Management Project (ICBEMP) such as Wisdom et al. 2000 recognized the importance of protecting and enhancing native plant communities for the long-term persistence of sagebrush biota, as well as the grave threats of growing exotic species invasions that could ultimately doom these lands (Wisdom et al. 2000, 2002). These studies were then buttressed by a number of comprehensive new analyses taking a hard look at the status of lands and species across the West (Knick et al. 2003, Connelly et al. 2004, Dobkin and Sauder 2004). These studies likewise highlighted the need to conserve, protect, enhance, and reconnect fragmented areas of sagebrush, salt desert shrub and other increasingly degraded, tattered and fragmented lands. These are applicable to the wild arid lands across the sagebrush biome. Nevada BLM itself conducted two Ecoregional Assessments

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(Great Basin, the other Nevadaspecific) during the mid 2000s. The alarming results were never provided by the agency to the public. Instead, the authors had to publish this information on their own. In the Nevada assessments, impacts of livestock grazing and its entire Footprint were not fully taken into account – so these studies under-estimated the trouble the public lands and habitats were in. But the trajectories of lands under duress from many and often overlapping disturbances - including expanding cheatgrass, were mapped and examined. Battle Mountain must conduct its own intensive follow-up to that effort as part of the AMS for the RMP process.
Please don't go down the twisted path of the current Jarbidge DRMP DEIS. BLM has constructed am unwieldly Draft RMP that uses confusion to cover up harms and de-fang any required actions - so that the livestock and other industry can continue to follow a status quo destructive path in the Jarbidge. Many areas are subjected to a virtual free-for-all of other extraction or energy uses. We have Attached our comments here, as we believe it is necessary for BLM to be fully aware of how flawed documents can become. That RMP DEIS includes alternatives that are non-starters in the 2011 world. They contain such high levels of extraction/commodity use/OHV use that it is clear BLM would never choose them. It appears that non-starter alternatives were included to lower the bar of what will ultimately be selected in the Final RMP and ROD. This is designed to promote adoption of a mediocre and large-scale development Preferred Alternative that will not serve to protect watersheds, wildlife or many other Values of the public lands. BLM in the Jarbidge fails to provide any alternative that honestly grapples with the threats to sagebrush species, or that would effectively conserve sage-grouse and other imperiled species. The "environmentally friendly alternative" V is laced with "poison pill" provisions that help make it compare poorly to the Preferred Alternative. For example, by including a long list of mule deer protections in a larger area of habitat under the flawed Preferred Alternative, compared to under Alt V, and shorting sage-grouse in Alt IV, BLM then concocts a chart that totals up all the mule deer provisions – and claims Alt IV is "better". We are clearly spelling these agency tricks and artifices out, because it appears that BLM continues to ignore FLPMA and tries to subvert/"set up" the NEPA process to bias the outcome towards status quo commodity full-throttle destructive uses that are driving key components of native biodiversity extinct. The components of alternatives in your new Plan must be consistent. Many of the fairly recent Land Use Plans have failed to protect the values because they were not internally consistent – and promised there could be full-throttle development and thriving wildlife and bountiful water. Their claimed lists of standard "tepid" mitigations (that have failed so greatly across the range of sage-grouse) were supposed to protect species, but have been greatly inadequate. Overlaid on top of substanceless Goals, Objectives and Management Actions is confusion of adaptive management and laundry lists of BMPs. Examples of these lists: Lists of the same old fencing, salt, project grazing BMPs, Oil and Gas full-throttle development with minor seasonal "avoidance" BMPs, etc). These LUPs laid out full-throttle energy, mining, grazing, etc across the majority of their RMP lands, but at the same time promised wildlife would be preserved. Of course, that didn't happen. The high levels of grazing disturbance and energy development did proceed – and wildlife populations are plummeting.
Clear, specific and meaningful goals, objectives, and management actions must be developed.
BLM must collect adequate baseline biological data on wildlife habitats and populations and vegetation and other ecological conditions in the EIS lands. This will require a minimum of two years of intensive effort, and must include new on-the-ground inventories for special status species, waters and watersheds, analysis of habitat conditions and population viability for these species. This information must be thoroughly and systematically collected, as it will be used in developing the EIS and alternatives that will govern management here for the next decade or longer.
Use of Adaptive Management Agencies are increasingly relying on what is termed "adaptive management" as an excuse for not taking decisive action necessary to protect resources of public lands during planning processes. This results in a vacuum of management direction, with resources suffering. Use of adaptive management should be minimized. A set of clear actions laid out for management situation/challenges must be developed: "If X happens, then Y will happen", not - "we'll just keep trying something different and never act to really alter situations that are causing harm". And not just "refer to laundry list of BMPs" or "avoidance periods". There is great risk of loose, and open-ended Adaptive Management promoting further irreversible losses. BLM has not shown that it can recover arid lands, once dominated by cheatgrass or other weeds. So there is significant risk of irreversible long-term loss from uncertain AM schemes that lack clear sideboards and pathways for required actions to be taken in response.

Table C-4
Restoring Ecological Health

Restoring Ecological Health - General
BLM is required under FLPMA to consider present and potential uses of the public lands, and take into account the relative scarcity of values involved. The sagebrush sea, pinyon-juniper forests, salt desert shrub, aspen pockets, mahogany thickets, playas, scarce streams, springbrooks and seeps, clear air, and wild roadless or undeveloped expanses of this landscape are important examples of the wide-open country that once characterized the American West. These values face unprecedented threats. In order to prepare a meaningful RMP, BLM must take strong action to address these threats, and turn around the continued unraveling and downward slide of ecosystems on the public lands. BLM must not just re-shuffle the deck chairs on the Titanic. It must collect and analyze current Baseline data on native species and ecological processes across Battle Mountain lands. BLM cannot merely consult databases, but must inventory lands for current and updated sensitive, rare, and imperiled species and critically evaluate the status of populations. BLM must take a critical, hard look at habitat degradation, threats, foreseeable losses and extinctions under management schemes. It must tailor an RMP to conserve what remains, and significantly expand and restore essential habitat components. A series of scientific assessments conducted under the Interior Columbia Basin Ecosystem Management Project (ICBEMP) such as Wisdom et al. 2000 recognized the importance of protecting and enhancing native plant communities for the long-term persistence of sagebrush biota, as well as the grave threats of growing exotic species invasions that could ultimately doom these lands (Wisdom et al. 2000, 2002). These studies were then buttressed by a number of comprehensive new analyses taking a hard look at the status of lands and species across the West (Knick et al. 2003, Connelly et al. 2004, Dobkin and Sauder 2004). These studies likewise highlighted the need to conserve, protect, enhance, and reconnect fragmented areas of sagebrush, salt desert shrub and other increasingly degraded, tattered and fragmented lands. These are applicable to the wild arid lands across the sagebrush biome. Nevada BLM itself conducted two Ecoregional Assessments (Great Basin, the other Nevadaspecific) during the mid 2000s. The alarming results were never provided by the agency to the public. Instead, the authors had to publish this information on their own. In the Nevada assessments, impacts of livestock grazing and its entire Footprint were not fully taken into account – so these studies under-estimated the trouble the public lands and habitats were in. But the trajectories of lands under duress from many and often overlapping disturbances - including expanding cheatgrass, were mapped and examined. Battle Mountain must conduct its own intensive follow-up to that effort as part of the AMS for the RMP process.
A significant and comprehensive effort must be made to identify lands with important conservation value. BLM then must move forward in the RMP with a series of integrated and internally consistent alternatives with a clear aim to conserve and enhance native habitats. BLM must focus on large landscape-level ACECs and other measures to conserve and protect vanishing species and functioning ecosystems. An effort at highlighting Nevada ecosystems that BLM should use as an example of the type of conservation-based planning that must be part of the RMP from the beginning is the Nachlinger et al. 2001) Ecoregional Conservation Blueprint. This work focused more on rare plants and unique or intact representative native vegetation communities. Sage-grouse, pygmy rabbit and other wildlife species needs weren't really a focus in this. However, it provides an important model for protection of the full range of values that must be inventoried and examined in this RMP process. Where in BLM Lands are there still-intact expanses of salt desert shrub communities? Or low sagebrush? Or old growth pinyon-juniper? How can these be recognized and conserved?
A strong conservation focus must be the emphasis of the RMP. So much of the BLM in Battle Mountain and surrounding Districts land near I-80 are severely altered. They are heavily mined, and converted or converting to cheatgrass due to relentless livestock grazing and trampling disturbance, advance of flammable weeds, wildfire fire coupled with minimal rest from grazing post-fire, harmful agency crested wheatgrass or other exotic forage and post-fire seedings that have contributed to desertification processes. The existing trajectory of gold and other mine disturbance, now coupled with geothermal and other new energy development sprawling across the landscape, is creating a wasteland. Large areas are becoming mine pits, "brownfield" areas, and geothermal factory-like expanses. This development increasingly involves foreign mines and other developers. Great stress is being placed on aquifers, wildlife populations, and recreational/aesthetic uses of the public lands. BLM must act to strongly protect all the remaining lands from development and continued chronic grazing and trampling disturbance. Remaining native areas should be zoned off-limits to mineral sites, renewable energy sprawl, transmission, communication towers, and other facilities must be occur. VRM I and II designations must be applied to limit adverse visual changes, and provide a benchmark to help with recovery. This won't compensate for the massive losses already occurring. Such losses include those that will play out and even worsen over a 100 years or more – like water table declines drying up surface water flows. So we are seeing loss of springbrook surface flows from aquifer drawdown related to cyanide heap leach and other mining, and the footprint extending over a large area. Taking decisive actions to protect lands that remain will help to preserve at least some expanses large enough for species conservation and recovery purposes. It will provide a sought-out undeveloped area where visitors to public lands can view scenic untrammeled vistas, enjoy viable wildlife populations, etc. Large undeveloped areas kept free of development and where disturbance is minimized, are also essential for buffering the adverse impacts of climate change effects. These areas naturally absorb carbon dioxide, and buffer climate change effects. Disturbance like grazing and trampling must be minimized to aid in the natural resiliency of lands to buffer climate change effects. Lands must be protected from further desertification, cheatgrass and other weed invasions, and habitat and population losses. These areas are necessary

Table C-4
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for the protection of native biodiversity in the Great Basin Region. Areas of Battle Mountain BLM lands together with inter-connected US Forest Service lands tying the ranges together form the most significant diverse wild landscape in the Great Basin. (Monitor, Hot Creek, Toiyabe region). Their future value to the American people will be immense. The relative scarcity of such lands is growing every day.
The Battle Mountain lands provide great opportunities for BLM to actually fulfill its duties under FLPMA, and act to stop further ecological harm from occurring to relatively intact landscapes; to undertake meaningful conservation actions to enhance and restore damaged or degraded sites within these lands (i.e. restore riparian areas; provide for passive recovery of uplands – passive recovery is especially important; control and obliterate unneeded roading that has grown up without authorization as livestock projects or activities have occurred, such as roads to salting sites); remove harmful livestock projects that may be fragmenting sage grouse or other habitats and may be serving as epicenters of weed invasion; and to restore composition, structure and function of sagebrush communities.
The EIS must focus on management to protect intact landscapes of sagebrush valleys, alluvial fans, plateaus, and sweeping basins and forested mountain ranges. This will provide unfragmented core habitat for sage grouse, pinyon-jay, raptors, sagebrush-obligate migratory birds, pygmy rabbit, and other sagebrush obligates such as pronghorn. BLM must also protect rare and endemic plant and animal communities, cultural sites, and other important sites. BLM must recognize the current and potential value of portions of these lands as reference sites in scientific research, and as minimally fragmented ecosystems for species restoration and longterm population viability. In the increasingly developed US, the value of such lands as an enclave of solitude and open space is great. While recognizing, protecting, and enhancing special status species habitats and other important values, BLM must grapple with ongoing livestock grazing degradation of riparian areas and uplands; invasive species (primarily caused or extended by livestock disturbance, facilities and/or roading); fragmentation caused by grazing installations/livestock facilities, roading, fire and other factors; OHV use exacerbated by livestock facility-associated roading; and other impacts of livestock grazing that are increasingly fragmenting sagebrush habitats.
In its MUD processes, BLM has failed to systematically collect adequate on-the-ground information on the health of the land and waters and prepare valid FRH assessments. Plus, much of BLM's data used in the MUD processes was old. Updated, systematic, science-based FRH assessments must be conducted across the planning area, and must be based on adequate monitoring of current conditions.
BLM should not allow Temporary Non-Renewable Use (TNR) on these lands through this EIS process. TNR use is not compatible with conservation of native communities and habitats, restoration of damaged plant communities, protection of special status species habitats, or maintenance of wildlife populations. TNR has typically occurred in the winter - when there are significant conflicts between wintering wildlife and human intrusion on special status species, raptor, big game and other winter habitats. Plus, in many areas where TNR has been issued, smaller native bunchgrasses may be growing, microbiotic crusts extensively trampled under muddy conditions, and sagebrush consumed as winter browse. Ranchers now clamor for TNR in spring – with adverse consequences for wildlife. Grazing does not and cannot effectively control cheatgrass – and TNR should not be issued for this purpose.
Soils
Be proactive vs. activities (ORV, grazing) that cause or contribute to soil disturbance or compaction or inhibit soil processes.
Livestock Trampling Compacts Soils and Alters Soil Structure Cattle traffic on livestock trails and watering areas and flatter sites increases soil compaction. Soil compaction by heavy objects, including trampling by cattle, penetrates and compact [s] soil material to depths of 15 to 20 inches. The surface 4 to 6 inches is usually released from compaction by frost action. The deeper soil compaction that is not affected by frost action may remain in the soil for years. Deep soil compaction restricts root growth, reduces soil productivity and contributes to water and soil erosion. Deep soil compaction can increase over time". This trampling disturbance has very significant impacts to cultural sites, as well – breaking and disturbing artifacts, and altering site stratigraphy destroying site integrity forever. This permanently destroys the cultural heritage of the public lands. BLM must honestly detail and describe the severity of topsoil, soil horizon and other losses that have occurred. This has in many areas reduced potential. Any possible soil-formation rates are so much slower than the losses in water and wind that are occurring, and that must be honestly detailed and mitigated in this RMP. BLM must assess impacts of livestock on soils, soil processes and the resources that intact healthy soils help protect and conserve.

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Livestock Grazing and Trampling Causes Widespread Erosion of Soils and Loss of Microbiotic Crusts Leading to Weed Invasion Soils in many areas have suffered large-scale erosion, and are continuing to erode away in grazed, trampled, burned, mining and/or road-disturbed sites. Often trampled, disturbed grazed hillsides have eroding roads in valley bottoms. Trampling by domestic livestock harms or destroys microbiotic crusts in arid climates (Fleischner 1994, USDI BLM Belnap et a. 2001). Microbiotic crusts are indicators of ecological health – they fix carbon and nitrogen, absorb incoming energy, stabilize soils inhibiting germination of non-native seeds, produce a rough microtopography that helps slow runoff, and unambiguously act to reduce wind erosion of soil surfaces. Biological crust loss occurs under heavy grazing on sandy soil sites. Loss of microbiotic crusts increases soil erosion in both coarse and fine-textured soils. The list of Attached references contains many current studies on their pivotal role as a front line defense against weed invasion (submitted on cd). BLM routinely accepts large amounts of soil erosion in wind and water as the norm. BLM must not routinely authorize domestic livestock grazing on lands with heavy to severe erosion hazards, or vulnerable soils lacking healthy crusts and vegetative covering. In this RMP Planning effort, BLM must act to restore damaged soils on arid lands, and prevent new disturbance-related erosion from occurring. Preventing soil damage and erosion must be a key restoration goal. Cross country mining exploration ,geothermal and other energy activities and development also promote soil disturbance, erosion, and weeds. Wind-eroding soils are increasingly implicated in promoting snowmelt amplifying adverse impacts of climate change. BLM can not just prepare a map of potential erodibility of soils – it needs to fully integrate measures of soils disturbance and apply conservative measurements of upland trampling disturbance. Limiting road disturbance- broad rights-of-way, and restoring unneeded roads are all critical components this RMP must deal with. It is necessary to establish clear disturbance-reduction and restoration actions as part of the fabric of the RMP
Vegetation- General
Conduct a biological inventory on all dune/playa areas prior to consideration of any recreational use.
Conduct a soil type/ elevation assessment to map potential cheatgrass areas and co-ordinate it with the fire plan.
Utilize prescribed burning and approproaite livestock management to
Re: seedings in the 50's : allow to continue natural succession and/or enhance succession to native perennial species.
Priority shall be given to reseeding with native seed. • Do not use any exotics which are slow or will not give way to natives.
Only 2-5% of an established stand shall be crested wheat (CW). A high % of CW will primarily benefit livestock and is not a multiple use plant. There is a whole spectrum of organisms and wildlife that can't exist in stands of predominantly CW. Use of CW for greenstripping is a concern for the above reason. Is there a cool season native that could work??
Stewardship of Land and Water. The RMP should require preservation and reclamation of the rangeland as a continuous practice, rather than waiting until monitoring finds significant deterioration. Proactive steps would include grazing rotation, reseeding with preferred forage plants such as ricegrass and wheatgrass, and temporary exclusionary fencing around sensitive riparian areas. The removal of fencing that blocks wild horses' ability to roam freely among grazing areas would also help restore the range. The RMP should recognize that mustangs are gentle grazers. They clip their forage whereas cattle tend to rip out grasses. Moreover, equine digestive waste disperses the seeds of the grasses on which the horses feed, thereby replenishing desirable forage and helping to heal the range.
Restoring Ecological Health. This should be the highest priority for the BLM RMP since thousands of acres have been lost to the cheatgrass-fire cycle, years of livestock overgrazing, now exacerbated by the impacts of excess wild horses and unknown future impacts of climate change. The RMP should define ecological health, based on plant and soil science, in the various ecosystems in the plan area. Can ecological health be achieved using standards and guidelines set for ecosystem health? If not, the standards and guidelines should be revised to meet ecological health objectives. The RMP should assess whether public lands in the planning area are ecologically healthy. If not, the RMP should state how management will be changed and what actions will be taken to restore ecological health.
Mandatory measurable standards for upland and riparian use that accurately capture ecological damage must be laid down as part of the RMP.

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The new assessment/inventory of acres of lands suitable and unsuitable for livestock grazing, and capable and not capable, must be based on scientifically accurate criteria, be comprehensive, and include collection of on-the-ground data on condition and health of soils, microbiotic crusts, native vegetation (quality, quantity, production, risks from depletion/weeds, erosion factoring in predicted climate change stressors), habitat values and quality, and effects of depletion or fragmentation on special status species habitats and populations, the relative scarcity of values, etc. Examples: - Across large areas, greatly depleted Wyoming big sagebrush, black sagebrush, pinyon-juniper and salt desert shrub communities require 20 acres or more to support a single AUM. Just the trampling alone by a cow necessary to eke out food over vast areas must have significant impacts. These lands are increasingly being invaded by cheatgrass, halogeton, exotic mustards and other weeds as livestock further deplete and trample vegetation, soils and microbiotic crusts. Yet grazing that one AUM across dozens of acres differentially impacts the remnant native grasses and forbs, weakens, breaks or kills shrubs, tramples and displaces soils and microbiotic crusts --- creating ideal conditions for weed establishment, removes plant materials necessary for food and cover for special status species and other important components of the food chain– such as raptor species, small birds, mammals, reptiles, etc. This grazing of naturally sparse or depleted lands is akin to forage "mining" – and results in further depletion of remaining native vegetation communities and tramples and destroys remnant microbiotic crusts. That one AUM has to roam over large areas to find enough to eat. Arid lands that will face increased stress from climate change. Yet under many of its current management paradigms based on "range" and commodity interest claims, and not ecological science, BLM appears to be managing to promote cheatgrass and halogeton, and doing all it can to foster continued harm. In this EIS effort, BLM must admit that portions of these lands (some with stocking rates of 20 or more acres per AUM) are NOT suitable for grazing, remove livestock and reduce AUMs in any lands where grazing continues. If productivity is below a certain level, lands should not be available for grazing use. Invasive "treatments" to increase productivity should not be conducted – as they spawn only more weed and other problems. The less fragmented and relatively intact lands are essential for maintenance and recovery of sage grouse, raptor prey, migratory bird, pygmy rabbit and other important or special status species populations. These values are being harmed by the grazing of large numbers of AUMs and/or threatened by new livestock facilities or vegetation treatments should be found unsuitable for grazing – giving the increasing importance of these competing values. The solution is not to juggle seasons of use - but to determine, when weighing relative values -if livestock grazing is not a compatible use of this land, or if should be withdrawn from grazing. Examples: - The steep, at times forested, slopes of the mountain Ranges are unsuitable for livestock grazing (slope, erosion, values of forest communities), and should be found unsuitable for grazing. - Depleted seedings that have lost productivity should be identified for restoration to native vegetation, and removed from the "forage" base. If ranchers did not take care of seedings, the public deserves to have the lands restored and taken out of the forage base. Their depletion shows the lack of sustainability of grazing livestock on them. Large coarse exotic grass seedings contribute to unnatural and frequent wildfires. This is amplified when stocking promotes cheatgrass or weed invasion in the interspaces. Please review and provide actual use figures over the past decades, to see where even this "honor system" method reveals AUM numbers/stocking rates far above those actually grazed. By failing to adjust stocking rates to reflect the suitability (based on current ecological science), capability and productivity of lands for livestock use, BLM artificially inflates and props up the sale values of public land grazing permits – to the detriment of all other values of the public lands. This artificial inflation of AUMs enables the livestock industry in exerting political pressure to graze livestock far in excess of sustainable levels, and casting aside other values of public lands. Lands in the EIS area must also be assessed for suitability in comparison with/weighing against their other uses by society (rare species habitats, scientific reference area value, recreational uses, etc.).
At present, BLM has very little current information on ecological conditions and the health of native plant communities across the landscape. When BLM conducts its limited and narrow FRH assessments and allotment evaluations, it often relies on data that is very old. Key Area sites are located in only the most accessible areas and are located distance from areas of more severe impacts. They are typically clustered in particular areas of the allotments, leaving vast land areas with no monitoring information at all collected. BLM also failed to collect necessary data on degradation caused by livestock facilities and management activities. Current, comprehensive data on condition of soils vegetation, and habitats must be systematically collected. BLM cannot ignore evidence that its limited old data does show - i. e, only a small fraction of larger size native grasses, winterfat, etc. are present in most sites that should be dominated by these species. Thus, "production" is greatly less than that of good or better condition sites, and this is typical of nearly all areas. BLM must also tie water developments, water hauling, fencing, or other livestock management practices to site depletion and alteration of species structure and composition. As part of this process, BLM must revisit its limited monitoring sites, and must also establish a series of new ESI and monitoring sites across the allotments, in all vegetation types, and that represent levels of livestock use that occurs across these lands. The focus of this RMP must be to remove projects to conserve remaining native communities, and to facilitate restoration of native plant communities.
Livestock Grazing Destroys Composition and Structure of Shrub Communities Daubenmire (1970) described the lower resilience of sagebrush and western arid lands plant communities to grazing. Mack and Thompson (1982), in a classic paper "Evolution in steppe with few large, hooved mammals". This seminal paper discusses the myriad harmful

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impacts of livestock grazing to Intermountain and Great Basin vegetation communities that evolved in the absence of large herds of hoofed mammals like domestic livestock. Fleischner (1994) and Belsky et al. (2000) review the many harmful impacts of livestock grazing to arid western lands, including alteration of plant community composition and structure. Extensive literature documents the impacts of domestic livestock grazing in alteration of understory composition. Anderson and Holte (1981), Anderson and Inouye (2001) describe the significant increases in perennial grass and shrub cover that occurred after 25 years without grazing on sagebrush lands in southeastern Idaho. Cover of perennial grass increased exponentially, and shrub cover was 154% greater. Shrub cover increase was a result of increased canopy cover of sagebrush plants, and not shrub density increases. From a wildlife perspective, the tremendous rebound of sage-grouse populations in Hart Mountain following removal of livestock grazing demonstrates the large-scale chronic adverse impact from chronic grazing disturbance. We note that FWS set back recovery in a frenzy of burning - that has since been demonstrated to be quite harmful - - a few years after removal, and other dubious "treatments". Recent review of many agency vegetation treatments/destruction of sagebrush in Wyoming has revealed that there are no benefits to this. Nearly all treatments that kill or disturb/alter native vegetation are really more habitat destruction like the range profession has been foisting on public lands to try to sustain unsustainable levels of livestock use since the TGA. Battle Mountain BLM's own experience with band-aid aspen exclosure studies shows the severe adverse impacts of livestock grazing and trampling on native vegetation communities. Livestock Grazing Radically Alters Shrub Structure Land that is intensively grazed by livestock often has relatively low structural complexity. In areas of deeper soils, cattle often differentially congregate on deeper soil sites for shade, wind protection, etc. and damage shrubs. Grazing can break down sagebrush cover and thus make it unusable. Grazing disrupts sagebrush communities by breaking down individual plants and opening interstitial spaces. It is well known that grazing leads to loss of native grasses and forbs and invasions of exotic annual species like cheatgrass. The negative impacts of grazing to shrubs is often overlooked. Impacts to sagebrush-dependent wildlife include physical destruction of dense, structurally diverse patches of sagebrush and the corridors that connect them, resulting in simplified and fragmented sagebrush habitats. Fragmentation of habitats can influence size, stability and success of wildlife populations. Even a small number of cattle, which gravitate toward deeper soil sites or shade provided by shrubs, can strongly impact shrub structure. This is an impact that is never measured, quantified or controlled by land management agencies. This adverse modification of habitat can significantly alter or impair normal behavior patterns, as any agent that lessens shrub cover and structure harms the habitat components required by many native wildlife species.
Livestock Wells and Pipelines Destroy Habitats To sustain high numbers of livestock, BLM typically relies on a plethora of water developments that extend livestock use into remnant less grazed lands. The current BLM strategy Westwide continues to be to shift livestock impacts from beleaguered riparian or upland areas, and extend livestock use into previously less-used native shrub-steppe habitat. New intrusions in remnant less grazed uplands will have especially harmful impacts to populations of sage-steppe and pinyon-juniper species, as these may be the habitats where reproductive success is greatest, predation is less, etc. Such agency actions are rapidly destroying remnant less grazed big sagebrush habitats in northern Nevada. This RMP effort must focus on removing wells and pipelines, conserving all remaining native vegetation habitats, and restoring disturbed lands
Protection of Native Vegetation BLM must use current ecological science to develop a range of alternatives that act to protect remaining native vegetation communities from activities that result in disturbance that could lead to weed invasion/proliferation of exotic species that threaten sagebrush salt desert shrub, pinyon juniper and other vulnerable vegetation communities, and their ultimate further fragmentation. Protection of these communities is the first step to ensuring that their ultimate restoration may be possible. BLM must conduct a current inventory of native plant community condition and restoration needs. BLM must include a description and analysis of all the significant sagebrush, pinyon-juniper, forest, playa, spring, linked aquifer, watershed, and special status species habitat values of the EIS allotments and surrounding lands. This includes a discussion of the regional and national significance of less-fragmented sagebrush landscapes, wild raptor habitats, sage grouse habitats, etc. For example, BLM should describe the setting, and discuss in detail the unique and significant biological features of the lands, as its first and foremost consideration. The EIS should be seen as an opportunity to evaluate the ecological and conservation significance of these lands from the standpoint of special status species and scarce desert waters. BLM must consider livestock grazing as one of many uses of these public lands, and analyze it accordingly. This analysis must encompass native vegetation, soils, microbiotic crusts, native wildlife specie occurrence and habitats, special status species occurrence and habitats, roadless lands, livestock facilities, fragmentation, weeds, desertification, etc.
Sagebrush plant communities Westwide are besieged by an array of threats. These threats include exotic species, altered fire cycles, continued disdain in the eyes of the livestock industry, continued destruction by livestock grazing: livestock alteration of the native herbaceous understory with resultant cheatgrass invasion; livestock breaking or consuming sagebrush or other shrubs and destroying the physical structure with resultant destruction of the necessary shrub structure for nests of species such as loggerhead shrikes or overhead protection for the pygmy rabbit; plans to hack, beat, thrash, burn and otherwise remove sagebrush to conduct "seedings" or to thin or remove sagebrush in

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sites susceptible to cheatgrass or weed invasion, especially under harmful grazing practices (stocking levels, levels of use, no real rest). Many past BLM seedings, green strips, and sagebrush and pinyon-juiper thinning or eradication projects have been ecological disasters – leading to loss of topsoil, microbiotic crusts, and cheatgrass and other weed invasion, with associated loss of habitat (food, cover and space) for native species. Public appreciation of sagebrush country values and the beauty of wide open space and Basin and Range landscapes is growing. Sagebrush dependent wildlife species are known to be rapidly declining or jeopardized (Dobkin and Sauder 2004). The protection, enhancement and restoration of native sagebrush plant communities including: Wyoming big sagebrush, Basin big sagebrush, mountain big sagebrush, big sagebrush-bitterbrush, big sagebrush islands/inclusions in low sage brush, and the various low sagebrush communities - should be the basis driving management decisions in this Planning effort. In addition, the lower elevation salt desert shrub communities interfacing with sagebrush and found in the valleys, provide essential habitat for many special status species or their prey, and must also be considered a high priority. Livestock are causing weed invasion, and shifts in shrub species and loss of shrub structure through consumption and physical damage. Haphazardly killing trees especially be highly invasive methods like masticators, or large prescribed fire, is not in nearly all instances a suitable form of restoration. These actions often lead to hotter, drier more desertified weedy sites where fire risk is higher over a longer period. In contrast selective hand-cutting of younger age class trees minimizes weed-promoting disturbance.
BLM must identify lands to be actively restored to native vegetation. These include: exotic seedings, annual exotic communities, livestock-damaged native communities, areas highly impacted by livestock facilities or management activities. "Restoration" means returning native vegetation to a site, with ecosystem processes in a natural condition - as near to "pristine" as possible. It does mean achieving some artificially constructed "Desired Future Condition" that is biased towards cattle forage – as we see all the time in recent BLM documents. Specific areas to be restored to native vegetation composition and structure: Crested wheatgrass seedings, halogeton-infested salt desert shrub communities, cheatgrass communities, and areas where BLM fuels and other treatments have increased cheatgrass and weeds by producing, hotter, drier, disturbed sites. Only native plants should be used in all restoration, and in all postwildfire seeding. In addition: Degraded lower elevation salt desert shrub/Wyoming big sagebrush communities with cheatgrass understories, downcutting or shrinking wet meadow complexes and springs and seeps throughout the EIS area, "developed" and de-watered springs or white top/hoary cress infested areas, all should be a focus of restoration. The first step in restoration throughout these lands in native vegetation communities is passive restoration actions – through the reduction or removal of livestock grazing for sufficient periods to enable establishment of fragile native species and/or recovery of native understories. Preventing chronic disturbance that promotes weeds is essential. Passive restoration techniques, such as reduced livestock grazing or road closure should be conducted in a rapid time frame.
Likewise, dense sagebrush provides important nesting habitat for green-tailed towhee (mountain big sagebrush), Brewer's sparrow, pygmy rabbit, and sage-grouse nesting especially in lands where understories have been greatly depleted – as studies on Mono Basin sage-grouse have found. In fact, due the long-term disturbances of BLM treatments and chronic grazing disturbance, dense and mature or old growth shrubs are often limited.
Shrub or Tree Die-off and Drought Impacts Recent die-off of sagebrush, pinyon pine and juniper has occurred on many areas of public lands. BLM must inventory and assess areas of plant die-off across these allotments and surrounding lands. How will any die-off affect habitats? What actions can be taken to minimize impacts to native wildlife? Impacts of recent on plant vigor and species composition must be assessed. We also stress that climate change and disease impacts on higher elevation species like whitebark pine elevates the importance of pine seeds for species like the Clark's nutcracker. BLM must appreciate the value of large intact expanses of native woody plants for ecosystem resiliency – especially as stresses on systems increase. We also stress that climate change and disease impacts on higher elevation species like whitebark pine elevates the importance of pine seeds for species like the Clark's nutcracker. BLM must appreciate the value of large intact expanses of native woody plants for ecosystem resiliency – especially as stresses on systems increase.
A minimum period of 7-10 years rest from livestock grazing following any wild fire must be standard operating procedure on EIS lands. This is necessary to allow recovery and establishment of native species. Grazing should then be allowed only if specific measurable criteria for establishment of native vegetation and microbiotic crusts have been met.
Only native species should be used in any post-fire seeding effort - or in any seeding effort (such as road rights-of-way, areas where cow troughs are removed) in EIS lands.
A recent analysis, Dobkin and Sauder 2004,"Shrubsteppe Landscapes in Jeopardy: Distribution, abundances, and the uncertain future of birds and small mammals in the Intermountain West", examined bird and small mammal species in the sagebrush biome. The authors found that "very little of the sagebrush biome remains undisturbed", the

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inherent resilience of the ecosystem has been lost and the ability to resist invasion and respond to disturbance has been compromised (Dobkin and Sauder at 5). At least 60% of sagebrush steppe now has exotic annual grasses in the understory or has been converted completely to non-native annual grasslands (citing West 2000). More than 90% of riparian habitats have been compromised by livestock or agriculture. The authors distilled a list of 61 species of birds and small mammals that are completely or extensively dependent on shrubsteppe ecosystems, and conducted an analysis of their distributions, abundances, and sensitivity to habitat disturbance to assess current state of knowledge and conservation needs of these species, with focus on the Great Basin. In addition, BLM must conduct annual use pattern mapping to identify zones of intense livestock use. Use in no areas of a pasture/allotment should be allowed to exceed upland standards. This means there should be no sacrifice zones to livestock - such as areas close to water sources. If standards of use - upland or riparian - are exceeded anywhere in the pasture/allotment, this should be the trigger to remove livestock.
We are very concerned about the ensuing off-road impacts of any BLM fire and vegetation treatments causing increased soil disturbance, "brush clearing", cross country travel in the course of conducting projects (prescribed fire, mechanical thinning of woody vegetation, mowing, brush-beating, etc.), all of which are likely to lead to easier and increased OHV travel and new roading. BLM must consider this very negative impact of vegetation removal. Landscape scars and areas cleared by "treatments" entice motorized users, and take a very long time to heal in big sagebrush habitats.
Wetlands and Riparians
Close and/or relocate routes out of riparian / wetland areas.
Eliminate or harden stream crossings.
Wild horses also have a softer impact on riparian areas than do cattle. Mustangs are constantly on the move, and are known to range nine times as far from water as cattle, which loiter about and defecate in water sources. To protect riparian zones, the RMP should specify the installation of passive water collection systems -- guzzlers -- throughout the HMAs. Guzzlers benefit wildlife and wild equids, as well as domestic cattle, and draw them away from ecologically sensitive areas.
The Battle Mountain lands contain scarce desert springs that are essential oases for a native animal species. Large areas have been recognized by The Nature Conservancy (TNC) as being of great importance to long-term conservation of Great Basin biota and ecosystems. See Nachlinger et al. 2001, "Great Basin: An Ecoregion-based Conservation Blueprint". This type of information must be greatly updated. Since so much more has been lost since that early 2000s study, lands that were not as significant during that assessment now have greater value. i.e smaller areas may now be more significant.
Riparian Fencing Shifts Intensive Livestock Use to Unresilient Uplands, and Any Remaining Unfenced Riparian Areas Receive Even More Severe Use Typical riparian fencing projects slice across big sagebrush, pinyon-juniper or other areas near stream bottoms, and do not include the entire floodplain area. Livestock continue to concentrate on flatter areas, differentially crowd near fences, etc. So while some portion of a riparian area or spring complex may be protected by fencing, significant new "dead zones" - where livestock strip understories and batter and often kill shrubs - and large bare soil areas vulnerable to weed infestation, result. Water gaps, sometimes several hundreds of yards or more, may be constructed to allow livestock access to streams, and floodplain, banks and sidehills become a barren wasteland. Livestock use here is often so intense that agencies dump rocks on banks and sidehills to "harden" the water gap. Zones of impact of shrub structural damage, soil compaction, etc. of water gaps extend for large areas, as livestock converge on single point water access. Fences concentrate use into new areas. We have frequently observed big sagebrush habitats that has been essentially stripped of understory, the sagebrush battered, bashed, and weakened, and canopy cover reduced – due to construction of riparian projects designed to continued high levels of livestock grazing.
BLM must conduct a full inventory and assessment of the location, condition and characteristics of all spring, seep and wet meadow areas, including historically wetted sites. BLM must study the role of historic and ongoing livestock grazing and trampling activity (and other disturbances such as roads, mining, wild horse use, etc.) in altering, degrading or desiccation of these scarce sites. The inextricable link between the health of springs, seeps and wet meadows and watersheds must be addressed. This must be compared with all past or historical data available – such as 1970s or 1980s water inventories where available. A full suite of restoration actions for damaged, degraded or diverted riparian areas must be assessed under all alternatives – including an array of passive treatments, such as stubble heights, rest to jump start recovery, or until recovery, then limited, if any grazing. BLM's own data and photographs in grazing documents we have reviewed over the years vividly demonstrate the failure of past structural or excavational developments

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and its failed riparian management actions – especially accompanied by high livestock stocking rates - to protect public land values. Despite the damage it has caused in the past, BLM proposes to develop and irreversibly alter even more fragile springs. Springs are "hot spots of "hot spots" in arid lands. 75 percent of 505 springs surveyed by Sada in northern Nevada were highly or moderately disturbed (Sada and Herbst 2001). Degradation of springs in the Great Basin is widespread. Their isolation and small size render many spring communities particularly vulnerable to disturbance and loss. "The continued development of springs for livestock by ranchers and state and federal agencies also poses a threat to the continued existence of spring biota". These actions typically involve fencing off an area, immediately adjacent to springs, piping most or all of the water off the site to livestock tanks. Although some riparian vegetation may be retained, "the essential flowing character of the spring is lost, and often no exposed water remains on the surface". Livestock grazing poses a serious threat to spring communities. Livestock trampling reduces substrates to mud, can completely eliminate vegetation, and alters flow characteristics. The magnitude is likely great because of complete alteration of vegetation and substrate structure. Sada and Pohlman (2003) provide a series of protocols to be followed to assess spring condiitons. Given the scarcity of springs across these allotments, the extreme damage that has been caused by livestock grazing and other disturbance, often coupled the ill-conceived developments that have occurred, often killing all natural water flows at spring sources, BLM must conduct Level I (locate and provide reconnaissance level characterization of springs, delineate important species distribution and salient aspects of habitat, and unique circumstances/challenges) Level II (qualitatively sample riparian and aquatic communities to determine community structure quantitatively sample salient physiochemical elements to identify aquifer affinities), and Level III Surveys (quantitatively sample to determine\aquifer dynamics, sample riparian and aquatic communities and habitats to determine spatial and temporal variation in environmental and biotic characteristics, and to quantitatively determine biotic and abiotic interactions). Identify and characterize all sites. BLM must then follow this with surveys that fully assess the ecological scene, and the effect of management and livestock use and other uses, across a broad area. These Protocols must include collecting information necessary to assess the extreme importance of springs and the continuum of hydric and mesic vegetation communities in their vicinity to sage grouse, especially in providing essential summer brood rearing habitats (green forbs); to migratory birds (deciduous shrubs and trees); and many other important attributes vital to other native animals. Level III surveys can add this element. Thus, in addition to all the important issues raised for consideration, the importance to sage grouse and other wildlife must be fully considered. We believe this elevates ALL spring areas here (especially since so much damage - including harmful development - has been allowed to occur, and the potential at many sites so greatly reduced) that all springs, seeps, wet meadows here are worthy of restoration to whatever potential can be achieved. This will aid in buffering wild lands and biota from climate change impacts. We urge BLM must carefully examine all intermittent and ephemeral drainages, as well – and apply measurable trampling and other use standards to these sensitive drainages, as well. Often, water not only persists in intermittent and perennial drainages in pockets as a result of runoff, but seep, spring and mesic areas may be present, and interspersed along the length of these drainages. Erosion, downcutting and lowered water tables stemming from livestock grazing is often a primary cause of perennial reaches becoming intermittent. To stop further degradation and loss, protection of the drainage networks must occur. BLM must also determine if stock ponds or other livestock facilities have been built/placed/gouged into or on top of spring, seep or meadow areas. Restoration potential must be assessed, and plans must be developed to restore such sites and increase perennial flow under all alternatives. Reduction of squalid stagnant trampled areas where West Nile mosquitoes thrive is also critical. BLM must conduct studies of all desiccated, dried up, or otherwise altered springs and drainage artieris, and develop plans for restoration of riparian area structure (areal extent of wetted area, native vegetation components), and flows. The benefits of restored or more natural springs to native species must be assessed. For example, what are the characteristics of a riparian community sufficiently restored to support nesting Cooper's hawks in the vicinity? Aquifer sources: Springs are supported by precipitation that seeps into soil and accumulates in aquifers (through fault zones, rock cracks, or orifices that occur where water creates a passage by dissolving rock) where it is stored. The hydrology of springs is affected by regional and local geology, and how water moves through an aquifer. Perched aquifers often characterize high elevations, where local aquifer springs may be fed by adjacent mountain range precipitation, and may change annually due to recharge from precipitation in mountain range. They typically have cool water, and may dry out during extended droughts. Regional aquifers support warmer springs fed by several recharge sources that may extend over vast areas. Aquifer flow is complex, and may extend beneath several valleys and topographic divides. Seeps are small springs that support vegetation adapted to drier conditions. Springs may be small, but have larger aquatic habitats, and support larger riparian zones with moist-soil affinity species. Springs are characterized by the morphology of their sources. Each spring and seep is a unique combination of physical and chemical conditions (Sada and Herbst 2001, Sada and Pohlman 2003). These, coupled with disturbance factors, are dominant influences on riparian and aquatic plant and animal communities. Highly modified springs have less diverse riparian communities, and may include non-natives, and upland-associated species. Plant and animal communities associated with spring-fed wetlands are a function of physical and chemical characteristics of water and soils, proximity to other aquatic habitats, and prehistorical connections with regional drainage systems (Sada and Herbst 2001, citing Hubbs and Miller 1948, van der Kamp 1995, McCabe 1998). Primary abiotic factors that influence biotic qualities of unmodified springs include habitat persistence, geographical and geological settings, and aquifer dynamics Sada and Herbst 2001 (citing Ferrington 1995, van der Kamp 1995). Springs have a more integral connection with ground water than streams (Sada and Herbst 2001). At Ruby Marsh, Sada et al. 2001 found that substrate composition,

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water depth, springbrook width, current velocity, conductivity and vegetation were most influential in affecting macroinvertebrate communities. Habitat condition strongly influenced biotic characteristics. Degraded conditions often masked the influences of natural events and chemical characteristics on the macroinvertebrate community structure. 54 percent of aquatic species endemic to the Great Basin springs have suffered population losses and 62 percent have suffered major decreases because of channelization, impoundment, removing water and the introduction of non-natives. Removing water from springs through diversion reduces habitat for vegetation and aquatic biota by decreasing springbrook length, water width, water depth, and quantity of water available for vegetation. Groundwater pumping and surface diversion have decreased and dried up many springs and springbrooks in the Great Basin, causing loss of populations and extinctions. Riparian vegetation at springs may be restricted to area just along immediate boundaries of aquatic habitat, or may extend outward over much larger areas. Wider riparian areas occur where water seeps outward and moistens hydric soils. Species may be restricted to spring sources. Rheocrene-inhabiting species are more similar to stream-inhibiting species, and limnocrene species to lake or pool inhabitants. Springs tend to be more constant environments than other aquatic habitats. Spring size and habitat conditions influence biodiversity of springs (Sada and Pohlman 2003, citing Sada and Nachlinger 1996 and 1998), with different species inhabiting spring sources than downstream reaches/springbrooks. Ephemeral springs and seeps with harsh environments may have fewer species. Possible relict endemic taxa may occur in Great Basin Springs springs, including these allotments. These taxa include springsnails, endemic beetles and bugs (especially if springs have gravel substrates and fast flow). High animal species diversity may exist in springs, due to relative isolation, the presence of water, and their relict nature. Plant diversity and endemism may be high too. In this RMP, BLM must identify all springs occupied b springsnails, leopard and other frog and native amphibian habitats, as well. Spring-fed riparian habitats are of great importance to wildlife species for roosting, food, and shelter. Higher quality springs have high structural diversity created by a dense undergrowth of tangled vegetation and debris. Mesic and meadow vegetation critical for sage-grouse brood rearing are linked to healthy riparian conditions. This vegetation may be reduced by diversion, burning, vegetation control and grazing, so suitable habitat is eliminated or degraded, with the result that the songbird nest parasite brownheaded cowbird can more readily invade and parasitize the nests of migratory birds. Migrating birds may use spring waters to drink, and vegetation and insects associated with springs to refuel. 39 Migration stresses may cause insectivorous and frugivorous bird species to drink. Plus, granivorous species are more dependent on water. Birds are vulnerable to predation, and seek watering sites with greater tree and shrub cover. Areas with larger intact riparian vegetation may attract more migrants, and thus provide more prey for raptors such as Cooper's hawk or northern goshawk. Small mammals such as voles may be endemic to spring-fed mesic alkali wetlands. Water produces insects whose aerial life forms are eaten by both birds and bats. Insectivorous birds forage on deciduous foliage. A spring creates a continuum of soil conditions from wet to moist to dry, each harboring plant and animal associations adapted to those habitat conditions. BLM must systematically inventory native fauna present in and near springs, seeps and springbrooks, over at least two years. As an example of breeding bird inventories (that should also be performed in the full spectrum of vegetation communities across a range of ecological conditions in these allotments) , see Red Willow 2004, "Pinyon-Juniper and Juniper Birds". In this two-year study, breeding bird surveys were conducted in and near riparian habitats primarily in pinyon-juniper and interfacing big sagebrush communities, which are typical of much of the vegetation in watersheds supporting springs in the project area. Aquatic biota must also be assessed. Sampling for invertebrates must include collection from all habitat types within a spring (spring, springbrook, degraded reaches, any undegraded reaches). All springs within the project area must be sampled for invertebrates. The link between the condition (health) of the watershed and the functionality springs and springbrooks must also be assessed. Anthropogenic disturbances like livestock grazing and other uses have degraded vegetation, increased water temperature, and increased fine sediments. Aquatic and riparian habitats can be degraded or eliminated through water diversion, intense grazing and trampling, and non-native plants. Springs have often been piped, spring brooks channelized, and excessive ground water withdrawal has occurred. This affects spring biota by decreasing habitat size (drying some habitats) and vegetative cover, and changing species composition. Level I Surveys: Locations, type of spring - rheocrene/limnocrene, volume of spring discharge, springbrook length and depth, wetted perimeter width, DO, temperature, conductivity, pH, percent of emergent cover, percent and type of emergent cover, percent of vegetative bank cover, springbrook bank incision, spring brook bank stability, percent of wetted perimeter covered by watercress, substrate composition, animals present. Estimate site condition and identify influences causing disturbance, i.e. level and cause of disturbance, grazing, horses, diversion. "natural disturbances" – drought, fire, scouring floods, avalanche – however – these can be exacerbated – or caused – by grazing effects. Multiple surveys are needed to measure discharge, which may vary seasonally or otherwise. BLM must research any existing information on spring characteristics – flow rates, aquifer depletion, BLM's own records and project files regarding any spring or other developments, any 40 water rights filings, any water rights surveys done by BLM, etc. BLM should also research any water rights filings by other parties on spring flows, or any waters where diversion/drilling/depletion may affect flow rates from springs in the project area (which includes other nearby lands important to special status species here, or to which springs may be linked). BLM must provide detailed descriptions of past projects – and promises made during authorizations, funding agreements, etc. and/or NEPA. This is necessary to understand all direct, indirect and cumulative impacts of actions affecting spring flows, health and hydrologic integrity. BLM must describe spring provinces/complexes/clusters. What type of spring is it? What functional changes or changes in biodiversity have occurred? How can function and/or biodiversity be restored? What are flow rates throughout the year – under

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drought or normal conditions? What is the current areal extent of wetted area vs. historical? (Examine soil profiles and characteristics, remnant plant communities, etc.). What vegetation would be present in an undisturbed site? What is the potential of the site (vegetation, flows, habitat) if livestock grazing or other disturbance is removed? Reduced by one half? Reduced by 75%? How are livestock grazing or other disturbances in the watershed affecting aquifer recharge or flow rates? How do runoff rates (and also recharge rates) from a watershed in pristine or good condition compare to the rates from watersheds in poor or fair condition? What is the condition of intermittent or ephemeral drainages in the watersheds? Is gullying, rilling, head-cutting or other erosion occurring, and how is grazing or other disturbance affecting this? What aquifer is each spring part of, and what are past, current or anticipated threats to these aquifers? How long will it take to recover flows to ¼, ½, all historically wetted areas of springs that have been highly degraded or altered through diversion? What are values of each spring as sheltering, rearing, feeding areas for sage grouse chicks, refueling stops for migrants, water for nesting songbirds across a land area, providing essential water to raptor chicks, etc.? BLM must commit to regular scheduled monitoring of many parameters – water quality, flow rates, aerial extent of wetted area, plant species composition trampling, etc. In review of many BLM riparian documents, such as subjective PFC assessments, we have frequently noticed a bias towards rating areas in better condition if livestock grazing has not yet occurred in an area at the time the assessment is conducted. Thus, surveys must be conducted over multiple years, and must also include surveys during periods when livestock have been present for a significant amount of time – for comparison with any studies conducted in livestock-free periods. BLM cannot rely on the minimal PFC as a Goal for riparian recovery – much more substantial measurable aquatic habitat parameters must be applied. BLM cannot rely on monitoring only springs in good condition. Given the extreme damage that has occurred (and continues) here – all sites should be monitored. This must be done during the time of year when livestock are actually present in the allotment. It is especially important that BLM track sheep grazing patterns in the Sheep allotment Complex, and fall/winter/spring use areas of the other allotments, and study impacts that are occurring throughout the period when livestock are present, and that these studies be conducted over multiple grazing years. Repeatedly, we have seen Nevada BLM blame wild horses for impacts when in reality livestock, 41 especially trespass cattle, are present during unauthorized seasons of the year and their impacts are being attributed to horses. Under all alternatives, BLM must establish long-term monitoring of effects of levels and types of resource use to riparian and aquatic macroinvertebrates, quantitatively describe biotic communities. Initiate by establishing baseline conditions that identify spatial and temporal; variability in biotic and abiotic features (Sada and Herbst 2001). Quantify baseline conditions by describing changes in vegetation and invertebrate demography and assemblage structure; and the characteristics of riparian and aquatic habitats. Sample for sufficient time to encounter a broad range of environmental conditions and fluctuations in demography and structure. Long-lived species should be sampled for a long time, short-lives species – long enough to encounter environmental variability. Sada and Herbst at 12). Springs and riparian vegetation should be managed as wetlands, and they can generally be protected by guidelines to manage similar wetland systems such as riparian zones. Macroinvertebrate and vegetation surveys should be conducted prior to implementing management actions that may adversely affect spring biota (Sada and Herbst 2001 at 14). These also serve as an environmental baseline to gauge any management changes. In order to be able to understand cumulative, synergistic or indirect impacts of proposed actions (and to adequately understand current conditions). Degradation/loss of springs and other riparian areas may be caused by groundwater pumping, hot spring development, open-pit gold mines. Just to the south of the Owyhee allotment, extensive ground water depletion has occurred as a result of cyanide heap leach gold mining. Cumulative or synergistic impacts of such activities, if they affect aquifers or biota on these allotments, must be assessed. As springs associated with aquifer sources affected by gold mining in northern Nevada increasingly dry up, the springs of these lands become of even greater regional significance. BLM must weigh the relative scarcity of undeveloped springs in the Great Basin landscape, and the increasing loss of springs across the region.
For all streams and springbrooks in or related to the project area and species of interest, BLM must assess the following: How has vegetation been changed, reduced, eliminated? How have channels been widened or degraded? Have water tables been lowered? Has erosion potential increased? How have these effects impacted habitats for raptors, sage grouse and other special status and important species? How does livestock consumption of overstory vegetation, elimination of shady cover, trampling of banks, etc. affect water quality (temperature, sediment, bacteria, algae) and aquatic species presence and habitats? What are the characteristics of the banks in areas accessible to livestock use? How is livestock grazing affecting recruitment of young willows and other riparian plants, and altering structure of older or mature shrubs and trees? How is roading, mining, or energy development impacting these areas? 42 What is was the historical potential of the site? What would the potential of the site be under rest from livestock grazing (coupled with flow restoration if large volumes are diverted or the spring is damaged by diversion) in 5, 10, 15, 20 or more years? How much more quickly would sites heal if livestock were removed to jump start recovery? How is livestock grazing or other current disturbance (of the stream and its watershed) affecting vegetation, banks, water quality, aquatic species, flow, stream morphology? How is livestock grazing or other disturbance contributing to the intermittent or ephemeral conditions of the stream or spring brook? For all riparian areas, BLM must pay particular attention to livestock trampling impacts, as over time, trampling of clay soils near springs may seal the spring, causing it to dry up completely. Plus, BLM must assess the impacts of intense or concentrated livestock use in areas in the vicinity of riparian areas, i.e. troughs or dug out ponds outside small

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exclosures. BLM must collect detailed water quality measurements throughout the time when livestock are present, as well as during spring runoff to assess livestock impacts to water quality. BLM must fully consider the relative scarcity of these values in the arid landscape when balancing uses.
There is an extensive body of scientific literature on desertification of watersheds, including in the western United States. Desertification is defined as: "a change in the character of the land to a more desertic condition", involving "The impoverishment of ecosystems as evidenced in reduced biological productivity and accelerated deterioriation of soils and in an associated impoverishment of dependent human livelihood systems". See Sheridan 1981, CEQ Report 1981 at iii. Major symptoms of desertification in the U. S. include: declining groundwater tables; salinization of topsoil or water; reduction of surface waters; unnaturally high soil erosion; desolation of native vegetation (Sheridan CEQ at 1). The existence of any one can be evidence of desertification. As lands become desertified, they become less productive, and activities such as livestock grazing become less sustainable. Continuing activities like livestock grazing may result in grazing becoming permanently unsustainable across the landscape. In many areas of these allotments, ecological conditions because of desertification and degradation processes that has already occurred and which is still underway, have already crossed the threshold between sustainability and, essentially, "mining" of increasingly non-renewable natural resources. Desertification can be both a patchy destruction, often exacerbated by drought, as well as as the impoverishment of ecosystems within deserts. The EIS must assess the levels and degree of desertification that have occurred across these lands. This is necessary to understand the suitability of these lands for livestock grazing, the productivity and carrying capacity of these lands for grazing, the effects of any alternatives developed here, the ability to meet any objectives, and the ability to sustain, enhance or restore habitats and populations of special status and other important species and native plant communities . For example, how has the extensive depletion of understories in many areas of Wyoming big sagebrush and salt desert shrub vegetation affected the degree and rate of desertification processes? How has this affected livestock patterns of use, acres per AUM, etc.? What are the acres per AUM across all vegetation types in all conditions? How many acres per 43 AUM are required to sustain cattle or sheep in the lower salt desert shrub or Wyoming big sagebrush communities? What actions can be undertaken to halt desertification processes and begin recovery? BLM must also assess the combined effects of desertification and exotic species/weed increase and infestation. Even PRIA acknowledged that production on many BLM lands was below potential, and would decline even further. To continue the current level of grazing under BLM's Decisions will result in even further loss of soil, microbiotic crusts, water, watershed integrity, wildlife habitat, and forage. BLM's Decisions (and "Proposed Action") allow livestock numbers greatly in excess of those grazed here in recent decades. The fact that AUMs/stocking rates much below the high permitted levels were actually grazed, demonstrates the continued loss of productivity on these lands. Desertification symptoms in arid lands include: Sparsity of grass; presence of invading plant species - both native and non-native, in grass areas that have survived: plants are of poor vigor; topsoil losses - in many places, topsoil is held only by pedestals of surviving plants. Surface signs of soil erosion include: pedestaling, gullies, rills, absence of plant litter to stabilize soils. Desiccation and erosion caused by livestock can cause water tables to drop, rilling, gullying and arroyo cutting to occur, and result in sediment flow from degraded areas (Sheridan CEQ at 14). Grazing creates extremely dry site conditions for plants due to removal of litter, loss of soil cover, and trampling of the ground that prohibits rainfall from reaching plant roots (CEQ at 15). Livestock grazing exacerbates any climate changes and shifts that may be occurring (CEQ at 16). This is of particular concern in the northern Nevada landscape periodically plagued with severe drought, and which is facing increasing heat and aridity due to global warming. The near-absence of many species of native bunchgrasses, such as larger-sized native grasses from many areas of these lands, such as the diminished state of the once abundant Indian ricegrass (Oryzopsis hymenoides), signals stress of overgrazing (CEQ at 19). Such losses are vividly shown in BLM's Key Area data, as shown in the Assessments. Absence of plant litter makes germination of natives more difficult. Recovery of lower elevation areas will be exceedingly slow, especially considering the aridity of the project area. Arid land recovers very slowly; massive soil erosion has exposed soils that are less able to support plant life because of lower organic content; and invader species have become well established and have the competitive edge (Sheridan CEQ at 21). Even though it is well recognized that "the way to end overgrazing is to reduce the number of livestock in the end" (Sheridan CEQ at 22), political pressures from ranchers results in strong political opposition to reduced grazing. Political pressures have hamstrung implementation of the Taylor grazing Act. This EIS process provides BLM a special opportunity to gain a better understanding of the actual capability and productivity of the vegetation and soils that meets the desires and needs of the public on these lands. Sagebrush, pinyon-juniper and salt desert shrub vegetation communities in Nevada have long 44 shown signs of "extensive changes" and significant stresses, with livestock grazing and aggressive non-native weeds recognized as among important causal factors. Nevada Natural Resources Status Report 2002. Continued grazing disturbance, degradation and weed invasion will cause native plant communities to cross thresholds from which recovery is very difficult, if not impossible. The decline in Nevada's sage grouse populations and other species dependent on arid land shrub habitats is a landscape-scale biological indicator that the loss of functions and values of sagebrush ecosystems are serious and widespread. These are also signs of desertification processes across the landscape.

