

United States Department of the Interior  
Bureau of Land Management  
Battle Mountain District  
Mount Lewis Field Office

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Battle Mountain, NV 89820-1420

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# FINAL SCOPING REPORT

## 3-Bars Ecosystem and Landscape Restoration Project Environmental Impact Statement







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## 1.0 SUMMARY OF PUBLIC AND AGENCY SCOPING ACTIVITIES

### 1.1 INTRODUCTION

The 3-Bars Ecosystem in northern Eureka County, Nevada, spans about 750,000 acres and includes three major mountain ranges (Roberts Mountains, Simpson Park Mountains, and Sulphur Spring Range). Many factors are contributing to the overall decline in land condition of this area, which is facing the loss of sagebrush, bitterbrush, and mountain shrub habitats that are critical for sensitive wildlife species such as sage-grouse, pygmy rabbit, and mule deer, and riparian wetlands that provide important habitat for the threatened Lahontan cutthroat trout and other aquatic species. These factors include increasing incidence and severity of wildfire, increasing expansion of downy brome (cheatgrass), increasing expansion and densification of pinyon pine and juniper woodlands, and increasing human impacts (such as mining activities, grazing management practices, and off-highway vehicle [OHV] use).

The Bureau of Land Management (BLM) is proposing a comprehensive treatment program for dramatically improving the health of the 3-Bars Ecosystem (planning area) and reducing the risks that are contributing to its decline. The proposed project, known as the 3-Bars Ecosystem and Landscape Restoration Project (3-Bars Project), focuses on restoration at the landscape level. It will address landscape protection priorities identified in the Healthy Lands Initiative (maintaining sagebrush steppe habitat and strategically restoring fragmented habitat for at-risk wildlife species), as well as resource management goals that are important to the BLM's Mount Lewis Field Office and Battle Mountain District. The proposed vegetation treatments would range from several acres to several thousand acres, depending on specific treatment and management goals and desired outcomes for each resource area. Possible treatment methods could include prescribed fire or wildland fire use, and manual/physical, mechanical, chemical (herbicide), and biological treatments, and other management actions.

In order to implement the proposed 3-Bars Project, the BLM must develop treatments and treatment objectives that meet previously-identified resource management goals. These goals are consistent with the *Shoshone-Eureka Resource Management Plan* (Shoshone-Eureka Resource Management Plan), which guides land management activities on the 3-Bars Ecosystem. These goals pertain to wildlife and habitat components, fire and fuels management, control of weeds, woodland and rangeland values, wetland and riparian components, wild horse components, Native American components, and cultural resources. In order to develop treatment objectives, the BLM must also identify where existing conditions warrant a change based on ecosystem needs for health maintenance, habitat requirements, restoration goals, and protection.

As part of this proposal the BLM is preparing a *3-Bars Ecosystem and Landscape Restoration Project Environmental Impact Statement* (EIS) that will evaluate proposed landscape restoration alternatives on lands managed by the BLM in 3-Bars Ecosystem. As part of the development process for the EIS, the BLM held public scoping from January 25 through March 10, 2010 to allow the public to comment on the proposal. Comments on the proposal could be submitted in writing, by electronic mail, or by facsimile to the BLM Project Manager. In addition, the BLM held two public scoping meetings, one in Battle Mountain (February 22) and one in Eureka (February 23), Nevada. Written and/or oral comments were accepted at these meetings.

The scoping process was initiated by the publication of a Notice of Intent in the *Federal Register* and in local newspapers. The scoping process included holding at least one public meeting per affected area and requesting written and/or oral comments on what issues and environmental concerns the EIS should address.

### 1.2 PUBLIC NOTICES AND NEWS RELEASES

On January 25, 2010, the BLM published a Notice of Intent in the *Federal Register* (Volume 75, Number 15, pages 3916-3917) notifying the public that the BLM had formed a team to prepare an EIS on the restoration activities for the 3-Bars Ecosystem. The Notice of Intent stated that comments on issues may be submitted in writing until February 24, 2010. The date(s) and location(s) of the scoping meetings were announced at least 15 days in advance through local



new media, newspapers and the BLM Web site at: [http://www.blm.gov/nv/st/en/fo/battle\\_mountain\\_field.html](http://www.blm.gov/nv/st/en/fo/battle_mountain_field.html). In order to be considered as part of the Draft EIS, all comments must have been received prior to the close of the scoping period or 15 days after the last public meeting, whichever was later.