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Forestry
Nye County also supports efforts to reduce the spread of Pinyon-Juniper overgrowth, the increased severe fire potential created by that overgrowth, and its deleterious effects upon associated habitats.
Objective: retain all existing aspen clones, expand where possible, achieve mixed age classes in stands.
Inventory / monitor aspen stands.
Prioritize restoration / protection sites. Site-specific prescriptions for restoration and maintenance of aspen clones to achieve objectives
Effects to aspen clones when making decisions re: recreation and grazing should be a first priority.
No plans to massively harvest pinyon pine and juniper for biofuels should be considered. Pinyon/juniper forests can represent ecosystems that are hundreds of years old. Their removal will hurt wildlife, scenery and contribute to C02 buildup in the atmosphere.
We encourage you to consider the appropriate planning necessary in order to commercially use pinion – February 11, 2011 juniper resources in the District , the same to be used as a management tool to maintain and restore important wildlife habitat.
We are concerned at bias in the recent Nevada Soil surveys and how they are being used. These quite recent surveys did not take into account the impacts of past mining deforestation, past vegetation treatments and other events including a half century of BLM treatments that altered forested areas. The soil surveys did not take into account these past losses. These soil surveys are then used to make claims of forest "invasion" and omit clear analysis of successional processes, or consideration that forests are re-colonizing sites, not "invading". We are seeing soil survey information on soils from limited sites – like narrow riparian flats and fingers or inclusions of deeper soils being extrapolated to whole mountain ranges to try to justify large-scale deforestation. BLM must be honest about the extraordinary values of pinyon-juniper, and not propose large-scale deforestation. These surveys greatly downplay the importance of microbiotic crusts – including in PJ communities as important components for site function.
BLM must recognize values of juniper and pinyon-juniper as native tree species. In areas where junipers may be thought to be increasing, BLM must collect site-specific data to verify this information. BLM must determine first - does an "invasion" really exist? There are many scientific articles on the promiscuous burning by sheepherders and livestock in post-settlement times. In addition, there was widespread deforestation across Nevada associated with mines. If an "invasion" actually is occurring, why is this? Have soil erosion, and the loss of native understory vegetation due to livestock grazing, actually resulted in site conditions more suitable to juniper? If so, what actions will BLM take to heal these damaged sites before undertaking any vegetation alteration? How does plant succession factor into the changes we see on the landscape? Any treatment should be selective hand-cutting of trees with the entire felled tree left in place. This method is selective, leaves all nutrients on site, and the structure of the felled tree helps to trap moisture on site, and provides suitable micro-habitats for native species establishment. Due to the impacts to understories, soils, microbiotic crusts, etc. from 140 years of livestock grazing, and the looming threat of exotic species invasion in post-burn environments, burning is simply too risky. Plus, burns may extend intense use by cattle or wild horses into previously less used areas. Please review Joy Belsky's articles on western juniper (Belsky 1997), and livestock as a causal agent of "doghair thickets" of trees in forests due to the stripping/destruction of understory vegetation (Belsky and Blumenthal 1997), available on-line at www.onda.org .
Weeds
Use information from cheatgrass studies (use of early season grazing, large-scale cheatgrass die-out phenomenon) to propose actions.
Factor-in impacts of weeds when considering any decision related to motorized recreation, road up-grades, utility corridors.
Make it a priority to eradicate noxious weeds
BLM must address domestic livestock as a primary cause of weed infestation across the EIS area lands. Livestock: travel cross-country transporting weed seeds in mud on hooves, fur and feces; create zones of intensive disturbance that are ideal sites for infestation by weeds, harm and weaken native vegetation giving aggressive exotic species an

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advantage. BLM must identify lands that are currently "at risk" for weed invasion, and identify specific preventative measures that will be taken to prevent their spread. BLM has shrugged aside the role of livestock in weed infestation and greatly failed to practice Integrated Weed Management. So as a result it has been largely ineffective in weed control. The typical response has been "spray and walk away". Then turn the cows back out, Trail the sheep through – and weeds expand. BLM continues to graze sites of known weed infestation, thus ensuring that infestations spread – as livestock are tremendous vectors of weed seed spread and create disturbance where weeds thrive. BLM's approach is obviously not working.
BLM must take all possible measures to prevent the spread of weeds into the fairly intact native vegetation communities in the EIS area, including closing lands to grazing, new ROWs, crosscountry geothermal, mining Oil and Gas or other explo or developmnet activity, quarantining cattle or sheep before turnout on public lands for sufficient periods for weed seeds to pass through their systems. Vehicles are also a source of weed transport, so banning cross-country travel by mining/geothermal or other exploration or development activity, ORVs and closing jeep trails or minor roads in lands "at risk" for weed infestation are logical ways to limit vehicle transport of exotic species seeds.
A rapidly expanding threat in the EIS lands are white top/hoary cress and other mustards, which have the potential to become established in disturbed sites - such as livestock-trampled wet meadow and spring margins (like in Argenta and Carico Lake), and then move out into surrounding native vegetation. BLM's past failure to act to control livestock grazing practices and reduce stocking rates has resulted in the rapid spread of this ineradicable exotic. The impacts of the flammable cheatgrass are well known. BLM must specify actions that will be taken to prevent infestation - such as closing pastures or allotments to all grazing until weed infestations are under control.
BLM must take all possible steps to prevent the spread of weeds into native vegetation communities. Weeds are spreading at alarming rates on arid western lands. BLM must first recognize that domestic livestock are the primary cause of weed infestation on BLM lands. Livestock: Travel cross-country transporting weed seeds in mud on hooves, in fur, in feces. They create zones of intensive disturbance associated with large-scale wind roading promotes ideal sites for initial infestation by weeds. They prime sites for weed invasion by harming and weakening native plant communities, providing bare soil sites for aggressive exotic species invasion. See Belsky and Gelbard (2000). BLM must inventory all lands and assess their vulnerability to weed infestation. Strong preventative measures necessary to stem and reverse the tide of weed invasions must be identified and put into action. In the past, BLM has shrugged off and ignored the role of livestock in wed infestation. Its only attempt at control was spraying the most obvious weed patches, taking no efforts to revegetate the "nuked" sprayed sites, and continuing to let livestock graze as normal and continue to spread weeds. This head in the sand approach has resulted in the alarming weed problem we now face. Knapweeds are rapidly expanding in Planning area lands. These are spread by livestock, and once established in disturbed areas move aggressively into surrounding lands. They are also spread along disturbed road areas, and by vehicles. Livestock should be quarantined for a period of 4 days before entering public lands, and be fed only weed-free hay. Any lands with known weed infestations should not be grazed until the weed problem is addressed, and weeds have been eradicated. Livestock grazing must be sharply restricted or ended on lands at risk to weed invasion. Livestock projects that result in concentrations of animals and epicenters of weed infestation should be removed, and disturbed sites restored. 54 Roads and vehicles are also a major source of weed transport, and soil disturbance that creates ideal sites for weed infestation. Banning cross-country travel by ORVs, closing and restoration of roads and ways in wild lands "at risk" for weed invasions are logical ways to limit spread of weeds. Limiting road maintenance activities is also important, as the blading of ever-widening shoulders on gravel and dirt roads provides an ideal site for weed infestation and then outward spread. Various mineral and energy exploration activities involve significant cross-country travel by heavy equipment that disturbs soils and/or spreads weed seeds. These activities should be prohibited in all lands with known weed infestation, or which are identified as being "at risk" for weed invasion or spread. BLM's RMP must make land use allocations that prevent lands from undergoing weed infestation. Please review the Citizens Alternative submitted to BLM for its Weed EIS The alternative addresses causes of weed infestation, and provides actions to address those causes. These actions include changes/reductions/cessation of livestock grazing, road closure and other actions that are aimed at effectively addressing causes of weed invasion and spread. In this Weed EIS process, we were endlessly told by Brian Amme, BLM's Weed EIS planner, that it is at the RMP level where BLM makes forage allocations and other decisions that address causal factors of weed invasion. So, according to BLM's own planners like Mr. Amme, it is BLM's task, in the RMP to effectively address causes of weed invasion. The official BLM party line is that the RMP is the vehicle to address causal factors of weeds, in making land/land use allocations. This is what you need to do. BLM must also address measures to restore lands where weeds have been treated. Instead of spraying large areas with lingering herbicides that result in large "dead zones" in soils, and then continuing status quo grazing – which typically results in weeds thriving while all native vegetation on the site perishes – you must remove livestock grazing/vehicles – whatever the disturbance factors are to a site – until it is fully restored with native vegetation, healthy microbiotic crusts, etc.

Table C-5
Air and Atmospheric Values

Air Quality
be sure to consider air quality impacts when deciding on actions in the areas of ORV/Recreation and road improvements.
Please examine the impacts on air quality from development proposals, including groundwater withdrawals and develop RMP guidelines for avoidance, minimization and mitigation for unavoidable impacts. How will dust storms from massive groundwater pumping in proposed interbasin water transfers and the subsequent loss of surface vegetation affect air quality locally and in downwind areas? What can BLM do to prevent air quality problems from massive water projects?
Climate Change
BLM must act in any ways possible in the Land Use Planning process to protect clear desert air and scenic vistas.
The RMP EIS Must ADEQUATELY ANALYZE AND DISCLOSE THE IMPACTS OF THE PROPOSAL WITH REGARDS TO CLIMATE CHANGE The warming of our climate system is unequivocal. There have been significant increases in global average air and ocean temperatures, widespread melting of snow and ice, and rising global average sea level. Eleven of the past twelve years rank among the warmest in the instrumental record of global surface temperature, and it is likely that average temperatures in the Northern Hemisphere have been the highest in at least the past 1,300 years. Satellite data since 1978 show that Arctic sea ice is shrinking at a rate of 2.1-3.3% per decade, with even larger declines in summer sea ice.13 The National Snow and Ice Data Center ("NSIDC") reports that in 2006, Arctic ice had diminished to its all time lowest recorded level. They further report that sea ice extent averaged over the month of March 2009 was 5.85 million square miles. This was 282,000 square miles above the record low of 2006, but 228,000 square miles below the 1979 to 2000 average. Air temperatures over the Arctic Ocean were an average of 1.8 to 3.6 degrees Fahrenheit above normal, and sea ice older than two-years reached record lows.14 15 In April 2009, the Wilkins Ice Shelf destabilized and collapsed, leading researchers to state that, "There is little doubt that these changes are the result of atmospheric warming on the Antarctic Peninsula, which had been the most rapid in the Southern Hemisphere".16 The inescapable fact is that global warming and climate change now presents a dire situation for life on Earth, and as a major emitter of GHGs, the United States must act quickly and deliberately, using any and all the tools at its disposal to eliminate or reduce the dangers to human health and the environment. In its Endangerment and Cause or Contribute Findings, the EPA has explicitly acknowledged that climate change resulting from elevated GHG levels would result in human health risks such as heat-related mortality, exacerbated air quality, aggravated risks for respiratory infection, aggravation of asthma, and potential premature death for people in susceptible groups.17 The World Health Organization has estimated that as of the year 2000, 154,000 deaths and the loss of 5.5 million daily adjusted life years per year worldwide were already attributable to global warming.18 The Scientific Assessment of the Effects of Global Change on the United States devotes an entire chapter on the significant impacts of climate change on human health. The impacts can be characterized as stemming from: temperature effects; extreme events such as storms, wildfires and droughts; climate-sensitive infectious diseases; aeroallergens (pollens); and, reduced air quality.19 The impacts to species and biological diversity are likewise severe. In a study published in Nature in 2003, Parmesan and Yohe reported a "globally coherent fingerprint of climate change impacts across natural systems." 20 In documenting this "fingerprint" of global warming on ecosystems, scientists have predicted three categories of measurable impacts from recent warming: (1) earlier timing of spring events and later autumn events (i.e., changes in "phenology"), (2) extension of species' range poleward or upward in elevation, and (3) a decline in species adapted to cold temperatures and an increase in species adapted to warm temperatures.21 Of local concern, are impacts to the sage grouse, desert fish, and low elevation plants or plants with narrow environmental constraints. Impacts of global warming have been predicted with a high degree of both certainty and precision, providing the BLM with more than adequate information to analyze and disclose the carbon footprint of the proposed action and its contribution to global warming and the likely impacts on resources including air quality, water availability, and to imperiled plants and animals. In a Ninth Circuit case, Center for Biological Diversity v. National Highway Traffic Safety Administration, 508 F.3d 508, 555 (9th Cir. 2007), involving an NHTSA rule for corporate average fuel economy standards for light trucks, the court found that climate change satisfied several of the "intensity" factors in 40 C.F.R. § 5108.27(b). First, the court found that although the NHTSA rule at issue may have an "individually insignificant" effect on climate change, it may nonetheless have a "cumulatively significant" impact, thereby satisfying 40 C.F.R. § 1508.27(b)(7). In addition, the court found that climate change will affect public health and safety, satisfying 40 C.F.R. § 1508.27(b)(2). The National Environmental Policy Act ("NEPA") requires that each agency disclose relevant environmental information to the public and demonstrate that the agency took a "hard look" at the consequences of the proposed decision, and alternatives that might be pursued with less environmental harm, before making its decision. See, e.g., Kern v. U.S. Bureau of Land Mgmt., 284 F.3d 1062, 1066 (9th Cir. 2002). To that end, agencies must first describe the environment of the area that will be affected by the proposed decision. 40 C.F.R. § 1502.15. In addition, agencies must "study, develop, and describe appropriate alternatives to recommend courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources." 42 U.S.C. § 4332(2)(E). This requirement applies whether the agency undertakes an environmental assessment ("EA") or an environmental impact statement ("EIS").

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42 U.S.C. § 4332(2)(E); see 40 C.F.R. §§ 1501.2(c), 1508.9(b). The BLM cannot ignore the gravity of the threat of climate change to life within the planning area, and not take a hard look at the impacts. Federal agencies' mandatory duty to take a hard look at the ongoing impacts of global warming in NEPA documents has been affirmed by the courts. As the Ninth Circuit has recognized: Global warming has already affected plants, animals, and ecosystems around the world. Some scientists predict that 'on the basis of mid-range climate-warming scenarios for 2050, that 15-37% of species in our sample of regions and taxa will be 'committed to extinction." In addition, there will be serious consequences for human health, including the spread of infectious and respiratory diseases, if worldwide emissions continue on current trajectories. Sea level rise and increased ocean temperatures are also associated with increasing weather variability and heightened intensity of storms such as hurricanes. Past projections have underestimated sea level rise. Several studies also show that climate change may be non-linear, meaning that there are positive feedback mechanisms that may push global warming past a dangerous threshold (the 'tipping point'). See CBD v. NHTSA, 538 F.3d at 1190-91 (citations omitted). Global warming's well-established impacts on resources including air quality, water quality, and imperiled plants and animals will combine with and exacerbate the direct, indirect, and cumulative impacts of management actions and land use activities such as motorized recreation. At a minimum, a description of the effects of climate change on existing conditions such as the prevalence of exotic plant species, important habitat for wildlife and habitat connectivity, the availability of water and the health of riparian areas, zones of soil erosion or vulnerability to erosion, all provide critical baseline information necessary for the BLM to determine whether public land resources can withstand any of the proposed management alternatives. Without this basic foundational information about the existing impacts of climate change on the land, and future expected impacts, it is impossible to make informed decisions about the level, location, and kind of activities the land and its ecosystems can support in the future. Several recent reports from high ranking U.S. science groups made the following factual findings regarding the social and environmental impacts resulting from increased GHG emissions and climate change: "[A] severe drought has affected the southwestern United States from 1999 through 2009"; □ "Human-induced climate change appears to be well underway in the Southwest." (Includes California and Nevada; □ "The annual peak of streamflow in snowmelt-dominated western mountains is now generally occurring at least a week earlier than in the middle of the 20th century. Winter stream flow is increasing in basins with seasonal snow cover. The fraction of annual precipitation falling as rain (rather than snow) increased in the last half century"; □ "Most climate models project an increase in winter precipitation in the northern tier of states and a decrease in portions of the Southwest during the 21st century"; □ "The snow-covered area of North America increased in the November to January season from 1915 to 2004 due to increases in precipitation. However, spring snow cover in mountainous regions of the western United States generally decreased during the latter half of the 20th century. The IPCC determined that this latter trend is very likely due to long-term warming…"; □ "In the last three decades, the wildfire season in the western United States has lengthened and burn durations have increased. Climate change has also very likely increased the size "associated decrements to air quality and pulmonary effects, are likely to increase in frequency, severity, distribution, and duration in the Southeast, the Intermountain West and the West"; □ "The forested area burned in the western United States from 1987 to 2003 is 6.7 times the area burned from 1970 to 1986 (Westerling et al., 2006)"; □ "Wildfires pose significant direct health threats. They can also have substantial effects through- increased eye and respiratory illnesses due to fire-related air pollution and mental health impacts from evacuations, lost property, and damage to resources" and "associated decrements to air quality and pulmonary effects, are likely to increase in frequency, severity, distribution, and duration in the Southeast, the Intermountain West and the West"; □ "Conditions observed in recent years can serve as indicators for future change. For example, temperature increases have made the current drought in the region (Southwest) more severe than the natural droughts of the last several centuries. As a result, about 4,600 square miles of pinon-juniper woodland in the Four Corners region of the Southwest have experienced substantial die-off of pinon pine trees". □ "Another example of the ecological consequences of climate change involving Insects and affecting adaptability is the devastation of millions of acres of western U.S. and Canadian pines by bark beetles during the warmth and drought of 2000 to 2004. Recent modeling and observations revealed that beetles invading the northernmost lodgepole pine trees are now only a few miles from previously pristine jack pine populations (Logan and Powell, 2007). This may create a direct pathway of invasion to valued pine forests in the eastern United States and Canada"; □ "Climate-fire dynamics will also be affected by changes in distribution of Ecosystems across the Southwest. Increasing temperatures and shifting precipitation patterns will drive declines in high-elevation ecosystems such as alpine forests and tundra. Under high emissions scenarios, high-elevation forests in California, are projected to decline by 60 to 90 percent before the end of the century"; □ "In California, two-thirds of the more than 5,500 native plant species are Center for Biological Diversity Page 18 Scoping Comments for the Revision of the Battle Mountain RMP projected to experience range reductions up to 80 percent before the end of this century under current projected warming"; □ "As the climate warms, stream temperatures are likely to increase, with effects on Aquatic ecosystems. There is some evidence that temperatures have increased in some western U.S. streams, although a comprehensive analysis has yet to be conducted. Temperature changes will be most evident during low flow periods, when they are of greatest concern"; □ "Streamflow peaks in the snowmelt-dominated western mountains of the United States occurred one to four weeks earlier in 2002 than in 1948 (Stewart et al., 2005)"; □ "The area that is expected to face the most serious water constraints is the arid southwestern United States"; and, □ "Stream temperatures are likely to increase as the climate warms and are very likely to have effects on aquatic ecosystems and water quality. Changes in temperature will be most evident during low flow periods, when they

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are of greatest concern." Regarding the presence of a level of uncertainty about the precise degree of future change in climate conditions, uncertainty does not excuse the BLM from addressing this issue. As a report by the Climate Change Science Program states, "It is not possible to predict the changes that will occur, but managers can get an indication of the range of changes possible. By working with a range of possible changes rather than a single projection, managers can focus on developing the most appropriate responses based on that range rather than on a 'most likely' outcome."23 Given the tremendous significance and far-reaching implications of these analyses and conclusions, and the direct relevance of this information for the proposed action, the BLM must address it in the RMP EIS.
What is missing from the BLM list of scoping issues is how the RMP should address climate change impacts in the future on all multiple uses, rangeland health, wildlife habitat, special status species, socioeconomics, etc. Adaptive management, annual or biannual reviews of any adjustments to BLM permits, even a supplemental EIS if climate change impacts are severe and many management adjustments are necessary to the RMP in the next 10-15 years should be planned for.
Recommendations: The Battle Mountain District Office should utilize the attached scoping brief to address climate change in the RMP at the level which this type of planning process demands. The RMP should adopt management actions that reduce contributions to greenhouse gas emissions and climate change and promote adaptation.
The legal framework for addressing climate change in land use plans BLM has a legal duty to address the impacts of climate change both from land management actions and to the resource area in the plan revision. There is a global scientific consensus that human-induced climate change is currently altering the landscape and ecological functions at an unprecedented rate. According to the U.S. Climate Change Science Program, the Great Basin could be greatly transformed due to drought, wildfire, invasive species, and rising temperatures. The Great Basin Restoration Initiative (GBRI) has been in place to help the agency specifically evaluate and address climate change in this region. GBRI Coordinator, Mike Pellant, has made the following statements before the Senate Subcommittee on Public Lands and Forests regarding the GBRI on October 11, 2007: § The impact of climate change on Great Basin ecosystems may be magnified compared to other ecosystems due to the aridity and lower resiliency of these lands. Rangelands in the Great Basin always are ―on the edge‖ given the uncertain timing and quantity of precipitation, invasive species, altered fire regimes and increasing human population pressures. § More emphasis on climate change will be incorporated into land use and sage-grouse plans in the future with additional agency and Departmental guidance and [Great Basin Restoration Initiative] technical assistance. § BLM scientists are participating in the design of experiments specific to land management in the Great Basin. § Over 200 managers, scientists, non-government organizations and private citizens met in Reno, Nevada, in the winter of 2006 and identified climate change, invasive species, and wildfires as key challenges in the Great Basin where better linkages between scientists and managers would prove beneficial. § The BLM is an active participant in other research that has or is producing data and analysis with application in adaptation to climate change. These efforts include the National Center for Ecological Analysis and Synthesis Nevada Conservation Area Design, the Joint Fire Science-Funded Sagebrush Steppe Treatment Evaluation Project and the USDA-funded Integrating Weed Control and Restoration for Great Basin Rangelands. § Monitoring the potential impacts of climate change on the flora and fauna on the 75 million acres of public land in the Great Basin requires a landscape approach. GBRI is participating with the USGS on the development of a ―Great Basin Integrated Landscape Monitoring Pilot Project‖ that will assist managers to predict effects of climate change on stressors such as invasive species and wildfires at a landscape scale. Thus, BLM has been involved in climate change analysis and planning for years now through GBRI. Additionally, BLM is co-lead agency in the Department of Interior's Great Basin Landscape Conservation Cooperative (LCC). This LCC, also being coordinated by Mike Pellant, will continue to capitalize on the efforts already in place and can provide the Winnemucca District with valuable data for planning and management purposes. The BLM Battle Mountain District Office will undoubtedly experience real effects of climate change during the 20 year period that the RMP is in effect. Many prescriptions in the RMP may contribute to and exacerbate the impacts of human-induced global climate change. In addition to a genuine analysis of impacts, it is imperative that BLM craft strategies for addressing the impacts of climate change both in terms of mitigating management decisions' contributions to climate change and adapting to inevitable impacts of climate change.
BLM must take a hard look at climate change impacts from management decisions in the environmental impact statement for the resource management plan Impacts to the ecosystem from climate change include shrinking water resources; extreme flooding events; invasion of more combustable non-native plant species; soil erosion; loss of wildlife habitat; and larger, hotter wildfires. Many of these impacts have been catalogued in recent studies by federal agencies showing the impacts of climate change specifically in the United States such as the recent report entitled Global Climate Change Impacts in the United States, available at http://www.globalchange.gov/publications/reports/scientific-assessments/us-impacts. On September 14, 2009, Interior Secretary Salazar issued Secretarial Order (S.O.) No. 3289. This order unequivocally mandates all agencies within the Department of Interior to ―analyze potential climate change impacts when undertaking long-range planning exercises, setting priorities for scientific research and investigations, developing multi-year management plans, and making major decisions regarding potential use of resources under the Department's purview.‖ S.O. 3289, incorporating S.O. 3226

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(emphasis added). This RMP revision falls squarely under this guidance and BLM must assess impacts from the proposed actions that may directly, indirectly, or cumulatively result in exacerbating climate change within this document. BLM must fully analyze the cumulative and incremental impacts of the proposed decisions in the RMP. Center for Biological Diversity v. National Highway Traffic Safety Administration, 538 F.3d 1172, 1217 (9th Cir. 2008). In CBD v. NHTSA, the NHTSA failed to provide analysis for the impact of greenhouse gas emissions on climate change and was rebuked by the U.S. Court of Appeals for the Ninth Circuit, which observed that ―[t]he impact of greenhouse gas emissions on climate change is precisely the kind of cumulative impacts analysis that NEPA requires agencies to conduct.‖ 538 F.3d at 1217. For example, off-road vehicle designations, oil and gas management stipulations, and renewable energy development may significantly increase or reduce greenhouse gas emissions contributing to climate change and must be analyzed under NEPA. Further, NEPA regulations require that NEPA documents address not only the direct effects of federal proposals, but also ―reasonably foreseeable‖ indirect effects. These are defined as: 3 Indirect effects, which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.‖ 40 C.F.R. § 1508.8(b) (emphasis added). BLM is required to take a hard look at direct, indirect, and cumulative impacts to and from climate change in the planning area in the RMP. The following sections provide recommendations for quantification of greenhouse gas emissions and assessment of baseline conditions in the planning area.
Quantification of Greenhouse Gas Emissions BLM must analyze greenhouse gas (GHG) emissions in the planning area as part of the RMP revision. In determining what levels of GHG emissions to measure as ―significant‖ under NEPA, the agency should look at the relative percentage of GHG emissions reductions that an alternative could produce compared to the baseline carbon performance for the planning area. This is the approach taken in the President's Executive Order 13514. Setting an actual numerical threshold of significance is ill-advised as it is against the current policy trends of CEQ and other agencies and because it ignores the cumulative nature of climate change. As a general approach, BLM should first assess and, wherever possible, quantify or estimate GHG emissions by type and source by analyzing the direct operational impacts of their proposed actions. Assessment of direct emissions of GHG from on-site combustion sources is relatively straightforward. For many projects, energy consumption will be the major source of GHGs. The indirect effects of a project may be more far-reaching and will require careful analysis. Within this category, agencies should evaluate, inter alia, GHG and GHG-precursor emissions associated with construction, electricity use, fossil fuel use, downstream combustion of fossil fuels extracted or refined by the project, water consumption, water pollution, waste disposal, transportation, the manufacture of building materials, and land conversion. Because failure to conserve carbon sinks results in direct and quantifiable GHG emissions as well as indirect effects from reduction in carbon sequestration, the GHG effects of destruction of carbon sinks should be analyzed as part of the EIS. The GHG effects of destruction of carbon sinks should be analyzed both in terms of carbon already stored in the landscape and soil itself and in terms of the landscape's ongoing carbon-capturing properties. Such an analysis requires that an initial inventory of carbon storage potential be conducted for each landscape. The environmental review should assess and where possible quantify all the various component carbon pools – live trees, other vegetation, dead trees or vegetation (coarse, woody debris and snags), logs, litter, duff, and mineral soil – and the fluxes of carbon to and from these pools, due to natural 4 processes like decay and fire, and those associated with management, harvest and/or manufacture of extracted resources, including the burning of fossil fuels needed to remove, transport, and process those materials. In conducting this assessment, fluxes associated with fire management and the restoration of the resilient native ecology should be accounted for separately. Net fluxes from terrestrial pools to the atmosphere may occur from management activities, such as prescribed and natural fire management, but may be considered beneficial, if they enhance the long-term carbon storage ability of the ecosystem and enhance ecosystem integrity.
While quantifying the GHG emissions from decisions in the RMP is important, BLM is also required to include qualitative analysis of impacts. A suggested approach for this type of analysis can be found in the ―Risk Assessment‖ section in the attachment on addressing climate change in land use planning.
Addressing Climate Change Conditions BLM baseline data on climate change must be sufficient to permit analysis of impacts under NEPA. Importantly, 40 C.F.R. § 1502.15 requires agencies to ―describe the environment of the areas to be affected or created by the alternatives under consideration.‖ Establishment of baseline conditions is a requirement of NEPA. In Half Moon Bay Fisherman's Marketing Ass'n v. Carlucci, 857 F.2d 505, 510 (9th Cir. 1988), the Ninth Circuit states that ―without establishing . . . baseline conditions . . . there is simply no way to determine what effect [an action] will have on the environment, and consequently, no way to comply with NEPA.‖ The court further held that ―[t]he concept of a baseline against which to compare predictions of the effects of the proposed action and reasonable alternatives is critical to the NEPA process.‖ There is a growing body of scientific information already available on climate change baseline conditions, much of it generated by or available through federal agencies. Where there is scientific uncertainty, NEPA imposes three mandatory obligations on BLM: (1) a duty to disclose the scientific uncertainty; (2) a duty to complete independent

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research and gather information if no adequate information exists unless the costs are exorbitant or the means of obtaining the information are not known; and (3) a duty to evaluate the potential, reasonably foreseeable impacts in the absence of relevant information, using a four-step process. Unless the costs are exorbitant or the means of obtaining the information are not known, the agency must gather the information in studies or research. 40 C.F.R. § 1502.22. Courts have upheld these requirements, stating that the detailed environmental analysis must —utiliz[e] public comment and the best available scientific information.‖ Colorado Environmental Coalition v. Dombeck, 185 F.3d 1162, 1171-72 (10th Cir. 1999) (citing Robertson v. Methow Valley Citizens' Council, 490 U.S. at 350); Holy Cross Wilderness Fund v. Madigan, 960 F.2d 1515, 1521-22 (10th Cir. 1992). As the Supreme Court has explained, while "policymaking in a complex society must account for uncertainty," it is not "sufficient for an agency to merely recite the terms 'substantial uncertainty' as a justification for its actions." Motor Vehicle Manufacturers Ass'n v. State Farm Mutual Automobile Ins. Co., 463 U.S. 29, 52 (1983). Instead, in this 5 context, as in all other aspects of agency decision-making, —[w]hen the facts are uncertain,‖ an agency decision-maker must, in making a decision, —identify the considerations he found persuasive.‖ Small Refiner Lead Phase-Down Task Force v. EPA, 705 F.2d 506, 520 (D.C. Cir. 1983), quoting Ind. Union Dept., AFL-CIO v. Hodgson, 499 F.2d 467, 476 (D.C. Cir. 1974). BLM's duty to evaluating reasonably foreseeable significant adverse impacts includes —impacts which have catastrophic consequences, even if their probability of occurrence is low, provided that the analysis of the impacts is supported by credible scientific evidence, is not based on pure conjecture, and is within the rule of reason.‖ 40 C.F.R. § 1502.22(b). Such impacts are especially significant in the face of climate change. BLM must provide the public with an explanation of both the data used in analyzing the potential effects of management alternatives and the methods used to conduct the analysis, as well as an opportunity to provide comments and propose corrections or improvements.

BLM must craft long-term management prescriptions without permanent impairment and unnecessary or undue degradation to the resources in the face of climate change. S.O. 3289 states that —[t]he realities of climate change require us to change how we manage the land, water, fish and wildlife, and cultural heritage and tribal lands and resources we oversee.‖ FLPMA gives BLM the authority to manage and plan for emerging issues and changing conditions that global climate change will affect in the planning area. FLPMA mandates that when BLM revises land use plans, it must —use and observe the principles of multiple use and sustained yield set forth in this and other applicable law‖ 43 U.S.C. § 1712(c). The term —multiple use‖ means 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. . . a combination of balanced and diverse resource uses that takes into account the long-term needs of future generations for renewable and nonrenewable resources. . . 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 or the greatest unit output. 43 U.S.C. § 1702(c) (emphasis added). Additional pertinent requirements of FLPMA that specifically apply to land use planning include using —a systematic interdisciplinary approach to achieve integrated consideration 6 of physical, biological, economic, and other sciences; consider[ing] relative scarcity of the values involved; and weigh[ing] long-term benefits to the public against short-term benefits. Id. FLPMA also provides that BLM must —take any action necessary to prevent unnecessary or undue degradation to managed resources.‖ 43 U.S.C. § 1732(b). Collectively, the provisions of FLPMA highlighted above necessitate on-the-ground implementation of climate change policies. In addition to the agency's duty under NEPA to take a hard look at the impacts of climate change to and from decisions in the resource management plan, BLM must also include a range of alternatives that includes a strategy for mitigating these impacts. CEQ regulations instruct agencies to consider alternatives to their proposed action that will have less of an environmental impact, specifically stating that —[f]ederal agencies shall to the fullest extent possible: . . . Use the NEPA process to identify and assess the reasonable alternatives to proposed actions that will avoid or minimize adverse effects of these actions upon the quality of the human environment.‖ 40 C.F.R. § 1500.2(e) (emphasis added); see also, 40 C.F.R. §§ 1502.14, 1502.16. Other recent directives from DOI, including S.O. 3308 and S.O. 3310 have stressed the important role that BLM's Conservation Lands and Wild Lands play in helping to mitigate and adapt to the impacts of global climate change. Further, the America's Great Outdoors report (Feb. 2011) makes several recommendations that, if adopted, should help BLM greatly in addressing climate change impacts, including: · Incorporate landscape-scale conservation and restoration as a priority in BLM resource management plans and programs. · Integrate units of the National Park System, Fish and Wildlife Refuge System, and BLM National Landscape Conservation System into landscape conservation and restoration activities on public lands as anchors of preservation. · Incorporate into BLM Resource Management Plans provisions to support carbon sequestration and climate change adaptation. · Address wildlife and ecosystem connectivity through . . . BLM Resource Management Plans . . . including the placement of energy projects and transmission lines. The impacts of climate change should be a major factor in every alternative that is created since it is an undeniable reality that will drive all land use planning decisions. As provided in the Oregon/Washington BLM State Office guidance document IM OR-2010-012, —[r]esource management plans and other broad programmatic analyses are actions

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that would typically have a long enough duration that climate change could potentially alter the choice among alternatives.‖
Further, general statements that BLM will conduct monitoring are also not an appropriate form of mitigation. Simply monitoring for expected damage does not actually reduce or alleviate any impacts. Instead, a vigilant science-based monitoring system should be set out in the RMP in order to address unforeseeable shifts to the ecosystem. A detailed monitoring approach is also required under the BLM's planning regulations: 7 The proposed plan shall establish intervals and standards, as appropriate, for monitoring and evaluation of the plan. Such intervals and standards shall be based on the sensitivity of the resource to the decisions involved and shall provide for evaluation to determine whether mitigation measures are satisfactory, whether there has been significant change in the related plans of other Federal agencies, State or local governments, or Indian tribes, or whether there is new data of significance to the plan. The Field Manager shall be responsible for monitoring and evaluating the plan in accordance with the established intervals and standards and at other times as appropriate to determine whether there is sufficient cause to warrant amendment or revision of the plan. 43 C.F.R. § 1610.4-9 (emphasis added). Such vigilant monitoring is absolutely necessary in order to create an effective adaptive management framework in the face of climate change.
Recommendations: The revision, in conjunction with the Great Basin Restoration Initiative and the Great Basin LCC, provides BLM with an excellent opportunity to analyze the impacts from climate change to the planning area over the next two decades, as well as the contribution to climate change from management decisions made in the plan. This analysis should in turn lead to the development of thoughtful management prescriptions and alternatives in the land use plan that will address how BLM will mitigate these causes and adapt its management over the coming years to prevent permanent impairment and unnecessary or undue degradation to the resources in the face of climate change.
Like other land management agencies, BLM has been struggling to define how it can meet its legal obligations to analyze the baseline conditions and environmental impacts associated with climate change in light of scientific uncertainty and complexity as well how to set management prescriptions that mitigate and adapt to additional or exacerbated stressors caused by a changing climate. In its Fourth Assessment Report, the Intergovernmental Panel on Climate Change reviewed a number of impacts on biodiversity associated with anticipated changes in climate world-wide and concluded, ―Overall, climate change has been estimated to be a major driver of biodiversity loss in cool conifer forests, savannas, mediterranean-climate systems, tropical forests, in the Arctic tundra, and in coral reefs… In other ecosystems, land-use change may be a stronger driver of biodiversity loss at least in the near term…‖ but ―beyond 2050 climate change is very likely to be the major driver for biodiversity loss globally‖ (Fischlin et al. 2007, p.241). The IPCC notes further that, ―Although links between biodiversity intactness and ecosystem services remain quantitatively uncertain, there is high confidence that the relationship is qualitatively positive‖ (Parry et al. 2007). Thus, the IPCC has concluded that through its influence on biodiversity, climate change is likely to have direct negative consequences on the provision of ecosystem services. In response, they prescribe ―an iterative risk management process that includes both 8 mitigation and adaptation, taking into account actual and avoided climate change damages, co-benefits, sustainability, equity and attitudes.‖ (IPCC 2007) (emphasis added). Under the pressures of global change, it must be acknowledged that many objects of conservation are at risk wherever they are found, and the traditional natural resource management paradigm of modifying ecosystems to increase yield must change to a new paradigm of managing wildland ecosystems to minimize loss – specifically loss of the ecosystem composition, structure, and function that yields the benefits we seek from wildlands. Natural resource management must change from a paradigm of maximum sustained yield to a paradigm of risk management. Although there is no widely-accepted method of assessing and managing risk, we recommend breaking risk down into its component parts—vulnerability, exposure, and uncertainty—as a useful way to think about risk to biodiversity and productive potential. In the attached recommended approach to addressing climate change in land use planning, we recommend an approach for assessing risk in the planning area as well as an approach for management of that risk for BLM to comply with its legal obligations under NEPA and FLPMA as set out above.

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Water

Nye County believes that a rigorous evaluation of the cumulative direct and indirect impacts of proposed and existing action and policies is a prerequisite to sound decision making. Many polices enacted by the Department of Interior, while protective of sensitive species and wildlife, have the direct effect of limiting water availability for human consumption, community growth, business development, and other elements that are critical to quality of life. Thus, the impacts of water resources policy and land use decisions that administratively restrict the availability of water resources our citizens, businesses and communities, must also be addressed, evaluated, and disclosed.
Guzzlers or artificial watering devices for wildlife help distribute water into areas that can provide suitable habitat for wildlife but are currently lacking available water. The Plan should allow for water development in areas that expand the amount of useable habitat for both big game and upland game species including in wilderness.
Furthermore, the Plan should be specific to identifying conservation measures to protect spring and riparian resources from overutilization by livestock or wild horses to the detriment of wildlife.
NDOW would like to see greater emphasis placed on the need to maintain existing water developments and add others if deemed desirable in wilderness.
Manage water quality in LCT creeks to meet requirements for recovery.
Monitor annually
Removal of P-J near springs/riparian does not always improve flow. Fencing to reduce compaction can work even better in some situations.
Water resources are rare and fragile in Nevada. No increased use should be encouraged to any of these areas.
I would like to see the BLM aggressively persue to availability of water for wildlife, etc. without securing the water right themselves. I realize this is a stupid comment because Bob just explained to me about the executive order of 1926 with respect to water rights, but I still don't believe the FEDS should hold water rights in the state of NV.
The BLM is responsible for managing habitat within the confines of regulating multiple use applications and extractive industries. Two of these, mining and agricultural uses, have dominated the western landscape for over a hundred years. Historical maps I've seen dating from 40-100 years ago, indicate springs and water sources were much more abundant during prior decades. The cumulative impacts from dewatering occurring as a result of mining operations, which utilize huge amounts of water for processing, have greatly affected surface and underground water levels and availability throughout the west. Agricultural demands have also had cumulative impacts on reducing surface water flow and underground aquifers levels. In turn, these have been further impacted by reoccurring drought conditions placing additional strains on available surface water due to either slower recharge rates or aquifer levels dropping to levels that are no longer capable of recharging surface waters at all. There is a high probability of these cumulative impacts affecting the Battle Mountain planning area to a significant degree. As a result, the BLM has an obligation to mitigate these impacts throughout the planning area to partially restore and help return ecosystem functions based on historical water abundance prior to extractive industry's disrupting the thriving natural ecological balance. This may be accomplished by providing multiple artificially created springs, ponds, and water sources through the drilling of wells to replace what has been lost. This in turn would increase critical resources needed by all species of interdependent wildlife such as insects, birds, bats, reptiles, small rodents and mammals, as well as large ungulates such as wild horses and burros and other wildlife species. 2 Effects of increased water abundance would decrease competition for available water by all users of rangeland resources who depend on sufficient habitat and critical resources to survive and prosper, help mitigate urbanization and habitat fragmentation by increasing available use areas, disperse grazing pressures while decreasing grazing pressures in site-specific areas, and maximize productivity of natural resources on public lands. Increasing the frequency of surface waters would also greatly enhance visual and aesthetic values within the planning area as well as support increased wildlife viewing opportunities, hunting and recreational activities, which in turn will support increased public use and stimulate economic growth.
Surface waters should be made available wherever possible with a potential goal of surface waters occurring every 10-20 miles within the planning district to be implemented throughout the life of the plan.
Based on this value, estimates of all potential surface water sites that can be implemented should be ipresented in the RMP. A rating system of priority could then be assigned to each potential site based on its implementation having the greatest impact on the greatest number of resources. Given the total number of potential sites, an average value can

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then be assigned to the number of water sources necessary to install annually to achieve short-term and long-term objectives.
Wells used to supply water should be powered by solar pumps and/or windmills and webcams or other video equipment should be installed to provide remote viewing in order to monitor water levels. This would help ensure timely maintenance in the event of disrepair as well as provide a method to acquire data regarding water use.
The creation of artificial water sources to compensate for cumulative surface water loss and availability should be tailored to look as natural as possible and enhance aesthetic values of the area. This can be accomplished through the incorporation of rocks, deep channels, natural vegetation, possible incorporation of trees and banks that allow for utilization by livestock, wildlife, wild horses and burros, and recreational activities.
Water. In a time of growing scarcity of water due to extended droughts, climate change impacts as well as proposed massive interbasin water transfers, BLM must move to secure enough water to meet its mission, goals and objectives. How can BLM acquire sufficient water - under State Water Law and through federal reserved water rights? How can BLM protect water quality and restore degraded water quality in surface waters and springs?
The diminishment, degradation and often disappearance of springs and other surface waters in Nevada is a serious expanding threat to the persistence of native biota. Many springs have been developed for livestock, thus killing or much-reducing surface flows. Irrigation diversion remove flows from many small streams in lower reaches. The Reese River is a dry gully over large areas. Desertification is expanding. Plus, the threat of water export and ground water depletion affecting regional aquifers is looming over eastern Nevada due to plans to construct pipelines and export water to Las Vegas or other areas. This threatens surface water and aquifer depletion.
Livestock Water Developments Degrade and Destroy Habitats Water developments typically dig into the heart of springs and springbrooks and greatly alter and reduce flows. (See Sada et al. 2001). Water is removed from the spring to a pipeline system that then supplies a series of troughs in upland sites. These developments extend livestock use into less used areas, and have serious harmful impacts to soils, vegetation and wildlife. This dewatering of spring flows can also reduce the zones of soil moisture surrounding springs that often support meadows critical to sage-grouse broods. Once a spring is dug into, and water put into a pipe, the pipeline provides new water sources, and resultant intensive concentration of livestock use in lands surrounding each trough site. The impacts of this extreme use extend outwards in a bulls eye pattern. The immediate area around the trough becomes a dead zone – dirt, manure, stubs of sagebrush, heavily compacted soils - and an ideal site for weed infestation and spread. The area becomes a sacrifice zone to livestock. Locations chosen for troughs and pipelines are often remnant patches of better condition native vegetation, which may be essential refugia for native species. Livestock utilization levels are averaged over large areas, and impacts of new developments are largely unaddressed and unmitigated. There is a lag time between when pipeline and trough installation occurs, and the full extent of resulting damage to more distant native vegetation communities occur. Rapid habitat loss occurs in zones close to the trough. Vegetation depletion spreads outward each year, and is followed by continued and cumulative degradation and loss of native understory vegetation and altered shrub structure for 1 to 2 miles surrounding upland water sources. Plus, spring projects de-water wetted areas of deeper soils surrounding springs, and the size of the area capable of supporting tall sagebrush and other vegetation may shrink over time. The severe threat that West Nile virus that thrives in livestock ponds, and in association with artificial water sources, or grossly trampled riparian area margins poses - is now recognized as a serious threat to sage-grouse, migratory birds, many other wildlife, and human health of recreational users or residents neighboring public lands. See Knick and Connelly 2009. Pipeline construction also causes large bare areas of disturbed soils, and pipeline routes often are driven, and end up becoming new roads. Roads serve as travel corridors for predators in sagebrush habitats (Braun 1998) and hunters, as well as conduits for OHV users to access new terrain. This plague of pipelines and other livestock developments has been accelerating in recent years, driven by constant failure of livestock permittees to meet grazing objectives and agency unwillingness to cut overall livestock use and numbers. In many areas the severe negative impacts that large-scale cyanide heap leach molybdenum or other mining are having are causing large-scale impacts to ground and surface waters. Drawdown and loss once set in motion will continue for hundreds of years. Climate change is predicted to place even more threats on perennial water flows – with hotter temperatures, earlier and more rapid snowmelt effects, as well as more dramatic runoff and other events heightening erosion gullying and down-cutting risk in degraded lands. Surface water flow expression is tied in varying ways to infiltration into ground water as well as precipitation patterns and snowmelt processes. Alarmingly, now geothermal and other renewable energy development – including potential solar technologies - may further alter and deplete water sources. Large amounts of concrete and other water-uses are associated with wind turbine footings. Large-scale industrial wind imposes a massive new and expanded road footprint on watersheds, interfering with hydrological processes, water infiltration, and conservation of ground and surface waters. What dangerous and hazardous substances are being used, and how are they currently polluting ands? How worse could this become in the next 20 years? There is the potential for fracking chemicals and other highly intrusive methods to greatly alter, deplete and pollute ground waters. Use of such chemicals should be prohibited under the RMP. A full

Table C-6
Water

analysis of the risks that fracking chemicals, mining methods and chemicals used, and other developments must be conducted in the RMP. In a landscape like Battle Mountain, where water is very scarce, the impacts of pollution or loss are amplified. Yet BLM in Nevada continues to manage its lands as if there is a endless supply of 'resources". In adjacent Winnemucca lands, BLM drilled a well to keep cows out on ever-depleting lands where mine aquifer drawdown was killing springs – rather than removing the cows as mitigation for severe loss of surface water expression, and acting to clamp down on such severe mining impacts.
Livestock grazing is the primary cause of water quality degradation in the EIS area. Livestock grazing causes watershed destruction ranging from desiccation of headwater springs and seeps to downcutting and gullying of streams resulting in rapid runoff and limited water storage. WWP has collected water quality samples on springs, seeps and headwater streams on BLM lands in Idaho and in many areas in Wyoming. Coliform and fecal coliform bacteria levels of hundreds of thousands are common. Degraded conditions are similar to those found in many parts of the Planning area. It is precisely these polluted waters that are often critical to declining species such as sage grouse, to pronghorn antelope who are forced to drink what is essentially a brine of liquid livestock feces, urine and mud, and to rare native biota like spotted frogs or Lahontan cutthroat trout. Battle Mountain BLM must collect baseline water quality data on springs, seeps, streams and other riparian areas during periods of the year when livestock are present, and/or runoff is occurring, as part of this process. Please review and expand on the Carico Lake report. This is necessary to allow up-to-date and informed decisionmaking on compliance with state water quality standards and the CWA, and much-needed additions to the 303d list. It includes bacterial, temperature, sediment and other data. BLM cannot merely rely on state lists - since in many cases, state agencies regulating water quality have old, or out-dated information that includes only a very limited number of sites. BLM must assess the effects of livestock-caused pollution of springs, seeps and all surface waters on recreational uses, and on aesthetics.
BLM must provide for compliance with water quality standards with definite triggers and responses to water quality problems that are clearly spelled out in the EIS. Application of specific yearly water quality monitoring procedures must be a made a term and condition of livestock grazing permits in the EIS area. BLM must analyze watershed-scale impacts of livestock grazing, roading, mining, geothermal or other energy development.

Table C-7
Cultural Resources, Native American Concerns and Paleontology Resources

Cultural Resources
Basic policy must be one of development only where there is a demonstrated need to protect resources. Eliminate any "Build it and they will come" philosophy beyond four or five miles from communities.
Do not provide interpretation on-site until/unless the impact on the resource mandates that level of development.
Inventory and prioritize all sites according to current threats/impacts and need for protection. (Note – the recent looting and vandalism of sites in Clark Co. makes this ever more important!)
The first proactive AEM step to take for those sites most at risk should be to close any/all routes to the area for a site-specific length (ie. steep site = ¼ mile, gentle site = 1 mile)
Inventory all natural water sites as potential cultural resource sites.
Travel planning shall emphasize protection of cultural resources.
All cultural sites should be inventoried and examined for cumulative renewable impacts with Native American consultation
Cultural Resources, Native American Concerns and Paleontology Resources. BLM should improve its consultation with Nevada tribes on avoiding impacts to cultural resources from development projects.
FLPMA obligates the BLM to protect cultural, geologic, and paleontological resource values (43 U.S.C. §§ 1701(a)(8) 1702(c)). In the context of historical and cultural resources, the National Historic Preservation Act of 1966 ("NHPA") (16 U.S.C. § 470 et seq.) affords heightened protection to these resources, establishing a cooperative federal-state program for the protection of historic and cultural resources. In particular, the review process set out in Section 106 (16 U.S.C. § 470f) obligates the BLM to consider the effects of management actions on historic and cultural resources listed or eligible for inclusion under NHPA. Additionally, Section 106 requires the BLM to consider the effects of its management actions on all historic resources and to give the Advisory Council on Historic Preservation an opportunity to comment before the BLM takes action. Section 110 of the NHPA requires the BLM to assume responsibility for the preservation of historic properties it owns or controls (16 U.S.C. § 470h-2(a)(1)), and to manage and maintain those resources in a way that gives "special consideration" to preserving their historic, archaeological, and cultural values. Section 110 also requires the BLM to ensure that all historic properties under the jurisdiction of the field office are identified, evaluated, and nominated to the National Register of Historic Places. Id. § 470h-2(a)(2)(A). Therefore, the Battle Mountain District Office must carefully consider the effects of all RMP decisions on the historical and cultural values located in the planning area. Since it will be difficult to evaluate the effect of decisions when the location of cultural resources is unknown, the BLM should undertake an archaeological inventory wherever necessary.
In conducting travel planning, the BLM should consider where motorized and non-motorized routes are directing people, inventory cultural resources along those routes, and carefully consider the potential impacts to those resources. Specifically, BLM should evaluate whether dust from vehicle use, energy development, and other authorized uses are impacting petroglyph panels. Aside from dust itself, dust suppressants have been shown to impact rock art in Nine Mile Canyon, Utah.6 These impacts must be analyzed and minimized.
Furthermore, the Pony Express National Historic Trail traverses the Battle Mountain District. National Historic Trails closely follow a historic trail or route of travel of national significance in order to identify and protect their history for public enjoyment. See, e.g., BLM website on National Scenic and Historic Trails (http://www.blm.gov/nlcs/nsht/). The intended experiences of these trails are, therefore, not generally consistent with noticeable development and the RMP should focus on facilitating the purposes for which the trails were created, as summarized in the National Trails System Act, "to promote the preservation of, public access to, travel within, and enjoyment and appreciation of the open-air, outdoor areas and historic resources of the Nation." 16 U.S.C. § 1241(a). RMP provisions regarding the trail should also be coordinated with, and complementary to, actions taken or anticipated for other federal-land portions of the trail and for private-land portions of the trail. Further, this consideration should include interpretative information, visitor access and services, and ensuring the protection of sensitive artifacts and sensitive natural lands in the vicinity and historic landscapes associated with the trail.

Table C-7
Cultural Resources, Native American Concerns and Paleontology Resources

Recommendations: BLM's goal should be to protect, conserve, and where appropriate restore cultural and historical sites and landscapes. To that end, BLM should: Survey all known or discoverable cultural and historic sites, or those adjacent sites may be adversely affected.
Recommendations: BLM's goal should be to protect, conserve, and where appropriate restore cultural and historical sites and landscapes. To that end, BLM should: Determine the sites or areas that are most vulnerable to current and future impact and adopt management actions necessary to protect, conserve, and restore cultural resources.
Recommendations: BLM's goal should be to protect, conserve, and where appropriate restore cultural and historical sites and landscapes. To that end, BLM should: Complete a Cultural Resource Management Plan that coordinates with the objectives of the RMP and seeks to provide for an appropriate proactive process of inventorying for cultural resources, making determinations of eligibility for the National Register, and seeking to nominate eligible properties to the National Register. The RMP should establish a timeline for completing the Cultural Resources Management Plan, and prioritize areas to be inventoried for cultural resources.
Recommendations: BLM's goal should be to protect, conserve, and where appropriate restore cultural and historical sites and landscapes. To that end, BLM should: Outline specific management actions, such as stabilization, fencing, signing, closures, or interpretative development, to protect, conserve, and where appropriate restore cultural resources.
Recommendations: BLM's goal should be to protect, conserve, and where appropriate restore cultural and historical sites and landscapes. To that end, BLM should: Adopt measures to protect cultural resources from artifact collectors, looters, thieves, and vandals.
Recommendations: BLM's goal should be to protect, conserve, and where appropriate restore cultural and historical sites and landscapes. To that end, BLM should: Consult with the Native American community to determine whether there are sites or specific areas of particular concern, including sites of traditional religious and cultural significance.
Recommendations: BLM's goal should be to protect, conserve, and where appropriate restore cultural and historical sites and landscapes. To that end, BLM should: Manage the Pony Express National Historic Trail to preserve the visual and overall experience of users and their ability to appreciate the historic uses of this trail.
Important cultural sites are often located in association with rare springs, plateau rimrocks, canyons, or pinyon pine nut harvest or associated camp sites. Threats to these sites include increasingly easy road access due roads resulting from livestock facilities and management purposes. Increased or more improved roading leads to vandalism or disturbance of cultural sites. Livestock cause erosion and damage or loss to artifacts and sites - particularly in the vicinity of springs, seeps and other riparian areas. Livestock facility construction causes shifts in livestock use that may lead to new or extended damage to sites – spanning the range from disturbance of rimrock stone blinds, to trampling and breakage of artifacts. Invariably, BLM's cultural specialists are forced to allow range developments to proceed, despite shifted use to new areas that may also have cultural importance. Comprehensive cultural surveys must be conducted in the vicinity of all springs and seeps, and all livestock facilities, and the impacts of current livestock grazing on sites must be studied as part of this process. Agency vegetation manipulation and fuels treatments also greatly threaten cultural sites, including pinyon-juniper cultural areas. Huge masticator machines severely alter and disturb soils. In immediately adjacent Forest lands to Sevenmile, the Forest violated its promises to not burn cultural sites in a Prescribed burn NEPA document (Savory burn).
The best way to protect cultural sites from looting is to maximize protective vegetation and complex microbiotic crust cover, and limit roading and motorized access to sensitive areas. BLM must analyze significant road closures of salt site roads, or other facility roads (require routine maintenance or salt placement by horseback, limit new livestock developments - that inevitably lead to increased roading), and take other measures to limit ease of access that might damage these sites. BLM must also analyze and prohibit mining, geothermal or other explo and development in sensitive landscapes –as this harms sensitive cultural locales, and increases risks of damage. Livestock harm and/or destroy cultural sites in many ways, including: trampling and soil compaction breaking artifacts and destroying site stratigraphy; erosion revealing artifacts to surface collection and livestock trampling damage; erosion destroying site stratigraphy; defiling sites with large amounts of feces and urine. BLM must act to stop this damage under all alternatives of the EIS.

Table C-7
Cultural Resources, Native American Concerns and Paleontology Resources

Paleontological Resoruces
Paleontological resources : • Ditto -- all the above comments for Cultural [Basic policy must be one of development only where there is a demonstrated need to protect resources. Eliminate any "Build it and they will come" philosophy beyond four or five miles from communities. • Do not provide interpretation on-site until/unless the impact on the resource mandates that level of development. • Inventory and prioritize all sites according to current threats/impacts and need for protection. (Note – the recent looting and vandalism of sites in Clark Co. makes this ever more important!) • The first proactive AEM step to take for those sites most at risk should be to close any/all routes to the area for a site-specific length (ie. steep site = ¼ mile, gentle site = 1 mile) • Inventory all natural water sites as potential cultural resource sites. • Travel planning shall emphasize protection of cultural resources.]
The impacts of livestock grazing and facilities under all alternatives on paleontological values of these lands must be thoroughly assessed. Paleontological values are threatened by haphazard collection (exacerbated by networks of livestock facility roads) and livestock grazing and 46 trampling that results in site erosion, exposure of fossils or strata and other impacts. BLM must inventory and assess paleontological sites, evaluate impacts of grazing activities and facilities on these sites, and identify measures to be taken to protect them from damage or loss.

Table C-8
Visual Resource Management

Dark sky attributes and other VRM characteristics are a finite resource and subject to increasing deterioration as inappropriate development covers the landscape. This is even more evident in remote stretches of Nevada where dark skies prevail yet are seriously impacted by even one new lighting source. There is a concern about the cumulative visual impacts to public lands users' experiences. A comprehensive look at visual impacts should be considered when the BLM reviews any development plans on public lands in Nevada, and nationally.
All facilities should have shields placed on all lights. This should be an enforced condition of approval of all projects. Federal agencies are encouraged to develop a consistent policy and "condition of approval" that can be required of applicants and included in NEPA decisions. It is hoped that all Federal agencies would include dark sky lighting as a condition of approval for permanent and temporary applications. The BLM should consider the Mojave Southern Great Basin RAC's policy statement on dark sky lighting (attached). The following language is suggested that should be provided up front to applicants who propose development on public lands that includes lighting: Utilize appropriate lighting: - Utilize consistent lighting mitigation measures that follow "Dark Sky" lighting practices. - Effective lighting should have screens that do not allow the bulb to shine up or out. All proposed lighting shall be located to avoid light pollution onto any adjacent lands as viewed from a distance. All lighting fixtures shall be hooded and shielded, face downward, located within soffits and directed on to the pertinent site only, and away from adjacent parcels or areas. - A lighting plan shall be submitted with the site plan review and/or architectural or engineering drawings indicating the types of lighting and fixtures, the locations of fixtures, lumens of lighting, and the areas illuminated by the lighting plan.
In addition, the following mitigation measures should be employed. Utilize building materials, colors and site placement that are compatible with the natural environment: - Utilize consistent mitigation measures that address logical placement of improvements and use of appropriate screening and structure colors. Existing utility corridors, roads and areas of disturbed land should be utilized wherever possible. Proliferation of new roads should be avoided. - For example, the use of compatible paint colors for vertical structures reduces the visual impacts of the built environment. Using screening, careful site placement, and cognitive use of earth-tone colors/materials that match the environment improve the user experience for others who might have different values than what is fostered by built environment activities. - Federal agencies should require these mitigation measures as conditions of approval for all permanent and temporary applications.
Manage to maximize the primitive natural visual setting for visitors
It is BLM policy that visual resource management (VRM) classes are assigned to all public lands as part of the Record of Decision for RMPs. The objective of this policy is to "manage public lands in a manner which will protect the quality of the scenic (visual) values of these lands." BLM Manual MS-8400.02. Under the authority of FLPMA, the BLM must prepare and maintain on a continuing basis an inventory of visual values for each RMP effort. 43 U.S.C. § 1701; BLM Manual MS-8400.06. Specifically, IB No. 98-135 states, "It is the intent and policy of both the Department and the Bureau of Land Management that the visual resource values of public lands must be considered in all land-use planning efforts" (emphasis added). In addition, IM 2009-167 states, "All field offices (FO) are required to have current VRIs in place and to have VRM classes designated within its LUPs. Both the inventory and management class determinations are critical for baseline NEPA visual impact analysis and compliance evaluation with visual resource management objectives and for facilitating appropriate advancement of all surface disturbing land use activities, including renewable energy projects." Therefore, BLM must update the visual resources inventory for the Battle Mountain District and reclassify lands where necessary during the RMP process.
In addition, NEPA requires that measures be taken to "assure for all Americans . . . aesthetically pleasing surroundings." Once established, VRM objectives are as binding as any other resource objectives, and no action may be taken unless the VRM objectives can be met. See IBLA 98-144, 98-168, 98-207 (1998). The RMP must make clear that compliance with VRM classes is not discretionary.
BLM should ensure that scenic value is a resource that is conserved and must establish clear management direction describing areas inventoried and possessing high scenic importance with clearly defined objectives that limit surface disturbance within important viewsheds, including: 1. Lands managed to preserve their natural values, such as primitive recreation areas and land with wilderness characteristics, should be managed as Class I to "preserve the existing character of the landscape." BLM Manual 6302 affirms that VRM Class I may be appropriate to protect Wild Lands. 34 2. Lands within popular and easily accessible vantage points should be managed for visual resources, such as VRM Class II to "retain the existing character of the landscape," including clear provisions dealing with oil and gas development, renewable energy infrastructure, and other human disturbance. 3. ACECs and other special management designations and prescriptions should be used to protect scenic landscapes and lookout points within the resource area with stipulations specifically addressing and managing human development impacts, including VRM Class I to "preserve the existing character of the landscape" or VRM Class II to

Table C-8
Visual Resource Management

"retain the existing character of the landscape" as appropriate.
Recommendations: BLM must update its inventory for visual resources on all lands within the planning area. We urge BLM to prioritize completion of this inventory, as well as to keep the public apprised of the values identified by posting the VRI for public review prior to assignation of VRM classes. Updated VRM classifications should be incorporated into the new RMP to reflect the inventory and the new designations.
Protective VRM standards of VRM I must be overlaid not just on roadless or other areas, but all native vegetation communities of importance and important habitats for rare and imperiled native biota. This is necessary to prevent any further visual intrusions and disruptive changes. It is increasingly known that sage-grouse and other wildlife are exceedingly sensitive to visual disturbance, noise and other intrusions – so protections for human values also better protects lands for wildlife.
BLM must designate manage large areas of roadless lands greater than 5000 acres in size, and all portions of ACECS as VRM I. This is fully compatible with special status species habitat management – for example, VRM I classification would result in removal or no new construction of elevated sage grouse predator-perches in wide-open sagebrush landscapes. It would also help to prevent industrial energy development and other intrusions into landscapes where it is increasingly recognized that visual intrusions, noise and other effects impair sagegrouse, migratory bird, raptor nesting and other habitats.
The RMP effort must manage lands and resource activities to protect the darkness of night skies, which is an attribute of wild lands increasingly sought by the recreational public

Table C-9
Special Status Species

Nye County plans to develop a Multi-Species Habitat Protection Plan, and will provide a copy of the plan to BLM when completed. We request that BLM assist us in this process and it be incorporated in BLM plans at that time.
Every effort should be made to reduce the impacts on sage grouse populations to prevent a possible listing. Grazing objectives and strategies for livestock, wild horses and burros must be developed in order to protect and enhance crucial sage grouse habitat including nesting and brood rearing habitats. Land Uses in conflict with nesting habitat for sage grouse need to be modified to decrease their impact on nesting success and recruitment survival. As already mentioned, fire suppression objective must provide a priority to protect intact sage grouse habitat. An inventory and evaluation of all rangeland fences should be conducted. Any fences that pose a threat to sage grouse (and wildlife in general) should be modified, removed or replaced to reduce their impact. All new and existing fences being built within sage grouse habitat should be modified with bird reflectors to decrease the incidences of collision.
Incorporate all the latest scientific data re: sage grouse.
Update data on LCT, Sage Grouse and other SS species.
Manage habitat and populations of SSS to meet standards for "secure" ranking within 10 years.
Insert new data re: sage grouse to incorporate the importance of nesting/brood areas, year-round needs -- not just strutting grounds.
All rare plants and wildlife should be evaluated for massive cumulative impacts of renewable energy.
The RMP/EIS Must Comply with the ESA Pursuant to ESA Section 7(a)(1) federal agencies have an affirmative duty to conserve endangered and threatened species occurring within their jurisdiction. ESA Section 7 (a)(2) and its implementing regulations require federal agencies to insure that any action they take is not likely to jeopardize the continued existence of adversely modify the critical habitat of any listed species. The ESA further requires that any action that may affect listed species must be made in consultation with the U.S. Fish and Wildlife Service. We recommend that the RMP outline the circumstances that necessitate ESA re-consultation at the RMP level and the circumstances that necessitate ESA consultation (whether formal or informal) at the implementation planning and decision-making levels. The BLM should complete inventories to fill any gaps in its knowledge of special status species and periodically reinventory populations to determine status and trends. A goal of the BLM should be to ensure the conservation and recovery of threatened and endangered species, special status species, and designated critical habitat within the resource area. BLM should designate protected activity centers around known species. BLM should manage visitation and use, particularly motorized, by limiting activities and closing certain areas to prevent impacts (i.e., theft and disturbance) to sensitive species.
The Center is particularly interested in seeing that special consideration and protections be afforded to sage grouse, a species found to be warranted for protections under the Endangered Species Act, but precluded at this time due to lack of agency capacity. Critical sage grouse habitats such as leks, nesting and winter range should be a priority for protection in the RMP.
We hope BLM will avoid solar and wind energy development in areas and habitats where such development will not be compatible with the habitats for listed or candidate species (both federal and state), and BLM special status species.
I hope you will incorporate recent sage-grouse habitat management guidelines into your planning decisions.
For Sage Grouse, BLM should enforce the guidelines for habitat protection and restoration in the Nevada Sage Grouse Conservation Plan and specific PMUs in the planning area.
BLM should also participate with the USFWS in implementing recovery plans for listed species.
Fish and Wildlife: We emphatically encourage you to incorporate recent sage grouse habitat management guidelines into your planning decisions so as to manage for maintenance of existing and restoration of historic and non- functioning habitat for the greater sage grouse within the District. As you are aware, the necessary guidance to achieve those goals is contained in the local area sage grouse planning documents, the BLM's own habitat management guidelines for the species, as well as numerous other

Table C-9
Special Status Species

sources. One of our concerns is that renewable energy development could potentially result in the loss of important habitat for sage grouse if planning for renewable energy development is not undertaken carefully.
The series of maps in Connelly et al. 2004, the Conservation Assessment for Greater Sage- Grouse, and in the Knick and Connelly (2009) Sage-grouse Monograph, serve to vividly illustrate the many elements of change and treats, and the degree and severity of threats posed to native species on Battle Mountain lands. This information on the threats that sagebrush and other arid lands species face is available at the USGS Website: http://sagemap.wr.usgs.gov/monograph.aspx http://sagemap.wr.usgs.gov/SageGrouse.aspx The latter includes a link to the March 2010 USFWS Warranted but Precluded Finding for Greater sage-grouse. This like the Conservation Assessment describes the many threats sagegrouse face from energy, oil and gas, renewable (geothermal, wind, solar), transmission, pipelines, road networks, livestock and livestock facilities, weeds, etc. Since the preparation of the 2004 Conservation Assessment, threats to sage-grouse and other native wildlife have only escalated. BLM has failed to follow its own Conservation Plan and hollow promises related to sage-grouse. These threats include: Range-wide losses of habitats – in WY, MY and portions of UT from run amok energy development under utterly inadequate BLM "BMPs", avoidance provisions, etc. BLM has also continued to minimize honest analysis of threats from grazing, and has continued and expanded adverse impacts. These clearly have not worked to protect habitats or prevent population declines. BLM cannot just conduct a cookie-cutter RMP like the recent series of Wyoming, Ely and other RMPs that try to pull the wool over the public's eyes by pretending that the identical measures that are known to have failed to protect sage-grouse in the face of grazing impacts, Oil-Gas and CBM, are now somehow still the "best practices" to base a 2011 RMP process on. Be honest, for goodness sakes.
Sage Grouse Landscape Recent sage grouse research has revealed that vast acreages (across hundreds of square miles) may used by sage grouse in the course of a year. BLM must fully consider the vast acreages needed by sage grouse for leks, nesting, brood rearing, and winter habitats. ACECs of sufficient size to include all the lands required by populations must be designated accordingly. This analysis must also transcend artificial agency boundaries – as wildlife nesting in one allotment may have critical wintering habitats, prey bases, etc. in other allotments, other Districts, etc. BLM must provide detailed information on the current and foreseeable status of populations, using current science as found in Knick and Connelly 2009. Please provide detailed mapping of active, inactive, historic leks, all seasonal habitats. Please overlay an analysis of habitats, ecological conditions, and specific threats faced by each local and population, and the regional population as well. Use this to identify priorities for restoration in the RMP. Then lay out a time frame to do this. ACECs should include the restoration areas, too. Battle Mountain contains several small and isolated populations that are facing severe problems with viability due to increased mining, grazing, powerlines and other development and activities eating away at remaining habitats. The viability of all populations must be examined in both the short, mid and long-term under a range of conservation-based alternatives. A clear plan to restore significant habitat areas for supporting a viable population with specific time frames to achieve goals must be laid out here. BLM must examine how removal of grazing from significant area of Forest Service lands (Hage trespass and other areas) adjacent to Battle Mountain BLM have helped bolster sage-grouse populations in the Monitor Range Table Mountain and other areas. Now, these lands are greatly threatened by Forest proposals to re-impose grazing. All direct, indirect and cumulative impacts of activities on Forest or private lands must be examined. Passive restoration through removal of disturbance should be the focus in native habitats, coupled with active restoration removal and rehab. of harmful facilities, intrusive roading, etc. Planting sagebrush and local native ecotypes for recovery of degraded lands must be the path forward for restoration.

Table C-10
Fish and Wildlife

Nye County supports BLM efforts regarding habitat management.
Mule deer habitat should be protected from encroachment, and restored where degraded. Mule Deer do not respond favorably to displacement caused by development or human presence. Development and wildfire have fragmented and degraded their habitat resulting in a significant reduction in useable habitat. Special attention to available forage quality and quantity should be addressed where livestock and wild horse use coincides with Mule Deer habitat. Areas that have been identified as critical habitat should be addressed in grazing plans to maintain or increase plant health, vigor, and diversity, especially in regards to native vegetation.
There is potential bighorn sheep habitat available in NDOW Management Areas 13, 14, 15, and 16.which should be identified in the Plan to facilitate future reintroductions.Historic sightings have been documented throughout Lander, Eureka and Nye Counties and restoring native populations of bighorn is a priority for NDOW. In these areas we propose that the U.S. Animal Health Association Joint Working Committee of Wildlife Diseases & Committee On Sheep and Goats (October 2009), recommendations on best management practices for domestic sheep grazing on public land ranges shared with bighorn sheep be considered. The implementation of these best management practices provides the best opportunity for domestic and wild sheep to co-exist on public lands. The separation of domestic and wild sheep in time and space is essential.
Antelope populations are increasing and distributing themselves throughout the Battle Mountain District. Further reintroductions of antelope into unoccupied areas would be important to NDOW. As locations become identified, NDOW would be interested in having the opportunity to develop and implement releases in those locations.
Key habitat for antelope should be protected from overutilization by livestock and wild horses. Winter range for antelope in NDOW Management Area 15 includes the Rocky Hills seeding, the Gilbert Creeks seeding and the seeding along the west face of the Simpson Parks. All three of these seedings are comprised of forage kochia and crested wheat grass. When sage brush is not present due to fire or other causes, forage kochia becomes important winter forage for antelope. High utilization between livestock and wild horses has been documented on the Rocky Hills seeding and along the base of the Simpson Parks impacting forage availability to Pronghorn Antelope. Proper utilization criteria must be implemented to protect these crucial antelope winter habitats
Elk sightings have been reported throughout the Battle Mountain District and in NDOW Management Areas 14 and 15. Excellent elk habitat exists in the Diamond, Shoshone, Toiyabe and the Simpson Park Mountains. NDOW would like to include elk immigration and release considerations through these areas in the RMP process.
Mountain goats are naturally immigrating into the Diamond Mountains from locations further to the east. NDOW would like to include consideration of this species in the management direction for this range.
An inventory and evaluation of all rangeland fences should be conducted. Any fences that do not meet big game movement standards should be modified, removed or replaced to reduce their impact.
Lander and Eureka counties have potential but unoccupied habitat for mountain quail, California quail, chukar, ruffed grouse, blue grouse and turkeys. The Plan should provide the mechanism to identify and facilitate the opportunity for NDOW to release upland game birds into suitable habitat in the Battle Mountain District.
Riparian areas account for less than 10 percent of Nevada landforms but are utilized by most species. Even more limited in the Battle Mountain District are the numbers of perennial fish bearing waters, so protection and proper management of these habitats is critical. NDOW would like to work with BLM to insure that the Plan identifies these areas, their associated species and outlines proper management strategies for the benefit of both lentic and lotic riparian areas. Furthermore, standards relative to the aquatic habitats of fish bearing waters should be identified and incorporated. "Riparian and wetland areas should exhibit a properly functioning condition and achieve state water quality criteria" (Northeastern Great Basin RAC). In particular, spring and spring outflow systems occurring on public lands are a critical resource because of the presence of BLM sensitive and State priority aquatic species including endemic fishes and spring snails. Many of these species are ESA listed, state protected, or have been petitioned for listing under the ESA. NDOW can assist in the identification of areas of particular sensitivity which should be highlighted in the Plan. Future oil and gas development and future leasing actions, particularly in Railroad Valley, are a particular concern because of the occurrence of priority conservation fish species at numerous locations in that basin, including on State lands adjacent to the Railroad Valley Wildlife Management area. The Nevada Wildlife Action Plan includes both identification of those priority aquatic species occurring on

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public lands within the Plan area, and clear delineation of priority key habitat types essential to those species along with identification of objectives and strategies for the restoration and maintenance of those key habitats. We suggest the BLM use the Wildlife Action Plan as a resource for addressing the needs of those aquatic species and associated key habitats, in coordination with NDOW, in development of the Plan.
Given the demand for green energy development, NDOW would like to insure that the Plan delineates areas of the greatest importance to wildlife and provides protection for species that are negatively impacted by this land use. There are many documents the BLM could reference which identify management guidelines for the compatible development of energy resources with wildlife. NDOW would like to propose the development of a minimum of 6 key raptor areas in the Plan. The areas proposed are in Big Smoky Valley, Pancake/Reveille Ranges, Stone Cabin Valley/Ralston Valley, Antelope Valley, Smith Creek Valley and Esmeralda County for the protection of raptor habitat. While many land uses are compatible with raptor use, power lines and wind energy development still present mortality threats resulting from collision that cannot be easily or inexpensively mitigated.
Many hollow, plastic, mine claim markers remain standing on Battle Mountain District lands. These posts are death traps for birds, reptiles, small mammals and pollinating insects. We want to work with the Battle Mountain District to remove all these posts located on public lands.
Lands in the Battle Mountain District have important wildlife species occurrences as identified in Nevada's Wildlife Action Plan. In Attachment A, we have provided a synopsis of the Species of Conservation Priority (SOCP) from the Nevada WAP that we are fairly certain occur on lands in the Battle Mountain District. Our list is presented by habitat associations where we group the SOCP's by habitats and focal areas located in the district. NDOW's Wildlife Action Plan serves to link and integrate other Nevada conservation plans into the RMP. These plans are listed in Attachment B. We would like to make special note of the recently revised Nevada Bird Conservation Plan. This document offers several previously unavailable assessment tools that can be used to quantify bird populations in selected habitats and demonstrate conservation value of habitat management strategies. NDOW supports adaptive management principles that evaluate plan performance at regular subintervals throughout the life of the Plan Regular evaluations will afford the District the flexibility necessary to adjust strategies as new information comes to light regarding changes in wildlife distribution, populations or species composition as new data become available.
Inventory of LCT habitat and potential recovery areas
Do not allow new water developments in ungrazed or lightly grazed areas. These few remaining areas likely provide important habitat for grazing sensitive species.
Special planning led by NDOW shall identify opportunities for appropriate transplants and /or augmentation of game species.
Incorporate management recommendations of the NV Bird Conservation Plan.
Update critical wildlife habitat info to decide actions in appropriate areas.
Inventory fish and wildlife populations to meet life history / habitat requirements. Monitor use to apply AEM.
Prioritize closure of routes when approaching or exceeding maximum
Include maps indicating the important wildlife areas on the district.
Planning needs to make natural water sources and natural vegetation a priority, in support of native wildlife.
My principal concerns with the RMP are the wild lands inventory and management, wildlife, and archeological site protection. I realize that the staff of the Battle Mt. district is far too small to do complete inventories on such a large area so I hope you will consider citizen inventories and inventories by other agencies such as NDOW.
Reinstate mandatory maximum use levels for large game animals occurring within the planning area. Prior BLM land use planning use to incorporate population objectives and appropriate population levels to ensure a thriving natural ecological balance between all rangeland users. The current trend to omit this information should be reversed in the

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Battle Mountain RMP. b) Prohibit the introduction of large game animals, which include elk, pronghorn antelope, mule deer and bighorn sheep in any areas where historical ranges cannot be established through historical records dating back to the turn of the century. c) Prohibit the approval of any rangeland improvements that exclusively benefit big game species to the detriment of other rangeland users by increasing competition for resources.
Require areas of conflict to be identified in all proposals that involve big game species with livestock and wild horses/burros as part of the RMP structure and mandate mitigation measures. e) Require suitability criteria be incorporated in forage allocations, carrying capacity and stocking rates separated by class of users to ensure fair allocations for free-roaming animals. f) Incorporate and require methods used to measure class use and utilization of vegetative resources by species be mandatory throughout all proposals for the life of the RMP.
Fish and Wildlife. For other wildlife, BLM should work with the Nevada Department of Wildlife to help implement the Nevada Wildlife Conservation Plan and protect and restore wildlife habitat damaged by wildfires and poor livestock grazing management.
Science-based wildlife management Given the sizable land management challenges of the coming decades— including federal land management agencies' response to climate change and the complex natural resource dilemmas associated with climate change (i.e. species adaptation, extreme variability in natural processes)—it is imperative that the BLM, the Battle Mountain District Office and this RMP employ effective and efficient science-based planning and analysis methods to support robust and legitimate decision-making processes. The effective application of science to land management planning and decision-making requires three "essential ingredients": • Well-defined, measurable standards (e.g. wildlife population or habitat condition targets), developed via robust public involvement processes • The employment of science-based analytical tools to evaluate compliance with the standards (e.g. population viability analysis, or the spatially explicit Decision Support System recommended by the Western Governors' Association) • Consistent implementation of science-based analysis and decision-making (i.e. dedicated funding for monitoring and science-based adaptive management processes)7 The Battle Mountain District Office should consider these essential elements as it moves forward with efforts to respond to the pressing land management challenges of the coming decades. Well-defined standards Providing functioning habitat for wildlife and ensuring the long-term persistence of wildlife populations are part of the BLM's responsibilities to manage the public lands for multiple use and sustained yield. FLPMA specifically directs that management of public lands "takes into account the long-term needs of future generations" for wildlife, as well as other resources, and is implemented toward "achievement and maintenance in perpetuity" 43 U.S.C. §§ 1712(c)(1); 1702(c) and (h). Achieving these goals for wildlife can best be realized by establishing well-defined, measurable standards. The use of well-articulated concepts and operational planning practices associated with the literature and practice of population viability assessment may provide land managers with effective and efficient means of applying science-based conservation methods to wildlife planning decisions. Science-based analytical tools In order to adopt a legitimate, efficient and effective science-based planning framework, the Battle Mountain District Office should look to the well-established conservation planning and population viability assessment literature, as well as models employed by other BLM units and neighboring agencies.8 For example, some national forests monitor populations of "management indicator species" to measure the effects of management activities on unmeasured species and to provide insights into the integrity of the ecological systems to which they belong. The use of an indicator or focal species approach, in combination with robust knowledge of the link between species and habitats, allows managers an effective means to apply science-based principles to resource management decisions. Indeed, to meet the challenges of 21st century land management and conservation, agencies will need to cooperate on vital management planning activities, including the sharing and co-generation of biological information. Another example of a comprehensive monitoring approach can be found in Appendix 2 - "Implementation, Monitoring, and Evaluation Process" - of the Jack Morrow Hills Coordinated Activity Plan, prepared by the Wyoming BLM, available at: http://www.blm.gov/pgdata/etc/medialib/blm/wy/field-offices/rock_springs/jmhcap/rod.Par.76416.File.dat/31apx02.pdf (and attached). We particularly note the following, as examples of the sort of detail that should be contained in the RMPs: § Table A17-1 Resource Management Indicators - p. 8 § Table A17-2 Indicator Detail - pp. 9-11 § Table A17-3 Measurement Detail - pp. 12-14 § Figure A17-3 CAP Management Process - p. 16 § Discussion of the JMH CAP - pp. 20-21 Landscape-level planning The adoption of a science-based approach to land use planning is also consistent with the agency's commitments in the Healthy Lands Initiative (HLI). HLI is premised on the BLM's recognition of major changes to the landscape arising from population growth, energy development and climate change. The goal of HLI is "to preserve the diversity and productivity of public and private lands across the landscape." HLI is to be implemented through specific projects, which will "enable and encourage local BLM managers to set priorities across a broader scale and mitigate impacts to an array of resources in ways not previously available to them" and "give managers flexibility to identify lands where a particular resource might be emphasized in order to encourage sustained health and balance across a broader ecosystem or landscape." See, generally, HLI Factsheet at: http://www.blm.gov/pgdata/etc/medialib/blm/wo/Communications_Directorate/public_affairs/healthy_lands_initiative.Par.80058.File.dat/HLI-National_FY09.pdf . Implementation

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of the management approach described above will further support efforts to address habitat fragmentation and climate change, as discussed in other sections of these scoping comments. Recommendations: The Battle Mountain RMP should adopt planning and decision-making processes (including data collection, analysis, and monitoring) that employ measurable planning objectives at multiple biological scales (i.e. fish and wildlife populations, habitat and ecosystem conditions) to ensure viable wildlife populations. Specifically, the RMP should put in place management actions to protect sage-grouse that are based on the most recent science and provide for adapting to emerging science.
Wildlife Corridors The Intermountain West contains multiple ecosystems that remain ecologically intact and biologically diverse; they are crucial for both Western economies and quality of life. But the balance between natural systems and human use is fragile and increasingly at risk. Proactive management on public lands is a necessary part of sustaining the health of wildlife and wildlands, and of human communities. To take a crucial step forward, BLM should identify and protect wildlife corridors to ensure that usable habitat and migration pathways will remain. The Western Governors Association's Wildlife Corridors Initiative9 defines wildlife corridors as: "Crucial habitats that provide connectivity over different time scales (including seasonal or longer), among areas used by animal and plant species…and serve to maintain or increase essential genetic and demographic connection of populations" (emphasis added). Reduction in habitat connectivity through increased fragmentation – due to roads, residential and commercial development, energy development, and off-road vehicles – substantially decreases the amount of ecologically intact core habitat available for many wildlife species. Ecologists have long recognized that the loss of core habitat and habitat connectivity pose the greatest threats to species persistence and overall biodiversity (Wilcove et al. 1998). Through resource management plans, BLM plans for the management of its lands at the landscape level, which gives the agency the ability to designate and protect naturally-occurring wildlife corridors. The BLM has the legal authority to implement protective management of wildlife corridors, and also the legal obligation to address threats to wildlife and wildlife habitat as stewards of the western public lands. Protecting wildlife corridors through administrative designations, like ACECs, is consistent with the BLM's obligations under the Federal Land Policy and Management Act (FLPMA), 42 U.S.C. § 1701, et seq., and National Environmental Policy Act (NEPA), 42 U.S.C. § 4321, et seq. In the Pinedale Record of Decision and RMP, the BLM specifically designated and protected an important wildlife corridor as an ACEC. The BLM designated the Trapper's Point ACEC with the specific goal to "preserve the viability of the big game migration bottleneck, cultural and historic resources, and important livestock trailing use." Pinedale ROD/RMP, 2008, p. 2-56, available on-line at: http://www.blm.gov/pgdata/etc/medialib/blm/wy/programs/planning/rmps/pinedale/rod.Par.45058.File.dat/05_Record_of_Decision_and_Approved_Pinedale_RMP.pdf . We are currently completing a policy brief that details the legal and policy framework for designating wildlife corridors on BLM lands, and provides methods for identifying and protecting corridors. We expect to submit this brief to BLM in the near future, and hope the Battle Mountain District Office will use the brief to plan for wildlife corridors in the RMP. Recommendations: To appropriately designate and protect wildlife corridors within the Battle Mountain District, BLM should: § collaborate with other state and federal agencies and non-governmental groups to obtain current data regarding crucial wildlife habitat and corridors; § connect already designated wilderness areas and other reserves to ensure that wildlife populations have the ability to easily move between large areas of protected crucial habitat; § identify species that will act as focal species for identifying important wildlife corridors and will also act as indicators for how well the wildlife corridors are working; § use the best available science to decide upon the exact areas to be designated and protected; § ensure that all designations include specific provisions regarding management so that designated wildlife corridors are protected and can function as designed; and § constantly monitor the effectiveness of designated wildlife corridors and implement adaptive ecosystem management strategies.
There is resounding evidence of the harmful impacts of livestock trampling on pygmy rabbit burrows, and the burrows of other small mammals as well as reptiles. FWS in 68 FR 43 states that cattle can directly damage pygmy rabbit burrow systems through trampling. Austin (2002) documented cattle trampling of active burrows in the Shoshone Field Office. Burrows were subsequently abandoned. FWS has recognized that trampling is a form of direct take, causing injury or mortality (68 FR 43). There is also significant concern about trampling impacts to larval insects that provide key food resources or that are pollinators of rare plant species. There are also identified rare butterflies from the Project area – and all impacts of livestock on vegetation and soils in relation to these butterflies must be fully examined. Cattle can also trample and destroy nests and eggs of ground and shrub-nesting migratory birds, sage-grouse and other wildlife. Livestock disturbance that flushes birds from nests exposes hens to predators, as well. See Coates et al. 2009, Coates and Delehanty (2009), Knick and Connelly (2009). The RMP must assess alternatives that minimize harm to ground-dwelling mammals, as well as prohibit all livestock grazing during nesting periods for migratory birds, sage-grouse and other important species.
BLM must assess the impacts of predator control actions across these lands on special status animal species and native plant communities. BLM must outlaw aerial gunning of coyotes - which causes intrusive disturbance in wild land areas and may disturb sensitive wildlife species during critical periods of the year. Activities of Wildlife Services can damage public lands. For example, WS may harm public lands and values by: driving roads when muddy, disturbing wildlife during sensitive times of year; cross-country travel by

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OHVs spreading weed seeds, crushing vegetation or harming soils; trapping in sensitive species habitats or near popular recreation areas or important wildlife habitats; altering population structure of native predators; removing badgers that are important in providing burrows for burrowing owls; reducing predator kills and thus reducing carrion for bald eagles and some other raptors; accidental mortality of golden eagles or other raptors in traps, etc. Purposeful drastic alteration of predator communities takes place on an annual basis in many wild lands of the West as a result of predator killing activities conducted by APHIS/WS as a subsidy to the western public lands livestock industry. Public lands livestock grazing is often accompanied by aerial gunning, trapping, snaring, den gassing, poisoning and other methods of predator removal, aimed primarily at coyotes. Harmful impacts of removal of resident adult coyotes is discussed below under Predation. Predator removal may also actually increase predation by smaller predators in localized areas. Removal of larger predators like coyotes may result in meso-predator release where smaller predators thrive in absence of larger ones. The placement of artificial water sources (wells, pipelines and water troughs) for livestock may increase predator impacts on sage grouse, pygmy rabbits and other sensitive species, by increasing predator distribution and density. BLM must propose alternatives that constrain or remove WS activities from sensitive species habitats on EIS lands. Removal of native predators only results in increased predation problems, and upsets the stable social structure of coyotes or other native predators. If a rancher claims a predation problem, then that rancher should be responsible for protecting livestock by increased herding and vigilance. If the rancher is unwilling to do that, the livestock should be removed from the public lands. BLM must present accurate and detailed information on the areas where predator control activities currently occur, and the amount and timing of such activities. Predators like mountain lions provide a control on wild horse numbers - and help promote population stability.
BLM must lay out a plant to restore and recover bighorn sheep in all identified potential habitat across the FO. How many sheep operations preclude bighorns re-inhabiting all of these sites? Four or five – or even fewer? Retiring or converting to cattle use of bighorn re-occupation conflicting domestic sheep operations must be a primary goal of the RMP. BLM must also identify and map large avoidance zones for domestic sheep around all occupied bighorn habitat immediately, and plan to remove domestic sheep from zones of impact. In many instances, more than nine mile buffers may be required.

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Wild Horses and Burros

The new RMP must recommend options for increasing wild horse and burro appropriate management levels (AML), reinstating wild horses to zeroed-out herd areas (HAs) and ensuring that wild horses and burros are afforded equitable distribution of resources within designated habitat areas.
Designate all HMAs to be managed principally for wild horse or burro herds as allowed under 43 C.F.R. 4710.3-2. Decrease or eliminate livestock grazing in HMAs pursuant to 43 C.F.R. 4710.5(a).
Base AMLs on scientific and rational principles that provide adequate herd size for genetic viability.
Replace outdated and costly wild horse management that relies on mass roundups and removals with a cost-effective and science-based approach manages horses on the range.
Allocate resources equitably. Livestock and other commercial usages should not be allocated more resources or given preference over wild horses and burros in designated herd management areas.
Prevent "zeroing out" of wild horse or burro herds. Range rotation, reseeding temporary fencing and reduction of livestock grazing should be among the tools used to protect and restore any areas that do not meet habitat or rangeland standards.
Prioritize range management tools in HMAs, including repair and enhancement of water resources, removal of fencing, PZP fertility control (if necessary) and protection of predators to restore ecological balance.
Support public-private partnership for on-the-range management of wild horses and burros and the creation of wild horse preserves.
Declare the HMA closed and off-limits to geothermal/fluid mineral leasing, mineral allocations, locatable mineral development, gas and oil exploration and mining. Recreational vehicle activity should be minimized.
In addition, the Environmental Analysis for the RMP should include hard data on range conditions, impacts of livestock grazing on the range and a clear delineation on maps and in the analysis of the impacts on wild horse caused by all commercial uses allowed within the HMAs.
Ban vehicular intrusions that are disruptive to wild horses in all HMAs and minimize other commercial uses within HMAs that disrupt wild horse populations.
Provide American people the science you base your so called facts upon, with regard to overpopulated Mustangs.
Please change the current wild mustang and burro management policies and made them more equitable for these animals, instead of favoring welfare ranching practices and local interested. I'm tired of my tax dollars being wasted on the mismanagement of these wild mustangs and burros. They deserve our sincerely protection.
As a private American citizen, I oppose any plan that minimizes the public land access to the wild horse and burro populations and the reduction of those animals.
We need to manage more of the land for the mustangs and burros. They deserve to have more of the allotment of grazing lands.
The population estimating system is flawed and biological studies of the herds need to be conducted fully and properly before eliminating the herds, or decreasing them to a point of non-viability.
Please take into account the public's wishes when you craft the new Battle Mountain Draft Resource Management Plan. These lands belong to the PUBLIC, not the ranchers, yet the ranchers' interests are the only ones ever adhered to. These lands also belong to the horses and burros who live there, yet the BLM continues to cruelly round them up all so the ranchers can let their cattle take over grazing the land and all for only pennies on the dollar. This is such a waste of our taxpayer dollars and ruins these horses and burros lives forever. Currently there are 40,000+ horses corralled in federal holding pens and it costs a fortune to feed them. And here I thought the govt. was out of money. They never seem to run out of money when it comes to keeping the ranchers happy. I really hope you come up with a responsible, humane plan and allow the horses and

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burros to remain in their home. It's time to zero out the cattle instead of the horses and burros
I strongly agree with the implementation of in-the-wild management, which would keep wild horses on the range and save taxpayers millions annually by avoiding the mass removal and stockpiling wild horses in government holding facilities.
AMERICAN mustangs have a right to roam FREE on American rangeland. They were here before the ranchers, their cattle, and the BLM, and have every right to stay in their home.
Please consider the American public and their ACTUAL wishes and increase the amount of our land available for the wild horses. Commercial usage, including mostly ranching and energy companies have had their way with our public land for too long at the distinct detriment of the wild horse. Please ensure that wild horses and burros are afforded equitable distribution of resources within designated habitat areas.
People living in that area need to have the round ups. These round ups offers additional income to the residents. Looking at the spending of 77 million dollars in 2010. Most of which was used just to round up and house an additional 12, 000 wild horses seems to be frivolous and wasteful spending. After these horses are rounded up, the BLM must pay someone to transport them, process them and then ship them to smaller holding facilities. Do the residents of that area really need the income gained from the round ups? From the looks of things it seems that there is no other employment available in the whole mustang area of Nevada. To me it is no longer about the cruelty of the round ups, that speaks for it self in all the footage from all the round ups this year past alone. It is now about the economics of the round ups and the greed of making money from their suffering. I can only hope that someone in the BLM offices has enough inner strength to put a stop to the greed, before it is too late.
Please, if you have to do something, don't use the damn helicopters. It scares the horses. There has to be a better way, i.e. on horseback for one thing.
Please uphold the spirit of the Wild Free-Roaming Horses and Burros Act.
When conducting your drafting the Resource Management Plan (RMP) for the Battle Mountain district, I urge you to consider wild horses and burros and their future on the range. The new RMP needs to support the wild horse and burro population as a symbol of the American West and an admired icon by the American public. I urge that you take the following into consideration: ● Raising the Appropriate Management Levels (AMLs) for wild horses and burros ● Allocating the majority of forage in the area for wild horses and burros ● Improving existing water sources ● Removing fencing to allow for free roaming wild horses and burros ● Allow for a genetically viable population on each area of the range ● Consider predation as a way for natural population management Wild horses and burros have historically received only a minimal portion of the pie, and I urge the Bureau of Land Management to take a good look at the impacts of wild horses and burros compared with livestock. Wild horses and burros should be the principal users of these public lands, and I cannot support the mismanagement of these true symbols of the American West.
Maybe it would do the BLM good to review the practices of the AK BLM. Please stop these ridiculous round ups. Save our wild horses so that my children will be able to see our heritage.
Livestock and other commercial usages should not be allocated more resources or given preference over wild horses and burros in designated herd management areas.
Horses that were roundup by Sun J are sick because of the time of year roundup was conducted and the contractor who conducted roundup should be held accountable as well as agency who contracted. Sick horses at holding facility is no joke either is covering it up. Number of reason why this should not go any further. 1) Necropsy shows result's of death's caused by roundup procedures. 2) Young horses don't have a fully functioning immune system and exposing them to continued stress will end in a death's sentence. The same happens to humans. No immune system no life. 3) I oppose any further roundup and Sun J pilot should be reported to the FAA for repeated violations of animal cruelty by use of vehicle and lack of experience. Who ever took over operation of round ups should be removed from position. 4) 5) Currant numbers of wild horses in target area's does not justify further action. 6) Care of horses in what you call short term holding should be returned to repopulate area's decimated by these actions 7) The Recorded video's of roundup has been circulated around the nation and news media.