### **1.3 PUBLIC MEETINGS**

Public meetings were held in Battle Mountain on February 22 and Eureka, Nevada, on February 23, 2010. The scoping meetings were conducted in an open-house style. Informational displays were provided at the meeting, and handouts describing the project, the National Environmental Policy Act (NEPA) process, and issues/alternatives were given to the public. In addition, a formal presentation provided the public with additional information on program goals and objectives. Representatives from the BLM and their consultant responsible for preparing the EIS were present to answer questions from the public.



## 2.0 COMMENT STATISTICS AND ISSUES

The BLM received 24 comment letters on the proposed 3-Bars Project EIS. In addition, comments were recorded from informal discussions with the public at the public scoping meetings. However, not all individuals commenting orally at the meeting were able to be identified, making it difficult to determine the exact number of individuals presenting comments at the meetings. Based on written and oral comments given during the scoping period, 637 catalogued individual comments were recorded during scoping on the 3-Bars Project EIS.

**Table 1** lists the individuals/organizations providing scoping comments. **Table 2**, Comment Subject Breakdown, provides the number of individual comments received during scoping by relevant section of the EIS. It should be noted that some comments could fit in more than one category, but were only listed once. **Table 3** lists the key issues identified during scoping.

**TABLE 1**  
**Agencies/Organizations/Individuals Providing Written Comments**

<b>Individual/Organization</b>	<b>Commenter Number<sup>1</sup></b>	<b>Number of Individual Comments Provided</b>
Paiute Pipeline Company	1	1
Center for Biological Diversity	4	29
U.S. Environmental Protection Agency	5	2
National Mustang Association, Inc.	11	2
State of Nevada Department of Wildlife	12	25
Nevada State Clearinghouse	13, 14	2
Eureka County Natural Resources Advisory Commission	15	57
Western Watersheds Project	16, 21, 22	345
University of Nevada Cooperative Extension	18	11
Individuals	2, 3, 6, 7, 8, 9, 10, 17, 19, 20, 23, 24	123
<sup>1</sup> Commenter numbers are referenced throughout Section 3, Summary of Comments, to indicate the individual that provided the comment.		



**TABLE 2**  
**Comment Subject Breakdown**

Comment Subject	Number of Comments <sup>1</sup>	Percent of Total
<b>Proposed Action and Purpose and Need for Action</b>		
Proposed Action	4	0.6
Purpose and Need for Proposed Action	2	0.3
Scope of Analysis and Decisions to be Made	1	0.2
Relationship to Statutes, Regulations, and Policies	9	1.4
Interrelationships and Coordination with Agencies	13	2.0
Public Involvement and Analysis of Issues	9	1.4
<b>Alternatives Including the Proposed Action</b>		
Vegetation Treatment Planning and Management	53	8.2
Description of Treatment Methods	45	6.9
Description of Action Alternatives	6	0.9
No Action Alternative – Alternative A	2	0.3
Proposed Action – Alternative B	3	0.5
Other Possible Alternatives	13	2.0
Alternatives Considered but Eliminated from Analysis	3	0.5
Treatment Standard Operating Procedures	24	3.7
Special Precautions	1	0.2
Studies and Monitoring	33	5.1
Coordination and Education	5	0.8
Mitigation	3	0.5
<b>Affected Environment</b>		
Affected Environment	2	0.3
Introduction and Study Area	4	0.6
Land Use	6	0.9
Climate and Air Quality	1	0.2
Soil Resources	5	0.8
Water Resources (Quantity and Quality)	23	3.5
Wetlands, Riparian Areas, and Floodplains	6	0.9
Vegetation Resources	72	11.1
Fish and other Aquatic Resources	6	0.9
Wildlife Resources	39	6.0
Livestock	32	4.9
Wild Horses	20	3.1
Wilderness and other Special Areas	2	0.3
Cultural Resources	3	0.5
Social and Economic Values	5	0.8
<b>Environmental Consequences</b>		
Environmental Consequences	6	0.9
Assumptions for Analysis	10	1.5
Land Use	9	1.4
Climate and Air Quality	6	0.9
Topography, Geology, and Minerals	4	0.6
Soil Resources	2	0.3
Water Resources (Quantity and Quality)	6	0.9
Wetlands, Riparian Areas, and Floodplains	3	0.5
Vegetation Resources	53	8.2
Fish and other Aquatic Resources	2	0.3