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Wild Horses and Burros

I really don't understand why fertility control was not used over this round up. And I don't understand why you would not consider the other refuge. I think you need to tell the American public your reasoning behind ignoring other options here. And why is 4730 missing out of your decision reports? Doesn't say how you put these unwanted or unhealthy animals down. Some say a bullet to the head. I assume gun since you can really handle these animals. With them moving everywhere, how can that be humane? Why not let the vets dart them with the drugs instead?
Using the "200 year" rule is short-sighted and relies on too few opinions in this matter.
Update your reports to include new realities such as the increase in average size of cattle to show higher consumption of forage to ensure a more accurate, equitable and scientific manner of allocation.
Seek other types of population control methods especially newer, better and more advanced forms of contraception and birth control. Seek not to disrupt herds with gathers which makes them wilder and wilder and thus more prone to injury and death.
Set your goals to include making more options available for the wild horses and burros, and eco-tourism, in your management goals.
Multi-use doesn't mean all uses on the same acres. Also checkerboard type situations should never be used for wild horses and burros.
Information on scientific verities which show how wild horses and burros can improve the range is blatantly missing in your writing.
Please don't keep these wild animals in holding pens. It is wrong for the horese & wrong for the Taxpayers Give them more land & water & Take Down The Fencing, Please
AMLs need to be a minimum of 200 animals for each herd area within each dedicated wild horse management area. BLM's own contracted equine geneticist expert has advised this is the lower limit of AML in order to guard genetic diversity/viability.
Wild horse and burro Herd Management Areas (HMA) must be managed to ensure that the Appropriate Management Levels (AML) of horses and burros are being maintained. In order for this to occur, scheduled inventory efforts should be performed before signs of deteriorating range conditions are documented. As horse or burro numbers approach AML, timely gathers should be conducted to remove excess animals including all other horses outside of the HMA's. NDOW is concerned that wild horses and burros are moving outside the HMA boundaries and are impacting key wildlife habitats. Riparian areas and springs in active HMA's should be monitored for utilization, vegetation trampling and soil compaction and if management cannot address impacts, exclusion should be considered. NDOW supports BLM's effort to utilize the full range of management tools at their disposal to ensure that horse and burro numbers are maintained at or below AML. These tools include the use of sex ratios, chemical or surgical sterilization, adoption and other activities which remove the animals from rangelands.
NDOW is very concerned about the consideration of the conversion of cattle use to horse use on allotments. Wild Horses, as super competitors, prevent wildlife use at water sources making those areas unavailable for wildlife use. In addition, NDOW is not supportive of burro herd expansion into previously unoccupied rangeland.
I understand that The BLM is seeking public comments on its plan to revise the 25-year old Battle Mountain Resource Management Plan (RMP), which sets land use policies for BLM lands in central Nevada. I understand that this process will determine population levels and resource allocations for wild horses and burros living in this roughly 1.8 million acre public lands area. Traditionally these areas have been managed to maximize livestock grazing at the expense of wild horses. This is wrong. The wild horses and burros should receive their share of the resources on OUR public lands. I'm sick and tired of the horrific roundups and the waste of tax dollars to stockpile these marvelous creatures. If these holding areas were investigated I would bet money that there would be many cases of abuse and neglect where these horses are concerned while in the "care" of the BLM. Thank you for taking public comments. Its about time that our voices are heard. I cannot understand why the BLM isn't totally open to working with Madeleine Pickens. I heard a newscaster opine that "The BLM doesn't went to lose control" of these animals. Guess what.... to me they have no control. I make my decisions at the polls as to whether or not our politicians are listening on these issues and how they vote on them in the House and Senate. I believe that the BLM needs to give these horses and burros the protection they deserve to live wild and free….our country was built on their backs.

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Wild Horses and Burros

I have been aware of BLM roundups and disposal of our wild horses for many years. I have also been aware of the abuse to these wild animals by those who would call the roundup, intemment and /or disposal of them necessary and humane I question just how necessary it is and how humane... I say...necessary for whom...the horses or the ranchers who covet graze for their cattle? It is my express opinion, and desire that these roundups stop, that the destruction of natural predator be stopped. There is a place for wildness. Without it we are less than human For God's sake, let these beautiful animals live wild and free.
I am sick and tired of hearing about the BLM's plans to remove our wild horses from public lands, and mistreat them in the process, so I will simply say, "NO MORE ROUNDUPS!"
The RMP will address, among other issues, how the Bureau of Land Management's (BLM) Wild Horse and Burro Program will be handled in 12 herd management areas (HMAs) located in central Nevada. The HMAs in question cover approximately 1,800,000 acres -- only about 17 percent of the 10,430,000 acres composing the District. While this acreage might seem like a lot, it should be noted that Nevada's mustangs and burros originally had 22,100,000 acres set aside for their use. Over the years, the state's wild-horse range has been severely reduced. Nearly 7,000,000 acres have been "zeroed out" and the wild horses, kicked out. Worse yet, the allowable wild equid population within HMAs is set at arbitrary and misleadingly-named "appropriate management levels" (AMLs). These absurdly low AMLs keep the herds' population below the numbers needed to sustain genetic viability.
AMLs Set per Science. The RMP should stipulate that wild horse and burro AMLs will be set after consultation with, and per the advice of experts in the field of equine genetics. By setting AMLs according to scientific principles, BLM will have a better probability of ensuring that the population of each herd is sufficient to achieve genetic diversity.
HMAs Primarily for Wild Horses and Burros. The Battle Mountain HMAs account for just 17 percent of the public land managed by the District. The rest -- 83 percent -- is off-limits to mustangs. Thus, it is only right that BLM give precedence to wild horses and burros within the HMAs, while still honoring the multiple-use concept. Therefore, in accordance with BLM's authority to do so, the HMAs should be designated as principally for wild horse and burro herds, and managed accordingly. HMAs should be "no mining, no drilling" zones and be ORV-free. Five-mile buffer zones should be established to keep the peace and tranquility of the environment. Energy development projects and transmission lines should be routed around them.
Re-Open the Range. The RMP should provide for the re-opening of previously closed-out herd areas in the District and mandate that they be repopulated with wild equids. This provision will permit the expansion of the wild horse and burro range and preclude the need for roundups and fertility controls for years to come. Cost savings will be substantial. The RMP should rule out the "zeroing out" of herd areas from now on.
AUM Equity, Conversion. The RMP must ensure fairness and equity in allocating animal unit months (AUMs) between wild horses and livestock. For too long there has been a lopsided distribution of AUMs in favor of the latter. Now, however, beef production is in decline. According to the September 7, 2010 "Cattlemen to Cattlemen" show, sponsored by the National Cattlemen's Beef Association, producers are not holding back their heifers to become part of their cow herds for future growth. The principal reasons given for this decision were: Many operators are getting out of the business, young people are not getting into the business, and general economic conditions are poor. The program noted that it takes three years to build a cow herd; so this trend is likely to be long-lasting. Thus, unused cattle AUMs can and should be converted to wild horse and burro AUMs, along with a corresponding increase in the wild horse AMLs, without prejudice to cattle interests.
Btter Fertility Control. The RMP should provide that, until a herd's population reaches the level deemed more-than-adequate for genetic viability, fertility controls will not be used. This provision is critical in light of the sudden and unexpected drop in population recently disclosed in the neighboring Clan Alpine herd. Further, the RMP should provide for the transition to an improved contraceptive as soon as one is available. The current immuno-suppressive drug has too many adverse side effects and unintended consequences, including breeding selection for immuno-compromised individuals, sterilization, masculinization of mares, deterioration of band fidelity, and prolonged battling among stallions over mares that continue to display estrus month after month.
Btter Tracking and Population Modeling. With regard to tracking and locating the wild horses and burros, the RMP should specify employing inconspicuous electronic devices. The use of disfiguring freeze-marks must be prohibited. It should be noted that electronic tracking can also provide a record of each mustang's personal data for longitudinal studies. Finally, the RMP should stipulate that any software programs using population modeling to project herd growth must be based on data obtained on the specific herd in

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question and be updated per field studies conducted at least every five years. The goal must be to base decisions on actual proof, not "proofiness."
Puma Protection. The RMP should introduce a program of carnivore conservation to permit natural predator control of wild horse and burro populations. Such a program would actually tend to strengthen the herds and would save costs. Concerned cattle operators should be encouraged to use livestock guardian dogs to protect their animals. There are several specialty breeds that have been developed just for this purpose, and they are reportedly effective. BLM might even consider buying a number of trained guardian dogs, which could be placed, upon permittee request, with herds or flocks experiencing attacks.
Kind Roundup Method. The RMP should institute a kind approach to gathering wild horses and burros: Roundups should be done slowly, quietly, and gently. They should be conducted by trained riders on horseback, contracted through equine advocacy groups. The mustangs should be gathered one band at a time to preserve family structure, and roundups should be conducted every year in late autumn instead of massive rodeos every three-to-five years. Small-scale, annual fall roundups will mean fewer horses will come up for adoption, and they will be available just in time for the holidays. The horse adoption market won't be overwhelmed -- as it is now -- and fewer mustangs will need to be placed in sanctuaries, preserves, or long-term holding. Such an approach will prove cost-effective, enabling BLM to redirect its budget to rangeland improvements. The role of the Wild Horse and Burro Specialist will be enhanced by the new duty of overseeing the gentle gathers. BLM's public relations will be enhanced by the good will resulting from the kind approach to roundups. The wild horses and burros -- particularly the young and the old -- will no longer be terrorized by helicopters and stampeded for miles in the summer heat or winter cold. Mustang advocates, no longer antagonized, will become BLM allies.
Innovation. The RMP should provide for experimentation with innovative approaches for managing the Wild Horse and Burro Program. For instance, to help support the Program with less dependence on the annual budget, there could be a campaign called "Adopt a Mustang in the Wild." For a nominal donation, moderate-income persons across the country could each "own" a wild horse. Such a program would likely be so "wildly" popular that BLM might even run out of enough horses to accommodate would-be sponsors. The income generated could be put to good use for range-pasture improvements and the development of water resources. Another initiative could be the promotion of eco-tourism, with a "Mustangs -- See 'em in the Wild" marketing slogan. Wild horse advocacy organizations would likely be eager to help BLM administer both projects.
My concerns pertaining to the wild mustang are based upon their survival as a unique feature of the American wilderness and preventing them from being wiped out. It only takes a quick look at the statistics to convince anyone that populations are being reduced to levels unsustainable in terms of genetic diversity needed to assure the continued survival and existence of the wild mustang. At this point the number of mustangs on public grazing lands is so low that it is ridiculous to claim that they are competing with cattle or overgrazing the public lands. Frankly, any overgrazing is done by cattle. I also do not buy the argument that mustangs are am 'invasive species' put forth by some in the cattle industry. Albeit, horses are a reintroduced species but then again so are European cattle. In combination with a reasonable applied program of chemical birth control (as is being used in some instances), it would be cheaper for the federal government to subsidize qualified private individuals to adopt the excess population instead of turning long-term holding schemes into a major industry.
I am troubled by the rounding up of so many horses at a huge cost on an annual basis. I am troubled by it because it does not add quality of life to the Horses and Burros. Also, it appears to be contra to the Free Roaming Wild Horse and Burro Act of 1971. I do not see how culling the herds by incarcerating them is what our original goal was. I would like to see the reestablishment of larger areas for the Horses and Burros to roam. This would solve the problem of in breeding and afford healthier genetic diversity among the different bands. Also, it appears that cattle are getting the benefits of the doubt here as they receive priority for grazing rights and cause a toll on the soil and water sheds. Whereas the Horses are a better match for the landscape and reseed their own forage along with opening water holes for themselves and other animals in strategic times of the year. All the the above is to say, I do not like what I am seeing. It appears that the BLM is systematically reducing the herds of Wild Horses and Burros and calling it "management", which I do not agree with. I want the AML's raised. I want more land available without fences for their natural behavior to ensue and to perpetuate healthy herds. I want an increase in the population roaming free and I want the holding pens to be empty because we prioritize the "Free Roaming Wild Horse and Burro Act of 1971". And most of all I want an end to helicopter round ups and I want the BLM to hear me and so many other Americans who are not in favor of your current "management" of our Wild Horses and Burros.
Please allocate the majority of forage to the wild horses and burros. They are an American icon and deserve to be protected, not driven to extinction. These round-ups are upsetting the natural selection process and hurting the environement. Please improve the existing water holes and take down the fences so they can roam free. The wild horses

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and burros should have the public lands to live on, not cattle or other money making investments. We humans are using too much of the land for our benefit. There is more than enough land for these horses and burros to live very well on. It is the cattle that are grazing and ruining the land, not the beautiful creatures that really belong there. This is just another way humans are over stepping their boudns and taking what is not ours to take. Please leave the wild horses and burros right where they are. Nature will take care of keeping the herd genetically sound and natural predation will manage the population. Please do not destroy these herds. Leave them alone!!!
I oppose the waste of tax dollars to roundup up 1,726 wild horses, or approximately 78 percent of the estimated population in the Triple B, Medicine Maverick and Antelope Valley BLM Herd Management Areas (HMAs) and the Cherry Springs Forest Service Wild Horse Territory. The management approach detailed in the EA continues the unsustainable cycle of roundups, removals and stockpiling of horses in long term holding facilities. It also perpetuates the unfair allocation of resources within the HMAs to privately- owned livestock rather than federally- protected wild horses or other wildlife species. The BLM has set an artificially low Appropriate Management Level (AML) of just 472- 889 wild horses for this 1.7 million- acre range, yet authorizes up to nine times that number of livestock to graze the same area. The EA states that horses must be removed to prevent undue or unnecessary degradation of the public lands" and to "restore a thriving natural ecological balance," However, no threat to the "thriving natural balance" is greater than the extensive livestock grazing authorized by BLM in this federally- designated wild horse area. Yet the proposed action includes only removing wild horses; no reduction in sheep and cattle grazing is proposed. The EA is deficient because it: - is devoid of monitoring data, including data that supports the claim that horses are overpopulating the range and/or causing damage for the range. The EA is further devoid of monitoring data that clearly separates the impacts of livestock and wild horse use. - fails to consider the fact that horses utilize the environment, including stream riparian areas, very differently from cattle - fails to provide adequate information about water sources on the range, including how fencing and engineering of wells and springs for livestock grazing has impacted water availability for wild horses and other wildlife species. - omits any information about fencing within the HMAs, including of the impacts of existing fencing on wild horses. - fails to consider a reasonable range of alternative actions. Components of the alternatives examined are very similar. BLM discarded viable alternatives, and did not take the required "hard look" at those it did consider. - fails to adequately assess the harmful impacts of stampeding horses - - including the elderly, ailing and young foals - - in the heat of the summer in the desert. No alternative was considered for conducting the capture operation at a safer time of year, when temperatures are cooler and foals are older. - fails to provide any scientific justification for the plan to return horses to the range in a 60- 40 male / female sex ratio, including analysis of the impacts on wild horse behavior, welfare and reproduction. As a result, this EA should be scrapped in favor of a management plan that deals with today's fiscal realities and overwhelming public sentiment against the roundups and in favor of managing wild horses on the range where they belong. I urge the Ely District Office to avert the need for this costly roundup by: – Re- evaluating and increasing wild horse AMLs by reassessing and amending plans under BLM's Adaptive Management Policy (established by Interior Secretary Order N0. 3270, March 9, 2007); - Decreasing or eliminating livestock grazing in affected HMAs pursuant to 43 C.F.R. 4710.5(a); and - Designating such areas to be managed principally for wild horse herds under 43 C.F.R. 4710.3- 2.
I have been following the ongoing BLM programs in regards to Wild Horses and Burros in the west and urge the Battle Mountain Office to consider the interests of all Americans, not Just those who are receiving cowboy welfare and other special interest groups when crafting the new Battle Mountain Draft Resource Management Plan and all other land use documents tied to it. strongly believe the new Plan must recommend viable options for increasing wild horse and burro numbers to sustainable and manageable levels.
It must also include reinstating wild horses in currently zeroed out herd areas, which have been falsely created to accommodate special interest groups , and must ensure that wild horses and burros are afforded equitable distribution of resources within the designated habitat areas. Public lands and their resources, which include all flora and fauna must be managed to the satisfaction of all Americans, notthose select special interests in a particular state. America is a free market society. The needs of special interest groups should not hold sway over the interests of all Americans or given preference by the government, Special interests like all businesses must learn to compete in the market for available resources and not have these resources manipulated for their intej.gsts by the government.
Horses and burros need to be kept to manageable levesl with minimal impact upon native systems.
These wild horse roundups are cruel. Helicopters have no place rounding up these animals. It casues stress and death. The American public cares about these animals- they are a symbol of our heritage. Eventually with enough opposition this will stop.

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Based on research (and common sense when evaluating herd numbers-to-acreage), wild horses have little impact on Nevada's range land and water resources, especially when compared to the cattle who are allowed to deplete resources in growing numbers. As a U.S. citizen and Nevada resident, I absolutely object to wild horse gathers in this district, and in Nevada as a whole. The BLM's continued and ongoing gathers are not only a unnecessary burden on the taxpayer, but are depleting our lands of few remaining wild horses. These wild horses belong to American citizens, and we want them to run free. Further, it is my understanding that the wild horse's water rights and "use" could be in question. Wild horses and burros absolutely have water rights, as a protected animal under federal law, and they serve as a beneficial recreational use as we love to view them on our lands as a national symbol of freedom. As the BLM erodes the freedom of the wild horse, they in turn erode the freedom of the people whom government is meant to serve. So please, allow the horses and burros in this area to live in freedom and ensure their numbers are preserved.
I do not want wild horses and burros on our PUBLIC rangelands to be gathered and removed when BLM methods result in stress, trauma, injury and death to these creatures!!! And I don't want it done because it's only about ranchers' bank accounts! Suggestions have been received from experts regarding ways to better protect these animals during gathers (if these are even necessary); don't try to hoodwink us into believing the BLM is CONSIDERING the suggestions -- see that they are IMPLEMENTED!
Please make it a priority to bring wild horse populations to appropriate management level.
The wild horse populations can peacefully coexist with any and all efforts to utilize the Battle Mountain District for whatever energy gathering methods that are now being contemplated
I oppose the Battle Mountain roundup, and opt for BLM to accept Madeleine Pickens plan to bring them to her sanctuary.
Stop the Round Ups!
Oct. 1997 Tonopah RMP/ROD analysis (This document is available online at www.blm.gov/pgdata …): Livestock Grazing Management, p. 12: The initial stocking level for Tonopah East area is 134,355 Animal Unit Months (AUMs) while that for the Tonopah West area is 46,371 AUMs. I note that BLM promises adjustments in use for each grazing allotment based on monitoring data in consultation with the permittees and other publics. In Appendix 16, Livestock Grazing, p. A-75, it states that livestock have harvested an average of 73,385 AUMs of forage annually over the past five years, presumably 1993-1997. Presumably then, the initial stocking level total for BLM's Tonopah region of 180,726 AUMs has had to be reduced to 73,385 in order to accommodate other values such as wildlife including wild equids and/or due to the ecological trends revealed by monitoring. This is a reduction by 59% from the initial stocking rates and reveals possible over-exploitation by livestock that could have occurred in earlier years. However, I am perplexed to see that the livestock stocking rate has been greatly increased under the 1997 RMP, as evidence Appendices 5 & 6, pages A-12 through A-15. For the Tonopah East sector alone, this amounts to 134,355 AUMs, which is the equivalent of 11,196 year-round cattle foraging on the public lands, while for this same sector, the initial wild horse/burro 4 herd sizes amount to only 8,430 AUMs, representing a year-round usage by 694 wild horses. The total acreage covered by the 20 livestock grazing permittees' allotments is 3,435,034 acres. These figures reveal that within the Tonopah East sector there has been occurring 16 times more livestock grazing than wild horse/burro grazing and that there are 307 acres per individual cow (that often includes a calf) while there are 4,950 acres per individual wild horse or burro. This is an enormous disparity between livestock and wild horses/burros and reveals just how nearly empty this rangeland was in 1997 when it comes to WH/B in the Tonopah East sector. As concerns the Current Forage Allocation for the Tonopah West sector in Appendix 6, there are 14 livestock grazing allotments whose permittees were given 46,371 AUMs in 1997, the equivalent of 3,864 year-round cattle grazing. The initial herd size for wild horses/burros was 1,305 of which 377 were burros and 928 horses, for a total year-round forage consumption of 15,780 AUMs. The total area in Tonopah West is 2,428,707 acres. These figures signify that in 1997 in Tonopah West, there were 629 acres per year-round cow grazing equivalent and 1,861 acres per individual wild horse/burro. Basically there is three times more desert forage consumption by livestock than by wild equids in Tonopah West. While this is much fairer than the 16 times more livestock forage consumption than WH/B, it is still a marginalizing of the wild horses and burros in these their legal herd areas. Taken as a whole in both the Tonopah East and the Tonopah West sectors, the Tonopah region of BLM's Battle Mountain District possesses a total area of 5,863,741 acres and a total livestock grazing allotment of 180,726 AUMs. This is the equivalent of 15,061 year-round cattle (many with additional calves) grazing in the Tonopah Field Office Area of the Battle Mountain BLM District in 1997. This compares with a total of 24,210 AUMs worth of forage being eaten by 2,018 wild horses/burros (1,999 if totaling previously BLM-given figures). So, basically, there is 7 & ½ times more livestock grazing going on in the Tonopah region than there is wild horse/burro grazing. And there are 389 acres per individual year-round-grazing cow (plus likely calf) in this sector, while as concerns the wild horses and burros, there are 2,906 acres – nearly 3,000 acres – for every single solitary wild

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horse or burro living out its life in this vast area of our public lands in the Tonopah sector of the Battle Mountain BLM District. This is, indeed, a nearly equid-empty area, yet claims by WH/B detractors that this region is overpopulated by the wild equids are frequently heard. This is a form of scapegoating for abuses to the public lands attributable to the livestock industry itself and the government officials who accommodate them, among other reckless exploiters. (Good check: 2,906 acres per wild equid divided by 389 acres per cow = 7.47 or nearly 7.5.) Add to this the fact that in certain allotments the livestock are often allowed to graze during seasons that produce the most verdant and nutritious forage, i.e. late Spring and early Summer, and the disparity between livestock treatment and wild horse/burro treatment becomes even more apparent. (I remember noting this particularly in the Montezuma grazing allotment and the WH/B HMA bearing the same name in documents concerning seasons of use that were shown in the Tonopah Field office on 2/3/2011.) Wildlife, including WH/B must survive year-round in the dry desert of the Tonopah region; therefore our public officials should curb livestock usage in these dry areas and provide more for the natural community to enable populations that are genetically viable in the long-term. I am very concerned about the reproductive isolation that the diverse WH/B populations are experiencing in the Tonopah BLM and USFS conglomeration of WH/B HMAs as well as the WH/B Territories (USFS). Please address this issue in your revised RMP and EIS, as well as the disparity issue as to livestock vs. wild equid forage allocation brought up earlier in this scooping input letter.

Recent Tonopah Field Trip Observations and Related Thoughts/Issues: We traveled from Feb. 1 – 5, 2011, and personally visited the following HMA's/WHT's: Marietta Burro Range (where we observed 23 burros in good condition), Montgomery Pass WHT/HMA (these were both outside the Tonopah BLM region and were visited on 2/2/2011); Saulsbury WH HMA; Stone Cabin WH HMA (both on February 3); Montezuma Peak WH/B HMA, Goldfield WH/B HMA; Palmetto WH/B HMA; Silver Peak WH HMA; and Fish Lake Valley WH HMA (these latter five HMA's visited remainder of journey). 5 We are grateful for guidance provided by Mr. Dustin Hollowell, Tonopah WH/B Specialist. Without this it would have been more difficult to locate any wild horses for viewing (though in spite of extensive areas covered we saw no burros). In general, it was very hard to locate any WH/B, except for those wild horses occurring on the east side of Stone Cabin HMA, where we saw over 100 in over a dozen distinct bands, both to the north and to the south of U.S. Highway 6, and especially near Gifford Well. They were in fine condition with thick winter coats. Two widely spaced bands – also in good shape – were seen in the southern Monitor Range off Highway 6 in the southern Saulsbury WH HMA, though we had to search extensively and with the aid of binoculars in order to finally spot them. Our diligent search in the Montezuma Peak, Goldfield and Palmetto WH/B HMA's yielded not a single wild horse or burro, though rare droppings and tracks were encountered in the first two, which were those of burros. In earlier years, I could always count on observing the burros of the Montezuma Peak and Goldfield HMAs, but not so this time. A scouring of the southern Silver Peak and Palmetto HMA's producted neither any WH/B sighting nor any spore. Several evenly distributed wild horse bands were finally encountered, filmed and audio-video taped in the Fish Lake Valley WH HMA. These were outstanding wild horses, very alert and energetic. They clung to the eastern foothill of the prodigious White Mountains, of ancient Bristlecone Pine fame. Earlier we had observed a band of six WH's at the northern pie-de-mont of the 13,141-feet-high Boundary Peak (Nevada's highest mountain) in the Montgomery Pass Wild Horse Territory in the Inyo National Forest. It seems the steep terrain and forested habitat provides much needed shelter and respite from livestock monopolization of the public lands elsewhere in this legal herd area. The general sparsity or downright absence of wild horses and burros throughout ca. 80% of the legal HMA/WHT acreages inspected has me concerned that population fragmentation leading to inbreeding is occurring among Tonopah BLM sub-district's WH/B herds. Is BLM going to examine this fragmentation issue in its Tonopah RMP and EIS? I certainly recommend their doing so. This goes hand-in-hand with tackling the fairness issue as concerns livestock vs. wild horse/burro forage allocation. Just for the record, are BLM officials going to examine this issue in the revised Tonopah RMP & EIS (Environmental Impact Statement)? I certainly do hope so and strongly recommend that the wild horses and burros receive over 50% of the forage allocation within their legal HMAs. This would be in accord with the Wild Free Roaming Horses and Burros Act of 1971 (Public Law 92-195), which stipulates that legal herd areas where these animals were found in 1971 (meaning their year-round habitat) are to be managed "principally though not necessarily exclusively" for them. This has clearly not been happening in the Tonopah sector of BLM's Battle Mountain District. What are BLM officials going to do to remedy this very unfair treatment of the wild horses and burros in the Tonopah BLM region? And what is their justification for the status quo in regard to livestock vs. wild equid forage allocation? I would certainly appreciate answers to these and earlier questions and ask that these be specifically addressed.

I am also asking: What will BLM do to address adequate water availability for the wild horses and burros of the Tonopah BLM region, both East and West? Water is the critical limiting factor in Nevada's dry deserts. Due to an increasing demand from mining (especially enormous Open Pit mines that consume vast quantities of water and toxify the water source for centuries to come) as well as alternative energy projects especially solar, it is imperative that this issue be addressed and that the rights of the WH/B be asserted rather than relinquished. Too often in the past, it seems BLM officials have abrogated their responsibility to the wild horses and burros by simply going along with any excuse for their reduction or outright removal. I cite as a case in point the wholesale removal of the Caliente Complex of WH HMA's under the Caliente Field Office of BLM's

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Ely District. In the Fall of 2009, 1.4-million acres in 12 separate HMAs, containing an estimated population of only 620 wild horses, were zeroed out of these horses by contracted helicopter roundups in spite of well-founded legal protests by several people including myself. Now I realize that much of this area is slated for solar energy projects requiring much water. So I have been prompted to ask by the knowledgeable TV producer Ms. Moffat: Is BLM considering using the many urban and suburban rooftops that would be readily available instead 6 of the public lands for its renewable solar energy projects? It certainly should, for the public lands in and of themselves are far too precious to be overtaken by these and other similar projects (Ref. Argonne National Laboratory, Proposed Solar Energy Zone in Nevada. Map prepared on December, 2010). They are our last relatively wild and free, open spaces and possess incalculable values for preserving and restoring life on Earth, including that of mankind.
Among these values are those magnificent wild horses and burros who continue to dwell free on these lands and lend such uplifting grace thereto. To forget about these wonderful presences and to target these for reduction to cripplingly low levels or for outright elimination is to debase our relation with these animals and the ecosystem to which they belong and to which they contribute so much that is of a positive nature. But we two-leggeds must learn to appreciate in a truly positive light the value of a wild-horse-or-burro-containing ecosystem. And we must learn to share both freedom and the land with such deserving animals who have done so much for us over the centuries. Their ecosystem must become our ecosystem, an ecosystem we make possible for them by protecting it and letting it be. This life community is one where horses and/or burros are harmoniously integrating, but we humans must give this process the space and the time and the opportunity to realize itself. To this end, I am proposing the adopting of a professional Reserve Design strategy for the attainment of self-stabilizing WH/B herds within naturally suitable regions that provide the needs for each individual herd's long-term viability. This is possible if we employ the natural barriers and predators that are already in many cases present – such as in the selfstabilizing herd of the recently visited Montgomery Pass WH HMA/WHT.
Also Buffer Zones must be implemented with WH/B HMA/WHT bordering human communities though a positive approach making these people defenders rather than enemies of the wild equids and their natural home. So I am asking: what is BLM planning to do to incorporate the very wise principles of Reserve Design into its RMP and its future provision for these much loved, though also much hated, animals? In the ultimate analysis, the answer to this question will depend on whether it is Love or Hatred that prevail in the hearts and minds and wills of we people.
In general, this is what I ask of you our trusted public servants: that you increase the woefully low wild horse and burro AMLs throughout BLM's Battle Mountain District so that they can regain long-term genetic viability and ecological adaptation to their specific areas. This will make possible their greater self-stabilization of population numbers when they are allowed to fill their ecological niche. This signifies that they will not be so frequently and so drastically reduced by draconian helicopter roundups as they are at present. These thoughtless and ill-conceived roundups are grievously thwarting the wild horses' and burros' natural adaptations to those unique ecological communities where they are so marvelously integrating – if we will only give them the chance.
In this connection, I have but two further questions before parting: (1) What is your plan for promoting WH/B eco-tours as a way of increasing their value to society as well as a way to facilitate their public monitoring, vigilance, objective study, and protection?
And (2) What is your stand on whether the horse is a returned native species to North America, filling a niche only recently and very briefly vacated, paleontologically speaking, and how might this affect your policies toward their having a more just share of our public lands?
The Shoshone-Eureka RMP (1986) and the Tonopah RMP (1997) establish policy to manage public lands in the jurisdiction of the Battle Mountain District Office have set policy based on a misallocation of resources within this 10.5 million-acre area, which includes 3 million acres specifically designate for the surviving 27 Herd Management Areas (HMAs). (The Shoshone Eureka Planning Area contains 12 HMAs totaling approximately 1,800,000 acres and the Tonopah Field Station contains 15 HMAs totaling approximately 1,200,000 acres.) The history shows existing RMPs allocate more than 25 times more forage to livestock than to wild horses and at least eight times more forage to livestock than wild horses in HMAs. These decades-old public lands policies, which is driven by commercial livestock interests, is unacceptable in the present day, when millions of American citizens want to see our protected wild horse and burro herds protected and preserved. When revising its land use policies and establishing Appropriate Management Levels (AMLs) for wild horses and livestock grazing allotments, BLM must consider social factors including prevailing public opinion. This was highlighted in a 1982 National Research Council report on the BLM's wild horse and burro program: Attitudes and values that influence and direct public priorities regarding the size, distribution, and condition of horse herds, as well as their accessibility to public viewing and study, must be an important factor in the determination of what constitutes excess numbers of

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animals in any area. . . [A]n otherwise satisfactory population level may be controversial or unacceptable if the strategy for achieving it is not appropriately responsive to public attitudes and values. . . . Biologically, the area may be able to support 500 cattle and 500 horses, and may be carrying them. But if the weight of public opinion calls for 1,000 horses, the area can be said in this context to have an excess of 500 cattle. For these reasons, the term excess has both biological and social components. In the above example, biological excess constitutes any number of animals, regardless of which class above 1,000. Social excess depends on management policies, legal issues, and prevailing public preference.." Over the past year, the BLM has received tens of thousands of letters, emails and telephone calls from American citizens opposed to the mass roundups and removals of wild horses from public lands in the West. Americans have weighed in on the Secretary's proposed strategy for reform of the BLM program, as well as in comments on Environmental Assessments and scoping requests for Resource Management Plans. The public's outrage over the current costly and cruel policy is increasing as is the call for a more equitable distribution of resources in the small percentage of BLM acres that have been designated as wild horse habitat. This public outcry constitutes a "prevailing public preference" and provides sufficient reason for BLM to reanalyze the division of resources within the HMAs under the Battle Mountain District Office's jurisdiction. This strong public preference also mandates BLM to fully consider all alternatives that would accomplish this goal and avoid the mass capture and removal of wild horses from their home on public lands. The BLM manages the public lands for all Americans not just the local ranchers and others who commercially benefit from public lands; as such the RMP must reflect how Americans want the public lands to be managed.
PREFERRED ALTERNATIVE TO OPTIMIZE CONDITIONS FOR WILD HORSES WITHIN PLANNING AREA The HMAs in the planning area constitute slightly more than one-quarter of all public lands within the Battle Mountain District Office's jurisdiction. On these public lands, current policy authorizes unnaturally small and genetically unsustainable wild horse populations while authorizing livestock grazing at much larger numbers. Given the prevailing public opinion cited above, the Draft EIS must a preferred alternative for: • Maximizing conditions for wild horse populations; • Breaking the unsustainable cycle of roundups and removals; • Managing horses on the range in a humane and cost-effective manner. The AWHPC urges BLM to incorporate a preferred alternative with the following components: • Eliminating or reducing livestock grazing in HMAs, pursuant to 43 C.F.R. 4710.5(a), which authorizes BLM to close livestock grazing on areas of public lands "if necessary to provide habitat for wild horses or burros, to implement herd management actions, or to protect wild horses or burros from disease, harassment or injury." • Designating HMAs to be managed principally for wild horse herds under 43 C.F.R. 4710.3-2. • Re-evaluating zeroes out Herd Areas (HAs) for re-introduction of wild horses and or burros and reinstatement as HMAs. • Minimizing or eliminating harmful activities within wild horse and burro areas, including gas and oil exploration, mining and recreational vehicle activity. • Fairly allocating forage and water resources for wild horses and burros within designated herd management areas. • Giving priority to WHB over livestock and re-introduced or introduced big game species within designated HMAs. • Increasing Appropriate Management Levels for wild horses and burros and basing allowable population determinations on sound science and actual range monitoring data. • Enhancing range conditions, including restoration and improvement of water sources for wild horses and other wildlife species. • Protecting predators, through the establishment of District policies and outreach with state agencies, in an effort to restore natural population control mechanisms. • Utilizing PZP fertility control, where necessary, to control wild horse reproduction and avoid mass removals of wild horses from the range. • Supporting public/private partnerships for the creation of wild horse preserves and to implement alternative, in-the-wild management strategies. • Accommodating horse population numbers over AML through conversion of livestock grazing AUMs to wild horses.
Roundups should only be conducted in verifiable emergency situations. If necessary, roundups must be conducted with respect for the social integrity of wild horse herds; family bands should be relocated intact and not put into BLM holding facilities which are already overloaded.
AWHPC urges the Battle Mountain District Office to avoid the following detrimental population control methods, including: • surgical and/or chemical sterilization of horses; • use of unproven fertility control drugs; • skewing of sex ratios to favor males as a method for reducing reproduction due to harmful impacts on wild horse behavior.
The RMP should call for a number of studies, which include collaboration with environmental and horse advocacy organizations, and actions related to long-term determinations for wild horse and burro population numbers. These include: • effects of water development and distribution projects, vegetative rehabilitation and other wildlife and range development projects on the location, and movement of wild horses; • monitoring studies on herd on herd viability, range condition, viewing opportunities, cooperative management opportunities, and range development proposals. The results of these studies must be provided with the Environmental Impact Statement, along with all range-monitoring and other studies focused on the impacts of livestock grazing on public lands within the Battle Mountain District Office's jurisdiction.

Table C-11
Wild Horses and Burros

Friends of Nevada Wilderness is committed to protecting Nevada's and wilderness study areas and other lands with wilderness character. We are also concerned about the health of wild horese, wildlife and their habitat. When horse numbers increase above leves the lands can support, wilderness values can suffer as can overall health of our public lands. When horse numbers reach unsustainable levels, we are not only concerened about damage to the sagebrush community and competition with native wildlife, but we are also very much concerned about the current and future health of the horese themselves. Because wild horese in Nevada have no nautreal predators, we understand that active management can be necessar to maintain the herds at humanely sustainable leves, without destroyingthe land that sustains them. We support the RMP makding decisions that will keep our public lands healthy.
It would be helpful if the BLM would make an effort to define and explain how it plans to manage wild horses and burros in a "thriving natural ecological balance" with other multiple uses on public lands. While a worthy and legally mandated goal, it is not well-defined whether in reference to the health and welfare of horses and burros nor to horse impacts on wildlife and wildlife habitat. Once there is more general acceptable and support for how to meet the legal mandate for "thriving natural ecological balance" management, subsequent issues mentioned in the planning document, including HMAs, AMLs, Viability and suitability issues can be addressed in a more rational way. The RMP should study HMA boundaries to determine what numbers of animals can be sustainably supported, whether winter or summer range is adequate, and how habitat deficiencies can be corrected. There is a large professional literature on range suitability for livestock which can be adapted to the needs of wild horses. "Viability" is a biological term not used in range management which must be based on professional biological literature and the best available science. We know of no "urban-interface" issues. Any birth control methods to reduce excess population of herds should be cost-effective and be prioritized with the least amount of necessary handling. Use the best available science to determine what age structure and sex ratios meet legal mandates. Any proposed habitat improvement projects should benefit wildlife and other uses of public lands, as well as contribute to meeting standards and guidelines for healthy rangelands.
Wild Horses and Burros: We encourage the BLM to manage horses to the extent necessary to maintain and restore ecological health of rangeland resources within the District.
We have repeatedly witnessed Nevada BLM cutting horse numbers while at the same time keeping livestock numbers the same – or even allowing increases. BLM must conduct monitoring that carefully differentiates between the impacts of livestock and horse use. BLM must re-examine all recent decisions where horses have been cut, but domestic livestock numbers remained the same. The RMP must chart a clear path forward in specific measures to honestly develop AMLs – rather than the absurd livestock "forage" efforts. Horses are bale to move over much more rugged terrain and over very large distances, so impacts from livestock are often quite different. BLM's wild horse program has plagued with deception and cover-ups. In many of the big HMAs, up until the scorched earth round-ups of the past 3 or so years, horses were not taken down to the AML levels set. Thus, the degree of impacts compared to livestock in BLM's minimal monitoring was often based on more horses being present than BLM paperwork showed. Only in rare circumstances has BLM ever developed effective and diligent monitoring to separate wild horse and livestock impacts. See Eckel Soldier Meadows OHA Hearing testimony about relative impacts. Wild horses have large and passionate following in the American public –whose interests have long been sacrificed for domestic cattle and sheepe grazing for a hand full of ranchers
Preservation Campaign's (AWHPC's) Deniz Bolbol, of an old mare collapsing in a Bureau of Land Management (BLM) helicopter stampede is continuing to send shock waves around the nation. According to News 4 Reno, the incident is under investigation by the White Pines County Sheriff's Department for possible violations of the Nevada anti-cruelty statute. Meanwhile, mistreatment of horses in this unnecessary roundup continues on lands destined to become a wild horse eco-sanctuary developed by philanthropist Madeleine Pickens. AWHPC continues to press the case with local law enforcement, federal officials and our elected representatives in Congress to hold BLM accountable for its egregious treatment of our federally-protected mustangs
Include legal land descriptions for all Herd Areas and Herd Management Areas.
Review all Herd Areas within the planning area for reintroduction to Herd Management Status as required by CFR 4700.3-1. Provide a detailed analysis and reasons for previous withdrawals as well as potential mitigation measures that may reinstate wild populations on legally designated Herd Areas.
Identify wild hose and burro use areas as suitable for designation as wild horse and burro "ranges" to be devoted principally as sanctuaries for their protection and preservation as per Section 1333(a) of the Wild Free-Roaming Horse and Burro Act and 43 C.F.R 4710.3-2.

Table C-11
Wild Horses and Burros

Develop Alternatives that incorporate the designation of ACECs (Areas of Critical Environmental Concern) for all remaining wild horse and burro herds and the critical habitat and resources they need to survive to insure self-sustaining genetically viable populations within the planning area as per the FLMPA, Section 202 [43 U.S.C. 1712] (a)(3) for long-term sustainability.
Identify Herd Areas, Herd Management Areas and Ranges that provide unique opportunities to develop public viewing opportunities and/or development of ecotourism based on the promotion of wild herds as well as including an analysis of potential economic benefits this would bring to local communities.
Identify any bands or herds that use two or more Herd Management Areas to secure suitable year-long habitat and resources based on environmental conditions, migratory patterns or seasonal movement.
Base wild horse and burro resource allocations on scientific and rational principles. Incorporate suitability criteria be established within the framework of the RMP as recommended by the National Academy of Science over 30 years ago to better reflect actual use and available forage for free-roaming populations to achieve accurate appropriate management levels and "excess" determinations.
Develop and incorporate within the framework of the RMP the methodology used to distinguish wild horse and burro impacts from livestock and other rangeland users. One potential method is to mandate monitoring and utilization levels be measured prior to the introduction of livestock in a given area order to distinguish class use and impacts.
In all Herd Management Areas, assure management plans will provide allocations and resources adequate to maintain a minimum of 150 animals at all times on the range per individual HMA as necessary to maintain long-term genetic viability according to the best available science. This will help prevent inbreeding or population crashes as required by CFR 4700.0-6(a) and to ensure that populations are being managed as an integral part of the natural systems of the public lands.
In individual Herd Management Areas, prohibit management plans and strategies that fail to provide for self-sustaining wild horse and burro populations lower than a minimum population of 150 animals based on the concept of "genetic interchange" between bands or herds from different Herd Management Areas. The only exception to this could be if BLM can conclusively document known population interchanges by photographs or other identifiable markings of animals on a multiple and consistent long-term basis.
If necessary to provide habitat for wild horses or burros, to implement herd management actions, or to protect wild horses or burros from disease, harassment or injury, invoke BLMs authority to reduce or close areas of public lands to grazing use by all or a particular kind of livestock as established by C.F.R. 4710.5 (a), with the goal of maintaining self-sustaining genetically viable wild horse and burro populations through allocations assuring resources are adequate to maintain a minimum of 150 animals at all times on the range per individual HMA.
Prohibit the use of "blanket" management options that allow for wild horse and burro reductions without supporting data to make excess determinations, i.e., "in the absence of species specific data, equitable reductions in livestock and wild horse and/or burros authorizations will be implemented." The historical problem with the management approach of authorizing "equitable reductions" is there is no accountability or consequence to BLM if they fail to reduce the livestock portion of the projected reductions. Traditionally, BLM has removed wild horses and/or burros or reduced their population objectives while making no changes or increasing livestock authorizations shortly after applying changes exclusively to free-roaming populations.
Prohibit the issuance of non-renewable grazing permits in any wild horse and burro Herd Area, Herd Management Area or Range in order to allow maximum long-term rangeland health due to year long grazing pressure in these designated areas.
Establish criteria within the RMP framework for incorporating periodic monitoring at "key" times to establish data on available water. This should include mandatory flow rates, water quality data, status of historic sources (in order to collect trend data on water availability) and photographic evidence to establish credibility in BLMs data of all water sources in the area versus just an isolated spring or two.
Various related multiple use decisions issued by the Battle Mountain District as well as surrounding areas indicate the potential for significant and cumulative impacts to underground aquifers and water sources due to drawdown. Incorporate provisions within the RMP that provide mitigation measures for water loss, increase available habitat,

Table C-11
Wild Horses and Burros

disperse consolidated grazing pressures, and insure supplemental low cost water sources are available in times of drought or harsh environmental conditions for wild horses and burros as well as other wildlife species within the planning area.
Prohibit the use of any sterilization measures on populations that fall below the minimum genetic threshold of 150 animals or less at any point in time and assure balanced gender structures to preserve natural herd behaviors and social dynamics.
Prohibit the use of any sterilization measures on populations that fall below the minimum genetic threshold of 150 animals or less at any point in time and assure balanced gender structures to preserve natural herd behaviors and social dynamics.
Establish population objectives and thresholds for big game species within the planning area to insure habitats support a "thriving natural ecological balance" between all species. The current policy to omit critical information on species populations, increased pressure on resource requirements and their resulting impacts fails to conform to federal law mandating scientifically sound management decisions and quality data to determine suitable habitat for all rangeland users. As public stewards, BLM needs to recognize and honor their position to preserve and protect all resources for the American people, both now and for future generations. State wildlife agencies have a vested interest in increasing big game populations to increase revenue. As such, studies, data, recommendations and management objectives may contain inherent "conflicts of interest" and biased towards the balanced management of resources on public lands.
Provide for public review a detailed examination and analysis of all current multiple use applications within each Herd Area and Herd Management Area within the planning area. This is to include current livestock authorizations, the percentage each allotment overlaps existing wild horse and burro areas as well as maps clearly showing the relationship and resource allocations between livestock and wild equids within the planning area. The purpose of this information is to help the public be reasonably informed as to BLMs compliance with the Act's mandate to accomplish the protection of wild free-roaming horses and burros through their consideration as an integral part of the natural system of the public lands as well as their relationships with other uses of the public and adjacent private lands as outlined in CFR 4710.3.
With respect to wildlife impacts to critical resources required by wild horse and burro populations, provide current estimated big game populations such as elk, pronghorn, mule deer and bighorn, populations affecting the wild horse and burro areas within the planning district, reasonably foreseeable future big game population objectives for these same areas that may impact management strategies to maintain self-sustaining genetically viable herds.
With respect to wildlife impacts to critical resources required by wild horse and burro populations, provide current estimated big game populations such as elk, pronghorn, mule deer and bighorn, populations affecting the wild horse and burro areas within the planning district, reasonably foreseeable future big game population objectives for these same areas that may impact management strategies to maintain self-sustaining genetically viable herds.
Include detailed analysis of the miles, kinds and locations of fencing within each HA/HMA within the planning district. Reaffirm strict limitations on fencing in wild horse and burro Herd Areas, Herd Management Areas or Ranges in order to preserve their free-roaming behaviors and to prevent entrapment, injury, death or undue degradation of resources due to limitations on seasonal or migratory movement. Authorize the removals of any permanent or temporary fencing that is no longer necessary for management actions in the planning area.
Incorporate protections for predators in and around herd management areas as a management tool for low cost population control and to support the "thriving natural ecological balance".
Incorporate protections for predators in and around herd management areas as a management tool for low cost population control and to support the "thriving natural ecological balance".
Prohibit management strategies that are based on "adoption criteria" as the primary consideration. This policy fails to conform to both the intent and the mandates of the Act. Incorporate management strategies that support historical herd traits and local community values for the bands/herds.

Table C-11
Wild Horses and Burros

Utilize range management to address wild horses and burros who wander across the borders of Herd Management Areas (HMAs), instead of permanently removing them.
Removals of any kind should be rare and minimal. Other methods of management must be employed first and given a fair opportunity to succeed. If a limited removal is necessary, it must be done in a humane manner that respects horse social structure and keeps families intact.
Identify historically significant landscapes due to wild horse and/or burro presence and request that they become eligible for inclusion in both the State and National Historic Register.
Identify history of local herds and bands of wild horses/burros in the planning area.
Include management plans that authorize increasing water availability through the drilling of wells or other methods to restore historical abundance and mitigate cumulative impacts.
Include areas that would be suitable for establishment of water sources that could include potential long-term water trap sites for removals in the event of excess populations needing to be entered into the adoption pipeline to prevent unnecessary harassment, social disruptions and helicopter driving of free roaming herds.
Should HMA boundries be adjusted ,combined or eliminated? Combined. Combining HMA"S gives more room for horses and burros to roam in which causes less impact on the ecosystems. Rotation of HMA's is also a important tool so horse and burro populations can grow.
Please provide evidence in your Draft EA that wild horses are causing more damage to the eco system than all other livestock, wildlife and uses that mandate their removal before consideration of the removal of livestock reduction or other uses.
If BLM is so concerned for the wild horse and Burro habitat why are they allowing so many sheep to graze in these areas at the detriment to the wild horses, especially in light that the horse has first right to their HMA's and sheep reduction should be the first line of defense instead of wild horse herd removal. Please address this in your Draft EA.
Thus,BLM is destroying our wild horse herds, not managing them and they are doing this by targeting them as a destructive species, using PZP-22 in concentrations that destroy family structures , favoring livestock AUMs with higher percentages than the very wild horses are allowed themselves in their HMAs. Clearly this a unfair management practices and must be challenged . Please explain how you will stop this kind of behavior in your Draft EA.
Please present in the Final EA any changes by Congress in the Wild Free Roaming Horse and Burro Act of 1971 that states that the BLM has the right to give more AUMs to livestock and wildlife as well as all other uses in HMA's that justifies you allowing livestock and wildlife and other uses to preside over HMAs for the wild horse thus starving it out of its permitted areas?
I recently video taped the Stony Cabin Valley HMA Feb.3rd, 2011 (see enclosed DVD) where I noted to the public how carefully horses avoid stepping on any salt brush or other plant life. Hoof prints were seen everywhere but no salt brush or other riparian were stepped upon , destroyed or crushed or disturbed. Yet BLM continually accuses the wild horse of causing environmental havoc to riparian life. Please prove this as I have proved in my video tape to the contrary.
BLM states that AMLs (appropriate management levels) should be one horse to every 766 acres of land. Clearly the AMLs are set against the wild horse while allowing AML's for livestock much bigger allowances per acre on HMA's which goes against the Wild Free Roaming Horse and Burro Act. How can BLM deprive horses of their AMLs while giving bigger allowances for cattle and sheep for the year? Please change this critieria and explain how in your Draft EA.
Please justify in the Final EA how BLM can allow for the taking of extreme water usage for other uses on public land yet can deprive the wild horses its natural use of water calling it environmentally damaging to waterholes in its HMA's.?
Please address in the Final EA what livestock and wildlife take from the HMAs in terms of water usage that if minimized would create less stress on waterholes that horses must use within their given HMAs?

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Wild Horses and Burros

When wild horses are allowed to move throughout their given HMAs they don't graze so intensely on a given area. It is as though BLM purposely does everything within its power to create a situation that will force the wild horses to have to remain in smaller HMAs via fencing greatly restricting their natural movement. By nature, horses are meant to enhance the vegetation with their droppings and digestive systems that permit reseeding. Permitted movement can be attained with Streiter Light reflectors along roadsides instead of fencing HMa's in half. These reflective light systems work so well they are used along hi ways throughout Carson city and indeed the world. Please evaluate in the Final EA the use of Streiter Light Reflectors, the taking down of fences and allowing movement for wild horse herds to re populate their HMa's instead of shrinking them down to genetically dangerous sizes as BLM is now doing.
I have witnessed these HMAs, void of any spectacular herd sizes. Small bands of 6 at the most. These HMa's are empty and goes against BLMs reports of over population. I have also witnessed intact eco systems contrary to BLMs reports and I have observed 500 or more sheep grazing in these same areas where little or no horses can be found. Therefore, before BLM can remove any more of the public wild horses there must be an independent evaluation and count done by trusted wild horse ecologists and or a trusted neutral organization to make sure and to verify the counts BLM is making of wild horse populations. .This must be done because BLM has not shown the public any viable proof of overpopulation or distress of HMAs other than their own accounts.
Please evaluate the beneficial aspects of wild horses on the ecology as they are natural gardeners and nature does not create animals without a specific purpose in mind. Continually BLM berates the wild horses showing clearly that it has no idea of the wild horses beneficial attributes to the ecology. Therefore, please evaluate the horses natural beneficial attributes on the ecology in the Final EA.
BLM has not been able to provide any indication of horses suffering from decreased health at these HMA's at this time. If BLM can run these horses 15 to 20 miles in the dead of winter that is testimony enough that these are the strongest healthiest horses in existence and need to be left alone so they can multiply and regenerate the soils and reseed the environment as they go. We need increased populations of wild horses and decreased livestock grazing allotments. Please prove documented veterinary proof in the Final EA that horse herd populations are unhealthy due to lack of forage therefore necessitating removal.
Because BLM shows a hostile stance towards wild horse populations it is imperative that observers be present at close range at these round-ups to make sure the horses are treated in a humane manner. Natural horsemanship should be incorporated instead of the conventional cowboy types and cameras installed in trailers, helicopters and around the traps as advised by the vets that recently evaluated BLMs gathers. Wild horses, having been chased uncertain miles, run into steel traps ,often at full speed with foals at their sides, flagged with disarming white cloths, forced into trucks they have never experienced before is cruel and unusual punishment and the fact that BLM has no idea this is so shows their callous disregard for the wild horses and their predicament. Therefore natural horsemanship must be incorporated at these gathers, patience, video cameras, and vet assessment of horses ability to travel due to stress and exhaustion must be incorporated before this gather can even be considered. Public observers must be given full access to observe these humane handling techniques as is our right under the law. Area observation sites enclosed with steel barriers would ensure safety of individuals wishing to partake in observation days. The lame excuse given by BLM is that horses become alarmed when too many observers are present while they themselves brandish whip like sticks to the newly acquired horses in the traps. Please address in the Final EA how BLM will improve its gather techniques to meet the required standards that show care and compassion to so sensitive and intelligent an animal. Please address in the Draft RMP how BLM will fulfill it's legal obligation to the public to allow for closer observations instead of setting them up on some hill where observation is limited or impossible.
Another concern is the way BLM separates families and returns mares and stallions from broken bands. This is cruel and affects herd stability and could be easily remedied. This also shows that the BLM has no feeling for these marvelous beings who did so much to help make our country what it is today. Instead they separate the families , cause panic due to their impatience to get them hauled. This is unacceptable, criminal and shows a dark side to our government that can no longer be tolerated. The lack of morality, and kindness BLM exhibits towards our wild horses is unacceptable. It is as if they hated the wild horses and longed for their persecution and delighted in bringing them every sadness and misery they can. Therefore I ask that BLM address this malevolent behavior towards wild horses by not allowing families to remain together as much as possible in the Draft RMP EA and seek better solutions that will keep family bands in tact.
Starvation is a natural process. BLM does not round up starving elk or deer because of natural causes .So why the horse? And if they are so concerned for such animals why do they run them for miles in their weakened condition? How can any weak starving horse BLM must put down run uncertain miles in the worst of conditions? Please address your justification of this in the Draft RMP EA?
Cattle must be allotted smaller AUMs to abide by the Wild Free Roaming Horse and Burro Act of 1971 where the horse is given Principal status. Considering that under the 1934 Taylor Grazing Act, cattle hold exclusive rights of grazing on 152 million acres of public lands, the BLM cannot remove horses to accommodate more cattle under the

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premise they are starving or will starve. Since cattle and wildlife complete with wild horses on their HMA , other species, including livestock and wildlife must be removed first to accommodate more food for the wild horses. Therefore cattle and sheep AUMs must be reduced in numbers to accommodate for the loss of food that might contribute to wild horses lack of substance.
Regardless of the science BLM uses that accuses the wild horse of grievances unavailable or discernible to the human eye it is time BLM start documenting the damages horses do that are beyond comparable to mining, and livestock grazing or wildlife uses..
BLM sites trampled waterholes as one of the reasons horses destroy the environment but as some horse activists point out these trampled areas could just as well been created by livestock and wildlife use. Reduce livestock use to AMLs smaller than what they allocate for horses and you reduce the problem.. Trampled water holes is a part of the natural ecology as is witnessed in Africa where millions of herd animals still roam today. All animals tread waterholes. That is their right.
Thus BLM needs to leave the wild horses alone in all three HMAs' or return gathered horses from that area to zeroed out HMAs in other districts since under the Wild Free Roaming Horse and Burro Act BLM is allowed to negotiate with other districts in this regard. Keeping wild horses in small confined areas is completely unacceptable since these animals require movement to retain their ability to survive and their young to develop strong bones and muscle. The adoption of these horses is not economically feasible in this economy which sets BLM up to have to consider feeding them indefinitely or selling them at auctions where I have personally seen wild horse go to horse killers.(www.davenportauction.com ,Washington State.)
I am requesting the BLM show areas in the Draft RMP EA where wild horses have been removed that prove that these areas have recovered from the so called environmental damages wild horses created. This must be done in a way that there is no doubt the damage wasn't done with cattle or other wildlife species.
We need to manage more of the land for the mustangs and burros. They deserve to havemore of the allotment of grazing lands.
Increase the appropriate management levels (AML's) for wild horses and burros. The AML's for many wild horse and burro populations are alarmingly and unnecessarily low. Permitting the AML to be raised would allow for management at the "minimal feasible level" per the Wild Free-Roaming Horse and Burro Act of 1971. The BLM must look at wild horses as a means for economy, not destruction. With over 40,000 wild horses already in holding at the taxpayer's expense, the BLM must start looking at reasonable alternatives and allow for an increased AML. It is fiscally irresponsible to continue to make the taxpayers to pay excessive and unnecessary costs of the BLM's ' management' techniques for wild horses and burros. Wild horses are also an opportunity for the local area to experience positive economic reward through eco-tourism associated with wild horse viewing.
Allocate the majority of forage for wild horses and burros. I urge the BLM to look at the wild horses fairly, especially with comparison to livestock levels. Livestock tend to do far more damage to the range than wild horses, by virtue of their behaviors which are driven by difference in digestion and abilities to exist in area with limited resources. With a post-gastric digestive system, horses have the ability to help reseed their native environment. They also have the strength to break water in the winter, giving other mammals access to fresh water. Wild horse are also upland grazers. Cattle, on the other hand prefer to stay in the lowland near water sources, often defecting in them which wild horses do not. Cattle also rip up many grasses, while horses clip the forage, leaving it to grow again. I urge the BLM to take a fair look at forage degradation resulting from livestock versus wild horses.
Remove fencing to allow free roaming on the wild horses and burro population. When wild horses are blamed for staying in one small area, there is most likely a fence blocking their way. It is the Free Roaming Wild Horse and Burro Act of 1971. There is so much unnatural fencing in way preventing the natural migration of wild horses from different foraging areas as well as their vertical migration up and down the mountain slopes. By removing fencing, it would allow horses to graze and roam freely thereby not overgrazing a small fenced area.
Allow for a Genetically viable population. A genetically viable herd is not a small number of mustangs spread out over a million acres. I urge the BLM to observe the natural behaviors of these social wild horses while conducting this Resource Management Plan. As you know wild horses live in bands with typically one stallion. This band stallion is the protector charged with keeping the family unit together. Frequently the band also has a lead mare whose role is to the guide the band. Other stallions that do not have bands are known as 'bachelors' and will often times try to steal away mares from various band stallions to create a band of their own. However, if the AML is set at a very low level, the wild horses of the area become far more spread out as a population. This has the potential to create smaller pocket herds amongst the HMA's. This does not set a good standard for genetic viability and sets the stage for potential inbreeding. But with a higher AML, the horses would be permitted to act in a more normal manner, where band members can exchange more frequently. Female offspring would be within a reasonable distance from unrelated bands and would naturally select her own stallion. Older colts

Table C-11
Wild Horses and Burros

would leave their father's band to join other bachelors who would attempt to win their own mares in time. The wild horse is the only hooved animal in our hemisphere with such a complex family structure in which the family unit has a male caretaker. Understanding and appreciating wild horse society can lead to more enlightened management that actually promotes more stable bands and slower growth rates.
Consider the possibility of mountain lions as a way for population management. Reducing the hunting and allowing the population of mountain lions to increase would be a natural solution to wild horse populations. Nature has its own way of controlling populations and predation is a major factor. Mountain lions are natural predator of wild horses, usually foals. It is far more economical to allow populations to be controlled through natural means as opposed to the unnatural, cruel, and costly roundups. In a recent predation study conducted by Canadian biologist, they found that mountain lions each much more than previously thought. Indeed, "cougars tended to kill younger animals, especially when preying on feral horses and moose (the largest prey available in west central Alberta)." They also observed a cougar that "brought down a feral horse in less than 30 yards from where it attacked." This predation of wild horses, according to this study, increases sharply during the summer months when more young horses are around.

Table C-12
Fire Management

Priorities for wildfire response should be set in conjunction with a spatial analysis of identified areas of high quality wildlife habitat values. Many of these habitats, if burned, take decades to replace and are susceptible to invasive/noxious weed replacement. Of particular concern to NDOW is sage grouse habitat and mule deer winter range. A stronger commitment to restore and rest areas after wild fires should be included in the Plan Rehabilitation of burned areas should emphasize the establishment of native species or adapted nonnative species that provide benefits to wildlife and the overall health of the vegetative community.
Provide a stable market for native seed by requiring natives for fire restoration (what better role for the gov't. than to stimulate the market so that private entities will begin to step in.)
Provide training of staff and equipment specific to native seed (it's not more difficult, just different from the old methods the agencies are familiar with)
The concept of greenstripping is a concern – wouldn't it have to be ¼ mile wide to be effective? Many grass fires will easily jump an interstate hwy. when the wind conditions are right.
The RMP should consider natural fire ecology in managing wildfires on public lands.
Fire Management: Our organization is concerned about the loss of important wildlife habitat to wildfire within the District in recent years, and we encourage you to adopt management decisions that will allow you to aggressively deal with the potential of losses of important wildlife habitat due to wildfire.
Fire, at present, is not an appropriate restoration technique in many parts of the planning area due to the risk associated with the threat of exotic species invasion following fire disturbance. The looming threat of exotic species invasions following site disturbance such as fire on livestockdegraded lands makes playing with prescribed fire a dangerous undertaking that may have irreversible consequences. Tausch and others had been claiming that cheatgrass would not invade burned PJ. Now that is known to false – and even Underdown Canyon and other sites are being invaded where agencies burned them to kill trees to promote cattle/sheep forage. Fire,"mastication", chaining or mowing are simply an additional (and often drastic) site disturbance on top of the ongoing chronic disturbance of livestock grazing that has altered species composition, function and structure on these lands (Fleischner 1994). Until BLM sufficiently eliminates livestock grazing, and sites recover and heal, use of fire and a plethora of invasive treatments further jeopardizes many native plant communities. Careful and selective hand cutting cutting of younger trees is the best strategy to reduce "encroaching" trees. However, this should only be done after surveys and review of historical records has determined that any trees are actually encroaching and livestock grazing has been sufficiently controlled/removed. Leaving trees and branches on-site maximizes watershed values, provides safe-sites for germination of native grasses and forbs, and shades the ground surface and traps snow, thus enhancing site moisture. Please fully consider the importance of forested areas, and the arid pinyon-juniper values as described by Dr. Ron Lanner in his book The Pinyon Pine. BLM has gone far overboard in trying to promote massive treatments –wasting a quarter to a half million dollars or more on just parts of deforestation and sagebrush killing projects like Sevenmile – all the while essentially lying about the age and importance of the trees and sagebrush that it is wasting huge sums of tax dollars on destroying. These treatments typically result in hotter, drier, weedier sites more prone to fires. A full analysis of the risks of fire, cutting, chipping, chaining and other disturbance must be conducted in any discussion of fules, FRCC, treatments etc. in this RMP. BLM promotes fear that unless it gets to massively manipulate landscapes- everything will burn up. This of course is not true – but is being foisted on the public. BLM will never be able to fireproof wild landscapes. The best defense is keeping the lands in as good as shape as possible before and post-fire – to prevent weed invasion. The Murphy Fire Report did not find that grazing under the conditions when fires actually burn would be at all effective in preventing fires. In fact, only "modeling" under cool, calm "prescribed" fire scenarios showed any potential positive impact. Unfortunately, the report is being falsely spun by the livestock industry and land grant college range personnel. Battle Mountain must not fall prey to this "spin". Recent studies on tussock (bunchgrass) landscapes find that grazing increases fire risk by leaving dried out grass behind. See Leonard et al. 2010. Grazing does not prevent blazing!
BLM should not construct new or temporary fences in burned lands. The already existing pasture fences should be used to control livestock. Electric fences very often fail, and burn trespass occur livestock trespass of burns or areas being rested from grazing must result in permit action against the responsible permittee. The public's investment in fire rehab is often tens of thousands of dollars, and it can be destroyed through trespass.

Table C-13
Livestock Grazing

Remove all privately owned cattle from OUR public lands.
Proper and sustainable grazing management remains a critical natural resource issue for the Battle Mountain District. Many of the allotments in the southern part of the District still have year-round use. Hot season use areas need to be identified and proper grazing management principals must be implemented by developing and enforcing utilization criteria, season of use, or exclusion to improve the rangeland conditions. Monitoring to ensure utilization objectives for vegetation are not being exceeded and promoting proper functioning range conditions, while controlling the spread of invasive/noxious weeds should be integral in the grazing management components of this plan. The plan should also address the construction or repair of several allotment boundaries within the district that have inadequate means to manage seasonal use.
The RMP should provide for protection of valid rights to graze, produce agricultural crops, and conduct range land improvements.
The RMP should provide for managed domestic livestock grazing use of appropriate lands within the BMD. The RMP should provide for innovative management systems to maintain and improve rangeland health and ecological conditions while maintaining and enhancing the domestic livestock economy.
Treated and burned areas must be rested a minimum of two years.
I'd like to see restrictions put on the number of livestock that are grazing on our public lands. I don't recall the American people ever getting a chance to vote on that. The horses are native to the land and it belongs to them. Their welfare should be the priority -- not that of privately-owned cattle.
Provide definitions in the RMP that describe actual weight and forage consumption of various animals as well as incorporating actual consumption values for calves and lambs in a separate category to prevent overstocking. b) Clarify if AUM formulas are based on forage air dry weight or oven dried weight. c) Incorporate frame size and body condition score in cattle as a heifer with a frame score of 2 has an average weight of 700 lbs. while a steer with a frame score of 9 has an average weight of 1,550 lbs. Incorporating body condition scores and frame sizes for cattle can help determine forage consumption and appropriate stocking rates for a given area. Inappropriate stocking rates may be reflected in low body condition scores of livestock. The same should be applied to sheep/lambs authorized within the proposal area as well.
Require maps to be incorporated in all future authorizations and proposals that include legal land descriptions of the proposal area and comprehensive illustrations of all multiple use of the affected area. For example, when issuing a grazing authorization or changes to season of use, all current pastures, fencing, location of all water sources, mining operations, roads, ROWs, migration routes, critical habitat and use areas, herd management areas, etc., and times of authorizations should be presented to determine overlapping conflicts and/or usefulness of mitigation measures. Providing a comprehensive overview to the public will help ascertain if the proposal will impact critical resources to other rangeland users due to the timing of the authorizations and should be made mandatory throughout the life of the RMP.
Require suitability criteria be incorporated in forage allocations, carrying capacity and stocking rates separated by class of users to ensure fair allocations for free-roaming animals. f) Incorporate and require methods used to measure class use and utilization of vegetative resources by species be mandatory throughout all proposals for the life of the RMP.
Withdraw authorizations for issuing Temporary Non-Renewable Grazing Livestock Permits throughout the planning area.
Is current livestock management meeting standards and guidelines for healthy rangelands? If not, what management changes are necessary to correct grazing problems and when will they be implemented? The RMP should include a suitability analysis of each allotment and adjustments to livestock numbers to be consistent with suitability determinations. The RMP must report on when and where grazing monitoring has been done and whether this is adequate in the future.
Livestock Grazing: We encourage you to adopt appropriate livestock management strategies so as not to compromise important wildlife habitat within the District.
Clear inclusive science-based carrying capacity and suitability analyses must be established. These must take into consideration the many severe conflicts that grazing and development have with the remaining native wildlife habitats.

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Maps are not only important in the EIS, but for users of the document in future years to understand management constraints, goals and allocations for specific land areas when agency projects are proposed, and when new threats arise. Maps need to be detailed, and provide ready geographic frames of reference so that a reader can more easily orient themselves on landmarks such as drainages, and understand locations. With the GIS capabilities available today, BLM can overlay values or threats such as cheatgrass domination of understories, old seedings, understories lacking forbs, areas of historic mining deforestation, land areas that have undergone or are threatened by wind or water-caused erosion, relatively intact native vegetation communities, etc. Maps must clearly and with sufficient detail show important lands, threats, etc.
Grazing Suitability, Carrying Capacity, Productivity and Other Analyses BLM is required under the Taylor Grazing Act to set forth its criteria and assessments for grazing suitability determinations. The TGA was passed to "stop injury to the public lands by preventing overgrazing and soil deterioration", and to determine that land is "chiefly valuable" for grazing. FLPMA requires that BLM undertake an exhaustive and continuous inventory of the public lands and use this inventory to develop land use plans. The RMP EIS process is where a current suitability analysis and allocation must be conducted. NEPA requires that an agency provide a "full and fair discussion" of significant environmental impacts, take a "hard look" at the environment and impacts of various alternatives, and that statements shall be supported by evidence that the agency has made the necessary environmental analyses. NEPA also requires the use of sound science. BLM must provide a two-part grazing suitability analysis that: 1) Catalogues and describes lands non-capable and unsuitable for grazing due to: • Lack of sustainable perennial herbaceous native perennial vegetation "production"; • Ability to maintain health of vegetation and microbiotic crusts as a frontline defense against weeds; • Distance from natural water sources and/or artificial sources; • Steep, forested or rugged slope; • Rocky or rugged terrain; • Existing environmental damage (downcut gullies, wet meadows with shrinking wetted areas due to livestock damage in watersheds, etc.); • Vulnerability and "risk" of weed invasion, important species declines, extirpations, losses; • Lands so seriously depleted or naturally sparse that are not able to support livestock grazing on a sustainable basis; • Lands that are "at risk" of crossing thresholds (due to livestock degradation often coupled with other disturbances) beyond which recovery to native vegetation communities will not be possible due to dominance of exotic species or other irreversible losses. 2) Identifies lands unsuitable for grazing based on their important values to rare and declining species, recreational uses, cultural sites, aesthetic value, and other legitimate uses and values of public lands that are harmed or degraded by the chronic effects of livestock grazing. The inability to adequately mitigate for disturbance must be fully taken into account. Inter-relationships between all of these values must also be examined. The cumulative battery of threats to all of these important factors must be taken into account. The old MFP range analyses did not employ current ecological science in capability and suitability determinations/allocations. There is no current ESI. Please review how very limited the old information to support massive AUM allocations was – and review it as part of this process. Please use best available science, and collect on-the-ground information necessary to up-date them. Old adjudication claims can in no way be considered "current", nor can they reflect current scientific knowledge of suitability of many of these lands for livestock grazing in the face of dire threats posed by weed invasions, species declines, plunging water tables and loss of sustainable perennial flows, and habitat loss. The outcomes of many of the grazing decision processes have failed to cut AUMs to levels that are even in exploitative "range" terms really sustainable – due to political pushback from entrenched ranching interests. In Nevada it is increasingly mines (often foreign-owned), land speculators, energy developers (often foreign) and in neighboring Ely water miners like SNWA) and others who hold public lands permits. These parties have come by them in pursuit of acquisition of other resources on private lands or otherwise. The livestock industry's economic impact is minimal. Grazing under mine-held or other permits if often doled at as favors to well-connected ranchers - to curry more political favor for the mining or other entity.
In any lands where BLM finds it acceptable to continue to allocate AUMs in this RMP process, BLM must layout anticipated stocking reductions and other controls as part of the RMP, and a timetable to achieve this. The RMP ROD must act to immediately place conservative measurable annual standards of use and other necessary protections on any lands where grazing continues. With GPS and other information now available, and with coordinated and competent ecological data collection to support and verify GIS info, BLM can make sound science-based predictions about needed de-stocking/facility removal and restiration/reductions/changes.
BLM has repeatedly acted to artificially prop up the re-sale value of public lands grazing permits by dragging along "paper" cows and sheep, as well as setting "active" use that does not cut numbers down to actual use or sustainable levels. This always results in continued tensions - and constant pushing by grazers for more habitat destruction through extending livestock infrastructure, and "treatments" of sagebrush and trees to try to eke out more forage. In reality, the processes grossly over-estimated the suitability, capability and production of the affected lands. Gross exaggerations in lands made in adjudication processes were largely carried forward in the outdated land use plans. Given the ongoing depletion, loss and desertification of many areas, with only scant Poa or squirreltail, or cheatgrass dominance as primary "forage", loss of large-sized native bunchgrasses, etc.), and ongoing weed invasions resulting in wildly fluctuating and unreliable annual forage production, current suitability and other assessments are urgently needed. BLM must abandon the mindset that endless forage exists to support the inflated permitted AUMs. It must stop carving up the landscape with new livestock projects

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that will harm refugia and remnant better condition habitats for native species, and greatly rollback and de-commission much of the current harmful infrastructure for grazing. The past pattern that is wreaking so much harm has been based on too many AUMs, and ever-expanding fencing and water developments and treatments. As resources get depleted ear existing projects, BLM has pretended as if there is an endless frontier of "new" projects and shifted or intensified livestock disturbance that can occur. The agency must make a clean break with trying to support these unsustainable numbers of cattle and sheep, and produce an honest and forthright ecological science-based Plan for the Future. A key part of this is determining non-capable and/or unsuitable lands - and terminating or AUMs accordingly.
Another critical element is BLM identifying facilities or projects that are harming important habitats, and scheduling their removal and site rehab/restoration. An overwhelming body of current ecological literature shows the harms and degradation from thee facilities. This must be factored into capability and suitability findings, as well.
In areas that would continued to be grazed, in many areas facilities that are supposed to control livestock use and distribution can be replaced with specific stubble height and trampling standards that serve as triggers for livestock removal. Active herding should substitute for fences and projects. Ranchers should be required to have at least one herder for every 50 cattle grazed on public lands.
Livestock Grazing Causes A Broad Array of Harmful and Ecologically Calamitous Impacts Often Downplayed by Agencies There has long been a tendency by agencies to mask or ignore the severity of the impacts of livestock grazing to native wildlife habitats and watersheds. The internal alteration, simplification, fragmentation and destruction of big sagebrush and other shrubs by livestock has been given lesser prominence and concern than understory vegetation conversion. But it is also of significant concern in many areas – as structurally complex shrubs are essential for many migratory bird nesting, sage grouse especially in areas with greatly depleted understories, See Mono Grouse research Casazza and other studies. Nearly all BLM lands suffer significant livestock grazing impacts/mechanical treatment on an annual basis (Braun 1998, Connelly et al. 2004, Knick and Connelly 2009), and face chronic and cumulative damage. When grazing has been discussed – it is typically referred to as "overgrazing", or "intensive" grazing without an acknowledgment that what is being termed "over" grazing are the standard stocking and grazing practices on public lands. The drastic alteration and simplification of sagebrush structure caused by livestock is readily visible when even the most gross visual comparisons are made between untrespassed exclosures or ungrazed road right-of-ways, and grazed sites. Stark visual contrasts exist between battered, broken, and structurally altered big sagebrush growing in grazed areas and the full and deep canopied, structurally diverse unbattered shrubs in long-time ungrazed sites. BLM must move away from blind acceptance of myths put forth by commodity-driven range scientists often tied to western land grant universities. BLM must use best available science, not driven by commodity-production minded researchers. Public lands grazing is much-dominated by huge corporate entities (see San Jose Mercury News 1999). Political pressures on range and agency scientists to ignore harmful impacts of livestock grazing can only be expected to increase. Adverse effects of livestock management activities include sagebrush control efforts, effects on predator distribution and density through the use of artificial watering or supplemental nutrition and feeding sources for livestock, structural damage to dense stands of sagebrush, removal of current herbaceous growth or residual cover of native grasses and forbs by livestock for forage, and increases in the density or distribution of various invasive weed. Besides scientific journal articles (Mack and Thompson 1982, Fleischner 1994 and others), we urge BLM to review the wealth of scientific and factual information and photographs presented in both Waste of the West (Jacobs 1991) and Welfare Ranching: The Subsidized Destruction of the American West (Wuerthner and Matteson, eds. 2002) and also Debra Donahue's (1999) The Western Range Revisited in fully evaluating the colossal threats posed by livestock grazing across the Intermountain and Great Basin region. Recent microbiotic crust information is found in the list and literature on cd. Livestock grazing during all periods of the year damage soils and microbiotic crusts, and increase soil vulnerability to wind and water erosion. Trampling damage to soils effects everything from burrows of native animals, to larvae of native pollinators to roots and mycorrhizae of native tree shrubs and trees. Since harms to soils are hard to quantify and monitor from year-to-year, it is essential that BLM establish upland standards of use that provide maximum protection for soils.
Livestock Grazing Causes Behavioral Disturbance of Wildlife, Removes Protective Cover Livestock movement may disturb foraging or resting wildlife, increasing their vulnerability to predation, or increasing stress during winter, harsh weather or other critical periods. This may cause mortality. Grazing removes cover important for visual screening and avoidance of special status and imperiled species like nesting sage-grouse and the pygmy rabbit, and protection from attack by aerial and ground predators. Taller grasses also provides possible scent screening from ground predators. See Connelly et al (2004).
Livestock Fences Degrade and Fragment Upland Habitats, Aid Predators and Kill Sage- Grouse and Other Wildlife that Collide with Them Between 1962 and 1997, more than 51,000 km of fence were constructed on land administered by BLM in states supporting sage grouse populations (T. Rich pers. comm. cited in Connelly et al. 2000). Instead of cutting or eliminating livestock use, BLM has only further industrialized the landscape since then with even more facilities. The pace of new fence construction on BLM and

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Forest Service lands shows no sign of letting up, and in fact appears to be increasing as land managers seek to perpetuate high stocking rates on degraded lands and keep refusing to cut or eliminate livestock use. Construction of fences often involves cutting or clearing sagebrush along new fence lines, thus reducing areas of big sagebrush cover. Fence lines are often routinely driven, including during construction, with new unplanned and proliferating roading being the end result. Roads spring up along fencelines, as the land is driven during the process of fence construction as well as for future maintenance, and visible scars attract continued motorized use by the public. Livestock trailing back and forth along fences commonly occurs, further crushing and battering sagebrush, as well as compacting and trampling soils and degrading understories. Weeds soon follow. Fences with maintained trails adjacent to them provide travel corridors for predators of sage grouse (Braun 1998, Connelly et al. 2004). Many BLM 1:100,000 land status maps show this effect – most of the spider-webbing of roads and roading are associated with livestock fences, pipelines, troughs, salt/supplement sites and other facilities or intensive zones of disturbance. While fences are frequently described as being constructed to "improve livestock distribution", the end result of fences is more intensive livestock utilization and degradation of previously less used areas. All of this is to the detriment of watershed, wildlife, and myriad values of the public lands. Fences provide perch sites for raptors, ravens and brown-headed cowbirds. (Call and Maser 1986, cited in Connelly et al. 2000). Raptor predation has been the cause of known or suspected pygmy rabbit mortality in many pygmy rabbit field studies, and of sage grouse mortality. Vast lower elevation wild lands (sage brush and salt desert shrub) are a landscape that is devoid of many natural elevated perch sites that can be used by raptors to scan for prey, so fences introduce an unnatural and harmful vertical structure that provides an advantage to predators. Fences distribute livestock over areas that were sporadically or lightly used in the past (Nevada BLM Sage Grouse/Sagebrush Ecosystem Plan 2000), to the detriment of native species. The serious collision risks and impacts to populations from collisions with fences killing birds is shown by recent studies by Wyoming Game and Fish 2009, Connelly and others recent reports. See Knick and Connelly 2009. No matter how many markers may be placed on fences – grouse have been documented colliding with the wires between markers. See Challis BLM sage-grouse study report (2011) showing grouse killed by colliding with fencing between markers. Plus, placing shining material on fences may alter wildlife use of areas, or provide even stronger visual cues for predators to key in on prey species nests or other important areas. Range "improvements" cause degradation and risk to all known sage grouse habitats. Example: Construction of water developments that result in increased livestock utilization in known sage grouse habitats; construction of fences that provide perch sites for avian predators, construction of livestock facilities (livestock troughs, fences, corrals, handling facilities) that result in livestock concentrations in sagebrush habitats. Nevada BLM livestock grazing decisions continue to blithely ignore the agency's own guidelines for sage grouse and other wildlife. BLM must act in this RMP to implement actions necessary to protect native species from the harmful effects of livestock facilities. Control of livestock under this planning effort must be focused on measurable standards of use as triggers for movement and removal, and active herding, and not structural facilities that fragment habitats and degrade wild land settings. A clear and concise plan for significantly decreasing the facility burden and footprint on public lands must be provided as part of this RMP. Example: Identify for removal on a specific time frame all fences within 5 miles of leks, in or near winter or other important habitats for sagegrouse, fences in important antelope habitats of movement corridors, etc. Water pipelines and troughs must face the same scrutiny. A critical review of all water development facilities in native vegetation habitats must parallel the fence review. Livestock depletion spreads outward like a cancer from artificial upland water sources, with minimal to no recovery occurs of depleted areas, and new areas succumbing.
Water Hauling for Livestock Also Depletes Habitats BLM frequently allows water hauling as a way to provide livestock access to water in lands with some forage remaining. Water hauling is a method to extend livestock use in allotments where forage near traditional water has been severely depleted, and has the same effect as pipeline trough placement. Water hauling is typically little controlled, and one-time livestock watering events can cause long-term and/or irreversible harm to native vegetation sites. Nevada BLM offices in the range of pygmy rabbit routinely allow and extol the benefits of unsupervised water hauling in new sites to extend livestock use from severely depleted sites into less used areas. In addition, water hauling activities associated with sheep and cattle grazing can alter or destroy habitats in one-time trough positioning events. Many sheep operators in arid lands have water trucks that haul water to troughs that are regularly moved over the course of a day along with the sheep. Soils and sagebrush surrounding temporary water trough locations can be irreversibly damaged by large concentrations of sheep. This RMP must stop this use of water-hauling, as it leads to destroying, rather than restoring, native plant communities. One-time water hauling events can cause permanent harm to sites where tanks are located and large areas of surrounding lands, as they result in intense concentrations of livestock. The surrounding area essentially becomes "cow/sheep-bombed", with native vegetation and microbiotic crusts destroyed, and primed for weed invasion. Lands that are too arid to have available surface water should not be grazed. The more arid the lands, the greater the difficulties - or impossibility – of site restoration following livestock or other disturbance events. We have been dismayed by BLM grazing decisions we have received in the past that actually promote/require the use of new water haul sites for livestock, with minimal or no discussion of the serious harmful impacts that result of this shifted or intensified use. If BLM plans to continue water hauling, it will not be fulfilling its goal of restoration. Current sites must identified and catalogued in the RMP. Plans for restoration and rehab must be developed.

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Placement of Livestock Salt and Mineral Supplements in Upland Sites Alters and Destroys Habitats and Promotes Weed Invasion Due to current agency focus on shifting livestock use away from riparian areas, many agency grazing permits require the placement of salt and mineral supplements ¼ mile or more distant from water – which means anywhere a rancher wants in sagebrush uplands. Agencies exercise no oversight over where these livestock lures are placed, as management paradigms continue to view sagebrush as "disposable". A one-time placement of salt or minerals can cause long-term alteration of dense patches of big sagebrush, severe soil compaction, lead to irreversible weed 21 invasions, etc. Nevada BLM (2000) Sage grouse/sagebrush plan recognized this as a threat. It is time to sharply limit and constrain this activity, and rehab livestock-damaged sites. Roads that have sprung up as ranchers have laced salt/supplement ot extend livestock use must be rehabbed.
Intensive Holistic Grazing Destroys Big Sagebrush Habitats Holistic grazing is often invoked by agencies and livestock interests to resist or delay making reductions in livestock numbers in degraded lands. The practices of holistic grazing are particularly harmful to wildlife habitats. Large herds of livestock uniformly inundate sites, uniform and heavy utilization occurs, and soils are uniformly trampled and disturbed. Plus, a basic "tool" of holistic grazing is placement of salt or supplements in patches of thick shrubs to lure livestock to break down and alter the shrub structure – practices that are anathema to the pygmy rabbit.
BLM Rest Rotation Grazing Schemes Flood Wildlife Habitats with Cattle Without significant cuts in livestock numbers, a rest rotation grazing system typically means livestock numbers are increased in lands in "rotation" years when they are being and not being rested. This means additional livestock use on depleted lands. Effects of increased livestock numbers during spring periods or drought years increases competition for grasses, and may place even more stress on native wildlife populations. It leads to declines or extirpation. Agencies typically cover this up – or claim that increases won't occur – when in fact they do. This is especially the case when actual use has been much below permitted use.
Drought Exacerbates Livestock Grazing Impacts and Competition Agencies allow heavy levels of livestock use even in drought years. In the last decade, despite 2002 being the third or fourth consecutive drought year throughout arid lands, status quo livestock grazing continued on BLM and Forest lands in nearly all areas. In 2002, all of Nevada and most big sagebrush counties in Idaho were declared drought disaster areas. The consequence of unrelenting livestock grazing is vividly shown in the drought and livestock destroyed lands. Weakened, stressed plants, depleted understories, pulverized soils with damaged microbiotic crusts with increased vulnerability to exotic species invasion, etc. all result. BLM Nevada Sage Grouse/Sagebrush Guidelines (2000) conservatively stated the need to reduce stocking rates or change management practices with drought, and identified the failure to adjust grazing during drought periods as a when competition for scarce resources intensifies as a risk factor for sage grouse and sagebrush ecosystems. Stocking in any grazed lands must be based on drought levels, not an "average" year.
There is overwhelming scientific understanding of the harms to arid western lands caused by domestic livestock grazing. We refer BLM to Professor Debra Donahue's excellent recent book The Western Range Revisited. This book describes and catalogues the loss of biodiversity, exotic species, soil erosion, water pollution, and ask that you incorporate it as part of our comments. Note that during her professional career, Professor Donahue spent time in sagebrush habitats working for BLM on its livestock-degraded lands in Nevada. BLM must prepare the EIS based on this scientific knowledge about the harms caused by livestock grazing to native species and their habitats. First and foremost, BLM must honestly assess harms being caused by livestock grazing which occurs year after year across nearly every acre of Battle Mountain lands. It must describe the importance of this land for other uses, and carefully and honestly evaluate whether continued grazing on damaged lands is in the public interest.
If BLM, using current science and following detailed inventory and assessment finds it may be suitable for livestock as a use of public lands to continue in any areas, the EIS must establish specific measurable standards of livestock grazing use as Terms and Conditions of grazing permits. A 6" stubble height must be the trigger to move livestock from springs, seeps and riparian areas. A trampling standard of 5% or less of trampled accessible bank area is another trigger/threshold that must be instituted. When the 5% trigger/threshold is crossed, livestock should be removed from the area. Riparian browse use should be 15% or less on new growth. In any grazed uplands: Upland utilization standards must be 15% or less of native species, or levels sufficient to allow a minimum nine inch residual herbaceous stubble height for ground nesting species ad to promote passive recovery, with no grazing allowed during critical growing periods or sensitive periods for native species. 5% or less browse and breakage use by livestock should be the maximum allowed on shrubs. BLM must establish a system of annual monitoring of impacts to upland soils and microbiotic crusts.
The adverse impacts of grazing use across the seasons must be laid out. Example: Winter grazing desiccates native grasses, strips them of standing material necessary to protect sensitive crowns from winter freezing, eliminates food and cover for native wildlife, and typically occurs during periods when some growth actually is occurring on native plants.

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This needs to be very carefully controlled and/or eliminated. Microbiotic crust damage from livestock trampling occurs at all times of years - in summer when crusts are powdery dry, and in winter or spring when moist soil conditions results in deep cow hoofprints in soft soil conditions during thaws. BLM must fully and honestly evaluate all of these risks.
BLM must develop a range of alternatives that rely on the implementation of measurable standards of use, coupled with expeditious removal of livestock grazing from threatened landscapes. It must undertake significant reductions in stocking rates and require active herding management by permittees, to protect remaining grazed lands from livestock damage. It must not backslide into the construction of even more livestock facilities, or convoluted grazing schemes when the fundamental problem is too much use, too many facilities. It must fully analyze that grazing of lands that under any grazing scheme will be damaged. Again, we refer you to Debra Donahue's recent book for use in your EIS analysis. We are including relevant scientific references detailing the ecological harms caused by livestock grazing. This should also be used as a basis for BLM's analyses. Basic references include: Fleischner 1994, Belsky 1996, Belsky et al. 1999, Belsky and Gelbard 2000. Please also see microbiotic crust references on cd. BLM must develop a range of suitable and clear alternatives that protect special status species, watersheds and ecosystems. Please do not resort to insertion of "poison pills", in which an alternative contains something blatantly unacceptable to various factions of public lands users who might otherwise support that alternative. See Jarbidge RMP discussion. Given the outstanding values and significance, and vulnerability to weed invasion and ecosystemic change of many of these lands, BLM must develop several alternatives that focus on ecological protection. All alternatives must have clear, measurable standards of use and objectives for livestock grazing, and time frames for action to be taken.
BLM must designate large (greater than 10,000 acres) sites, and entire watersheds, over several representative portions of the EIS area to act as scientific reference sites to provide refugia for native species whose habitats have been degraded by livestock grazing practices and livestock facilities, and to allow evaluation of livestock grazing impacts to these wild lands.
BLM must inventory and identify all livestock facilities, range projects and zones of heavy livestock concentration such as salting or water haul sites, and present this information to the public in the EIS - wells, pipelines, troughs, spring projects, fences, cattleguards, corrals, as well as water haul sites. The location, operating condition and state of repair of all installations must be revealed to the public, as well as their cost at time of construction, and maintenance responsibility. For example, if there is a rusted out cow trough sitting surrounded by a pool of mud that resulted from a spring development, the public needs to know this. How many springprojects have resulted in drying of the spring water source? How much water is removed from the "developed" springs, and how much remains, for all existing spring projects? Which springs can potentially have increased flows to springbrook areas restored, and how can this be done? Likewise, all vegetation treatments (seedings, chainings/railings, mastications, spraying, prescribed fire, post-wildfire seeding) must be detailed. How many seedings exist on these lands, for what purpose were the done, when were they done, and what is their current condition and productivity (compared to what the condition/productivity was planned to be)? How are these projects or facilities fragmenting habitats for wildlife, affecting watershed, affecting recreational or other uses of the lands? All direct, indirect and cumulative impacts must be identified. How are these installations or treatments impacting soils, vegetation, cultural sites, habitats, etc. on adjacent lands? How are they impacting the broader landscape? BLM must provide an analysis of range installations that may be degrading important wild land sites. For example, if a cow trough is leading to increased disturbance of soils in a WSA or a cultural site or sage grouse nesting habitat, then that cow trough should be removed, and lands rehabilitated. What threats does each of these facilities pose to imperiled/special status species or their habitats? BLM must examine such impacts across land ownership lines. Livestock permittees routinely clamor for more projects, and BLM - in an attempt to avoid reductions in livestock numbers necessary to protect public lands values - obliges. It is time to reverse this trend. After compiling a comprehensive inventory and analysis of range installations and their impacts to native biota, BLM must identify those which are no longer working/in repair, and also those which are causing harm to special status species, raptor prey, springs, watershed, or other important public lands values, and act to remove them. It does not matter if these facilities were built pre-FLPMA or not. BLM must review all project information in its files, and thoroughly examine the facility network on-the-ground, visit all installations, collect complete and systematic information on their impacts on soils, microbiotic crusts, native vegetation, watersheds, wildlife, and cultural sites, and determine whether it is in the public interest to remove them and restore damaged lands. We are tired of visiting Battle Mountain BLM wild lands and encountering seas of livestock feces, bare dirt or weeds surrounding cattle tanks, and on closer examination seeing extensive areas of lithic scatter being newly exposed by erosion from livestock concentration, or expanses of halogeton or white top emanating outward from them. In addition, even modest maintenance and protective measures for native wildlife are often lacking. Floats to promote water flow conservation are lacking, there are no wildlife escape ladders so troughs are deathtraps for migratory birds, etc. BLM must also evaluate the impacts of fences and fence posts on special status species and their habitats. For example, if a fence is located in important sage grouse nesting habitat and it is providing perches for sage grouse nest predators such as ravens, the fence should be removed. See Connelly et al. 2004 for a discussion of

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harmful impacts of fences and the recent Wyoming GFD and other studies. In the past, the construction of these facilities has been the justification for continued excessive stocking rates. A key part of BLM's analysis must be the suitability/capability studies, and reduction in livestock numbers and changes in livestock management practices that includes facility removal and subsequent site restoration. In particular, BLM must assess the impacts of all wells, pipelines, water haul sites, stock ponds and other artificial upland water sources on special status species, watersheds, and native vegetation, and analyze the removal of harmful artificial livestock water sources in the EIS alternatives. These artificial water sources are resulting in serious damage to surrounding lands due to concentrated and/or increased livestock use. These facilities and the excessive livestock use associated with them is a serious threat to special status species. It greatly increases site vulnerability to exotic species invasion, creates habitat and behavioral conflicts with wildlife, degrades recreational experiences, promotes West Nile virus, etc. These artificial water sources are not compatible with achieving enhancement or restoration of damaged special status species and sagebrush sea habitats. BLM must examine the roading that has incidentally been created in association with these facilities, and identify it for closure. Unless this is done in the RMP, proper Travel Planning cannot occur, either.
Federal legislation implementing a buyout of grazing permits and the permanent removal of livestock grazing from the affected lands is a very reasonably foreseeable development in public lands management in the EIS area within the next few years. BLM must recognize this in its EIS process, and identify allotments the high priority for permanent protection of many of these lands – such as the better condition sagebrush communities - from livestock grazing impacts, and the value of permit buyout for restoration purposes, to protect critical habitats, to protect cultural sites, to reduce conflicts with wildlife and recreation uses, etc. Such clear identification of lands in the EIS will also streamline any permanent allotment closures that may go through without the necessity of a LUP Amendment process. BLM must take all measures necessary in the RMP make allotment closures as easy as possible. WWP requests that the RMP include language that will enable relinquished or waived grazing permits to be held indefinitely for wildlife habitat and watershed health and not be reissued for livestock use. WWP does not support using such allotment permits as grass banks. From the Challis RMP: Grazing privileges that are lost, retired, relinquished, canceled, or have base property sold without transfer would have attached AUMs held for watershed protection and wildlife habitat until allotment vegetative objectives are reached. Once vegetative objectives are reached, these AUMs would remain unallocated to any particular livestock permittee, but may be used to provide short term (less that three years) flexibility to permittees for vegetation treatments or other management actions affecting their base permit.

Table C-14
Recreation and Visitor Services

The DEIS should identify and implement performance bonding for all special recreation permits in the district, and especially bonding for the large OHV races.
Do not plan actions with a "build it and they will come" premise (except within 5 miles or so of a community). In no situation attract use until there are resources to manage that use.
Monitor for impacts. Apply AEM only in cases where recreation impacts on the resources demand action. Use a minimalist approach.
Primitive country is abundant in NV, but rare nationally and thus is a scarce resource to protect into the future. The USFS and NPS will provide developed sites for recreationists. The BLM's role should be to provide large areas of minimally developed, directed, or managed landscapes.
Recreation sites currently heavily used should be prioritized according to need for protection. Any "development" should be primitive and keep management to a minimum. An EA or EIS should be issued before any "development".
Camping should be restricted to 300 ft. or more from springs and streams.
Recreation areas shall only be proposed after scientific review and in coordination with NDOW.
Include an educational component. Use every opportunity to provide Leave No Trace/ Tread Lightly materials to the public. Instigate an outreach program to the schools emphasizing ethical use of ATVs/ORVs and provide information on impacts. Co-operate with NDOW to provide materials with every hunting/fishing permit.
Include as a SRP requirement (for commercial, competitive, or group events) that all participants attend a Leave No Trace/ Tread Lightly workshop.
All ORV use must be restricted to existing routes until such time as the travel plan is complete. Closed areas should remain closed in the interim. A TRT should be formed to advise BLM during the travel plan process.
In the Palmetto mountain range there are a number of historic miners cabins and or cow camps. Some are nearly completely collapsed while others with some TLC could be structurally sound. At many of these camps there are old corrals and springs. These locations are perfect for family day trips camping and as a stop when horsback riding or hiking as well as providing shelter if needed. I would like to see a policy in the RMP that would preserve rehabilitate the cabins corrals and springs and possiblty consider establishing a non-motorized trail system between these locations. This could create additional tourism in the area. The project would work if there was a cooperative arrangement between local governemnt citizens and the bLM for management operation All these locations are accessible by existing roads so this would also benefit motorized recreation hunters and bikers.
The idea of catering to certain recreationalists leads to unfavorable land and budget usage. The thought of providing a few special people with serenity and solitude is completely unreasonable and irresponsible.
The RMP should minimize expensive and elaborate recreation facilities and services, considering BLM budget limitations for the foreseeable future.
The Wilderness Society's hundreds of thousands of members are passionate about preserving traditional "quiet" forms of recreation such as hiking, backpacking, non-motorized hunting, angling, horseback riding, and birdwatching. On the public lands, our members want to experience naturalness, quiet natural soundscapes, undeveloped scenery, an undisturbed natural landscape, the timelessness and geological sweep of the BLM's remote and rugged landscapes, a low level of facilities and management presence, and opportunities for uncrowded and solitary experiences. We want to be able to recreate in primitive, undeveloped, natural appearing settings. The experiences we are looking for are closeness to nature, a contemplative relationship with the natural world, savoring the total sensory experience of a natural landscape, escape from crowds, quieting our minds by escaping urban traffic and crowding, and a sense of humanity's place in the larger universe, as well as improved outdoor knowledge, independence, self-reliance and a sense of adventure. We and our members are whole-hearted participants in these types of experiences with a keen interest in preserving for future generations these time-honored traditional experiences of the outdoors. a. Preservation, creation and enhancement of opportunities for quiet recreation The recreation resource on public lands is becoming increasingly valuable: more people want to recreate on a finite amount of public land. As mentioned above, the vast majority of recreationists and other public land

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visitors desire solitude, clean air, clean water, vast undeveloped landscapes, and a place to witness healthy natural systems thriving with native plants and wildlife. The Battle Mountain District can provide a wealth of these types of experiences, encompassing many natural and scenic landscapes. (i) FLPMA and Off-Road Vehicle (ORV) Regulations Applicable to Noise As discussed above, FLPMA requires the BLM to manage the multiple uses and resources of the public lands, which include fish and wildlife, watersheds, scenic values, recreation opportunities, scientific and historic values, and other natural values, such as wilderness characteristics. FLPMA also provides for the agency to do so by excluding or limiting certain uses of these lands. BLM's regulations relating to management of off-road vehicles, similarly acknowledge the need to address the manner in which motorized recreation can prohibit other experiences, requiring that both areas and routes for off-road vehicles be located to "minimize conflicts between off-road vehicle use and other existing or proposed recreational uses of the same or neighboring public lands, and to ensure the compatibility of such uses with existing conditions in populated areas, taking into account noise and other factors." 43 C.F.R. § 8342.1 (emphasis added). Providing a "quiet" recreation experience, as also discussed in reference to opportunities for primitive, unconfined recreation and for solitude provided by lands with wilderness characteristics, also requires thoughtful management to provide for a quiet soundscape. Much research exists on the importance of natural sound to public land visitors. We recommend the Battle Mountain District Office conduct a soundscape analysis to guide formulation of intended user experiences, for example by analyzing how canyon topography and vegetation might reflect or propagate vehicular sound and how that might affect quiet users, neighboring homeowners and wildlife habitat effectiveness. We ask that the alternatives specifically compare impacts of, and the potential for the increase of ORV noise on natural sound and other resources, consistent with the BLM's regulations. We have included a more detailed discussion on soundscape modeling and management later in these comments.
National Visitor Use Monitoring Program The Moab Field Office completed a National Visitor Use Monitoring Program (NVUM) as a pilot project for visitor use monitoring on BLM lands. The NVUM for the Moab Field Office was developed through an interagency agreement with the Forest Service to be useful, in part, for making decisions during the planning process. BLM's website on the program explains the NVUM's relevance and applicability: Such visitor monitoring information enables BLM to incorporate statistically valid visitor use monitoring information into planning and management decisions as well as long-term monitoring assessment. The FS NVUM system provides BLM with accurate data with high confidence levels for reporting to Congress and constituents, thereby building credibility and establishing legal protection in decision-making. BLM, Visitor Use Surveys & Research, http://www.blm.gov/wo/st/en/prog/Recreation/national_recreation/visitor_use_surveys.html. The information provided from the NVUM shows that motorized use is a small portion of recreation activity on public lands in the Moab Field Office. The NVUM states: "In terms of total participation, the top five recreation activities of the visits to the Moab Field Office were viewing natural features, hiking/walking/trail running, relaxing (hanging out, escaping heat and noise), viewing wildlife and driving for pleasure (Table 16)." The Battle Mountain District Office should conduct a similar survey in preparation of the RMP. If the Battle Mountain District Office also finds that quiet-use recreation is the most prevalent type of activity on public lands within the field office, it should ensure the RMP reflects that finding and adequately accommodates quiet users.
Recommendations: In managing recreation on the lands of the Battle Mountain District, the RMP should ensure that quiet recreation opportunities are given sufficient attention and that management of motorized recreation, in general, is also designed to protect the experiences of other public land visitors. 24 Comprehensive travel management planning, including landscape level planning and road density analysis, as well as compliance with land health standards, will also ensure healthy ecosystems that can support positive recreation experiences.
Standards for Issuance of Special Recreation Permits BLM should adopt unambiguous, protective criteria for issuance of special recreation permits (SRPs) in order to effectively manage the increase in commercial and competitive group activities that can have a significant impact on the lands in the Battle Mountain District. The BLM Handbook on Recreation Permit Administration (H-2930-1) clearly states that field offices can and should develop guidelines for issuing SRPs. The Handbook states: "Field Offices are encouraged to develop thresholds through land use planning for when permits are required for organized groups and events for specific types of recreation activities, land areas, or resource settings" H-2930-1 at 13. On the issue of Special Area Permits, the Handbook states: "Applications for Special Area Permits issued to individuals are processed according to the area-specific land use and/or business plan, or guidelines approved by the State Director." H-2930-1 at 17. The Battle Mountain District Office therefore must provide clear guidelines for processing SRPs, because in this situation the Handbook directs that permit issuance will tier to the RMP.5 The Price Field Office Draft RMP, Appendix 14, (attached to these comments) provides an excellent example for evaluating SRP applications and issuing such permits. It classifies SRPs into four distinct classes, ranging from least intensive to most intensive, based on specific factors such as type of equipment, size of area used, number of participants, etc. These factors are defined and then compared in a simple permit classification matrix consisting of Classes I through IV (with I being for smaller and less impacting events and IV being for larger, more

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impacting events). Each Class also has an example of the type of event that may fit into the category. After the Class is determined, the BLM can then look to see how permit types fit into Recreation Opportunity Spectrum Classifications and/or Special Recreation Management Area (SRMA) or Extensive Recreation Management Area. Various SRMAs can be broken into classes and it is easy to see what types of uses and events should be permitted for each area. Because the standards set out in the Price Draft RMP are very specific (for example, surface disturbance of 5-40 acres ranks as "medium intensity"), BLM can easily determine whether to issue an SRP and where, and can better estimate cumulative impacts from such permits. The Battle Mountain RMP should use the model provided by the Price Draft RMP for classification of SRPs to define which uses may be appropriate or inappropriate in specific areas. BLM has not only the discretion to establish SRP guidelines, but also the obligation to do so in order to protect the resources that the RMP is intended to protect and sustain. Furthermore, BLM issued new guidance recently clarifying the SRP manual (IM 2011-019). The guidance requires the agency and applicant to show that they have taken measures to sufficiently administer the permit and remedy damage that may occur from the event. Recommendations: The BLM should set out clear standards for issuance of SRPs, to protect other uses and natural and cultural resources. Before issuing SRPs, the BLM must ensure that the agency has sufficient resources available to administer the permit and that the applicant can remedy any resultant damage to the public lands.
Special Recreation Management Areas and Extended Recreation Management Areas In the Battle Mountain RMP we encourage the BLM to use recreation management areas to preserve or restore primitive and backcountry recreation opportunities – providing a prescriptive approach to creating, enhancing and protecting quiet recreation experiences on our public lands, using the tools and guidance set out above. In 2010, BLM issued new guidance (IM 2011-004) for recreation and visitor services planning in the land use planning process. The guidance changes recreation management to a three-category system wherein lands in the planning area can be designated as special recreation management areas (SRMAs), managed as extensive recreation management areas (ERMAs), or classified as public lands not designated as recreation management areas. Management focus for SRMAs is to "protect and enhance a targeted set of activities, experiences, benefits, and desired recreation setting characteristics," whereas ERMAs are managed to "support and sustain the principal recreation activities and the associated qualities and conditions of the ERMA." In SRMAs, recreation is to be the dominant use, and in ERMAs management is "commensurate with the management of other resources and resource uses." Whereas SRMAs are intended for more intensive management, ERMAs may be appropriate to designate for quiet-use, backcountry experiences and layer with other special designations that are compatible with quiet recreation, such as ACECs and lands with wilderness characteristics. Both SRMAs and ERMAs provide mechanisms for the BLM to actively manage different types of recreation to the benefit of users while protecting the other resources of the public lands. If ERMAs are designated for backcountry experiences, they should be closed to uses that are incompatible with those types of experiences such as oil and gas leasing and off-road vehicles. The new guidance also includes an updated Recreation Setting Characteristic Matrix. We encourage BLM to not use the qualities in the matrix as a "bright-line test" to disqualify areas which are or could in the future provide a primitive recreation experience. Rather, the qualities should be used as a goal which proper management could help the areas achieve and focus on the experience that can be achieved. In this manner, areas which have primitive character should be managed for that experience and desired future condition, even if they do not currently meet all of the criteria that the BLM has set for primitive physical settings or designation. By adopting such a prescriptive, or aspirational management approach, as opposed to a more descriptive or reactive approach of just basing the management of the RMAs on perceived evidence of human presence or an expectation of more people wanting to use the area, the BLM can ensure that some level of existing disturbance does not disqualify areas which do provide a primitive experience from a decision to manage them to protect and enhance such qualities and provide this important experience. Recommendations: BLM should adopt a range of SRMAs and ERMAs and management prescriptions which provide adequate opportunities for non-motorized or quiet recreational experiences and are written to enhance the other values that ultimately contribute to the experiences of the area. BLM should use an aspirational approach which allows the agency to ensure that some level of existing disturbance does not disqualify areas which do provide a primitive experience from a decision to manage them to protect and enhance such qualities and provide this important experience.
Evaluating and protecting natural soundscapes is an important part of the land use planning process. As part of providing opportunities for quiet recreation, BLM must consider activities that interfere with the soundscape associated with quiet recreation opportunities. Research shows that for many people, especially quiet recreationists, the primary reason for visiting primitive landscapes is to attain a sense of solitude and tranquility, which are interrupted by non-natural noises. A study performed by psychologists at Colorado State University found that acoustic stressors impact visual landscape quality, meaning non-natural noise actually affects the perceived naturalness of a landscape (Mace 1999). Therefore, in order to preserve the naturalness of an area, BLM must preserve the natural soundscape. Furthermore, the authors of the study note that "tranquility" and "solitude" are explicitly addressed in the Wilderness Act as values that must be preserved by land management agencies. BLM guidance directs the preservation of "naturalness" in Wilderness Study Areas, Visual Resource Management I zones, and other areas managed to protect wilderness qualities. All of these values are negatively impacted when the natural soundscape is impacted; therefore, BLM must retain the natural soundscape in primitive recreation areas and lands managed to protect wilderness characteristics. a.