**TABLE 2**  
**Comment Subject Breakdown (Cont.)**

<b>Comment Subject</b>	<b>Number of Comments<sup>1</sup></b>	<b>Percent of Total</b>
<b>Environmental Consequences</b>		
Wildlife Resources	10	1.5
Special Status Species	4	0.6
Livestock	6	0.9
Wild Horses	21	3.2
Wilderness and other Special Areas	4	0.6
Cultural Resources	2	0.3
Recreation	5	0.8
Social and Economic Values	13	2.0
Human Health and Safety	1	0.2
Cumulative Effects Analysis	19	2.9
<b>Other Comments</b>		
References	4	0.6
Glossary, Acronyms, and Abbreviations	3	0.5
Comments not Evaluated in this EIS	2	0.3
<b>Total Comments</b>	<b>650</b>	<b>100</b>
<sup>1</sup> Total number of comments is greater than actual number of comments provided because a few comments were referenced under more than one comment subject.		



**TABLE 3**  
**Scoping Comment Issue Summary**

Issue	Number of Comments <sup>1</sup>
<i>General</i>	
Clarify/define the terms “landscape restoration,” “rehabilitation” versus “restoration,” “shrub-steppe landscape,” “sagebrush steppe habitat,” “Potential Natural Vegetation” versus “Ecological Sites,” “appropriate mitigation measures,” “ecological site description,” “alternative (NEPA definition),” “encroached,” and “invaded”	3
Include a glossary or expand the Terminology section	1
Provide accurate deadlines and email addresses for public comment	1
Use a land restoration template for other BLM lands, if available	1
Provide Standard Operating Procedures	1
Provide a list of reference areas and location maps used in developing models for the project	2
Cease the project and reassign staff	1
Clarify whether most of the region is a Known Geothermal Resource Area	1
Provide maps of key areas used to monitor forage utilization levels and impacts when they were established; distinguish which species use each area; and why each area was selected as a monitoring site	1
<i>Program Purpose and Need</i>	
Evaluate land use (grazing, fire suppression, and mining) on ecosystem health	38
Address whether big fire years are beyond agency control (result of climate change)	1
Focus on long-term ecosystem sustainability and biological diversity; clearly define restoration objectives	8
Evaluate rangeland health in terms of ecological health-natural communities within historical conditions	1
Address potential for ecosystem restoration to limit options for multiple uses on federal and adjacent lands	1
Provide an evaluation and assessment of past treatments on District lands, including maps	8
Provide an explanation of the rationale for why these lands need treatment	8
Focus on addressing the causes rather than treating the symptoms	7
Provide assessment of areas that are functioning well; provide maps of vegetation in good or better condition; evaluate what has occurred in these areas	5
Provide the date of each Rangeland Health Assessment performed since the implementation of the Battle Mountain District Resource Management Plan (RMP); provide information on how data are being collected	2
Develop protocol for determining lands in need of treatment	1
Provide information regarding soil stability, erosion hazard, and wind and water erosion risks	1
Provide a copy of the watershed analysis, if one has been completed	1
Provide an analysis of how the BLM intends to achieve production of the dominant and/or native perennial grass and forb components on all range sites and achieve a minimum of 50 percent of the range potential; clarify what range site potential is believed to be	1
Provide a detailed analysis of how the BLM intends to promote upward trends in plant species frequency, production, and composition where the dominant and/or co-dominant species is missing; provide timeframes	1
Address economic and habitat value of pinyon pine	5
Provide clarification as to the threat of “hazardous fuels” and what fuels are considered “hazardous”	1
Focus on the recovery and viability of listed, rare, and imperiled species	20
Examine the degree and severity of sensitive and imperiled species habitat degradation that currently exists	1
Provide methods used to determine which lands were or are historic and current habitat for wildlife	1
Provide information on how wild horses contribute to the value of the historic landscape	1
Include information on management actions that have led to a disruption of free-roaming behaviors and/or reduced availability of critical resources	1
<i>Relationships to Statutes, Regulations, and Policies</i>	
Ensure compliance with existing statutes, regulations, and policies	6
Discuss how project will comply with Migratory Bird Treaty Act (MBTA); Clarify MBTA protocols	2
Discuss how project will comply with Executive Orders 11644 and 11989 regarding use of off-road vehicles (ORVs) and land protection	1



**TABLE 3**  
**Scoping Comment Issue Summary (Cont.)**

Issue	Number of Comments <sup>1</sup>
<i>Relationships to Statutes, Regulations, and Policies (Cont.)</i>	
Consider the objectives of Eureka County’s plans and policies	1
Describe how the project would be impacted if sage-grouse were listed under the Endangered Species Act	1
Assess how development of water for wild horses meets state water laws	1
<i>Interrelationships and Coordination with Agencies</i>	
Address how EIS will impact the Battle Mountain District RMP and other planning; update RMP	10
Work closely with agencies, conservation groups, and private landowners on restoration activities	11
Develop local support for project and draw on knowledge of permitted users to ensure success	1
Disclose how the BLM worked with the Nevada Division of Environmental Protection to evaluate water quality parameters, develop standards, and determine compliance	1
Work with the Natural Resources Conservation Service to establish Ecological Site Descriptions	1
Clarify the role of Native Americans in this project and consider involvement	2
Utilize existing program of “at risk” youth for manual treatment – expand with Native American aid	1
Eureka County requested inclusion in the EIS process, especially in development of the economic section	1
Form a coordinated resource stewardship group to assist with restoration planning	1
Have independent scientific assessment of project to ensure action needs and new disturbance risks assessed	1
<i>Proposed Action and other Alternatives</i>	
Provide information regarding the historical ranges of variability and natural fire cycles; incorporate current conditions (deforestation, disturbance, livestock, weeds, and grasses); highlight cheatgrass fire risk	9
Treatments should be less invasive/more “passive”; avoid additional disturbances due to treatments	9
Consider all treatment methods; allow for innovative solutions	7
Describe where acres will be treated and by what methods; treat areas uniquely	6
Expand/adjust the boundaries of the project; use natural boundaries; use grazing allotment boundaries; focus on human interface areas	5
Assess thresholds between states; assess whether there are multiple desired plant communities	3
Provide a timeline for short- and long-term trend objectives and the time each alternative would take to reach goals; provide timeframes for seeding establishment with and without livestock grazing	2
Match treatment type with physical and biological attributes of specific areas	2
Ensure that treatments do not make mining, oil and gas, or other exploration easier	2
Complete diverse types of small-scale active restoration	1
Focus restoration first on economically viable actions with the highest probability of success	1
Examine all methods of treatment that were not analyzed in the 17-States PER	1
Treat each allotment uniquely, as in a different state of incline or decline	1
Set long-term ecological goals and conditions for the sites	1
Provide a description of each treatment method	1
Explain how it is determined that an alternative is “reasonable” and how the “range” of alternatives is determined	1
Provide information regarding the BLM’s desired conditions and functionality parameters	1
Provide a full range of alternatives for reducing cheatgrass or other weeds as hazardous fuels; provide map	1
Make every effort to avoid communities from crossing vegetation thresholds	1
Analyze the costs and probability of success for transitions of communities back across thresholds	1
Avoid limitations on further development	1
Limit interruptions to grazing, timber, mining, and recreation	1
Fuels reduction should only occur in the wildland urban interface or where there is a threat to significant wildfire	5
Review the fire and livestock history of lands in Idaho to assess how seeding of crested wheatgrass, grazing, and high stocking rates resulted in more extensive and larger acreage fires	1
Develop an actionable plan for long-term prescriptive reduction of fuel loads	1