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BLM's Obligation to Preserve Natural Soundscapes BLM regulations implementing Executive Order 11644 (1972), as amended by E.O. 11989 (1977), orders the BLM to locate areas and trails to: Minimize conflicts between off-road vehicle use and other existing or proposed recreation uses of the same or neighboring public lands, and to ensure the compatibility of such uses with existing conditions in populated areas, taking into account noise and other factors. 43 C.F.R. § 8342.1 (emphasis added). In order to effectively and appropriately achieve this goal, the Colorado BLM issued "A Recreation and Visitor Services Strategy" ("Recreation Strategy") to help field offices provide quality recreation 35 experiences for all users. The Recreation Strategy recognizes that BLM's obligation to provide recreation areas for many user types requires designation of quiet recreation zones. It defines "quiet recreation" as "Outdoor recreation enthusiasts such as hikers, skiers, mountain bikers, equestrians, bird watchers, hunters and anglers who seek the opportunity to enjoy natural soundscapes" (P. 17) (Emphasis added). We encourage the Battle Mountain District Office to implement strategies similar to the Colorado strategy for minimizing conflict between user groups by establishing quiet use areas and mitigating potential noise impacts on these areas. Additionally, courts have upheld the responsibility of federal land management agencies to evaluate noise impacts on the natural soundscape. See Izaak Walton v. Kimbell, 516 F.Supp.2d 982, 985, 995-96 (D. Minn. 2007) (EA prepared by USDA Forest Service for plan to construct snowmobile trail adjacent to Boundary Waters Canoe Area Wilderness failed to properly analyze noise impacts from snowmobile use, as required by NEPA; EA provided no quantitative evidence of analysis of decibel levels to be projected by snowmobile use of the trail into adjoining wilderness).
Effective Soundscape Analysis In order to effectively preserve the natural soundscape in quiet recreation areas, BLM must quantitatively measure (1) the decibel (dB) levels of the natural soundscape; and (2) ORV dB levels on the natural soundscape. Quantification of ORV traffic volume, duration, and frequency are thus necessary components of soundscape analysis. There are many tools available to BLM to adequately measure noise impacts and set prescriptions to prevent negative impacts. The Wilderness Society has created a GIS model based on the System for the Prediction of Acoustic Detectability (SPreAD), a workbook issued by the Forest Service and Environmental Protection Agency for land managers to "evaluate potential … acoustic impacts when planning the multiple uses of an area." The Wilderness Society adapted the SPreAD model to a GIS environment so that potential noise impacts could be integrated with other variables being considered in the planning process. We recently completed an updated version of this software, which we can provide to the field office at your request. The SPreAD-GIS model can be implemented in your existing ArcGIS software at no additional cost. The SPreAD-GIS model was developed for the Forest Service, but its applicability extends seamlessly to BLM lands, as the inputs include vegetation and topography. The Battle Mountain District Office should use the SPreAD-GIS model to determine what sounds will impact visitors in each segment of the planning area, and what steps must be taken to mitigate these impacts. It is important to note that the original SPreAD operates under the premise that in primitive recreation areas, no noise should be audible above the natural soundscape. We envision this model as eventually being used throughout the district, but at this stage believe BLM should at least apply it to special management areas, such as Wild Lands and backcountry recreation management areas, and/or other strategically prioritized portions of the field office.

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The RMP should establish flexible land disposition practices that support economic development and sustainable use of lands for economic, recreational, and community development purposes. These practices should conform with existing legal authorities for land exchanges and land sales through consideration of land use proposals on location-by-location or programmatic bases depending on the specific proposal.
LEDA will provide BLM with specific land disposal requests during the RMP process.
The RMP should accommodate adaptive reclamation practices for existing land use authorizations that allow for re-purposing of those uses for economic, recreational, and community development purposes. These re-purposing activities could include potential mineral exploration and development, energy production, manufacturing, commercial use, recreation, wild life habitat, community development, and other unforeseen uses.
To support the development of renewable energy projects, all NEPA reviews should include an alternative for the sale of the land to the project owner and the RMP should be amended to include all renewable projects as disposable land.
In conjunction with the support of renewable energy development, the official designation of the proposed Programmatic EIS transmission (368) corridor right-of-way along highway 95 near Beatty, and in northeast Nye County, as well as other designated utility corridors should be coordinated with adjacent BLM districts in both Nevada and California to ensure connectivity with corridors within those districts. Nye County anticipates the development of renewable energy will exceed Nevada requirements, necessitating the export of that energy to adjacent states. The current utility lines will be unable to support rapid growth in renewable energy development and new transmission corridors will be required.
BLM has expressed concerns with the "Long-term impacts" associated with the "proliferation of randomly placed utility line" rights-of-way; "Right-of-way corridors could reduce social, economic, and environmental impacts by confining similar uses to a specific area;" and that scenic values and integrity of the surrounding area would be better protected by designation of corridors. Designation of corridors would help protect viewsheds by concentrating impact within specific geographic areas." Consistent with these concerns, Nye County is working to identify previously disturbed lands and brownfields which can be utilized for renewable energy development. Nye County will work with the BLM to encourage development on those lands whenever possible. Nye County encourages the designation of corridors include such areas whenever possible.
Designating and coordinating utility corridors and maintaining the 368 corridor will also facilitate discussions and the development of agreements between renewable energy and various power companies desiring to construct transmission lines in support of renewable energy development in Nevada. As stated in the Record of Decision for the Approved Las Vegas Resource Management Plan and Final Environmental Impact Statement (October 1998), "The establishment of designated corridors enables more efficient planning of future energy, communication and transportation facilities. A lack of such designated corridors, or the avoidance of existing corridors, engenders higher planning costs to utility companies and results in longer processing time for rights-of-way applications."
To reduce impacts to land resources, the 368 corridor and other utility corridors should be modified to allow for transportation rights-of-way that accommodate utilities and transportation infrastructure, including future roads, fiber optic and other communication, pipelines, and power transmission. Consolidating infrastructure will minimize land disturbances throughout the Planning Area in accordance with published BLM public land Management goals.
Nye County requests the areas described in the attached "Battle Mountain RMP Disposal Requests and Legal Descriptions" be evaluated for designation as disposal land at Tonopah and Beatty (in addition to that currently so identified) for the following reasons: Public Safety: The designation of the gravel pit on the east side of Radar Road, Tonopah, would provide a safe and controlled shooting range for residents, as well as a training range for the Nye County Sheriffs Office. Community Development Considerations: Additional lands have been identified for future development in Tonopah, and Beatty. Land around the airports has been included to allow additional airport and renewable energy development, and for the planned expansion of runway facilities and runways. Cemeteries: Nye County has identified cemeteries within the Battle Mountain District. The cemeteries are important to County residents and should be available to them for maintenance and use. Nye County has requested an R&PP lease for the Mt. Mariah Cemetery, and intends to request R&PP leases for the Berlin Cemetery, Desert Hill Cemetery, Bullfrog-Rhyolite Cemetery, Duckwater Cemetery 3, Ione Cemetery, and Tybo Cemeteries 1 & 2. IfBLM believes the R&PP leases for the aforementioned cemeteries cannot be allowed, Nye County requests each be identified as disposal lands and made available to the communities.

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Nye County has filed two Title V applications for approximately 140 miles of County maintained roads. Public works staff are in the process of completing Title V applications for approximately 1000 miles of additional maintained county roads. Due to the number of applications anticipated to be made to BLM, Nye County requests BLM increase the number of personnel available to the Tonopah Field Office for the timely processing of those applications.
In addition, the following mitigation measures should be employed. Utilize proactive measures to site new rights-of-ways and facilities: - Shared use of utility corridors should be a requirement of new projects. - New facilities should only be allowed where there are identified rights-of-ways. - If new rights-of-ways are necessary, new facilities should be allowed as near to existing rightsof- ways as possible or only allowed if they can be accommodated in an existing shared use right-of-way. - New facilities and rights-of-ways should not be allowed in any VRM Class I or Class II. Existing VRM classes should maintain their integrity and not be subject to haphazard threats to their integrity.
The RMP should look at logical areas for disposal and at the same time, consider areas that are currently identified for disposal to determine whether or not it would be in the public's interest to maintain them under BLM management.
GMI would like the BLM to designate for disposal some BLM land that is adjacent to the private lands. The BLM suggested land is approximately 1,217 acres with approximately 125 acres disturbed. Future land use of said lands will be mining and these lands will be closed to the public indefinitely, further reducing value to the public interest. Therefore, GMI respectfully submits that the public lands described here and identified on the attached map be included in the Battle Mountain District RMP as land tenure for sale, swap or disposal. The patented claims are non-symmetrical in shape so the proposed land outlined has been delineated for ease of to facilitate any future transactions
The RMP should allow unique, innovative and adaptive reclamation practices for existing mining and exploration authorizations that provide for and support post mining land uses such as potential mineral exploration and development, energy production, manufacturing, commercial uses, recreation, wild life habitat, community development, and other unforeseen uses which would foster economic, recreational, and community development purposes.
The RMP should allow flexible and innovative reclamation practices and postmining land-uses that recognize an array of potential post-mining sustainable development scenarios. These include, but are not limited to potential future mineral exploration and development, energy production, alternative commercial uses, recreation, wildlife habitat, open space, and other possibly yet unforeseen uses.
The RMP should avoid management decisions that will adversely affect access to an use of privately owned lands and minerals that are adjacent to r near federal lands. The RMP should also provide for management of grazing and rangeland resources in a manner that recongizes the rights of private landowners. The BLM should consider the potential impacts of management alternatives on adjacent and nearby priavte land and mineral holdings, as required by 43 C.F.R $1601.0.8. This is especially critical given the extensive areas of checerboard land ownership within the BMD.
The RMP should establish flexible land disposition practices that recognize existing legal authorities providing for land disposition through an array of mechanisms, including land exchanges and land sales. The RMP should allow for site-specific consideration of the relevant resource management considerations in response to specific proposals for federal land exchanges, sales and other dispositions. The RMP should recognize that land exchanges and other realty dispositions can be a valuable resource management tool in a variety of circumstances.
Yes, we need to go further and discuss compatible land use on the lands adjacent to the NTTR. Ranching/Farming/hiking/hunting are land uses that generally are compatible and do not impact our operations.
Do not give up on managing checkerboard areas. Work toward consolidating areas with high public values. Worktoward agreements for enforcement with the major landowners.
Avoid the impacts that follow powerlines: increased ORV use, thus increase in weeds and fire; decrease in a range of species, visual/aesthetic impact to primitive character of the landscape.

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Assess the checkerboard areas for those with high public values, such as wildlife, and prioritize those for trade and/or acquisition.
Do not dispose of any public land with high public values such as riparian and wildlife.
RS 2477 needs to be fully respected-Period.
No renewable energy transmission corridors should be designated along Highway 95 near Beatty, Nevada or anywhere. The Nye County Commission is aggressively pushing for this. We certainly hope BLM will not pander to their unreasonable requests this time. New transmission near 95 will cut through wet -lands, threaten the Amargosa toad and the Oasis Valley Speckled Dace. Transmission lines also cause deadly bird collisions. A full analysis will be needed to examine impacts to wildlife. New transmission will be a visual eyesore to the residents and tourists in Oasis Valley. A full analysis of loss to property values will need to be examined. Any sighting of transmission near private property may result in expensive litigation against BLM by some group or individual. New transmission will impact the health of any people it is built near. Include this in the plan. New transmission will open up a cumulative scenario of destructive renewable projects all along Hwy 95 and adjacent wildlands. SF6 gas, hexaflouride is a greenhouse gas 24,000 time more potent than C02 and that new transmission lines are one of the main sources of these gases. From the Environmental Protection Agency web site: http://www.epa.gov/electricpower-sf6/basic.html The green house gas called SF6 is used primarily in electricity transmission - and is emitted in especially large amounts in construction of new lines – and is 24,000 times as potent as CO2 in it" global warming impacts. The Environmental Protection Agency has declared "that the electric power industry uses roughly 80% of all SF6 produced worldwide." Ideally, none of this gas would be emitted into the atmosphere. In reality significant leaks occur from aging equipment, and gas losses occur during equipment maintenance and servicing. With a global warming potential 23,900 times greater than CO2 and an atmospheric life of 3,200, one pound of SF6 has the same global warming impact of 11 tons of CO2. In 2002, U.S. SF6 emissions from the electric power industry were estimated to be 14.9 Tg CO2 Eq. Carbon sink: Scientific studies have revealed that desert ecosystems and minerals have the ability to store C02 gases. Have Desert Researchers Discovered a Hidden Loop in the Carbon Cycle? Richard Stone: Science 13 June 2008: Vol. 320. no. 5882, pp. 1409 - 1410 DOI: 10.1126/science.320.5882.1409 . Removal of so much land for renewable energy will damage this resource.
Remote renewable projects require use of 5,000 acres and more at a time. this is all for only one use. What kind of "mitigation" would be provided to compensate for disruption of access? Has this been considered? The Bureau of Land Management's multiple use philosophy simply can not be met if so many acres are going to be sacrificed for only one use. Plans to convert so much public land use to energy use violates BLM's multiple use philosophy.
No public lands in Nye County should be available for disposal at the requests of the Nye County Commissioners. Their requests usually neglect wildlife conservation and local property values. All land disposal plans should have full NEPA review. Each plan should have an Environmental Impact Statement.
The BLM must evaluate the sustainable capacity of the resources to support the expanded growth of these areas to be disposed. Of primary concern is the level of sustainability with regards to water needs. Growing scientific evidence is making it clear that the level of groundwater needs for continued growth.
Any areas identified for disposal must be encumbered with the assurance that comprehensive NEPA will conducted prior to any conveyance of the land.
We specifically request that the following screens be used to eliminate lands to be considered for disposal: o Areas with sensitive and rare natural communities; o Areas identified as important for species in state comprehensive wildlife plans, the Heritage Program's "Scorecard 2006", State Priority Wetlands, Audubon's Important Bird Areas, regional conservation plans, and recovery plan for threatened and endangered species; o Areas that provide habitat for species of plants and animals listed under the state administrative code and the ESA; o Areas that serve as corridors for species movements between key habitat requirement areas and corridors needed to accommodate genetic flow and for climate change adaptation.
Sensitive lands and resources should be retaind in federal ownership. Sensitive lands and resources that would benefit the public should be purchased from willing sellers as the opportunity arises. Acquisition of inholdings within existing Wilderness Study Areas or future wilderness areas or ACECs and other special areas should be given a high priority when opportunities with willing sellers occur. When these lands are acquired, they should be managed win the same manner as the adjacent public lands.

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The RMP should set up criteria for any possible disposals of public lands, including no disposals for lands which provide critical habitat for TES species, especially in Amargosa Valley, and for candidate species, including sagebrush-dependent wildlife - Sage Grouse, Pronghorn Antelope, Pygmy Rabbits, and passerines.
BLM should review the previous plans and decisions and look at future land tenure decisions with an eye towards providing adequate open space for the growing public, maintaining key viewsheds and taking into consideration new proposals for open space and trails and special management areas. Section 102(a)(1) of FLPMA requires that BLM-managed lands be retained in federal ownership unless BLM determines through the land use planning process that disposal of a particular parcel will serve the national interest. 43 U.S.C. 1701. Land tenure decisions must achieve the goals, standards, and objectives outlined in the land use plan. With the growing population has come a desire to develop more land, some of which may be appropriate. However, the BLM must retain land near sensitive and ecologically important areas, including those within existing or proposed ACECs or other special management areas, and including specifically citizen-proposed special management areas. Lands identified in new citizen proposals for open space and/or other special management that include lands not owned by BLM should be given priority for acquisition. BLM should only pursue land tenure decisions if they will serve the national interest by supporting key values and resources, such as protecting ecologically important areas and providing open space. In addition, disposal or exchange may be appropriate where the BLM determines that lands will be dedicated to renewable energy development, if those lands are already degraded, closest to the load served for siting development, and can be sold or exchanged with a commitment to obtain lands with higher conservation values (such as wildlife corridors). As local entities are also developing plans and considering the best uses for nearby lands, the relationship between the RMP and these plans will be important, since BLM's decisions can affect local open space, parks and trail plans. Particular care should be taken to prevent sale or exchange of BLM parcels highly valued by local communities for the open space, wildlife habitat, and recreation opportunities they provide. Further, disposal or exchange may be appropriate to assist with development around local communities. Recommendations: The BLM should work with local governments and Tribes when identifying areas where disposal of public lands may be appropriate. However, BLM should identify areas such as ACECs, citizen wilderness proposals, or sensitive species habitat for retention and acquisition. BLM should not dispose of parcels valued by local communities for their open space, wildlife habitat, and recreation opportunities.
BLM should pursue acquisition of additional lands located in key habitat areas identified in the EIS process, with BLM acquisition of private inholdings through purchase with Land and Water Conservation funds or other conservation funding. BLM should strive for no net loss of public lands, including retention of significant blocks of lands where checkerboarding now exists.
BLM must strengthen environmental protection and prohibit new rights-of-way in native communities or other important occupied or restoration habitat in EIS lands. We stress that "avoidance" mitigation is simply not adequate to protect sagebrush and other species – BLM's disastrous experience in Wyoming ad elsewhere with development and avoidance shows that this is not possible. The same applies to renewable energy, transmission lines, etc. In any areas where ROWS are issued, Protections include: Limiting use during sensitive nesting, fawning, wintering or other periods of use for all native wildlife, assessing impacts of rights-of-ways on spreading exotic species onto surrounding lands and revocation of rights-of-way when weed infestation or wildlife disturbance results. BLM's planning process must not authorize new utility corridors, and must re-examine the suitability of existing corridors. In sensitive areas it must limit any further expansion. All direct, indirect and cumulative impacts of mining, wind, geothermal, and other energy development on populations of special status species or aquifers across the EIS region must be considered.
BLM in this RMP effort must solidify the rights of the public to access public lands. If ranchers block access, BLM should purchase easements, or condemn private lands if they are an impediment to a long-established right-of-way. Providing a right-of-way across base properties should be a requirement of holding a public lands grazing permit. Private land owners should NOT rewarded with issuance of a right-of-way if they unlawfully blade roads on public lands, or engage in other such activities to assert a right-of-way.
Roads further fragment wildlife habitats and dispersal corridors, and serve to isolate wildlife populations. Energy development and production activities require vast networks of new roads, cutting across sagebrush habitats, as previously described. Mining, oil and gas, geothermal and wind development, cause extensive new roading. Roading associated with exploration and development results. Roading facilitates weed spread. Direct effects of roads are destruction of habitat and disruption of dispersal corridors. Indirect effects of roads are cumulative and involve changes in plant and animal community structure and ecological processes. Roads fragment and isolate populations in species that are hesitant to cross them. Direct habitat loss, facilitated invasion of weeds, pests and pathogens, altered predation rates – are all a consequence of roading. Many weedy plants dominate and disperse along road sides. Opportunistic animals benefit from roads. Edge effects are now seen as harmful consequences of habitat fragmentation for many native species. Indirect effects include increased human access, OHV use, hunting, human-caused wildfires, Roads diminish native diversity of ecosystems. Many roads in rugged western

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terrain follow streamcourses, so are constructed through the middle of big sagebrush sites following drainages and draws that are critical as dispersal corridors for pygmy rabbits.
BLM's planning process must not authorize new utility corridors. These corridors open the way for a proliferation of energy developments, and have significant environmental impacts that are directly counter to the goal of restoration. BLM must strengthen environmental protection for all rights-of-way on these lands. Protections include: Limiting use during sensitive nesting, fawning, wintering or other periods of use for all native wildlife, assessing impacts of rights-of-way currently held on spreading exotic species onto surrounding lands. Criteria for revocation of rights-of-way 50 if environmental harms (weed spread, significant wildlife disturbance) are occurring must be established. A bonding requirement for any right-of-way must be established by this RMP. The bond must be sufficient to restore the land at the termination of the right-ofway, as ell as to mitigate all environmental harms that stem from right-of-way construction and other or ongoing activities. The need to preserve wild untrammeled vistas, primitive and undeveloped wild land settings and the darkness of night skies must be the guiding principle in any right-of-way issuance, or utility corridor consideration.

Table C-16
Mineral Resources (includes Oil, Gas, Geothermal, Coal, Saleable, Solid Leasable (except coal) and Locatable)

Mining is a major activity on the public lands in the Battle Mountain District. Mining development on public lands needs to be consistent with the recommendations for wildlife protection found in the numerous plans and guidelines which are included in Attachment A of this letter.
With Oil & Gas and Geothermal Lease Sales, it will be important to identify which parcels should be removed from future sale consideration to protect wildlife resources. The stipulations should expand on which lease sale parcels would have a "no surface occupancy" stipulation; and, which parcels we could accept application of "timing restrictions" stipulations. Areas of specific interest include but are not limited to: Railroad Valley WMA (including Lockes Ranch acquisition), non-WMA portions of Railroad and Big Sandy valleys in Nye County and Fish Lake Valley/Columbus Marsh, Monte Cristo Range (esp. Trough Spring), and Lone Mountain in Esmeralda County.
With respect to the RMP, the plan and associated EIS should continue to provide for the protection of valid existing rights and claims to explore for and develop mineral resources.
The NOI specifically requests Input from the public on Planning Issues and Planning Criteria that will guide BLM's development of the RMP. The BLM's NOI identifies some "preliminary issues" for the RMP. That list omits several significant issues that should be central to the BLM's planning efforts. In particular, the NOI fails to identify hardrock mineral development and the protection of mineral exploration and development rights as a planning issue. Given the importance of mineral exploration and development activities to the local, regional, and state economies, and the substantial mineral potential within the BMD, these are critical issues to be addressed in the RMP. Congress has long recognized this country's substantial interest in developing its domestic minerals base for the benefit of the American public. The Mining and Minerals Policy Act of 1970 (30 U.S.C. § 21 a) provides: (I)t is the continuing policy of the Federal Government in the national interest to foster and encourage private enterprise in (1) the development of economically sound and stable domestic mining, minerals, metal and mineral reclamation industries, (2) the orderly and economic development of domestic mineral resources, reserves and reclamation of metals and minerals to help assure satisfaction of industrial, security and environmental needs.... The longstanding federal policy to encourage mineral exploration and development dates back to the General Mining Law of 1872, which declared that all valuable mineral deposits on the federal lands shall be free and open to exploration and purchase. Congress continued to promote the important national interest in developing domestic mineral resources under the Federal Land and Policy Management Act of 1976 (FLPMA). Among the key policies established in FLPMA Congress directed that the public lands continue to be managed in a manner that recognizes this Nation's need for minerals and in a manner that implements the Minin and Minerals Policy Act of 1970. 43 U.S.C. § 1701 (12). Congress also expressly provide that the land-use planning directives under FLPMA shall not "in any way amend the Mining Law of 1872 or Impair the rights of any locators or claims under that Act including, but not limited to, rights of ingress and egress" to public lands for mineral exploration and development. 43 U.S.C. § 1732(b). With this background, key Planning Issues and Planning Criteria for the RMP should include the following: The RMP should provide for protection of valid existing rights, including rights to explore for and develop minerals.
Land and minerals within the RMP area should remain open for exploration and mining to the full extent allowed by law. The RMP should also ensure access to federal minerals for exploration and development purposes. Management of mineral resources should be consistent with federal mining laws, FLPMA and the Mining and Minerals Policy Act of 1970. As noted above, these statutes set forth the longstanding federal policy to encourage mineral development and require that federal land-use plans do not impair the rights of locators under the federal mining laws.
The RMP should recognize that a substantial regulatory framework for managing locatable mineral activities and protecting other resource values already exists. The RMP should avoid unnecessary additional prescriptions. For example, the BLM has implemented FLPMA's directive to prevent unnecessary and undue degradation through regulations adopted at 43 C.F.R. Subpart 3809. The BLM's 3809 regulations establish a comprehensive permitting framework by which the BLM evaluates the potential impacts of proposed mineral exploration and mining operations, and develops project-specific mitigation measures to ensure that other resources are protected in a manner that prevents unnecessary and undue degradation. In conjunction with the environmental analyses required under the National Environmental Policy Act and the numerous other mediaspecific permitting requirements that apply to mining activities (e.g., Clean Water Act Clean Air Act), the BLM's 3809 regulations provide the means to effectively manage the effects of mineral exploration and development activities while recognizing the longstanding national policy to foster mineral development for the benefit of the American people. Compliance with these existing laws and regulations is sufficient to ensure that public land resources, such as water quality and wildlife, are protected from the potential impacts of mining-related activities.

Table C-16
Mineral Resources (includes Oil, Gas, Geothermal, Coal, Saleable, Solid Leasable (except coal) and Locatable)

The RMP should provide for mechanisms to enhance the efficiency of administrative processes and systems to ensure expeditious review and approval of minerals exploration and development project proposals.
However, mining operations could impact our operations (tall equipment such as cranes and conveyor belts).
Mining (and the needed exploration process) is an important part of Nevada's economy. Mining is vital to our National security by providing useful minerals. The 1872 Mining Law should be observed and respected. The BLM should promote this industry versus hindering and over regulating.
Large mineral, Oil and gas, geothermal and wind energy siting withdrawals must be made as part of this planning process. These activities should be precluded by 49 withdrawals in all biologically sensitive, roadless or other important lands. For example, all identified sage grouse habitat should be withdrawn from ALL mineral, oil and gas, geothermal, wind energy and biomass energy activity – including both exploration and development due to the extensive habitat fragmentation that these activities would cause.
Extensive cyanide heap leach gold mining and other forms of hard rock mining occurs in many areas of Nevada. Plus, mines frequently are located on the lower slopes of ranges, so the zone of extensive disturbance and infrastructure, when located on north-south running Great Basin ranges serves to slash across possible north-south sagebrush linkages and dispersal corridors, and further isolate any remaining sage-grouse, pygmy rabbit and other populations. Limitations on gravel and other materials must be zoned for in this RMP. The Footprint of land scarring impacts must be controlled.
Conduct a separate EIS for geothermal/oil/gas leasing. These activities are a single use over very large areas. The impacts are so profound and different than most other activities that they warrant a separate EIS
The BLM has a multiple use mandate and must manage its lands for a variety of uses, not primarily for oil and gas development. FLPMA obligates the BLM to abide by the principles of multiple use and sustained yield, especially during the land use planning process. Specifically, multiple-use is defined as: …the use of some land for less than all of the resources; a combination of balanced and diverse resource uses that takes into account the long-term needs of future generations for renewable and non-renewable resources, including, but not limited to, recreation, range, timber, minerals, watershed, wildlife and fish, and 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 or the greatest unit output. 43 U.S.C. § 1702(c). The definition of multiple use makes it clear that the BLM is obligated to manage the land for a number of resources other than oil and gas leasing, and states specifically that the BLM should manage some land for less than all of the resources and should not always be concerned with managing the land in order to receive the greatest economic return. The definition of multiple-use makes it clear that simply because a particular resource exists does not mean that the BLM needs to be able to extract that resource for a profit. It is well within the realm of BLM's multiple-use mandate to not have a significant portion of the Battle Mountain District open to oil and gas leasing. Further, BLM should consider alternatives which choose not to re-lease areas formerly leased when those leases expire or are terminated. Areas where there are specific resource concerns or that are identified as important habitat should be considered for other uses besides oil and gas leasing. These areas may include, but are not limited to: Areas of Critical Environmental Concern, Recreation Management Areas, critical habitat, areas with cultural resources, and lands with wilderness characteristics. BLM's answer to charges that it is not adequately protecting resources from oil and gas impacts is often to provide leasing with No Surface Occupancy (NSO) stipulations. While NSO stipulations are a marked improvement over offering leases with standard lease terms, it is important to note that NSO stipulations do not necessarily resolve the wildlife and other resource concerns associated with oil and gas leasing. There are adverse consequences to wildlife associated with oil and gas development, regardless of whether or not there is an NSO stipulation on the lease. An example of this, noted by Clait Braun (2006) in A Blueprint for Sage-grouse Conservation and Recovery, a copy of which is attached to these comments, is that "oil and gas development influenced the rate of nest initiation of sage-grouse in 37 excess of 3 km of construction activities. Clearly, the amount and (likely) frequency of noise associated with development has major negative effects on greater sage-grouse." Further, BLM often offers companies exceptions, modifications or waivers from the application of NSO stipulations. Having NSO stipulations on a majority of the lands within the field office is better than allowing surface occupancy in terms of wildlife and resource concerns, but that does not supplant the BLM's obligation to manage for a variety of resources, of which oil and gas is only one.
NEPA requires the BLM to consider and evaluate a reasonable range of alternatives for oil and gas development. The range of alternatives is "the heart of the environmental impact statement." 40 C.F.R. § 1502.14. NEPA requires BLM to "rigorously explore and objectively evaluate" a range of alternatives to proposed federal actions. See 40 C.F.R. §§

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Mineral Resources (includes Oil, Gas, Geothermal, Coal, Saleable, Solid Leasable (except coal) and Locatable)

1502.14(a) and 1508.25(c). "An agency must look at every reasonable alternative, with the range dictated by the nature and scope of the proposed action." Northwest Envtl Defense Center v. Bonneville Power Admin., 117 F.3d 1520, 1538 (9th Cir. 1997). An agency violates NEPA by failing to "rigorously explore and objectively evaluate all reasonable alternatives" to the proposed action. City of Tenakee Springs v. Clough, 915 F.2d 1308, 1310 (9th Cir. 1990) (quoting 40 C.F.R. § 1502.14). This evaluation extends to considering more environmentally protective alternatives and mitigation measures. See, e.g., Kootenai Tribe of Idaho v. Veneman, 313 F.3d 1094,1122-1123 (9th Cir. 2002) (and cases cited therein). For this RMP, the consideration of more environmentally protective alternatives is consistent with the requirement of FLPMA to "minimize adverse impacts on the natural, environmental, scientific, cultural, and other resources and values (including fish and wildlife habitat) of the public lands involved." 43 U.S.C. §1732(d)(2)(a). NEPA requires that an actual "range" of alternatives is considered, such that the Act will "preclude agencies from defining the objectives of their actions in terms so unreasonably narrow that they can be accomplished by only one alternative (i.e. the applicant's proposed project)." Colorado Environmental Coalition v. Dombeck, 185 F.3d 1162, 1174 (10th Cir. 1999), citing Simmons v. United States Corps of Engineers, 120 F.3d 664, 669 (7th Cir. 1997). This requirement prevents the EIS from becoming "a foreordained formality." City of New York v. Department of Transp., 715 F.2d 732, 743 (2nd Cir. 1983). See also, Davis v. Mineta, 302 F.3d 1104 (10th Cir. 2002). In order to comply with NEPA, BLM must consider a broad spectrum of alternatives in regards to which lands will be available for oil and gas leasing. A draft RMP which leaves all the lands within the planning area open to oil and gas leasing or only allows for very slight differences between the alternatives in this regard fails to meet the "reasonable range of alternatives" directive. BLM has an obligation to rigorously explore and evaluate a range of alternatives.
A decision which leaves the vast majority of the District open to oil and gas development necessarily negates the effectiveness or long term viability of any conservation measures as there is always the potential that those conservation measures could be jeopardized by oil and gas development, regardless of how low the potential for development is. BLM has an opportunity in this RMP to make great strides in conservation and habitat restoration. However, the long term viability of these strategies, programs and goals could be severely impacted by oil and gas development. Oil and gas development is known to cause a variety of problems that are detrimental to wildlife, and by leaving nearly the entire planning area open to leasing, the BLM may 38 undermine any conservation efforts or goals it identifies in the RMP. The West is pockmarked with many places which were left open to oil and gas leasing based on the belief that these areas had low potential for development. As a result, when an economically recoverable reservoir of oil and/or gas was discovered, the area had insufficient protection measures in place. This lack of forethought has created many problems for wildlife and other resources. The impacts from oil and gas development are now well known, as such, areas of high ecological or cultural resource density should simply not be available for leasing. For example, Clait Braun, a leading researcher on sage grouse in the west, has stressed the impacts that oil and gas development can have on sage grouse populations: Road building, well pad construction, and noise disturbance associated with oil and gas development can fragment effective sage grouse habitat and compromise the quality of seasonal use areas. In addition, by creating more linear areas and smaller habitat patches, energy development can boost predation rates on sage grouse. So, for a variety of reasons, major oil and gas development reduces the area useable by sage grouse, which often leads to greater isolation of populations and a reduced ability to handle droughts, severe winters, or other natural disturbances.10 BLM simply cannot expect to have ecologically effective sage grouse habitat, or any other type of important wildlife habitat, and unlimited oil and gas development in the same area. A situation arrives in which the goals, programs, and designations BLM uses to protect a valuable resource is only effective until such time that the right technology and/or price of oil and gas reaches a point that a previously non-economically extractable supply becomes economically extractable, or until a previously unknown supply not thought to exist is discovered. History tells us that BLM must consider the impacts of oil and gas development across the planning area and close areas which have important wildlife, cultural, or wilderness values. Specifically, sage grouse core habitat and winter habitat should be closed to oil and gas leasing, and connectivity needs must be taken into account as well. Non-core habitat within 4 miles of active leks should have an NSO stipulation, with no exceptions, modifications, or waivers. Recent science indicates sage grouse require a 4-mile buffer around active leks to prevent significant population declines
Recommendations: In order for the BLM to comply with FLPMA and NEPA the agency should, at a minimum, consider and "rigorously explore" the possibility and design alternatives which do not leave a significant portion of the Field Office open to oil and gas leasing. See 43 U.S.C. § 1712(c)(1) and 40 C.F.R. §§ 1502.14(a) and 1508.25(c). We recommend, at a minimum, that the areas identified as having "low" oil and gas potential be removed from consideration for leasing. Further, BLM must consider a range of alternatives that will address what to do with currently leased lands which are not developed and are either terminated or expire. Not allowing oil and gas leasing in these areas would help the BLM move towards meeting its goal of managing the federal lands within its jurisdiction for a variety of uses, not primarily for oil and gas leasing. For lands which area identified as appropriate for leasing, a variety of non-waivable stipulations, conditions of approvals (COAs), and Best Management Practices (BMPs – discussed later) should be developed to protect the many resources present in the planning area. Protecting sage grouse from oil and gas development is of utmost concern in this planning area.

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Oil and Gas Leasing Reform In May 2010, BLM issued IM 2010-117, instituting broad reforms to the agency's oil and gas leasing program. The new policy intends to promote more organized and efficient oil and gas leasing and development that reduces environmental conflicts. Part of the new guidance is a revised process for lease parcel review and issuance that involves, among other aspects, increased public participation and on-site review of parcels. According to the new process, field offices must now form interdisciplinary review teams that undertake comprehensive review of proposed lease parcels and document NEPA compliance prior to leasing. This thorough process can be streamlined in instances where a master leasing plan (MLP) has been completed, demonstrating adequate leasing review. We encourage the Battle Mountain District Office to complete an MLP as part of this RMP. An RMP revision is an ideal time to undertake an MLP planning process, because BLM is analyzing resources on a landscape level and making large scale decisions such as where and how oil and gas leasing and development should proceed. By including the evaluations and decisions required in an MLP in the Battle Mountain RMP, the District Office will have set forth a course for well-planned oil and gas leasing and development that meets the agency's dual goals of providing more certainty for developers and protecting natural resources. This would also save the District Office from the necessity of producing an environmental assessment or environmental impact statement for every new lease parcel. Recommendations: The Battle Mountain District Office must ensure the RMP complies with the new oil and gas guidance. BLM should consider completing a master leasing plan as part of the RMP to craft an oil and gas leasing and development strategy for the District that balances energy development with the other resources BLM is charged with managing.
Impacts of Oil and Gas Leasing NEPA requires that federal agencies take a "hard look" at the direct and indirect environmental impacts of oil and gas development before any action that will lead to such development takes place. See, e.g., Pennaco Energy, Inc. v. U.S. Department of the Interior, 377 F.3d 1147 (10th Cir. 2004); Conner v. Burford, 848 F.2d 1441 (9th Cir. 1988); Sierra Club v. Peterson, 717 F.2d 1409 (D.C. Cir. 1983). NEPA's regulations further provide that the "effects" on the environment that agencies must consider include those that are "direct, indirect, or cumulative." 40 C.F.R. § 1508.8. The NEPA regulations define "cumulative impact" as: the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. 40 C.F.R. § 1508.7. (emphasis added). The analysis of impacts included in the RMP must adequately address the cumulative impacts of oil and gas operations within the region or the impacts inherent in the proposed action. Federal case law amplifies that agencies must disclose the direct and indirect environmental effects a federal action will have on non-federal lands. See City of Davis v. Coleman, 521 F.2d 631, 677-81 (9th Cir. 1975) (where federal approval of highway project likely to have impacts on development of surrounding area, agency must analyze development impacts in EIS); Coalition for Canyon Preservation v. Bowers, 632 F. 2d 774, 783 (9th Cir. 1980) (same); Sierra Club v. Marsh, 769 F.2d 868, 877-89 (1st Cir. 1985) (striking down EA where agency failed to account for private development impacts likely to result from its approval of causeway and port facility); Mullin v. Skinner, 756 F.Supp 904, 920-22, (E.D. N.C. 1990) (striking down EA where agency failed to account for private development impacts likely to result from agency approval of bridge). Such impacts must be disclosed, particularly where facilitating private development may be the project's "reason for being." See Citizens Comm. Against Interstate Route 675 v. Lewis, 542 F.Supp. 496, 562 (S.D. Ohio 1982). BLM must consider impacts of region-wide development and also consider impacts on private lands. Existing development from neighboring planning areas as well as development within the District affects the Battle Mountain planning area. Similarly, although the BLM may not have formal control over adjacent private lands, these lands can also be affected by oil and gas development. The impacts of oil and gas development do not recognize management boundaries. Recommendation: In considering the need and ways to manage these lands to protect the many resources of these public lands, the agency must consider the cumulative impacts from regional oil and gas development and the cumulative impacts to adjacent lands from oil and gas development. This analysis should inform the manner in which BLM allocates lands as available or unavailable for oil and gas development and the conditions under which development may be permitted.
Best Management Practices Significant portions of the planning area will likely remain open to oil and gas development. As discussed with respect to the many other values of the lands within the planning area, many of these lands should not be open to leasing and others require non-waivable lease stipulations to protect their resources, such as wildlife habitat, water quality and wilderness characteristics. It is vital that the RMP require the use of best management practices (BMPs) for oil and gas exploration and development, which can drastically reduce the impacts of oil and gas development on the other natural resources of the public lands. BLM's guidance requires consideration of BMPs for oil and gas development. BLM's Instruction Memorandum 2004-194 directs consideration of BMPs and both the IM and the recently updated Gold Book provide examples of BMPs that can be applied to both new and existing leases, in order to limit the damage from oil and gas development. It is critical that the RMPs consider and make BMPs mandatory in order to comply with BLM's guidance and obligations to protect the many natural values of these lands. Furthermore, the Battle Mountain District Office should ensure BMPs are consistent with the new state office standardized lease stipulations, as set out in IM 2010-117. Recommendations: The RMP must identify BMPs and make them mandatory, especially in sensitive areas. BMPs should include: • Phased or strategic development - in terms of timing (developing one area, then restoring before moving to another),

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location (such as staying out of big game corridors), limiting amount of equipment in use at any given time, limiting amount of surface disturbance on a lease at any given time and requiring successful restoration before permitting additional disturbance; • directional drilling; • clustered drilling; • closed loop drilling; • interim reclamation; • restoration standards; • unitization; and • increased bonding that will fund reclamation.