**TABLE 3**  
**Scoping Comment Issue Summary (Cont.)**

Issue	Number of Comments <sup>1</sup>
<i>Proposed Action and other Alternatives (Cont.)</i>	
Clarify whether the proposed action is linked with any biomass use	1
Consider projects that allow for use of biomass (pinyon-juniper)	4
Limit the use of herbicides	1
Reject any further analysis of tebuthiuron (an herbicide) or other harmful chemicals	1
Minimize the use of chemicals in wild land settings	1
Post signs that warn the recreational public in areas surrounding chemical treatment areas	1
Ensure that there will not be conflict with the existing high pressure pipeline which crosses Battle Mountain	1
Include an analysis of all water developments constructed, alterations, and sources utilized	4
Provide information on how current functioning condition status was determined	3
Develop a proposal to remove all artificial water facilities	5
Prepare an inventory of all big game water developments	1
Provide a description of water developments that are considered for the project area; include projected flow rates and availability to wild horses, wildlife, and livestock	1
Provide water quality data and the relationship to vulnerable wildlife species and ecosystem recovery	1
Do not thin re-forested/persistent woodlands; protect old growth; cut only younger age class trees; identify which areas are actually re-forested versus woodland expansion	20
Use selective hand-cutting/drilling; avoid mechanical removal	5
Incorporate assessments of sagebrush monocultures in terms of site potential	1
Demonstrate that the BLM can control cheatgrass following treatment of other disturbances	1
Include the number of miles considered for fish re-introductions, mitigation measures, and estimated time to reach goals	1
Do not allow grazing during critical growing periods for native species and during nesting periods	1
Maintain grazing permits; avoid livestock limitations	6
Determine current and appropriate forage allocations; distinguish between livestock, wild horses, and big game	5
Develop a prescription grazing alternative	5
Develop a no grazing proposal	1
Remove livestock from areas without significant components of cheatgrass and other weeds	1
Include acquisition and retirement of grazing permits as mitigation measures	1
Include a wide range of up-to-date livestock management alternative components with all alternatives	1
Utilize cheatgrass for grazing and other uses	1
Consider that all treatments would financially impact grazing permittees more than other affected parties	1
Clarify how fences are determined "unnecessary" and the criteria for "necessity" of each fence	1
Ensure viable wild horse herds; provide background and current conditions; include removal history, fertility control history, herd descriptions, genetic tests, areas of conflict, and historical movements	21
Clarify what "protection of Herd Management Area foaling areas during foaling season" entails, the time period covered, and the associated implementation actions	1
Include the number of individuals employed at mines in the project area and any projected growth, the estimated annual revenue generated for the state, and estimated contributions to the local economy	2
Consider the full range and value of forestry products on these lands and conserve these values	1
Consider economic, social, and environmental sustainability in the EIS	1
Consider design of projects that local economic opportunities and keep project dollars within the county	1
Provide information on the funding source and costs of the project	1
Preserve most of the Pony Express Trail but do not regard every segment as off-limits	1
Do not use the Pony Express Trail as a justification to stop exploration and mining activities; resolve conflict over use of the Trail	1



**TABLE 3**  
**Scoping Comment Issue Summary (Cont.)**

Issue	Number of Comments <sup>1</sup>
<i>Proposed Action and other Alternatives (Cont.)</i>	
Explore alternatives that promote tourism and identify heritage contributions of wild horses	1
Establish a plan to properly manage the motorized uses of the project area	1
<i>Restoration Goals and Best Management Practices</i>	
Use current and consistent ecological concepts, terminology, and theory; provide methods and complete references; make data readily available; do not focus only on range science for livestock	31
Establish a series of Areas of Critical Environmental Concern or reserves to leave large areas undisturbed and untreated	5
Focus restoration efforts on restoring natural disturbance regimes, ecosystem processes, and functions	4
Utilize adaptive management approaches	2
Avoid block design vegetation treatments; design treatments to create edge effects	1
Incorporate findings of Tausch and others regarding resting periods and cheatgrass invasion	1
Remove horses, cut trees, and construct enclosures in meadow areas	1
Use only temporary facilities and primarily electric fences, if any	1
Monitor success of treatments and establish performance measures to determine treatment success	30
Clarify the specific monitoring planned and the funding for this monitoring, include permittee monitoring	2
Establish weekly post-treatment monitoring	1
Include a full accounting of all fuels/fire/habitat projects conducted by the District in the past 10 years and foreseeable projects over the next decade; include land area and acreages to be treated	1
Conduct projects to help reestablish a more natural hydrograph	1
Use stream/riparian enclosures on other streams within 3-Bars Ecosystem	1
Consider more conservative stubble height for riparian protection	1
Restoration efforts should focus on restoring native vegetation; focus on areas seeded to exotics	17
Preserve sagebrush and sagebrush habitat; restore sagebrush in areas where it has been removed/degraded	12
Use native plants and certified native seed, where practical, for revegetation	7
Do no plant hybrid cultivars or other non-natives	1
Target areas of cheatgrass or created wheatgrass monoculture for restoration with natives	1
Avoid burning in areas with large amounts of cheatgrass	1
Avoid use of prescribed fire; burn only in areas not at risk of exotic species invasion	1
Do not eliminate “sagebrush monocultures”; preserve a mixture of sagebrush age and condition classes	1
Increase sagebrush in areas of exotic crested wheatgrass with less than 15 percent sagebrush cover	1
Preserve pinyon-juniper and pinyon-juniper habitat	1
Consider characteristics of persistent pinyon-juniper woodlands when crown thinning/spacing	1
Thin pinyon-juniper along drainages to bring water down and open up corridors on the south and east sides	1
Do not manage exclusively for pinyon; avoid excessive killing of juniper	1
Allow only minimal killing of pines	1
Tree removal should be highly selective and consist of individual tree removal of smaller-sized trees	1
Enact a stewardship program for harvesting lumber and firewood on Roberts Mountain	1
Restrict grazing during treatments on un-impacted lands; provide rest periods following treatments; include no-grazing reference areas	19
Limit the use of livestock related facilities as a response to fire	3
Continue to exclude livestock on Lower Roberts Creek; monitor to show recovery through time	2
Reduce the number of livestock water developments	1
Ensure cattle grazing is allowed only to the extent it does not jeopardize ecological goals and conditions	1
Set proper livestock stocking rates and consider these in the evaluation of all alternatives	1
Minimize and/or intensively monitor hot season livestock grazing in allotments with riparian/fisheries values	1
Remove fish barriers on Lower Roberts Creek	1
Do not conduct treatments during nesting periods or in critical wildlife habitats	1



**TABLE 3**  
**Scoping Comment Issue Summary (Cont.)**

Issue	Number of Comments <sup>1</sup>
<i>Restoration Goals and Best Management Practices (Cont.)</i>	
Disclose the management measures or guidelines the BLM would use to ensure protection of species that nest in the 3-Bars Ecosystem	1
Consider natural man-made habitats capable of supporting a variety of wildlife	1
Review sage-grouse studies conducted by James Sedinger	1
Avoid removing wild horses, chasing horses, or maintaining populations below the Appropriate Management Levels	2
Prioritize wild horse management within the appropriate management levels; provide flexibility in the EIS for more frequent wild horse gathers, if necessary	1
Do not conduct roundups of wild horses or burros on public lands; release previously captured animals	1
Do not use fertility drugs to render wild horses non-fertile	1
Conduct a travel management planning process as part of the EIS, and road/trail closure as passive treatment	2
Limit OHV use, especially in riparian areas and where land disturbing activities have occurred	1
<i>Affected Environment and Baseline Study Needs</i>	
Provide information on historic mining within the 3-Bars Ecosystem and surrounding watersheds	1
Include the projected percentage of acreage from historical and current mining that have contributed to soil compaction and erosion in the project area	1
Provide information on which mines and developers hold grazing permits within the 3-Bars Ecosystem	1
Provide information on grazing permit holders, base property owners, and lessees	1
Provide the current degree of desertification across the District and adjacent lands and how climate change may exacerbate	1
Include assessments of microbiotic crusts	2
Provide detailed maps and current conditions of the springs/seeps, perennial streams, and meadows in the project area	2
Provide photographic evidence of conditions of water sources and vegetative communities, and include dates and times	1
Provide seasonal availability of water sources and an estimate of all available water sources at the time of the Free-Roaming Wild Horse and Burro Act of 1971	1
Clarify which wetland and riparian areas have had hot season use reduced or eliminated under the Callaghan Complex Wild Horse Gather Plan; detail the changes implemented; include areas still receiving hot season use	1
Provide quantitative assessments of the quality of riparian areas	1
Provide the demands on and status of the local and regional aquifer and feasibility of Lahontan cutthroat trout introductions, status of sage grouse habitats, and migratory bird habitat loss	1
Conduct a current Ecological Site Index and capability and suitability/"capacity" analysis for livestock	2
Collect baseline data for vegetation species composition, current ecological condition, old growth and mature pinyon-juniper, livestock grazing regimen and standards of use, and wildlife habitats and populations	2
Complete Rangeland Health Assessments of the Roberts Mountain and 3-Bars allotments and provide to the public for comment prior to completion of the EIS	1
Conduct baseline studies of the ecological condition of sagebrush, pinyon-juniper, and other vegetation communities	1
Provide a map of better condition sagebrush communities of each of the several varied types	1
Provide information on the economic value of forestry products and compare this to livestock forage value; provide the cost of administering management of each allotment	3
Identify all forest and "woodland" sites based on charcoal, stumps, surveyor's records, trees present, and precipitation zones and differentiate between juniper, pinyon-juniper, and pinyon zones; provide maps	2
Provide a map of areas where pinyon and juniper may have been removed and/or altered by historic mining, old growth, persistent woodlands, and encroachment areas	2
Provide clarification of the extent of pinyon-juniper stands	1