Table C-17
Special Designations

Special Designation - General
The Railroad Valley Wildlife Management Area (WMA) needs a revised management plan and restrictions on surface and subsurface occupancy for renewable and nonrenewable resource utilization. A buffer around the WMA should also be established. No oil and gas leases should bellowed, at minimum, within the WMA and consideration given to not granting oil and gas leases in most areas of Rail Road Valley.
The RMP should describe how the Wild Lands Policy announced by the Department of Interior in December 2010 will be implemented within the Battle Mountain District. To the extent practicable, the RMP and EIS should include information and analyses with regards to the Wild Lands Policy that will allow subsequent federal actions to cite and tier from the RMP effort.
The Battle Mt. District encompasses some outstanding public lands that need protection from unwise practices and uses. Such protection can best be offered by special designations such as "wild lands," ACEC's, and others.
The Sierra Club also nominates the "Hearth of the Great Basin, NV" as a national monument. Department of Interior information describes this area and its significant resources. "The Heart of the Great Basin contains Nevada's wild heart - a globally unique assemblage of cultural, wildlife, and historical values...Thousands of petroglyphs and stone artifacts provide insight to the area's inhabitants from as long as 12,000 years ago. The region contains varied ecosystems including alpine tundra, rushing creeks, aspen groves, and high desert sage grouse habitat. The area is also a center for climate change scientific research (e.g. Great Basin Pika is a keystone species for climate research), and one of North America's least (known) wildland mosaics."
We encourage you to utilize the recently issued "Wild Lands Policy" so as to protect the wilderness characteristics of certain BLM lands within the District. We have attached a map of these citizen -- inventoried areas for your review and consideration.
In addition, there is no per se bar to managing and protecting the many values of these lands through overlapping designations, such as Wilderness Study Areas (WSAs) and ACECs or Special Recreation Management Areas (SRMA) and Wild and Scenic River Segments. For example, BLM's Jarbidge RMP (and subsequent amendments) in southern Idaho designated the Bruneau/Jarbidge River ACEC and the Salmon Falls Creek ACEC, which overlap the Bruneau River-Sheep Creek WSA, Jarbidge River WSA, and Lower Salmon Falls Creek WSA, and includes the Salmon Falls Creek, deemed eligible for inclusion in the National Wild and Scenic Rivers System. See BLM, Jarbidge Field Office, Idaho, Analysis of the Management Situation for the Jarbidge Resource Management Plan: Resource Management Plan/Environmental Impact Statement at 212-216 and Figure 39 (Locations of Current ACECs) (July 2007), available at http://www.blm.gov/pgdata/etc/medialib/blm/id/plans/jarbidge_rmp/documents/analysis_of_the_management.Par.59385.File.dat/part13.pdf; Figure 40: Wilderness Study Areas, available at http://www.blm.gov/pgdata/etc/medialib/blm/id/plans/jarbidge_rmp/documents/analysis_of_the_management.Par.18048.File.dat/part14.pdf (excerpts attached to these comments). These overlapping designations ensure that BLM protects both the relevant and important values associated with the ACECs and the wilderness character of the WSAs, both through current management and in the event WSAs are released during the life of the plan. In certain situations, overlapping designations are needed to fully protect the resources, for example IMP management of WSAs might differ greatly from the special management attention envisioned for the relevant and important values of a particular ACEC or in the event of congressional WSA release. In addressing objections to "layering" of designations (through "establishment of ACECs or SRMAs over WSAs and Wild and Scenic Rivers") raised in connection with the Monticello (Utah) RMP, the BLM responded, appropriately: "Layering" is planning. Under FLPMA's multiple use mandate, BLM manages many different resource values and uses on public lands. Through land use planning BLM sets goals and objectives for each of those values and uses, and prescribes actions to accomplish those objectives. Under the multiple use concept, BLM doesn't necessarily manage every value and use on every acre, but routinely manages many different values and uses on the same areas of public lands. The process of applying many individual program goals, objectives, and actions to the same area of public lands may be perceived as "layering". BLM strives to ensure that the goals and objectives of each program (representing resource values and uses) are consistent and compatible for a particular land area. Inconsistent goals and objectives can lead to resource conflicts, failure to achieve the desired outcomes of a land use plan, and litigation. Whether or not a particular form of management is restrictive depends upon a personal interest or desire to see that public lands are managed in a particular manner. All uses and values cannot be provided for on every acre. That is why land use plans are developed through a public and interdisciplinary process. The interdisciplinary process helps ensure that all resource values and uses can be considered together to determine what mix of values and uses is responsive to the issues identified for resolution in the land use plan. Layering of program decisions is not optional for BLM, but is required by the FLPMA and National BLM planning and program specific regulations. FLPMA directs BLM to manage public

Table C-17
Special Designations

lands for multiple use and sustained yield (Section 102(a)(7)). As a multiple-use agency, the BLM is required to implement laws, regulations and policies for many different and often competing land uses and to resolve conflicts and prescribe land uses through its land use plans. BLM's Land Use Planning Handbook requires that specific decisions be made for each resource and use (Planning Handbook "H-1601-1"). Specific decisions must be included in each of the alternatives analyzed during development of the land use plan. As each alternative is formulated, each program decision is overlaid with other program decisions and inconsistent decisions are identified and modified so that ultimately a compatible mix of uses and management prescriptions result. Monticello Proposed RMP, Response to Comments, comment no. 007-48 (attached). As clarified by the BLM, because different designations serve different purposes, and management is often limited to protect only those values relevant to those particular designations, the fact that an ACEC may lie within a WSA does not justify failing to designate the ACEC and the fact that a proposed SRMA may overlap with an ACEC does not obviate the need for the SRMA. Recommendation: The BLM must uphold its responsibility to protect the abundant natural values present in the Battle Mountain planning area when developing management alternatives in the Battle Mountain RMP and evaluating their environmental consequences, as required by both FLPMA and NEPA, 42 U.S.C. § 4321 et seq.
As noted above, the BLM has a variety of tools for protecting natural values. We also encourage the BLM to use designation of recreation management areas and areas of critical environmental concern to protect natural values as part of an overall management approach to creating, enhancing, and protecting quiet recreation experiences, protecting critical species habitats, and providing needed expansions of protections around current WSAs, ACECs, and SRMAs
To assist the Battle Mountain District Office with inventorying and protecting lands in accordance with Secretarial Order 3310 and FLPMA, we are attaching a map depicting specific areas with wilderness characteristics that should be designated as Wild Lands to protect the opportunities they provide for primitive recreation and otherwise experiencing solitude, naturalness and scenic beauty. These proposed wilderness areas have been inventoried by Nevada Wilderness Project and Friends of Nevada Wilderness. We would like to highlight that many of these proposed wilderness areas, and other areas which BLM will inventory during this RMP revision, are adjacent to existing WSAs or other roadless areas, and thus provide connectivity and an opportunity for landscape-scale conservation. For example, Castle Rock North and South and Goblin Knobs are adjacent to WSAs and should be protected to provide a connected natural landscape. These areas are also deserving of Wild Lands designation because of their unique geology and remoteness. Similarly, the Lava Flow, North Wall, and Easy Chair proposed wilderness areas are adjacent to WSAs and therefore should be protected to conserve these ecosystems at a landscape level. This concept is supported by the recently released America's Great Outdoors report, which recommends the agency incorporate landscape-scale conservation and restoration as a priority in BLM resource management plans and programs.3 Recommendations: The Battle Mountain District Office should ensure its inventory of lands with wilderness characteristics includes the areas depicted in the attached map, as well as other areas which BLM has previously found wilderness characteristics or otherwise believes may possess wilderness qualities. The RMP should give priority to protecting areas that are adjacent to WSAs and roadless areas and can support landscape-scale conservation.
Intact native communities, WSAs, recommended Wild and Scenic Rivers, significant unroaded lands suitable for wilderness, all ACECs, etc. should be protected from new or increased livestock intrusion, energy expo and development, mining, mineral activity in all parts.
In addition, BLM can use this EIS effort to newly evaluate and add to an understanding of: Naturalness, solitude, primitive and unconfined recreation, special features in existing unroaded lands and WSAs. Plus, BLM must update the "Special features" that in 2011 certainly includes presence of sage grouse or pygmy rabbit habitat, presence of native vegetation communities with minimal exotic species infestation, importance of large unfragmented "sagebrush sea" expanses, large contiguous pinyon-juniper forests, etc. Impacts of livestock grazing on WSAs or other Roadless land values must be thoroughly evaluated under all alternatives.
Areas of Critical Environmental Concern (ACECs)
Impacts of military activities or overflights on public lands must be fully assessed in this land use plan process, and the impacts – use of flares causing fires, noise or low level flights interfering with recreational uses, etc. must be fully addressed. Sage-grouse, bighorn sheep, migratory birds, nesting raptors and other wildlife are increasingly recognized to be highly sensitive to noise, and the cumulative adverse impacts of activities in the RMP area must be examined.
NDOW would like to participate in the delineation of ACECs that are important for the conservation of several wildlife species and their associated habitats during the RMP development. Wildlife for consideration would include (but are not limited to): bats, raptors (primarily Golden Eagle and Prairie Falcon), shorebirds (such as the Snowy Plover), small mammals (such as the Pale and Dark Kangaroo Mouse) pygmy rabbit, sage grouse and crucial big game habitats. NDOW would like to offer our current wildlife datasets in

Table C-17
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support of ACEC development for wildlife and habitat.
Areas of Critical Environmental Concern ("ACECs") are areas recognized as needing special management attention to protect and prevent irreparable damage to important historic, cultural, and scenic values, fish, or wildlife resources or other natural systems or processes; or to protect human life and safety from natural hazards. All current and existing ACECs should be maintained in their current status.
We also propose that you consider establishing new ACECs in the following areas: Cain Spring - In 2006, the State of Nevada Natural Heritage Program published its list of "Highest Priority Conservation Sites ("Scorecard").1 Through this process, the State identified its highest priorities for the conservation of biological diversity within its borders. We have included the Scorecard as Appendix A. The Scorecard ranked this site as "B1P1M1" meaning that it has outstanding biological significance, had a good chance of being immediately threatened by severely destructive forces, and without immediate new or annual ongoing management could suffer irretrievable degradation affecting biological populations of concern found there. Species of concern found there include the elongated Cain Spring pyrg and the ovate Cain Spring pyrg, both globally and state critically imperiled due to extreme rarity, imminent threats or biological factors.
We also propose that you consider establishing new ACECs in the following areas: Carico Lake Springs – The Scorecard ranked this site as "B1P1M1" meaning that it has outstanding biological significance, had a good chance of being immediately threatened by severely destructive forces, and without immediate new or annual ongoing management could suffer irretrievable degradation affecting biological populations of concern found there. Species of note found there include the large gland Carico pyrg and the small gland Carico springsnail, both globally and state critically imperiled due to extreme rarity, imminent threats or biological factors. Since a large extent of the habitat is shared with private ownership, the RMP should direct the BLM to attempt to secure a conservation agreement for the protection of the area.
We also propose that you consider establishing new ACECs in the following areas: Charnock Ranch - The Scorecard ranked this site as "B1P1M1" meaning that it has outstanding biological significance, had a good chance of being immediately threatened by severely destructive forces, and without immediate new or annual ongoing management could suffer irretrievable degradation affecting biological populations of concern found there. Smokey Valley speckled dace, state critically imperiled due to extreme rarity, imminent threats or biological factors. Since a large extent of the habitat is shared with private ownership, the RMP should direct the BLM to attempt to secure a conservation agreement for the protection of the area.
We also propose that you consider establishing new ACECs in the following areas: Cooks Creek - The Scorecard ranked this site as "B1P1M1" meaning that it has outstanding biological significance, had a good chance of being immediately threatened by severely destructive forces, and without immediate new or annual ongoing management could suffer irretrievable degradation affecting biological populations of concern found there. Species of concern include the large gland Carico pyrg, both globally and state critically imperiled due to extreme rarity, imminent threats or biological factors. Since the habitat is shared with private ownership, the RMP should direct the BLM to attempt to secure a conservation agreement for the protection of the area.
We also propose that you consider establishing new ACECs in the following areas: Duckwater Springs – This area lies within Railroad Valley. The Scorecard ranked this site as "B1P1M1" meaning that it has outstanding biological significance, had a good chance of being immediately threatened by severely destructive forces, and without immediate new or annual ongoing management could suffer irretrievable degradation affecting biological populations of concern found there. Species of concern include the Duckwater Creek tui chub, Railroad Valley skipper, Duckwater pyrg, Southern Duckwater pyrg, Big Warm Spring pyrg, and the Duckwater warm springs pyrg, all critically imperiled due to extreme rarity, imminent threats or biological factors, as well as the Railroad Valley springfish and pallid skipper which are imperiled due to rarity or other demonstrable factors. Springs and marshes in Railroad Valley have been identified by the State of Nevada as the co-fourth highest priority wetlands in the state.2 The purpose of the report is to inform land and natural resources managers and conservation partners about priority wetlands, their locations, priority rank, and factors determining their priority status. The ownership of this area is shared by the Duckwater Indian Tribe, BLM and private individuals. The RMP should direct the BLM to attempt to secure a conservation agreement for the protection of the area.
We also propose that you consider establishing new ACECs in the following areas: Fish Creek Springs - The Scorecard ranked this site as "B1P1M1" meaning that it has outstanding biological significance, had a good chance of being immediately threatened by severely destructive forces, and without immediate new or annual ongoing management could suffer irretrievable degradation affecting biological populations of concern found there. Species of concern found there include the Fish Creek Springs tui chub and low

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feverfew which are critically imperiled due to extreme rarity, imminent threats or biological factors, as well as Eastwood milkweed and starveling milkvetch which are imperiled due to rarity or other demonstrable factors. Since a large extent of the habitat is shared with private ownership, the RMP should direct the BLM to attempt to secure a conservation agreement for the protection of the area.
We also propose that you consider establishing new ACECs in the following areas: Hot Creek - The Scorecard ranked this site as "B1P1M1" meaning that it has outstanding biological significance, had a good chance of being immediately threatened by severely destructive forces, and without immediate new or annual ongoing management could suffer irretrievable degradation affecting biological populations of concern found there. Species of concern found there include the Railroad Valley tui chub, Hot Creek Valley tui chub and the Blaine pincushion, all critically imperiled due to extreme rarity, imminent threats or biological factors. Since the habitat is shared with private ownership, the RMP should direct the BLM to attempt to secure a conservation agreement for the protection of the area.
We also propose that you consider establishing new ACECs in the following areas: Hot Spring Hill - The Scorecard ranked this site as "B1P1M1" meaning that it has outstanding biological significance, had a good chance of being immediately threatened by severely destructive forces, and without immediate new or annual ongoing management could suffer irretrievable degradation affecting biological populations of concern found there. Species of concern found there include the Monte Neva paintbrush, critically imperiled due to extreme rarity, imminent threats or biological factors, as well as the one-leaflet Torrey milkvetch which is imperiled due to rarity or other demonstrable factors, and the pygmy rabbit which is rare and vulnerable to extinction. Ownership is shared with the State of Nevada and the RMP should direct the BLM to attempt to secure a conservation agreement for the protection of the area.
We also propose that you consider establishing new ACECs in the following areas: Lockes - The Scorecard ranked this site as "B1P1M1" meaning that it has outstanding biological significance, had a good chance of being immediately threatened by severely destructive forces, and without immediate new or annual ongoing management could suffer irretrievable degradation affecting biological populations of concern found there. There are numerous species of concern found in this area. Currant milkvetch, Blaine pincushion, Railroad Valley tui chub, Railroad Valley skipper, Lockes springsnail and Western snowy plover are all critically imperiled due to extreme rarity, imminent threats or biological factors. The Eastwood milkweed, one-leaflet Torrey milkvetch, Railroad Valley globemallow, Ripley biscuitroot, Railroad Valley springfish, and pallid skipper are imperiled due to rarity or other demonstrable factors. The rayless tansy aster is rare and vulnerable to extinction. Springs and marshes in Railroad Valley have been identified by the State of Nevada as the co-fourth highest priority wetlands in the state. The purpose of the report is to inform land and natural resources managers and conservation partners about priority wetlands, their locations, priority rank, and factors determining their priority status. Ownership of the site is shared by the BLM, State of Nevada and private individuals. The RMP should direct the BLM to attempt to secure a conservation agreement for the protection of the area.
We also propose that you consider establishing new ACECs in the following areas: Sand Mountain - The Scorecard ranked this site as "B1P1M1" meaning that it has outstanding biological significance, had a good chance of being immediately threatened by severely destructive forces, and without immediate new or annual ongoing management could suffer irretrievable degradation affecting biological populations of concern found there. Species of concern found there include the Sand Mountain blue, Hardy's aegialian scarab, Sand Mountain pygmy scarab, Sand Mountain serican scarab, and the Western snowy plover, all of which are critically imperiled due to extreme rarity, imminent threats or biological factors. Also found on the site are the dune sunflower, Nevada orycetes, and the dune honey ant which are imperiled due to rarity or other demonstrable factors.
We also propose that you consider establishing new ACECs in the following areas: San Antonio site spring and brook, Argenta Marsh, north Clover Valley spring pools and outflows, and the Diamond Lake playa, spring pool and brook – All these wetland sites have been identified by the State of Nevada as being in the top ten "highest priority wetlands" of the state. As such, the BLM should analyze and evaluate the appropriateness of identifying them as Areas of Critical Environmental concern through the RMP revision process.3
We also propose that you consider establishing new ACECs in the following areas: Monitor Valley – Monitor Valley has been identified by Audubon as an Important Bird Area in Nevada. It provides for many species of birds that are of concern in the state, supporting over a dozen Partners in Flight Conservation Species. It is particularly important for sage grouse, waterfowl and shorebirds. The RMP should establish an ACEC of significant size in the valley to protect the habitat of this species.4
All ACECs should have surface occupancy and mineral rights withdrawn, and federal water rights protected to ensure their integrity and site characteristics.

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The Sierra Club supports ACECs proposed by the Center for Biological Diversity in its letter of February 10, 2011
In addition, the Sierra Club proposes ACEC designation for an area of high paleontological values in Esmeralda County, known as The Sump. We will submit a formal application for ACEC designation for The Sump shortly.
Under FLPMA, BLM is also obligated to "give priority to the designation and protection of areas of critical environmental concern [ACEC]." 43 U.S.C. § 1712(c)(3). ACECs are areas "where special management is required (when such areas are developed or used or where no development is required) to protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources, or other natural systems or processes." 43 U.S.C. § 1702(a). For potential ACECs, management prescriptions are to be "fully developed" in the RMP. Manual 1613, Section .22 (Develop Management Prescriptions for Potential ACECs). ACECs also include Research Natural Areas (RNAs), established for their significant biological and physical features, including plant or animal species or geological, soil or water features. RNAs have "ecological or other natural history values of scientific interest" and are managed for research and educational purposes. Outstanding Natural Areas (ONAs) are another type of ACEC, established to preserve scenic values and natural wonders. ONAs contain unusual natural characteristics and are managed primarily for educational and recreational purposes. The resources in the Battle Mountain planning area include many values that merit protection through special designations. Protection of existing ACECs and due consideration of proposed ACECs, including RNAs and ONAs, must be a priority in the Battle Mountain RMP planning process.
Both FLPMA and the BLM's ACEC Manual (1613) emphasize the BLM's important duty to designate and protect Areas of Critical Environmental Concern. For example, FLPMA states: The Congress declares that it is the policy of the United States that - … regulations and plans for the protection of public land areas of critical environmental concern be promptly developed…FLPMA Title I Sec.102(a) [43 USC 1701] The Secretary shall prepare and maintain on a continuing basis an inventory of all public lands and their resource and other values (including, but not limited to, outdoor recreation and scenic values), giving priority to areas of critical environmental concern. FLPMA Title II Sec. 201(a) [43 USC 1711] In the development and revision of land use plans, the Secretary shall - … give priority to the designation and protection of areas of critical environmental concern….FLPMA Title II Sec. 202(c) [43 USC 1712] Therefore, ACEC designation and protective management are supposed to be a high priority within the BLM's mission. ACEC designation provides an important mechanism for the BLM to actively conserve and recover imperiled species so that the protections afforded by the Endangered Species Act and the designation of Critical Habitat are less necessary. Choosing not to conserve ACECs may contribute to the need to list species under the Act, and is inconsistent with the BLM's special status species obligations. In evaluating ACEC proposals, BLM's ACEC Manual requires that each area recommended for consideration as an ACEC, including from external nominations, be considered by BLM, through collection of data on relevance and importance, evaluation by an interdisciplinary team and then, if they are not to be designated, the analysis supporting the conclusion "must be incorporated into the plan and associated environmental document." Manual 1613, Section .21 (Identifying Potential ACECs). An ACEC is to be as large as is necessary to protect the important and relevant values. Manual 1613, Section .22.B.2 (Size of area to receive special management attention). In addition, the manual directs that, for ACECs proposed in at least on alternative, management prescriptions are to be "fully developed" in the RMP. Manual 1613, Section .22 (Develop Management Prescriptions for Potential ACECs). BLM should include specific management prescriptions for each designated ACEC that will protect the highlighted values, such as mineral withdrawal and travel management and route designations. Id. and Section .33.C (Provision for Special Management Attention). Setting out more detailed management prescriptions in the RMP will ensure protection of the ACEC values and can obviate the need for additional planning activities. Recommendations: The Battle Mountain RMP must evaluate a range of alternatives for ACEC designations that protects sensitive and important resources in the planning area. The RMP should put robust management prescriptions in place to ensure adequate protection for the resources which ACECs are designated to protect. The RMP should retain all existing ACECs, and expand them or improve management prescriptions where necessary.
The Center for Biological Diversity provided the Battle Mountain District Office with detailed information regarding potential ACECs to be designated in the RMP, based on the State of Nevada Natural Heritage Program. We recommend BLM review this information, ensure that it is incorporated into the baseline inventory, and give due consideration to protecting the species and areas addressed in CBD's comments through ACEC designation and/or other management prescriptions.
Designation of ACECs of sufficient size to truly protect functioning ecosystems is critically important to protect the special values of these landscapes. It is imperative that BLM in this planning process acts to protect these irreplaceable values and attributes. Recreational uses of public lands are burgeoning as populations in the Intermountain West grow. Plus, continuing damaging uses such as grazing costs taxpayers large amounts – and BM is certainly going to be facing budget limitations. Just trying to mitigate damage

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from grazing is an immense costs – and damage is very often unable to be mitigated.
We believe it is necessary for BLM to establish several large ACECs to protect the significant special status species, conservation, watershed and wild land values. These must be of a size that will protect landscapes or ecosystem level processes. In addition, BLM should designate RNAs, embedded within a larger matrix of an ACEC of sufficient size to protect important ecological values. Large ACECs and seasonal avoidance criteria should be part of the EIS process - for example, all identified sage grouse habitat should be withdrawn from all new development of livestock water, due to the extensive habitat fragmentation that could occur if new pipelines are built, and subsequent increased chronic depletion were to occur. Seasonal avoidance habitats by livestock grazing and other activities should occur during periods when sage grouse and migratory birds are nesting, when pygmy rabbit young are in shallow natal burrows, and other critical periods of the year, etc
WSA and Wilderness
Nye County does not support the creation of additional wilderness areas within Nye County.
NDOW requests the ability to actively manage wildlife in designated Wilderness areas or WSA's. These activities may include the survey and inventory of wildlife species and habitat, trapping, and transplanting for reintroduction or augmentation and the introduction of select game species wildlife to improve recreational opportunities for the public.
Close and revegetate all user-created routes or extension of existing routes (those created since the WSA inventory process) in WSAs.
The BLM should consider a wilderness plan for public lands located in Nye County. Promotion of the outstanding scenery could provide tourism dollars to local communities and sustain an economy that promotes ecotourism.
The RMP should study the suitability of wildlands in the planning area for wilderness designation.
Additionally, we encourage you to plan for the appropriate management necessary in order to maintain the wilderness characteristics of designated Wilderness Study Areas within the District
Wilderness Charactersitics
Conduct a thorough survey of all potential "wild lands" and manage those areas to conserve their wild quality. These are the lands that provide unfragmented wildlife habitat in a landscape where fragmentation is occurring at an alarming rate. They also represent the last vestiges of our frontier heritage in the lower 48.
The BLM brutal roundups are totally unacceptable. Horses including pregnant mares, and young foal are forced, brutally chased by choppers, over rocky terrain to arrive, some injured severely, especially the young foal. No justification for this outrage, just cater to cattle barons while horse sanctuaries are available to prevent this brutality, and while cattle numbers far exceed horse numbers. Secretary Salazar, the Obama Administration and the BLM continue ignoring public outcry on this issue.
Lands with Wilderness Character: The Battle Mountain has extensive beautiful, rugged back backcountry. Many of the lands with wilderness character were identified long ago as wilderness study areas. We believe that the inventory was a good one but that there are some additional lands that also have high value wilderness character. We have identified on the attached map in conjunction with the Nevada Wilderness Project some areas that should be lookd at more carefully during the BLM's RMP process. The areas shown on the map are just possible areas to consider for their wilderness values. We will be doing more field revies this summer to privide additional more detailed maps and photos and descriptions of wilderness values. We would welcome field trips with any of yoru staff that might be interested in reviewing these areas with potential wildernses character.
BLM must inventory for wilderness character and manage to protecting wilderness characteristics in the RMP. The lands governed by the Battle Mountain RMP contain pristine wildlands, including those identified in citizen inventories like that conducted by the Nevada Wilderness Project. Section 201 of FLPMA mandates that BLM inventory the resources of the public lands, their resources and values. 43 U.S.C. § 1711. In the land use planning process, including revision of RMPs, Section 202 of FLPMA requires that BLM take into account the inventory and determine which multiple uses are best suited to which portions of the planning area. 43 U.S.C. § 1712. BLM's mandate of multiple use and sustained yield, as well as other relevant law and BLM's current guidance, provides for inventory and protection of wilderness values. Wilderness character is a resource for

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which BLM must keep a current inventory. As the U.S. Court of Appeals for the Ninth Circuit recently held: wilderness characteristics are among the 'resource and other values' of the public lands to be inventoried under § 1711. BLM's land use plans, which provide for the management of these resources and values, are, again, to "rely, to the extent it is available, on the inventory of the public lands, their resources, and other values." 43 U.S.C. § 1712(c)(4). Oregon Natural Desert Ass'n v. Bureau of Land Management, 531 F.3d 1114, 1119 (9th Cir. 2008). Therefore, BLM is required to consider "whether, and to what extent, wilderness values are now present in the planning area outside of existing WSAs and, if so, how the Plan should treat land with such values." Id. at 1143. These obligations also apply to WSAs released by Congress, which BLM found to have wilderness characteristics. As the court stated: "wilderness characteristics are a value which, under the FLPMA, the Bureau has the continuing authority to manage, even after it has fulfilled its 43 U.S.C. § 1782 duties to recommend some lands with wilderness characteristics for permanent congressional protection." Id. at 1142. Secretarial Order 3310, issued by Secretary of the Interior Salazar on December 23, 2010, affirms that protection of wilderness characteristics is a "high priority" for the public lands and that the BLM should protect the "open and natural productive state" of these lands. The Order further directs the agency to not only inventory for wilderness characteristics, but also to formally designate lands where those values are identified as "Lands with Wilderness Characteristics." In a land use planning process, like this one, the BLM should designate these lands as Wild Lands. Further, the BLM is required to protect its ability to designate Wild Lands by identifying and protecting lands with wilderness characteristics as other projects and interim management decisions arise. The Order provides for the agency to determine, in accordance with the Order and other policy, that impairment of wilderness characteristics is appropriate based on law and other resource considerations. However, in light of the importance of the wilderness resource and the vulnerability of these values, the BLM should designate the Lands with Wilderness Characteristics identified through this planning process and/or during interim inventory to respond to other proposed uses as Wild Lands and manage those lands to protect such values.2 Recommendations: Recommendations: In accordance with Secretarial Order 3310 and new BLM Manuals 6301, 6302, and 6303, BLM should designate identified Lands with Wilderness Characteristics as Wild Lands, provide interim protection for wilderness characteristics during the preparation of the Battle Mountain RMP, and manage Wild Lands to protect their wilderness values.
Management prescriptions to protect wilderness characteristics should include, but not be limited to: • VRM Class I • Closed to motorized use and off-trail mechanized use • ROW Exclusion • Closed to mineral leasing; and retire existing leases as they expire • Recommend for withdrawal from mineral entry • Retain lands in federal ownership Manual 6302, Consideration of Lands with Wilderness Characteristics in the Land Use Planning Process, identifies these and other actions as appropriate for protecting Wild Lands.
Wilderness character is a valuable resource and important multiple use of the lands governed by the Battle Mountain RMP. As discussed above, wilderness is a resource to be inventoried and managed under BLM's multiple use mandate. BLM has identified "wilderness characteristics" to include naturalness and providing opportunities for solitude or primitive recreation. In making decisions about managing Lands with Wilderness Characteristics and designating Wild Lands in this planning process, BLM should recognize the wide range of values associated with lands with wilderness characteristics: (i) Scenic values – FLPMA specifically identifies "scenic values" as a resource of BLM lands for purposes of inventory and management (43 U.S.C. § 1711(a)), and the unspoiled landscapes of lands with wilderness characteristics generally provide spectacular viewing experiences. The scenic values of these lands will be severely compromised if destructive activities or other visual impairments are permitted. (ii) Recreation – FLPMA also identifies "outdoor recreation" as a valuable resource to be inventoried and managed by BLM. 43 U.S.C. § 1711(a). Lands with wilderness characteristics provide opportunities for primitive recreation, such as hiking, camping, hunting and wildlife viewing. Most, if not all, primitive recreation experiences will be foreclosed or severely impacted if the naturalness and quiet of these lands are not preserved. (iii) Wildlife habitat and riparian areas – FLPMA acknowledges the value of wildlife habitat found in public lands and recognizes habitat as an important use. 43 U.S.C. § 1702(c). Due to their unspoiled state, lands with wilderness characteristics provide valuable habitat for wildlife, thereby supporting additional resources and uses of the public lands. As part of their habitat, many species are also dependent on riparian and other wetland habitats, especially during either seasonal migrations or seasons and years when surrounding habitats are dry and unproductive. Wilderness quality lands support biodiversity, watershed protection and overall healthy ecosystems. The low route density, absence of development activities and corresponding dearth of motorized vehicles, which are integral to wilderness character, also ensure the clean air, clean water and lack of disturbance necessary for productive wildlife habitat and riparian areas (which support both wildlife habitat and human uses of water). Further, inventorying lands with wilderness characteristics will also provide important data on existing large blocks of habitat and how BLM can restore these blocks of habitat to better match the historic range of variability. Swanson et al. (1994) contend that managing an ecosystem within its range of variability is appropriate to maintain diverse, resilient, productive, and healthy ecosystems for viable populations of native species. Using the historical range of variability, they believe, is the most scientifically defensible way to meet society's objective of sustaining habitat. Patrick Daigle and Rick Dawson, Extension Note 07; Management Concepts for Landscape Ecology (Part 1 of 7). October 1996. http://www.for.gov.bc.ca/hfd/pubs/docs/en/en07.pdf; citing Swanson, F. J.; Jones, J. A.; Wallin, D. O.; Cissel, J. H. 1994. Natural variability--implications for ecosystem management. In: Jensen, M. E.; Bourgeron, P. S., tech. eds. Eastside Forest Ecosystem Health Assessment--Volume II: Ecosystem management: principles and applications. Gen.

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Tech. Rep. PNW-GTR-318. Portland, OR: U.S. Dept. of Agriculture, Forest Service, Pacific Northwest Research Station: pp 89-106. Identifying, restoring and protecting substantial roadless areas in the lands governed by the Battle Mountain RMP can provide crucial benefits to wildlife, especially to endangered and sensitive species. (iv) Cultural resources – FLPMA also recognizes the importance of "historical values" as part of the resources of the public lands to be protected. 43 U.S.C. § 1702(c). The lack of intensive human access and activity on lands with wilderness characteristics helps to protect these resources. The Notice of Intent for the Battle Mountain RMP revision identifies managing and protecting cultural and historical resources as an issue to be addressed in the RMP. Managing lands to protect wilderness qualities will also help protect cultural and archaeological sites. (v) Economic benefits – The recreation opportunities provided by wilderness quality lands also yield direct economic benefits to local communities. According to the U.S. Fish & Wildlife Service, in 2006 State residents and non-residents spent $917 million on wildlife recreation in Nevada. (USFWS 2006, National Survey of Hunting, Fishing and Wildlife-associated Recreation - http://www.census.gov/prod/2008pubs/fhw06-nv.pdf). In addition, local communities that protect wildlands reap measurable benefits in terms of employment and personal income. For instance, a recent report by the Sonoran Institute (Sonoran Institute 2004, Prosperity in the 21st Century West -The Role of Protected Public Lands) found that: Protected lands have the greatest influence on economic growth in rural isolated counties that lack easy access to larger markets. From 1970 to 2000, real per capita income in isolated rural counties with protected land grew more than 60 percent faster than isolated counties without any protected lands. These findings confirm earlier research, showing that wilderness is in fact beneficial for local economies. Residents of counties with wilderness cite wilderness as an important reason why they moved to the county, and long-term residents cite it as a reason they stay. Recent survey results also indicate that many firms decide to locate or stay in the West because of scenic amenities and wildlife-based recreation, both of which are strongly supported by wilderness areas. (Morton 2000, Wilderness: The Silent Engine of the West's Economy). Other "non-market" economic values arise from the ability of wildlands to contribute to recreation and recreation-related jobs, scientific research, scenic viewsheds, biodiversity conservation, and watershed protection. (Morton 1999, The Economic Benefits of Wilderness: Theory and Practice; Loomis 2000, Economic Values of Wilderness Recreation and Passive Use: What We Think We Know at the Turn of the 21st Century). All of these economic benefits are dependent upon adequate protection of the wilderness characteristics of the lands. (vi) Quality of life – The wildlands located within the Battle Mountain planning area help to define the character of this area and are an important component of the quality of life for local residents and future generations, providing wilderness values in proximity to growing population centers. Their protection enables the customs and culture of these communities to continue. (vii) Balanced use – The vast majority of BLM lands are open to motorized use and development. FLPMA recognizes that "multiple use" of the public lands requires "a combination of balanced and diverse resource uses" that includes recreation, watershed, wildlife, fish, and natural scenic and historical values (43 U.S.C. § 1702(c)). FLPMA also requires BLM to prepare land use plans that may limit certain uses in some areas (43 U.S.C. § 1712). Many other multiple uses of public lands are compatible with protection of wilderness characteristics – in fact, many are enhanced if not dependent on protection of wilderness qualities (such as primitive recreation and wildlife habitat). Protection of wilderness characteristics will benefit many of the other multiple uses of BLM lands, while other more exclusionary uses (such as off-road vehicle use and timber harvesting) will still have adequate opportunities on other BLM lands. Recommendations: In addition, the BLM should acknowledge the many important values of wilderness characteristics identified above in the RMP's management alternatives and thoroughly analyze this issue throughout the planning process.
Roadless Lands/Wilderness BLM must use this planning process to expand its understanding of unroaded lands beyond that of the out-dated, deeply flawed and politically biased wilderness inventory process of many years ago. The importance of large parcels of interconnected unroaded wild lands becomes greater with each passing day. As more information about roads causing disturbance to species during sensitive times of the year, roads serving as conduits for weed invasion (Gelbard and Belnap 2003), with weeds then being spread from roadsides into grazed wild lands by livestock, and road impacts to watersheds, is gathered. FLPMA requires BLM to undertake a continuing inventory of the public lands and to use this inventory to develop land or resource management plans. Review of BLM's own records on the 1979-1980's wilderness inventory process show that BLM engaged in flawed, biased and irrational analysis. It focused primarily on canyons or very rugged mountainous terrain, and rejected plateau, valley, playa and alluvial fan lands where the livestock industry hoped to increase livestock use through construction of new livestock installations or "treatments". It also did its best to avoid important unroaded lands with mining or oil/gas potential. Besides being fraught with political bias, the lens through which BLM evaluated roadless values in those bygone days is outdated. It is unsupported by current scientific knowledge of the accelerating fragmentation of sagebrush habitats, and the sensitivity of sage grouse and many other species, including Pinyon-juniper species, to disturbance or habitat degradation resulting from roading, the need for large intact landscapes to protect native species and biodiversity, and the growing public appreciation of wide open spaces. BLM must conduct an inventory of all roading, and evaluate its impacts in fragmenting habitats for special status species and imperiled species. BLM must lay out a plan to reduce road density with a specific time frame to do so. What are all threats posed to these species habitats (such as weed spread – especially when coupled with the added impacts of livestock crisscrossing road conduits and spreading weeds into adjacent wild lands, catalytic converter fires from

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recreational use on such roads, etc.)? On BLM lands, roads are often the result of livestock facility construction or maintenance.
BLM must conduct such an inventory spanning BLM-Forest boundaries – if smaller parcels of land are adjacent to Forest parcels – BLM must look at the land area as a whole. BLM must also recognize the importance of lands less than 5000 acres if they hold significant values.
In all activities on public lands, BLM must require severe restrictions on noise levels to protect wildlife and recreational values. Meaningful wild land noise analyses must be conducted n the RMP, and specific procures developed in the RMP to apply to all public lands actions.
Wild and Scenic River
Inventory all waterways for suitability.
We are glad to see in the scoping notice that the BLM plans to undertake a wild and scenic rivers eligibility study as part of the Battle Mountain RMP. Rivers deemed eligible for inclusion in the Wild and Scenic Rivers System must be managed to protect their values until the suitability determination is made, and suitable rivers must be managed so as to protect their qualities until Congress has an opportunity to designate the river as part of the System. Given that water is relatively sparse and that riparian areas are scarce in the study area, each stream is of tremendous value, and the BLM should fully protect these priceless resources via the Wild and Scenic Rivers Act and the Battle Mountain RMP. Protect all eligible segments Whether found suitable or not, all segments found eligible must, under the provisions of the Wild and Scenic Rivers Act and accompanying regulations, be managed in order to preserve the characteristics that make those segments eligible.
Protective measures must be specific to wild and scenic eligibility and suitability Protective management prescriptions and requirements—specific to segments' values that prompt findings of wild and scenic eligibility and suitability—must be included the final RMP and so must be carefully analyzed in preparation of the draft plan. Consideration other management prescriptions or designations that could, by coincidence, help protect features that contribute to the segments' eligibility and suitability are helpful (wilderness study areas, areas of critical environmental concern, visual resource management classes, mineral withdrawals, etc.). Those coincidental protections and designations must, in the final RMP and in its implementation, must specifically supplement wild and scenic river purposes, or similar measures must be provided in the final plan exclusively for wild and scenic river purposes. 28 Similarly, the BLM can protect river values through other special management designations. Such management designations should supplement, and not replace, complete consideration of wild and scenic river values or complete protection under the terms of the Wild and Scenic Rivers Act and its provisions for study and for interim protection.
Apply available protections to eligible and/or suitable segments Whatever the ultimate collection of stream segments found to be suitable, BLM should consider the following management options for protecting each segment and apply those that are necessary for adequate protection: • closed to off-highway vehicle use; • withdrawn from mineral entry; • VRM Class I or Class II areas; • right-of-way exclusion areas; • subject to remedial actions to ensure sensitive species habitat is maintained or enhanced; • subject to extensive and reliable no-surface-occupancy stipulations for all activities; • with related ACECs closed to off-highway vehicle use; • with related ACECs closed to oil and gas exploration and development; • among other appropriate measures.
Considerations for eligibility determinations The criteria for eligibility evaluation are clear. BLM Manual 8351, Wild and Scenic Rivers – Policy and Program Direction for Identification, Evaluation, and Management, Section .31A states: Basis for Determination. To be eligible, a river segment must be "free-flowing" and must possess at least one river-related value considered to be "outstandingly remarkable." These factors are summarized in Illustration 1. No other factors are considered in determining the eligibility of a river segment. All other factors are considered in determining suitability." (emphasis added) Since more detailed management decisions about stream segments would be made later in the suitability determination phase, it makes sense to list as eligible all segments that have any variation of the primary eligibility criteria, including even one outstandingly remarkable value. When in doubt, include them as eligible. Further, the BLM must disclose the scope of the outstandingly remarkable values (ORV) inventory process used in the draft eligibility report, and the BLM must extend that analysis to include all stream-related ORVs and study corridors wide enough to incorporate those ORVs. We note that some past wild and scenic have relied too heavily and arbitrarily on a one-quarter-mile "buffer" around identified segments in its initial identification of ORVs. BLM guidance is clear that such a "buffer" is not the appropriate measure for an ORV's association with a river. For example, ORVs can "owe their location or existence to the presence of the river" (IM 04-196), a standard on which it would be arbitrary for BLM to place a numerical value. We are concerned that if BLM uses this arbitrary buffer, the agency will

Table C-17
Special Designations

overlook significant ORVs that are tied to a segment. Geologic and scenic ORVs, as examples, could easily extend or originate from distances greater than one-quarter-mile from a segment. In an arid western slope climate, important cultural and historic values that are directly tied to segments used as water sources and migration routes for historic human populations are likely to exist a variety of distances from a segment yet "owe their location or existence to the presence of the river." Id. With vast amount of BLM land having never undergone formal cultural survey, it is important that BLM employ generous and inclusive boundaries in their inventory.

Table C-18
Renewable Energy

Nye County supports the responsible development of renewable energy projects in Nevada. There are many areas with excellent development potential for solar energy projects, and we have provided assistance to numerous developers in their endeavors to identify suitable sites. Our commitment to responsible development is also demonstrated by the development of the Nye County-BLM Memorandum of Understanding for renewable energy.
Renewable energy projects on Nevada's public lands are strongly supported. There is, however, a concern about the cumulative visual impacts to public lands users' experiences from these activities (temporary and permanent). Major intrusions include proliferation of new roads, poorly-sited and designed structures, lack of co-location of infrastructure and improper lighting, to name a few. Solar facilities are a different type of new application with impacts that extend much broader than a typical "multiple use" application, because a solar application on significant acreage is not a multiple use, it is a single use that will permanently remove these lands from the multiple use concept of public lands. Once the land is bladed, treated and developed for this use, it will not be able to be rehabilitated. In fact, BLM most likely will allow the solar developer to take ownership of this land. What is the potential and type of future uses on this site, their compatibility with adjacent public land and private holdings, and their long-term effects? The RMP DEIS needs to set the ground rules in a proactive manner for how BLM addresses major renewable energy projects. - A proactive solution would be the development of a "Renewable Energy Master Plan" as a component of the RMP. This Plan would identify opportunities and constraints on one unified map. This map would identify utility corridors including preferred shared-use branch corridors to preferred energy sites. The Plan would also identify areas not subject to renewable energy due to their unique characteristics that warrant protection. It would be prudent for the BLM to provide a Plan that gives the public a comfort level an understanding of what lands may be developed, and what lands WILL NOT be developed. Currently, applications for renewable energy are being accepted and processed in a haphazard manner with no sense of proactive planning for the long term. In development of this Plan, the RMP DEIS should: - State how permanent removal of substantial public acreage is a benefit to the general public and the multiple use concept of BLM public lands. - Explain how off-site impacts (roads, power lines, etc) that only serve permanent special interests is a benefit to the general public and the multiple use concept of BLM public lands. - Detail and explain how the BLM is planning cumulatively for all solar projects and their impacts to public lands. The "solar master plan" should be developed and approved by the public similar to, but more detailed than, the programmatic wind EIS that was developed recently. The solar master plan should identify specific development zones and also clearly delineate other areas that should not be developed. The public deserves a plan that gives a comfort level that not all lands will be haphazardly sacrificed permanently for one special interest. - Detail effects to wildlife, vegetation and the ecosystem as this site is bladed and leveled. It should be demonstrated how down slope conditions will not be impacted as the solar field is developed and the natural drainage is interrupted. - Explain how large-scale permanent developments affect existing species mitigation plans (e.g. Multiple species habitat conservation plans). If MSHCP's and other adopted policies identify these sites as a component of the species' viability for example, then, if these sites are permanently eliminated, how does the proposal affect the integrity of the existing adopted plans and policies? - Explain how monetary assurances can be enforced so that the site can be rehabilitated if the applicant cannot complete the project but has already removed the native vegetation. The DEIS should specify that all projects include a condition of approval that mandates up-front performance bonds that would pay for site reclamation if the proponent defaults on the project after the site is denuded. Specific mitigation measures should be employed including things such as scarification and reseeding of the site.
Potential renewable energy project impacts. CCY is the champion of these concerns. Any residential, commercial or industrial development adjacent to our lands may cause impacts.
The missions of Nellis AFB, Creech AFB, Tonopah Test Range and the Nevada Test and Training Range (NTTR) are critical to military testing, training, readiness and our National Security. Each year thousands of aviators from all branches of the Department of Defense as well as many of our allied countries come to Nevada to participate in training exercises on the NTTR that equip them with the required skillsets they will need for current and future conflicts. In addition to the irreplaceable training that occurs on the NTTR, there are unique testing requirements that can only be fulfilled on the NTTR. These highly sensitive tests are designed to assess USAF technologies against specific criteria to determine effectiveness. The AF is also supportive of the President's renewable energy (RE) goals to increase National Security by decreasing our Nation's reliance on fossil fuels. With the increased desire for RE, it is important to recognize that development of such technologies must be properly planned to maximize their potential while minimizing impacts on other areas such as threatened and endangered species, environment, water, and the testing and training missions of the DoD. It is critical that RE be developed in a manner that is compatible with the operations conducted in and around military operations in Nevada. This requires careful coordination w/ Nellis AFB experts as well as some flexibility to match the right technology in the right location. This will ensure RE initiatives can move forward with minimal adverse impacts on NTTR operations. For these reasons, we request the scoping process for the Battle Mtn RMP include interim long range plans to manage the challenges that will arise from increased

Table C-18
Renewable Energy

Renewable Energy development.
He was dissatisfied with the location of the two PEIS Solar Study Areas. He feld the location near Gold Point should have been 5 miles further north and the other one should have been at Columbus Salt Marsh. I explained the criteria and selection process To identify the two areas. We proposed (<1% slope, not near mountains, no mining claims, no other knonw resource conflicts.)
Regarding best environmental use of the approximately nine million acres of Nevada land, currently under consideration for development, BLM should consider the value of adding additional renewable energy systems to the mix of energy systems currently deemed most valuable. Recent BLM examples such as the Crescent Dunes Solar Energy Project make it clear that the current 2011 BLM management is moving in the right direction, regarding future domestic energy development efforts. On behalf of all Americans -- and our future generations -- please remain open to deployment of renewable energy systems, including but not limited to wind-electric, wind-mechanical, solar-thermal-electric, low-head hydro-electric, biomass and hybrid terraforming subsystems to enhance wind regimes and pumped hydro storage systems.
Purpose and Need: All alternatives are now defined by a Need reflecting the recent Secretarial Order 3283: Enhancing Renewable Energy Development on Public Lands. The goals of Section 4 in Secretarial Order 3283 clearly state a need for environmental responsibility: "the permitting of environmentally responsible wind, solar, biomass, and geothermal operations and electrical transmission facilities on the public lands;
Distributed Generation: This is the best alternative that can be legally considered not within the jurisdiction of the lead agency. Distributed generation in the built environment should be given much more full analysis, as it is a completely viable alternative. Granite Wind will need just as much dispatchable baseload behind it, and also does not have storage. But environmental costs are negligible with distributed generation, compared with the most renewable projects. Distributed generation cannot be "done overnight," but neither can large transmission lines across hundreds of miles from remote central station plants to load centers. Most importantly, distributed generation will not reduce the natural carbon-storing ability of healthy desert ecosystems, will not disturb biological soil crusts, and will not degrade and fragment habitats of protected, sensitive, and rare species. Alternatives should be looked at that are in load centers, not closest to the project site. There is a need to consider the "macro" picture, the entire state, to look at maximum efficiency. A Master comprehensive plan should exist before large expensive inefficient wind energy projects are sited and built out in the wildlands. This plan should carefully analyze the recreational and biodiversity resources of pubic lands in Nevada.. A list of assumptions should be included detailing the plan for integrating various fuels mixes and technologies into each utility's plan, an overall state plan, and a national plan. Loads should be carefully analyzed to determine whether additional capacity is needed for peaking, intermediate, or baseload purposes. Unit size, which impacts capital and operating costs and unit capacity factors, has a direct bearing on the relative economics of one technology over another. A plan might recommend that smaller units built in cities and spaced in time offer a less risky solution than one large unit built immediately. Large-scale central station solar plants have been sited very far from load centers out in remote deserts, with the only criterion being nearness to existing transmission lines and natural gas lines. Very little thought has been given to the richness of biological resources, the cumulative impacts on visual scenery to tourists, the proximity to ratepayers, or the level of disturbance of the site. The California Energy Commission says there will be a need to build many new efficient natural gas peaker or baseload plants to back up the renewables planned, and this will undoubtedly be the case in Nevada as well. Instead, the renewables should be distributed generation in load centers, which will provide much more efficiency, rather than inefficient remote central station plants that reduce biodiversity and require expensive transmission lines. This reduces the risk, as distributed generation is a known technology and has been proven in countries like Germany where incentive programs have been tested. Incentive programs can be designed in an intelligent manner to vastly increase distributed generation. Incentives for remote projects are unproven to lower risk and may actually raise debt levels with runaway costs associated with poor siting and higher-than-anticipated operating and maintenance costs.
The development of renewable energy is a critical component of efforts to reduce carbon pollution and climate-warming gases, avoid the worst consequences of global warming, and to assist in meeting needed emission reductions. The Center strongly supports the development of renewable energy production, and the generation of electricity from solar power, in particular.
Wind energy development impacts to birds, bats and other wildlife are well documented and could be severe if wind power development proceeds in the absence of careful planning to minimize collision impacts and habitat disturbance. Habitat impacts have received less publicity than collision impacts, although they could be as or more significant, particularly for imperiled species whose habitat is in prime wind energy production areas. Wind power facilities can directly impact habitats, via the footprint of turbines, roads,

Table C-18
Renewable Energy

transmission infrastructure, and other support facilities. We strongly disfavor the development of wind power facilities, or associated infrastructure, roads or transmission lines, in areas that will destroy, degrade or fragment important wildlife habitats. Roads and other linear disturbances present a particular challenge to wildlife in the form of habitat fragmentation. Continued habitat fragmentation forces wildlife to live on ever shrinking islands of habitat, where it is more difficult for them to find food, water, shelter, mates, and protection from predators. Genetic problems such as inbreeding appear, and populations become more susceptible to catastrophic events such as wildfire. The resulting fragmented habitat inevitably leads to smaller populations of wildlife, and extirpation of populations or complete extinction of species becomes more likely. Renewable energy projects should be sited to utilize existing rights-of-way.
We specifically request that any future renewable energy development within the Battle Mountain District address the following concerns: o Minimize the projects' ecological footprints; site renewable projects on previously disturbed lands; o Avoid steep slopes in order to reduce erosion impacts; o Avoid sensitive and rare natural communities; o Analyze, avoid, minimize, and otherwise fully mitigate impacts to wide-ranging species; Avoid identified wildlife corridors; o Require structures that discourage perching by raptors; o Avoid fly-ways, especially for raptors; o Avoid development of priority areas as established in state comprehensive wildlife plans, the Heritage Program's "Scorecard 2006", State Priority Wetlands, regional conservation plans, and recovery plan for threatened and endangered species; o Avoid impacts to species of plants and animals listed under the state administrative code and the ESA; o Avoid local, state, or federally protected lands; o Minimize growth-inducing impacts; o Be consistent with the conservation priorities of existing land management and conservation plans; o Minimize impacts due to on-going maintenance of the pipelines, transmission lines, or distribution facilities; o Minimize cumulative impacts due to existing and planned development in the region; o Actively restore native vegetation to the project footprints after the infrastructure has been constructed. The haphazard nature of the BLM's right-of-way application process for renewable energy developments have led to a situation in which a comprehensive regional and landscape analysis of the impacts of these developments on species has not occurred. This RMP revision process must remedy this situation by analyzing and disclosing the present situation, as well as by identifying suitable and appropriate areas for further renewable energy development that would avoid or minimize impacts to species of concern and affected species. Comprehensive cumulative effects analysis must be a part of the decision making process in identifying areas suitable for renewable energy developments.
While supporting the development of renewable resources on public lands, the Sierra Club is extremely interested in the appropriate siting of potentially industrial development on public lands. The RMP should develop criteria for siting which include maximizing the use of already disturbed lands for plant sites as well as any necessary transmission facilities.
In addition, siting should be prohibited from areas in which water resources are either scarce or already appropriated or basins are closed due to overappropriation.
The RMP should identify zones for renewable energy projects and limit all renewable energy development to those zones. Zones should be based on high-resource, low-conflict areas that are on already-degraded lands and near existing infrastructure. The BLM is already taking a similar approach in the ongoing Programmatic Environmental Impact Statement for Solar Energy Development, and is analyzing lands within the Battle Mountain District for solar energy zones. (The draft PEIS analyzes the Miller SEZ and the Gold Point SEZ in the Battle Mountain District.) We recommend the Battle Mountain District Office also adopt this approach for wind energy. Recommendations: The Battle Mountain RMP should identify zones for all types of renewable energy development that prioritize high potential for energy development areas that contain degraded lands and are in close proximity to new transmission, while excluding sensitive conservation lands, such as citizen-proposed wilderness areas and ACECs. The RMP should also specifically preclude development outside the designated zones.
Within the zones, BLM should prioritize lands that are most suitable for development, ensure adequate protective measures are imposed on development, and require both on-site and off-site mitigation of impacts to resources, as well as loss of uses (such as recreation). This approach is supported by IM 2011-061, which aims to guide applicants to areas that will raise as few environmental and cultural concerns as possible by establishing screening criteria to determine the level of potential conflict and requiring a pre-application process to engage stakeholders and identify conflicts early. Building on the BLM's guidance, the Battle Mountain RMP should incorporate screening criteria for solar and wind projects that ensures sensitive resources such as Lands with Wilderness Characteristics, ACECs, Recreation Management Areas, and other specially designated areas are protected from development. Recommendations: Within the zones, the RMP should also set out prioritization criteria, which direct development to degraded lands and identifies other areas where development is more likely to lead to conflict, as well as setting out protective stipulations to safeguard other resources. We have provided a proposed "Sensitivity Based Prioritization for Development Areas within Renewable Energy Zones" (attached to these comments) to be used by the Battle Mountain District

Table C-18
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Office in implementing these recommendations.
For off-site mitigation, we also direct BLM's attention to IM 2008-204, which describes the broad type of actions that may be taken to address both direct impacts of a project and greater cumulative effects that development is having on a landscape. IM 2008-204 identifies and elaborates on the types of off-site mitigation that can be used, stating: • Offsite mitigation may include, as appropriate: o In-kind: Replacement or substitution of resources that are of the same type and kind as those being impacted. § Example: For every acre of new, long-term surface disturbance in important sage-grouse nesting/early brood-rearing habitat in Area (A), (X) acres of unsuitable habitat in Area (B) is reclaimed, treated, or planted to create new or suitable nesting/early brood-rearing sage-grouse habitat. o Out-of-kind: Replacement or substitute resources that, while related, are of equal or greater overall value to public lands. § Example: For every acre of new, long-term surface disturbance in important sage-grouse nesting/early brood-rearing habitat in Area (A), the project proponent agrees to bury (Y) miles of existing power lines and remove the power poles used as hunting perches by raptors in Area (B). o In-lieu-fee: Payment of funds to the BLM or a natural resource management agency, foundation, or other appropriate organization for performance of mitigation that addresses impacts of a project. § Example: The applicant may make payment to the BLM or a conservation group based on the amount of acres that will be disturbed in exchange for commitment from the recipient to apply the funds toward local sage-grouse core habitat protection/restoration projects. In the context of renewable energy development, there may be additional conservation priorities that can be pursued to mitigate the impacts of individual projects and BLM could begin discussions with interested stakeholders to identify these potential targets for off-site mitigation efforts or funding. Recommendations: For off-site mitigation, BLM should provide for addressing a wide range of options to address the cumulative, far-reaching impact of renewable energy development (as set out in IM 2008-204) and should design a process to reach out to stakeholders and develop a set of conservation priorities to target in connection with off-site mitigation.
Please apply the previous ROW and other discussions to the siting of all energy projects (wind, solar, etc.). Please review Biodiversity Conservation Alliance and Montana Audubon reports on wind energy development, along with the USFWS WBP Finding for Greater sage-grouse and Knick and Connelly (2009). No siting of energy facilities should be allowed in biologically or culturally important wild land areas. Large areas must be withdrawn from use as energy production sites as part of this RMP planning process.
Wind energy projects are industrial developments that have an immense impact on wild landscapes and avian and bird populations, recreational uses and neighboring human inhabitants, as well as cultural sites. In valley floors – road network increase are extreme. BLM has been allowing MET tower or and other placement prior to intensive studies. Battle Mountain must require that upfront thorough analysis is conducted before baselines are altered –and wildlife like sage-grouse driven away. And foremost, it must deny ROWs in inappropriate locations. We are Attaching our comments on recent wind developments as an example of concerns this RMP must address in acting to properly "zone" lands in the RMP to exclude introducing new development. 53 Developer assurances of minimum impacts that agencies have relied on in authorizing these facilities are turning out to be false across the West, A great concern is impacts to golden eagles – with just a single facility in Oregon having 4 recent mortalities. The RMP analysis must take into account rare bat, sage-grouse, migratory bird, golden eagle and other raptor habitat use and migration patterns, and examine population levels and viability in zoning vast areas off-limits to development. This is also essential because renewable energy technology, increased reliance on distributive generation rather than sprawl, and the huge cost of these facilities is very likely to soon make ill-sited huge industrial facilities obsolete. Further, many degraded areas are windy enough – yet developers seek to pursue remote areas. This is readily apparent on the Snake River Plain in Idaho where man small wind facilities on marginal ag lands have sprung up. BLM must fully examine alternative siting in degraded sites in all NEPA.