**TABLE 3**  
**Scoping Comment Issue Summary (Cont.)**

Issue	Number of Comments <sup>1</sup>
<i>Affected Environment and Baseline Study Needs (Cont.)</i>	
Use pre-treatment soil bioassays to determine seed bank; baseline seed bank study; demonstrate where good native seedbank exists; analyze native and non-native seedbanks	4
Conduct a baseline survey for invasive species including in the understory of plant communities	3
Provide an estimate of the percentage of crested wheatgrass that comprises the project area; identify areas where post-fire rehabilitation or “emergency” stabilization with wheatgrass or other exotics has been conducted	2
Include information on weeds and exotics on all allotments, watersheds, habitats, and across the District and adjacent forest lands	1
Provide the percentage of invasive or non-native plants occurring from mining operations	1
Include historic and current population estimates of Lahontan cutthroat trout in project area and statewide	1
Identify areas of known and/or potential conflicts with Lahontan cutthroat trout and livestock or wild horses	1
Conduct at least two years of surveys for sensitive species/important wildlife prior to disturbance	3
Provide historical and current populations and background on big game species; identify hunt units and forage allocations; identify migratory patterns and seasonal competition	2
Provide a current inventory of areas of critical importance to native species	1
Assess the status of populations and habitats within the larger landscape area	1
Include the maximum desired population targets for each big game species and the necessary forage	1
Disclose which old-growth dependent species are present in the project area	1
Identify whether there are fewer than 500 birds in any of the Battle Mountain Population Management Units or the 3-Bars Ecosystem and what number constitutes a viable population	1
Provide a map which differentiates between active, inactive, and historical sage-grouse leks and trends	1
Include historic and current population estimates of sage-grouse in the project area	1
Provide information on the effects of placement of giant power lines on sage-grouse in central Nevada	1
Provide all actual and permitted use and livestock utilization, and stubble height or other monitoring since recordkeeping began	2
Provide the percentage overlap from each livestock allotment affecting each Herd Management Area	2
Provide maps of livestock facilities and salting sites for this allotment and neighbors; include inventory of fencing and other developments	2
Provide all monitoring data, actual use data for the past 20 years, all capability, suitability, Ecological Site Inventory, and other basis for livestock stocking	1
Provide information regarding how livestock utilization limits have affected hazardous fuels or rangeland health problems	1
Identify current pastures for each livestock allotment, authorizations, and seasons of use	1
Provide the average weight of cows, calves, and sheep on the allotments	1
Provide a map of all fences and the type/purpose of fences within the project area; include fences targeted for removal and timeline for removal	1
Map all areas where livestock use has been expanded due to artificial water	1
Collect baseline data regarding the role of livestock in habitat loss, hazardous fuels, understory depletion, desertification, rangeland health, and woody species invasion	1
Provide information regarding historical livestock grazing authorizations at the time of the Free-Roaming Wild Horse and Burro Act of 1971 and since the implementation of the RMP	1
Provide a projected percentage of invasive and/or exotic plants occurring in the project area from wild horse, big game, or livestock operations	1
Clarify the desired horse population levels in the project area and how the “average” body condition would be met	2
Provide an estimate of the percent of the project area that the BLM estimates big game and wild horses are contributing to degraded range conditions, reduction in plant diversity and vigor, and failure to achieve desired plant communities	1