Table C-19
Socio-Economic

Multiple Use Lands: Historically public lands have been managed to support mining, ranching, energy development, recreation and other activities that have a positive socioeconomic impact on the county and local communities. Any restriction on access or use for these public lands will have an adverse impact on jobs and tax revenue for the county and towns. This change in use and / or access for these lands must be discussed with the county through the planning process and any socio-economic impacts should be disclosed through the NEPA analysis.
Comment: Nye County supports responsible land use practices and sustainable community development. It has been estimated that the disposal of each additional acre could contribute more that $7,415 assessed values to the County, and nearly $140 in tax revenues. Nye County seeks to continue to grow and develop economically, to support the new "Green Economy" as well as other technologies and industries which are suited to this area.
Mining is a major contributor to the economies of communities within the BMD. For example, nearly 46% of Lander County's employed workforce works in mining and related fields. Net proceeds taxes from mining operations within the BMD constitute a significant portion of local government revenues. The resource management decisions that the BLM makes in the RMP have the potential to affect present and future mineral exploration and development operations. It is particularly important that the resource management directives contained in the final RMP do not negatively impact this important economic sector. In consideration of this, the RMP should address mechanisms to enhance and improve administrative efficiencies to ensure expeditious review and approval of project proposals including mineral exploration and development.
The RMP should recognize the substantial economic contributions of mineral resource exploration and mining to local, regional and state economies. RMP and EIS should evaluate the potential effects of RMP alternatives on these important economic sectors.
Ranching, farming, energy production, and mining should be embraced as they are productive industries that help support us all.
The analysis of the socio-economic impacts of the RMP must be thorough and accurate in order to responsibly manage the public lands. We have included with these comments a document entitled "Socio-Economic Framework for Public Land Management Planning: Indicators for the West's Economy," which details our expectations for the baseline analysis of the region's economy as well as the analysis of the potential impacts of proposed management alternatives on the area (Appendix 2). We request that your analysis of socioeconomic considerations in the Battle Mountain planning area follow the approach set out in this document. We recommend that the BLM use a total economic value approach that includes the estimation of non-market values for the wildlands and open spaces in the planning area. BLM recently affirmed its commitment to this approach in draft IM 2010-061, which explicitly directs managers to evaluate non-market values in RMP analyses. The total economic value analysis should include the full range of non-market values, including use values – such as recreation – as well as non-use values such as existence value (the benefit one gains just knowing wildlands are protected), option values (the benefit of knowing that one can visit a wildland for recreation) and bequest values (the benefit gained from knowing that wildlands are protected for future generations).
Also included in Appendix 2 are The Wilderness Society's recent report, Natural Dividends: Wildland Protection and the Changing Economy of the Rocky Mountain West and a scoping brief entitled "The Economic and Social Impacts of Oil and Gas Development," which describes the significant and often hidden costs associated with oil and gas drilling. The analysis in the RMP must include an assessment of these costs in order to describe net (rather than gross) benefits of any proposed oil and gas leasing.
The benefits that flow from protected wildlands are now also important economic drivers in many rural areas. Scenic vistas make communities attractive to businesses and employees seeking the highest quality of life. Wildlands in rural Western counties are correlated with income, employment, and population growth (Lorah 2000). They also increase nearby property values for home owners and generate recreation and tourism dollars. Additionally, protected wild lands provide a number of vital natural services such as filtering our drinking water. The BLM should analyze the benefits to the local communities from management which ensures that the area's scenic landscapes are protected, such as through special designations, and that the important economic role that protected public lands play in the local economy is continued and enhanced.
One of the most important purposes of public lands, including BLM lands, is the provision of non-market public goods such as opportunities for solitude, outdoor recreation, clean air, clean water, biodiversity, the preservation of wilderness and other undeveloped areas that would be underprovided if left entirely to market forces (Loomis 1993). FLPMA specifically incorporates such non-market resources as "the long-term needs of future generations" for recreation and "natural scenic, scientific and historical values" into the BLM's multiple use mandate. 11 FLPMA further defines multiple use to require the agency to encompass non-market values into management, directing the BLM to

Table C-19
Socio-Economic

achieve: 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 or the greatest unit output.12 (emphasis added). Resource economists recognize that some public goods and services produced by public land have characteristics that make them unprofitable to private enterprises. The aesthetic value of a scenic landscape, for example, would be difficult to divide up and sell to individual consumers, and to exclude "free riders" -- people who consume the scenic beauty but are unwilling to pay for it. As such, private firms have little incentive to produce such scenery and market forces cannot be relied upon to produce an adequate supply, even though additional view sheds may be economically rational and socially desirable. Protected public lands perform natural services worth billions of dollars. These lands provide – free of charge – a host of "ecosystem services," including air and water filtration, climate regulation, pest control, and seed dispersal. Based on a recent study by The Wilderness Society and The Gund Institute for Ecological Economics, the ecosystem service output of all US federal conservation lands is worth at least $242 billion per year (Esposito et al. 2009). Another study considers just some of these values and finds "the annual economic benefit from watershed protection, carbon storage for climate regulation, and nutrient cycling for waste treatment is estimated to be between $2 billion and $3.5 billion" (Loomis and Richardson 2001). Recommendations: The RMP should evaluate non-market values provided by wildlands, per BLM's commitment set out in draft IM 2010-061.
BLM should utilize the materials included in Appendix 2 to inform the RMP's socioeconomic analysis and ensure a full accounting of the costs and benefits of each of the alternatives.
The values of protected lands and the costs associated with motorized recreation should be incorporated into economic analysis.
Any economic analysis involving these lands must clearly identify that changes in livestock numbers in most lands here will not be affecting small ranchers. Instead, they mostly involve a huge corporate entities or land speculators that may in reality return a minuscule amount to the local economy. The quite minor economic importance of public lands ranching in the Planning area must also be studied here. BLM must detail its annual cost of administration of livestock grazing on affected lands under the current and alternative systems. BLM must provide the percentage of these administrative costs that are covered by BLM's income from the approx. very meager grazing fee, and present this to the public in its economic analysis. BLM must detail its other costs in administration of these lands (recreational opportunities lost, weeds invading and treatments, increased fire suppression costs with livestock-caused weeds like cheatgrass) and present this to the public in its economic analysis. This is necessary to understand the administration of livestock grazing. Of particular concern is the lesser funding traditionally spent on wild lands restoration, habitat enhancement, collection of baseline biological data. The values of public uses foregone or lost due to grazing, development or other impacts must be fully examined. How much is grazing or development hindering public recreation, uses and enjoyment? How much would it cost to recover a population of pygmy rabbits or sage-grouse, once extirpated?

Table C-20
Environmental Justice

BLM must also conduct environmental justice analysis of exploitation of sheepherders who are often forced to work in hazardous, isolated situations, are exposed to pathogens such as Q fever, and otherwise suffer abuses with little recourse.

Table C-21
Sustainable Development

Mcuh of area identified for community expansion surrounding Silver Peak NV in the current RMP is not suitable for development due to topography and the presence flood drainage zones which if developed would intefere with the existing drainage and could cause significant harm to already existing parts of Silver peak. It would be be neficial for Silver Peak to add more residents and the municipal water system has existing capacity to add users. Additional pages Map of suggested revised Silver Peak Community expansion area showing flood wellhead zones and the legal description.
However, like any project, proposed solar power projects should be thoughtfully planned to minimize impacts to the environment. In particular, renewable energy projects should avoid impacts to sensitive species and habitat, and should be sited in proximity to the areas of electricity end-use in order to reduce the need for extensive new transmission corridors and the efficiency loss associated with extended energy transmission. Only by maintaining the highest environmental standards with regard to local impacts, and effects on species and habitat, can renewable energy production be truly sustainable. Of primary concern are the impacts of renewable energy projects on listed, candidate and other imperiled species. The majority of the plans of development for solar projects to date have called for mass grading and/or vegetative clearance from the project site. Obviously this causes a horrific toll on the plants and animals residing on the site. Unfortunately, the same terrain characteristics favored by many species of concern are likewise the primary target area for solar and wind energy projects. Another concern related to renewable energy development, particularly solar and geothermal is the water needs for the development and operation of the site. Cooling for concentrated solar facilities, cleaning of photovoltaic mirrors, and water to support geothermal wells can consume thousands of acre feet every year. Being the driest state in the country, Nevada does not have an abundance of water for such uses. Lacking surface water resources, most of the water needed to support renewable energy projects is demanded from groundwater well. Many basins in Nevada are already over appropriated and pumping from them is already threatening seeps and springs and the species that depend upon them, such as rare desert fish and springsnails.
The RMP should consider an alternative which restricts future electrical transmission and gas pipeline to the West-wide Energy Corridor only and/or to existing already disturbed corridors or rights of way.
Please review the recent information on the Pinedale anticline, and all the information that has been compiled in the Holloran, Naugle and other studies of energy development. It is increasingly clear that BLM must prohibit energy (of all stripes) and other new development and intrusion in remaining sagebrush habitats. Much of the disturbance associated with energy development has clear parallels in mining, renewable and other developments occurring on BLM lands in the Great Basin. The bottom line is that BLM must learn from its own past mistakes.
Allocations must be based on reality – not paper cows and sheep dragged along from the old adjudication days, and never reduced to anywhere near a sustainable level (even as BLM defines sustainable). As we will discuss later, this also includes all components of the RMP and all allocations, including for minerals, mining, energy, road networks and other development.
Given the acknowledged national significance of the remaining lands in the ecosystem that spans BLM-Forest boundaries, and relatively intact salt desert shrub, and montane island communities, BLM cannot undertake a typical BLM livestock-and development -centered planning process. Accommodating public lands grazing and energy or mining everywhere cannot be the primary force in this effort. BLM needs to make clear at the very beginning of the EIS process that there are a host of other important and significant public lands values in these lands. Protection and enhancement of these values must drive the EIS effort and a range of reasonable alternatives, its land management decisions, and habitat enhancement or restoration actions. Development must focus on existing brownfields or highly disturbed lands.
Powerlines and Gas Pipelines Dissect Wildlife Habitat, Provide Raptor Perches, Result in Increased Predator Travel Corridors and Weed Spread Powerlines are known to isolate and impact sage grouse populations. Sage grouse use of areas near powerlines increases as distance from the powerline increases for up to 600 m., plus powerlines reduce the security of sage grouse populations in linear strips up to greater than 1 km. in width (Braun 1998). Powerlines may follow roads, or cut cross country through otherwise unfragmented sagebrush habitats. Residential development throughout the Intermountain West is accompanied by networks of powerline and utility lines, and a resulting myriad of raptor perches. Many large utility corridors already slice through Nevada. See Nielsen et al. (2002) Renewable Energy Atlas. New powerlines or gas pipelines accompany rapidly expanding energy and mineral development in the West. With an emphasis on accelerated energy development in rural and remote areas of Nevada and Idaho, new power networks and powerlines could proliferate. See Nevada Wind Power Development Strategic Plan 2002, BLM geothermal Website information, 2/21/03 DOI/DOE Press Release "Assessing the Potential for Renewable Energy on Public Lands", and "Assessing the Potential for Renewable Energy on Public Lands" DOE/BLM 2003

Table C-21
Sustainable Development

www.osti.gov/bridge. These will require major powerline/rights-of-way accessing remote sites, as well as networks of ancillary power line systems to relay energy to major transmission lines (Nevada Wind Power Development Strategic Plan 2002). Since this time, BLM has woefully failed to conduct responsible planning for compatible siting of energy projects. This has especially under Int Sec Salazar, where destructive renewable energy sprawl has been promoted without responsible site planning and avoidance of sensitive areas. Example: McGinness Hills Geothermal Project. BLM must understand that in many instances, development effects cannot be mitigated. It must set up a framework for denying siting. But most critically, this RMP must require siting in disturbed areas, weedlands, etc. and act to prevent energy sprawl. A clear roadmap for proper siting is in the best interest of developers and the public. Powerlines often cut cross country, accompanied by maintenance roads that may serve as travel corridors for predators, weed infestation, hunters, etc. Geothermal and wind development are accompanied by extensive powerline proliferation and agency issuances of rights-of-ways. This RMP planning process must sharply limit new powerlines and rows, and analyze all direct, indirect and cumulative impacts of the current or foreseeable lines. Necessary integrated analysis of energy development impacts is essential upfront –not a straggling series of CEs, DNAs and EAs as BLM currently does for geothermal and wind. The Baseline gets progressively altered, before full-blown biological, watershed and other studies are conducted. This biases outcomes in favor of developers.
BLM must analyze the suitability of all existing/pending communication sites as part of the RMP process. Are these sites intruding on habitats, or marring wild land settings? How can this be prevented in the future, or corrected if existing ROWS come up for renewal? Specific limited communication site areas should be established, based on minimal impacts to wild lands. Various companies must clump or bundle towers and developments in these sites, and not each pioneer a new area. Communication sites intrude on scenery, are typically accessed by roads with significant long-lasting road cuts, etc. Sensitive sites should be withdrawn from communication site development as part of the RMP process. Where are the migratory bird migration corridors in the Planning area lands? These must be identified, and these corridors closed to ANY communication or energy tower siting. Night lighting is a particular concern – as it may lure birds and bats to their death in collisions. There is great lack of data on migration corridors and paths in the Great Basin for songbirds and other species. As part of this process, such data must be collected and the placement of tall vertical objects and wind energy development prohibited in the RMP in critical sites.

Table C-22
Transportation Facilities

.. And our county according to Nevada Revised Statue has declared ALL roads as county roads . This includes two tracks, 4 wheeler and old mining roads and All other roads that exist at this time. This does not mean we want more or "new" roads. I feel it is the intent of most Esmeralda County citizens that we protect the roads that exist now. I personally feel that no new roads be put in without proper permitting thru the government.
Nye County and its communities that will host renewable energy projects are concerned about increased traffic through the communities and the potential public safety impacts to local communities and transportation infrastructure. Access and egress of construction materials, equipment, and workers at proposed projects in and around Nye County communities has the potential to significantly affect the rural quality of life, existing infrastructure, as well as increasing traffic hazards to community residents. Nye County and host communities believe that an area-wide approach to transportation planning can optimize the development of infrastructure and minimize impacts to our communities and the environment. Comment: Nye County requests inclusion in all planning of construction access/egress, as well as permanent access considerations for renewable energy projects proposed adjacent to, within, or near to existing communities.
Nye County is in the process of completing a Minor County Road, as defined in NRS 403. 170(c), Inventory project. This project is an iterative process and Nye County requests that each iteration be incorporated in BLM resource plans as each is received.
When considering any improvement or upgrade, seriously consider that it is likely most of the folks who recreate want roads to stay primitive. Consider the impacts of upgrades: an increase in use, speed, and therefore also dust, weeds, and potential for fires; also it is a surefire way to "domesticate" the landscape. There is a corresponding decrease in safety and in a primitive frontier-type experience.
Before adding any new signs, first have good maps available to the public. Only add signs if monitoring indicates a need to protect resources. Signs will "domesticate" the landscape and reduce the primitive experience. • Any signs for route and/or area closures must be of substantail material. Carosnite signs invite trespass as they do not convey serious intent.
Road maintenance and ever-expanding right of way disturbance must be kept under controls. BLM lands are increasingly characterized by examples of overkill in maintenance that results in blading willows, blading huge bare swaths (as weed corridors) on the roadsides, and unnecessary drainage furrows hundreds of feet long in relatively flat terrain. BLM must try to maintain and promote native vegetation on roadsides and keep them from becoming weed corridors (see Gelbard and Belnap 2003).
A large number of the roads in the wild lands of these allotments were pioneered or constructed only because they allowed ranchers to drive salt to the top of hills, or because they access cattle installations, or have just spring up on the path of a pipeline due to construction and subsequent maintenance. Incursions on unroaded lands are routine – such as those undertaken by livestock permittees to develop or maintain water sources, place livestock installations, place salt licks, etc. As part of its analysis, BLM must examine roading in the context of livestock activities. Roads and jeep trails whose primary purpose is placing salt or checking on a water trough should be closed and restored/obliterated. Livestock permittees own horses, and can and should use them in pursuing public lands livestock grazing. BLM must identify methods of road closure and restoratio

Table C-23
Travel Management

Off-highway vehicle (OHV) use and unauthorized user-created road establishment has a negative impact on wildlife resources. OHV travel is becoming more common in the northern counties as OHV regulations in California and generally in the West, become more stringent. Increased emphasis of law enforcement, the need for more signage and/or improved public education on the impacts of roads on wildlife resources would improve the public's awareness of the problems created by this activity. Both organized events and casual use should be accounted for in a district-wide transportation and travel management plan incorporated into the Plan. Permanent closure, seasonal use and other motorized vehicle restrictions should be incorporated into the Plan. Unauthorized roads should be closed and reclaimed so as to lessen their effect on wildlife.
Off highway vehicle use in the district has reached a critical level with many areas being impacted to a point of no return. - More areas similar to the Crescent Dunes and Clayton Valley Dunes should be identified in the DEIS to focus activities into suitable areas. - On the contrary, areas such as Monte Cristo north of Blair Junction should be precluded from OHV use to protect the unique visual resources found there.
A heightened public education campaign should be incorporated in future OHV planning so that this user group better understands the consequences of irresponsible actions.
Educate the public as to the real meaning of "open, closed, limited"— there is much misunderstanding
The RMP shall determine critical soils, aspen, vegetation, wildlife, cultural, paleontological areas before initiating a travel management plan.
Direct a process, with public involvement, to complete comprehensive route designations, limiting the entire district to travel on designated routes.
Until such time as the designation process is complete, restrict all motor travel to exisitng routes. Off-route travel must not continue to be tolerated.
Do not allow open play areas. This is a comsumptive, non-sustainable use and, as such, is not appropriate on public lands. They foster irresponsible use that carries over onto other land (ie. learn from the lesson of Sand Mountain).
Do not allow off-route game retrieval. The USFS is moving this direction nationwide, as is the H-T Forest in NV. All public lands should be consistent in this policy to avoid confusion and to aid in effective enforcement.
Initiate MOUs with all enforcement entities on the district (Counties, NDOW, USFS) for ORV management.
Give direction to train all field staff in citizen reports of ORV mis-use.
Include maps which indicate how much of the district is still 2 or more miles from any route. These dwindling areas are of high wildlife and primitive recreation value.
ohv competitive events need to be included in the rmp as they are financially beneficial to the areas where events happen . open areas for ohv use need to be included in the RMP with a minimum of 12000 acres
We believe in recreation opportunity for all, yet understand that healthy wildlife habitat, rivers and streams are the foundation supporting the American traditions of hunting and fishing. We believe there is a place for off-highway vehicle routes on public lands, but that greater controls and better enforcement are necessary in the face of growing human population and ever-more-powerful machines. In order to protect the future of hunting and fishing traditions we treasure, we want to protect large areas of public forest completely separate from the noise, disturbance and pollution that comes with off- highway vehicles. We urge you to put the full intent of the Executive Orders 11644 and 112989 first and foremost in your transportation planning. The Orders emphasize that travel management plans must: • Protect wildlife and wildlife habitat • Protect soil and other resources. • Minimize user conflicts. • Prevent impairment of wilderness suitability. • Minimize damage to soils,watershed,vegetation, air or other resources • Only if ORV use will not adversely affect their natural, esthetic or other values for which such areas were established, can ORV use be allowed in primitive, WSA, and natural areas, and wild areas. (It is hard to imagine how this directive can be met while allowing any ORV focused recreation use in such areas.) In other words, the EOs give direction which is much more specific than just designating areas open, closed, and limited. They very strongly require BLM to give priority to the many resources which are damaged by ORV use, particularly by ORV-focused recreation. In addition, we do not see how the EOs can be complied with by designating any area as "open." It must be made clear at the RMP level there will be no open areas. You likely already know that the BLM failed to to comply with the EOs for their Mojave plan and the courts just sent that plan back for them to re-do.

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Travel Management

We do understand the RMP will not designate specific motorized routes. That process will occur later, unit by unit. We have participated in several such travel planning projects. We urge that this plan give general directions which will apply Field Office- wide to each transportation planning unit. This will assure consistency and avoid repeatedly dealing with these same issues over and over as specific area plans are developed.
Direction at the RMP level plan should : Make it clear that travel within the entire Field office will be limited to designated routes. The Ely Field office has already led the way on that issue.
Off-route travel for game retrieval must not be allowed. Game carts are appropriate. If we allow the habitat to be overrun with vehicles by unskilled, unprepared and/or lazy individuals, then hunters will find neither the game nor the solitude we seek. Allowing exceptions to off-route travel rules greatly compounds enforcement problems. The adjoining H-T National Forest units have already banned game retrieval in their travel management plans. Travel management consistency between agencies is important to eliminate confusion and to simplify enforcement
• Route density has profound effects on all resources, particularly wildlife and quality recreation opportunity. A general direction for allowable route densities Field Office-wide will be needed. For example, direction should be that road densities should not exceed 2 miles per square mile, except in truly exceptional situations. • In addition direction should be given that there will be ample acreage remaining in each area which is at least two miles from any motorized route. • The EIS should display maps showing areas which are currently at least 2 miles from any known motor route, another depicting acreages one mile from any known motor route and one displaying important wildlife habitat.
Travel planning requires the agency to manage human travel across the landscape. The land use planning process, which addresses the broader landscape within a planning area, provides one of the best opportunities to make travel planning decisions in the appropriate context. The placement and design of travel routes defines which areas will remain or become roadless, whether they will maintain or become of Wilderness character, and which areas will be disturbed and how. In other words, route decisions determine the fragmentation of the landscape, and, thus, how naturally or unnaturally a landscape will behave in terms of water flow and quality, wildlife migration, and species composition and function. The Center recommends that the BLM address travel management on a landscape-wide basis by addressing the impacts of all roads in the planning area and accounting for the landscape-wide impacts of these roads. The BLM should establish a travel system that retains the minimum amount of routes necessary to provide for reasonable access to public lands including closure and rehabilitation of redundant roads, roads that serve no visitor or administrative purpose, and roads in sensitive resources areas
BLM must apply a legal definition of "road" within the planning process, develop appropriate criteria to accurately gauge what is or is not a road, ensure that illegal "ghost roads" are not legitimized, and in fact, close and reclaim such "ghost roads." Some legal roads serve important travel needs and are appropriate for motorized use. However, routes that are not "roads" should not receive equal consideration. The agency has a definition of "road," and this definition should be adopted and used consistently in order to create a regular expectation and approach on BLM public lands. We note however, that merely meeting the definition of a road is not sufficient to justify designating a route. In fact, the BLM must still consider whether a route has negative impacts to sensitive or protected resources, such as by the process recommended in this document, and should only designate those that do not impact these resources. The legal definition of road for the BLM public lands is derived from the definition of "roadless" in the legislative history of FLPMA: The word "roadless" refers to the absence of roads which have been improved and maintained by mechanical means to insure relatively regular and continuous use. A way maintained solely by the passage of vehicles does not constitute a road. (H.R. Rep. No. 94-1163 at 17 (1976)). In addition, the Code of Federal Regulations (43 C.F.R. § 19.2(e)) establishes the following definition: "An improved road that is suitable for public travel by means of four wheeled, motorized vehicles intended primarily for highway use." IM 2006-173 ("Implementation of Roads and Trails Terminology Report"), which sets out and defines associated with transportation management, also includes a definition of a road as: "A linear route declared a road by the owner, managed for use by low-clearance vehicles having four or more wheels, and maintained for regular and continuous use." Therefore, it's incumbent upon BLM to exclude "user-created" routes from the inventory. To include these routes is to legitimize and "grandfather in" illegally created routes and/or routes which have not been improved or maintained by mechanical means to ensure regular use.
Motorized recreation is a fast growing and important recreational use of federal public lands in Nevada. If such a use is to be allowed on the Battle Mountain District, it must be restricted to designated trails and roads that have been carefully selected, and cross country travel must be prohibited.
We also feel that competitive speed events do not belong on BLM public lands. Such events are destructive and disruptive to native ecosystems. Their sole purpose is to push the limits of man and machines. The racers pay little attention to their surroundings except as it pertains to their racing. Such events are best conducted on private lands with

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facilities established for this type of motorized use.
Executive Order (EO) 11644, as amended by EO 11989 provides clear and explicit direction to the BLM regarding the use of off-road vehicles (ORVs) on the public lands. The purpose of these EOs is to, "ensure that the use of ORVs on public lands will be controlled and directed so as to protect the resources of those lands, to promote the safety of all users of those lands, and to minimize conflicts among the various uses of those lands." Section 3 of the EOs speaks to the designation of areas and trails such that: damage to soil watershed, vegetation or other resources; harassment or disruption of wildlife habitats; and conflicts between ORV use and other uses of the federal lands; are minimized. Section 9 of EO 11989 states: "Special Protection of the Public Lands. (a) Notwithstanding the provisions of Section 3 of this Order, the respective agency head shall, whenever he determines that the use of off-road vehicles will cause or is causing considerable adverse effects on the soil, vegetation, wildlife, wildlife habitat or cultural or historic resources of particular areas or trails of the public lands, immediately close such areas or trails to the type of off-road vehicle causing such effects, until such time as he determines that such adverse effects have been eliminated and that measures have been implemented to prevent future recurrence. (b) Each respective agency head is authorized to adopt the policy that portions of the public lands within his jurisdiction shall be closed to use by off-road vehicles except those areas or trails which are suitable and specifically designated as open to such use pursuant to Section 3 of this Order." (emphasis added). In its analysis, the BLM must provide a thorough and comprehensive analysis of the effects and impacts from the motorized recreation currently on-going on the district as outlined in the EOs. The Center feels that the current level and type of motorized uses are resulting in significant damage to soils, desert vegetation and springs, as well as causing significant harassment and disruption of wildlife, including listed species or candidate species such as sage grouse.
The BLM must also ensure compliance with the minimization standards found in 43 CFR §8342.1. These regulations require the authorizing officer to designate ORV routes in accordance with minimization criteria which state: "(a) Areas and trails shall be located to minimize damage to soil, watershed, vegetation, air, or other resources of the public lands, and to prevent impairment of wilderness suitability. (b) Areas and trails shall be located to minimize harassment of wildlife or significant disruption of wildlife habitats. Special attention will be given to protect endangered or threatened species and their habitats. (c) Areas and trails shall be located to minimize conflicts between off-road vehicle use and other existing or proposed recreational uses of the same or neighboring public lands, and to ensure the compatibility of such uses with existing conditions in populated areas, taking into account noise and other factors. (d) Areas and trails shall not be located in officially designated wilderness areas or primitive areas. Areas and trails shall be located in natural areas only if the authorized officer determines that off-road vehicle use in such locations will not adversely affect their natural, esthetic, scenic, or other values for which such areas are established." In the ruling for the case Center for Biological Diversity, et. al. v. U.S. Bureau of Land Management, et. al. (C 06-4884 SI, filed 9/28/2009) the court found that not only did the BLM have to abide by the minimization criteria, but also must document how it does so specifically for the designations being considered. The use of tools, such as decision trees, is not sufficient unless they specifically address the criteria.5 The court also found that the BLM must show a "rational connection" between the facts considered and decisions made.6 In this same decision the court elaborated on the meaning of the word "minimize" in the regulation, clarifying that it refers to the "effects" of the route designations, such that the BLM is required to place routes specifically to minimize 'damage' to public resources, 'harassment' and 'disruption' of wildlife and their habitat, and minimize 'conflicts' of uses.7 In this EIS, the BLM must document its consideration of and compliance with the "minimization criteria", including analyzing the effects of the designations. Routes can only be designated if the agency can show that ORVs will not damage or harm other resources. We provide in Appendix B, a set of best management practices for off-road use on public lands. Although specifically written to address concerns on National Forest System lands, we feel itshould apply equally well to BLM public lands and should be used in identifying and implementing a motorized recreation system on the district.
The best designed motorized trail system will fall short of meeting the expectations set for it if there is inadequate enforcement. Over the past decades, advances in off-road vehicle technology and performance have enabled riders to drive on nearly any type of terrain, up steep slopes and onto lands previously only accessible by foot. An extensive network of unauthorized, usercreated routes now crisscrosses the public lands leading in many cases to a legacy of unacceptable damage to environmental and cultural resources. In this RMP, the BLM must include a viable enforcement component to accompany any proposed motorized trail system. To assist you in that task, the Center is including as Appendix C a report on six strategies for successful enforcement on public lands.
We believe in recreation opportunity for all, yet understand that healthy wildlife habitat, rivers and streams are the foundation supporting the American traditions of hunting and fishing. We believe there is a place for off-highway vehicle routes on public lands, but that greater controls and better enforcement are necessary in the face of growing human population and ever-more-powerful machines. In order to protect the future of hunting and fishing traditions we treasure, we want to protect large areas of public forest

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The RMP should consider alternatives which restrict OHV travel to designated roads and trails only with no "open" areas or "play" areas.
Comprehensive Travel and Transportation Management: We strongly encourage you to adopt planning decisions that will allow for necessary management to stop the damage to public lands within the District caused by the inappropriate use of off road vehicles.
In addition to designating areas for special management, the BLM can include management zones in the RMP. Management zones can form an important part of development an approach to comprehensive travel and transportation management (CTTM) planning, as well as planning for recreation and other activities governed by the RMP. CTTM is an interdisciplinary and holistic process that involves more than a route-by-route evaluation. BLM must take a complete look at all of the resource allocations and uses in the planning area and designate the route network that is appropriate for activities and access, while also closing or limiting travel in areas where important or sensitive resources should be prioritized or may conflict with certain types of travel. According to BLM policy guidance, CTTM should be "outcome-based," meaning that the network should be integrated with the RMP's desired outcomes with prescriptions that: • Meet all resource program goals and objectives, and be consistent with social and environmental objectives for allowing travel and determining transportation networks in the area, • Provide appropriate levels of access and associated benefits to both recreation travelers and resource users, • Ensure that prescribed setting characteristics are maintained and establish the primary means and modes of travel allowed for accomplishing the planning objectives. IM 2008-014, Attachment 1. In addition, BLM must manage the lands in the field office for "multiple uses," which means "making the most judicious use of the land for some or all of these resources or related services . . .; the use of some land for less than all of the resources; a combination of balanced and diverse resource uses." FLPMA, 43 U.S.C. § 1702(c) (emphasis added). One approach that has been successfully implemented by BLM to integrate CTTM into the goals of the RMP is to create management zones to guide decisions in the RMP. Management zones emphasize certain types of management and experiences for the planning area as allocated in the RMP. These broadly-defined

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landscapes describe the type of uses and experiences that will be expected in the specific areas and other management decisions, such as designated routes for travel, can be made based on the criteria for that zone. This is exactly the type of process envisioned by the BLM and stated in policy guidance. The selection of travel management areas should parallel identified Recreation Management Zones (RMZ) within Special Recreation Management Areas (SRMA). Both recreation management objectives and recreation setting prescriptions guide and constrain the kinds of travel, as well as the location of travel routes. All road and trail construction and maintenance must be constrained to fit within these setting prescriptions. IM 2008-014. In the same guidance, BLM states that "[f]ield Offices may choose to establish TMAs or management zones . . . that cover the entire planning area." Id., Attachment 1 (emphasis added). Here, with a broad mixture of land ownership and uses of BLM land throughout the planning area, the St. George Field Office would benefit greatly from delineating management zones as a baseline for designating routes. There are several examples where BLM has defined these types of management zones in RMPs. One is the Grand Staircase-Escalante National Monument Management Plan (MMP). In this plan, BLM described four zones to "provide guidance to help define permitted or excluded activities and any stipulations pertaining to them." MMP at 8. These zones included Frontcountry, Passage, Outback, and Primitive Zones. Id. at 8-9. Another example is the Craters of the Moon National Monument RMP which included the Frontcountry, Passage, Primitive, and Pristine Zones for the entire planning area. Craters RMP at 13-14. The plan describes the use of zones as a useful way to guide decisions to meet desired conditions. Management zoning is established throughout the planning area to provide and maintain a range of recreation and access for different user types with varying interests and abilities. Each separate zone has distinct settings to be provided and maintained. Physical settings consider the degree of naturalness and amount and type of facilities, as well as proximity to roads. Social settings consider the number of contacts with other people, the size of groups, and evidence of other users. Managerial settings consider the amount of visitor management used to achieve desired social and resource conditions, the compatibility of traditional land uses with the recreational environment, and the type of access and vehicle use allowed in the area. Other management zones for the broader planning area that we have seen include titles like "Rustic" zones or can parallel labels for Recreation Management Zones that are designated in SRMAs. There is currently no standard way to create management zones for a planning area; they are often based on the needs and uses of that particular area. However, once designated, zones can provide guidance for not only travel and transportation management decisions, but also for management of other uses, such as right-of-way exclusion or avoidance, and management prescriptions, such as visual resource management classifications. Recommendations: BLM should designate the management zones as proposed above to help guide the comprehensive travel and transportation management process, as well as other management decisions and prescriptions in the Battle Mountain RMP
BLM's internal guidance states that "each RMP will divide planning areas into OHV area designations that are open, limited or closed." IM No. 2004-005; see also 43 C.F.R. § 8342.2(b). This internal guidance was also incorporated into the updated version of BLM's Land Use Planning Handbook. H-1601, Appendix C, Section II.D (Comprehensive Trails and Travel Management). The Land Use Planning Handbook states that BLM should: Complete a defined travel management network (system of areas, roads and/or trails) during the development of the land use plan, to the extent practical. If it is not practical to define or delineate the travel management network during the land use planning process, a preliminary network must be identified and a process established to select a final travel management network. (emphasis added) The Land Use Planning Handbook (Appendix C, Section II.D) also sets out requirements for travel management at both the land use and implementation planning levels: • At the land use plan level, BLM must identify areas for use based on program goals and objectives, primary users, reason for "allowing travel" into an area, setting character to be maintained (including Visual Resource Management and Recreation Opportunity Spectrum classifications), and primary means of travel appropriate to meet objectives and keep setting character; and • At the implementation level, BLM must define a detailed travel management network, "establish a process" to identify roads, trails, etc. with criteria for selections, guidelines for management, monitoring and maintenance, and indicators for future plan maintenance. Because the Notice of Intent for the Battle Mountain RMP revision lists "identifying off-highway vehicle designations and travel management" as an issue to be addressed in the plan, we assume BLM plans to complete comprehensive travel planning as part of this RMP. If the agency does not complete travel management plans for all of the planning areas as part of the RMP, then the RMP must identify not only areas for use, but also reasons for permitting travel into an area and appropriate criteria for determining routes that will be made available for different uses, taking into account such factors as undeveloped recreation opportunities available and natural settings.
The RMP should also identify priorities for implementation of the travel management plan, which may also be instructive in the event that the agency expects that additional travel planning will be needed. Special management areas, such as ACECs, special recreation management areas and citizen-proposed wilderness, must include travel designations within their boundaries. Priorities for sub-regions to receive comprehensive travel management planning, which can also be useful for guiding implementation, were identified in the Proposed RMP issued by the Little Snake Field Office (available on-line at: http://www.co.blm.gov/lsra/rmp/index.htm) and we would encourage you to further prioritize areas in this manner as well. Please see Appendix F from the Little Snake Proposed RMP (attached), which sets out criteria for prioritizing areas to receive comprehensive travel management planning, including: • Special management areas • Areas identified as "limited to designated roads and trails" • Areas that meet fragile soil criteria • User and

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resource conflicts • Excessive complaints • Wildlife/wild horse population trends • Evidence of trail/road proliferation • Areas with high road densities • Impacts on cultural resources • Unacceptable erosion • Degradation of water quality • Impacts on visual resources • Loss of trail integrity • Habitat fragmentation and damage • Impacts on sensitive plants • Need to provide a variety of user experiences
Landscape level planning. Travel planning requires the agency to manage human travel across the landscape. The land use planning process, which addresses the broader landscape within a planning area, provides one of the best opportunities to make travel planning decisions in the appropriate context. While we understand that BLM does not have authority to close or relocate highways, major roads, or County roads, BLM must include these routes when analyzing the transportation network as they have a great impact on habitat fragmentation and reduction in core area size (discussed in length later in these comments and in Appendix 1). The placement and design of travel routes defines which areas will remain or become roadless, and which areas will be disturbed and how. In other words, route decisions determine the fragmentation of the landscape, and, thus, how naturally or unnaturally a landscape will behave in terms of water flow and quality, wildlife migration, and species composition and function. NEPA requires federal agencies to assess the direct, indirect and cumulative environmental impacts of proposed actions, taking a "hard look" at environmental consequences and performing an analysis commensurate with the scale of the action at issue. 42 U.S.C. § 4321 et seq; 40 C.F.R. § 1508.8; see also Metcalf v. Daley, 214 F.3d 1135, 1151 (9th Cir. 2000); Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 348 (1989). Travel planning affects the entire landscape and can only be thoroughly and properly assessed by considering potential impacts and making decisions at a comparable level. In terms of how to evaluate the potential impacts of travel management decisions, NEPA's definition of "cumulative impact" is instructive: the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. 40 C.F.R. § 1508.7. (emphasis added). BLM must account for the direct, indirect, and cumulative impacts of all roads in the Battle Mountain District when completing a comprehensive travel management plan. BLM policy guidance also defines comprehensive travel and transportation management planning as being integrated with the objectives of the RMP at the landscape level. Managers should consider access needs and incorporate management prescriptions for all motorized and nonmotorized travel and access that occur on public lands. Travel management implementation should be accomplished in a holistic approach that provides clear direction for access and recreation opportunities while protecting sensitive areas and meeting resource management objectives. IM 2008-014, Attachment 1. In addition, IM 2008-014 states that travel planning will "[s]upport the desired outcomes of other resource programs, as expressed in goals and objectives in the land use plan, along with any additional landscape prescriptions." Id. Thus, in order to undertake comprehensive travel and transportation planning, BLM must look at the entire landscape and the impacts to the area from decisions made in the TMP. Recommendation: BLM should address travel management on a landscape-level by evaluating the impacts of all roads in the planning area and tailoring its management prescriptions to account for and mitigate the landscape-wide impacts of these roads in conjunction with the objectives of the RMP.
Minimization Criteria. The Battle Mountain RMP must comply with the applicable federal regulations (43 C.F.R. §§ 8342.1 and 8342.2), codifying Executive Orders (E.O.) 11644 and 11989, that instruct BLM on ORV management. Specifically, the Battle Mountain District Office must take into account not only increases in ORV use, but also the damages caused to the natural resources by such use, and the heightened conflict between user groups as the number of ORVs increase and heretofore non-motorized areas are being transformed into motorized areas. BLM's regulations relating to management of off-road vehicles acknowledge the need to address the manner in which motorized recreation can prohibit other experiences, requiring that both areas and routes for off-road vehicles be located to "minimize conflicts between off-road vehicle use and other existing or proposed recreational uses of the same or neighboring public lands, and to ensure the compatibility of such uses with existing conditions in populated areas, taking into account noise and other factors." 43 C.F.R. § 8342.1. The BLM's ORV regulations also provide for protection of other values that are critical parts of not only a healthy ecosystem on BLM lands, but also of enjoying quiet recreation activities, such as hunting, photography and bird-watching, requiring that management minimize "damage to soil, watershed, vegetation, air, or other resources of the public lands" and harassment of wildlife or disruption of habitat; and to prevent impairment of wilderness suitability or adverse affects on natural areas. 43 C.F.R. § 8342.1. In designating areas as "open" to ORV use (such that cross-county travel is permitted) in compliance with these legal requirements, the Colorado BLM's guidance is instructive on evaluating such alternatives. IM CO-2007-020 (available on-line at: http://www.blm.gov/pgdata/etc/medialib/blm/co/information/efoia/2007/2007_im.Par.36137.File.dat/COIM2007-020.pdf) provides: Open areas will be limited to a size that can be realistically managed and geographically identifiable but large enough in size to offer a high quality motorized riding/driving opportunity for participants. Expansive open areas allowing cross-country travel, without a corresponding and identified user need/demand, will not be designated in RMP revisions or new travel management plans. We recommend the Battle Mountain District adopt a similar approach. Recommendation: BLM must design a travel plan that minimizes conflicts among users and damage to natural

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resources. New open areas should not be designated and current open areas should be reevaluated to ensure that they are located and bounded to meet the minimization criteria and limited to a reasonable size for purposes of BLM management and enforcement.
Mapping of routes. As part of comprehensive travel management planning, BLM produces route maps to illustrate a base travel network, to generate various route designation proposals, and for purposes of receiving public comments. In these contexts, it is vital that the agency clearly mark on all maps or proposed maps areas with existing restrictions on motorized use, such as: wilderness areas, WSAs, primitive non-motorized designations, Wild and Scenic Rivers, and ACECs. Depicting existing restrictions will ensure that public comments are informed by the knowledge that additional routes will not be permitted in certain areas. Further, maps should indicate resources that could be affected by motorized use, such as wilderness characteristics and wildlife habitat. Public comments will then be informed by the potential resource conflicts and the best opportunities for designating areas for non-motorized recreation. Route maps should also distinguish user-created routes from roads that were created and are maintained by the BLM to serve planned transportation needs. Also, user-created routes in areas that have motorized restrictions should only be shown as closed and/or for prioritizing restoration. To be added to the transportation system, user-created routes must go through NEPA analysis to ensure they are not damaging resources and comply with BLM regulations, such as the minimization criteria for ORV use discussed in these comments. In addition, as part of designating routes, BLM should use consistent definitions of roads, primitive roads, and trails. IM 2006-173 ("Implementation of Roads and Trails Terminology Report"), sets out and defines these terms, and includes a definition of a road as: A linear route declared a road by the owner, managed for use by low-clearance vehicles having four or more wheels, and maintained for regular and continuous use. It is important that BLM use these terms to distinguish both the types of routes and the appropriate types of motorized use. Recommendations: BLM should identify both existing restrictions on motorized access and other areas that can be damaged by motorized use on all maps used in travel planning. User-created routes should be distinguished from legitimate roads on travel planning maps, and, where they were created illegally, should be excluded from the baseline inventory.
Habitat fragmentation. As mentioned in the beginning of this section of our comments, BLM must address travel management on a landscape level to ensure that BLM meets its responsibility as stewards of the public land and mitigates against habitat fragmentation. We have included The Wilderness Society's recent Science and Policy Brief, "Habitat Fragmentation from Roads: Travel Planning Methods to Safeguard BLM Lands" (Appendix 1). Also included in Appendix 1 is a scoping brief entitled "Analysis of Habitat Fragmentation from Oil and Gas Development and its Impact on Wildlife: A Framework for Public Land Management Planning" and four scientific reports prepared by TWS and discussed in the habitat fragmentation report. These include Fragmenting Our Lands: The Ecological Footprint from Oil and Gas Development, Protecting Northern Arizona's National Monuments: The Challenge of Transportation Management, Wildlife at a Crossroads: Energy Development in Western Wyoming, and Ecological Effects of a Transportation Network on Wildlife. In addition to summarizing the four reports included, "Habitat Fragmentation from Roads: Travel Planning Methods to Safeguard BLM Lands" provides a summary of available scholarly and government reports and studies on the impact of habitat fragmentation on wildlife, provides methods for calculating habitat fragmentation, and provides recommendations on how to integrate fragmentation analysis into travel management. We also recommend that the BLM look at the travel planning criteria set out in the Record of Decision for the Dillon (MT) RMP (relevant sections attached and also available on-line at: http://www.mt.blm.gov/dfo/rod/contents.htm), as an example of criteria that incorporate key aspects of BLM's ORV regulations as well as ecological metrics. This field office did not complete a comprehensive travel management plan as part of its RMP revision; however, it included road density targets and included an appendix outlining the principles it will use when completing a comprehensive travel management plan during implementation. Recommendation: BLM should use the information provided in Appendix 1 to measure habitat fragmentation, conduct a thorough fragmentation analysis, and inform decisions regarding road closure and other limitations on use in the Battle Mountain RMP.
Principles of travel management. When completing a comprehensive travel management plan, it is vital to complete it in a systematic and transparent manner. Key principles of travel planning (1) Travel management is part of land use planning and should address both recreation and transportation needs from a landscape perspective; therefore, travel planning must be coordinated with recreation management planning. (2) Prior to conducting an inventory or designation of routes, BLM should assess the present resources, requirements for protection, and which uses for recreation and development are compatible with these resources, requirements and other users. (3) BLM should use a legal definition of "road" when designating routes. (4) BLM's consideration of ORV use should take into account its potential damage to resources and other uses, including exclusion of other users. (5) Where BLM presents a baseline travel system, it must present route maps in a responsible manner that does not legitimize or misrepresent the official status of the existing network of unauthorized ways/routes routes. (6) BLM should include a detailed closure and restoration schedule in the plan. (7) BLM should include and implement a monitoring plan. (8) BLM should include and implement education and outreach in the plan. The RMP revision provides opportunities for BLM to evaluate its travel system goals and whether the current system of roads and trails is furthering or hampering these goals. BLM should create a travel network that best serves the many resources

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which the agency is tasked with managing and does not inadvertently do a disservice to any other resource or public land visitor. The Wilderness Society and the Colorado Mountain Club developed a template for conducting travel management planning, including a detailed discussion of these key principles of travel planning, which we have attached and recommend that the BLM incorporate into the RMP as the process for travel planning. Recommendations: BLM should follow the eight travel planning principles detailed above to ensure that only routes which truly serve a valid purpose for the public remain open. BLM should also create comprehensive travel and recreation management goals and designate routes accordingly.
Criteria for Addition of New Motorized Trails In order to ensure that priority ORV management is addressed, the BLM should implement a prioritization hierarchy in which new construction is secondary to and incumbent upon successful restoration and prior achievement of other ORV related management goals. Management activities such as restoration and rehabilitation of existing impacts, signage and achieving compliance should take precedence over approving new motorized construction or adding motorized system trails that further increase the agency's management burden and might further retard other resource actions that are critical if not addressed first. The goal of this priority hierarchy is to 1) take care of the resource impacts from past ORV related activities; 2) establish conditions to prevent new and/or reoccurring ORV related impacts; 3) secure long term commitments, stipulations, and thresholds of new and existing system routes; and (4) once above priorities have been met, new proposals can be considered and reviewed through NEPA. Thus, in assessing whether additional motorized trails are to be considered, and if appropriate, approved, we recommend the following set of principles which builds upon the Royal Gorge Field Office's criteria set out in the Arkansas River Travel Management Plan Environmental Assessment, Appendix 6 (pp. 225-227). To provide for appropriate motorized uses, while also protecting the area's resources, the BLM should establish the following criteria for addition of new motorized trails to help guide future management and development of the ORV activities in the Battle Mountain District: 1. Approve construction of new or additional trails only after the following conditions have been met: a. The decision to approve the trail(s) has been authorized under a site specific EA or EIS that analyzes the site specific environmental effects of the proposal. b. The proposal would further the goals and desired future conditions (DFCs) identified by the agency. c. Priority implementation of effective on-the-ground closures (i.e. barriers, gates, berms) and restoration work (i.e. ripping/seeding, decommissioning, re-countouring, re-vegetation) has been completed and adequate funding and grants, partnerships/volunteer commitments, staff time allocations has been secured and employed. d. Implementation of all necessary signage (for closed and open routes) has been fully installed and adequate funding and staff/volunteer time for installment has been committed to. e. The proposal is sponsored under a partnership agreement that includes a plan for securing the necessary funds and/or volunteer commitments to construct and maintain the trail to accepted standards. f. The proposal is accompanied by long term commitments, and stipulations and thresholds are agreed to that if surpassed, corrective management actions will be taken to protect resource health. 2. A significant factor in approving new trails depends on the ability to maintain existing trails to agreed standards. With the participation of cooperating partners, develop accepted standards and guidelines for constructing and maintaining new and existing trails. 3. With the participation of cooperating partners, establish a system and procedures for monitoring trail conditions and performing necessary maintenance work. 4. Continue and strengthen long-term partnerships with motorized user groups for the purposes of maintaining existing trail networks. Note that new construction does not include incidental construction in order to reroute, mitigate, and/or prevent resource impacts as this would be included under number 1 (c); rather, this refers to new ORV opportunities that are considerable and are added to the current system and agency burden. This approach is consistent with the letter and the spirit of BLM's obligation to minimize impacts from ORVs to other users and resources. As discussed previously in these comments, Executive Orders (EO No. 11644 (1972) as amended by Executive Order No. 11989 (1977)) and the BLM's regulations (43 C.F.R. § 8342.1) require BLM to ensure that areas and trails for off-road vehicle use are located to minimize damage to soil, watershed, vegetation, air, or other resources of the public lands, and to prevent impairment of wilderness suitability; to minimize conflicts between off-road vehicle use and other existing or proposed recreational uses of the same or neighboring public lands; and to minimize distress and other impacts to wildlife.
FLPMA requires that BLM prevent unnecessary or undue degradation of the public lands. We are concerned with the proliferation of OHV use by the public, and some livestock permittees. 48 BLM must end all OHV races throughout sensitive special status species habitats. Holding an OHV race in wild lands causes irreparable damage. Trails driven by modern high-powered motorbikes have their soils pounded into concrete, with permanent damage to soils and vegetation. Where trails go up hills, gully formation processes are set in motion. Plus, both the racers and spectators are enticed to re-visit the lands where races occur - with use proliferating in areas where races are held. OHV use should be limited to only existing roads, and only within certain areas. Any trails off the designated roads must be slated for restoration. All roads in the important special status species habitats should simply be designated as "Closed" to OHVs - unless they are specifically signed as "Open". A Travel Plan map should be developed as part of the EIS process. We are aware of no lands in the Battle Mountain EIS area that are suitable for an "Open" designation.

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Off highway vehicle area: would like a buffer between any established areas and the NTTR boundary. This is more a safety issue. A contiguous boundary between the OHV area and the NTTR provides the opportunity for vehicles to stray onto the bombing range if a fence gets damaged. During the Ely RMP effort, much of this type information was hashed out during the round table discussions.

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