**TABLE 3**  
**Scoping Comment Issue Summary (Cont.)**

Issue	Number of Comments <sup>1</sup>
<i>Affected Environment and Baseline Study Needs (Cont.)</i>	
Provide a map of all roads and the relation to past vegetation treatments	1
Provide a map of all roadless areas over 2,000 and 5,000 acres; protect these from road intrusion	1
<i>Environmental Consequences</i>	
Include current area of all roading, amount present when land use plan was finalized, and a comparison	1
Explore the relationships of all ongoing or planned BLM activities in this region	1
Provide a detailed analysis of "historic" conditions, "historic impacts," and the impact on site potential	1
Include current mining and exploration impacts, acres affected, roadways necessary, resources necessary for operation, and expansion activities that are reasonably foreseeable	3
Provide an analysis of the land areas, authorizations, and numbers of all mining and energy exploration proposal that have been undertaken in or near the 3-Bars Ecosystem for the past 20 years; include effects to resources	1
Evaluate the impacts of historical mining operations	1
Evaluate the risks/unintended consequences of poorly planned and executed restoration projects	2
Evaluate cumulative effects of the project in relation to the Mount Hope Project	1
Consider the recently discovered mercury contamination of lands from gold roasting operations	1
Evaluate the impact of project activities on climate change and air quality; include assessment of overlapping or multiple treatments	5
Assess the impacts of climate change on weed problems, alterations in runoff, reductions in perennial flows, and changes to upland conditions	1
Fully factor the effects of climate change and increased risk of desertification and weed invasion following treatment, grazing, or other and overlapping disturbances	1
Examine the value of large un-grazed areas to buffer land and sensitive species from effects of climate change	1
Address the impact of proposed action on microbiotic crust loss and soil erosion	1
Address the impact of mining on aquifer drawdown/depletion	2
Evaluate current demands on the aquifer and foreseeable changes from mines, dewatering, energy development; evaluate impacts of woody vegetation removal on site drying and desertification	1
Evaluate the impacts of treatments on riparian and wetland areas	1
Address the impact of past and future land uses on anticipated success of vegetation treatments	6
Clarify where and how a reduction of pinyon-juniper by "208 to 1,200 stems per acre" would occur; provide scientific justification for reduction; clarify basis for "20 to 200" pinyon-juniper trees per acre dependant on management objectives	1
Review Western Watershed Project's photos and emails for the BLM Ely District Cave Valley sagebrush destruction projects	1
Provide information on how deforestation, removal, or killing of trees and sagebrush would alter ecological processes and whether mechanical injuries to trees would promote insects or other problems	1
Assess the full direct, indirect, and cumulative effects of all sagebrush alteration/destruction treatments in Nevada and the outcomes and current conditions of these projects	1
Assess the direct, indirect, and cumulative impacts of past, current, and foreseeable vegetation treatments; include adjacent Ely and Elko District and Forest Service lands	1
Provide a worst-case scenario of weed invasion of hotter, drier, desertified areas with and without grazing following treatments	1
Evaluate the potential for return of invasive species following treatment	6
Provide short-, mid-, and long-term impacts of past vegetation treatments since 1960	2
Address the impact of cheatgrass returning following treatments	1
Evaluate the effects of herbicide treatments on non-target species, on water supplies, and on human and wildlife health	9
Address the impacts of multiple treatments and application of multiple chemicals in single areas	5
Fully examine the effects of chemical use in wild lands	1



**TABLE 3**  
**Scoping Comment Issue Summary (Cont.)**

Issue	Number of Comments <sup>1</sup>
<i>Environmental Consequences (Cont.)</i>	
Evaluate the impact of herbicide drift and weeds from treatment disturbances on the Wilderness Study Area	1
Evaluate the costs of ongoing herbicide treatments, non-target effects of treatments, and indirect and cumulative effects of treatments	1
Assess the likelihood that treatment disturbance would increase invasive species	1
Address the impacts of seedings and other post-disturbance treatments	1
Address the impacts of treatments on fire/historical range of variation	6
Evaluate the impacts of the use of fire to kill woody vegetation on weeds and watersheds in the Wilderness Study Areas	1
Assess the impacts of any post-fire salvage logging or thinning and where this has occurred in the past	1
Address the impacts of project activities on available habitat and habitat fragmentation	9
Assess the loss of sensitive and imperiled species habitat from the proposed action	1
Assess existing and foreseeable stressors and fragmentation on sensitive species	1
Include a landscape-level survey of the existing and foreseeable components of fragmentation	1
Conduct special status species viability, persistence, and extinction/extirpation models for all alternatives	1
Address the effects of powerlines on sage-grouse	1
Evaluate the impacts of fire on special status species and other important biota	1
Address role of grazing in contributing to or controlling weeds, invasive vegetation, and hazardous fuels	6
Evaluate risks of invasions with continued livestock grazing	2
Evaluate how livestock grazing has led to degraded conditions	1
Assess the impacts of livestock grazing on ecosystem processes, fire, fuels, weeds, restoration, and rehabilitation efforts	1
Evaluate the impact of wild horse and livestock on water sources	1
Address the impacts of livestock on wetland and riparian areas	1
Address what would be done with displaced livestock following treatments	1
Assess the impacts of Animal Unit Months shifted to other locations	1
Assess the cumulative effects of grazing, energy development, and mining	1
Evaluate the impact of water developments for wild horses on wildlife and livestock	1
Address the impacts of roads and off-road vehicle use on vegetation conditions and treatments	4
Evaluate costs of treatments to recreational users and the impact on the local and regional economy	1
Assess how the project may increase or be related to OVH use in the 3-Bars Ecosystem and central Nevada	1
Evaluate the impacts of treatments on the Pony Express Trail and Wilderness Study Areas	4
Address how treatments will affect the local and regional economy	20
Provide a full cost-benefit analysis of all alternatives and actions	1





## 3.0 SUMMARY OF COMMENTS

### 3.1 PROPOSED ACTION AND PURPOSE AND NEED FOR ACTION

#### 3.1.1 Proposed Action

A few individuals commented generally on the proposed action or requested clarification regarding the proposal. One respondent was unclear about the term “landscape restoration project.” This comment assumed that the term referred to tearing down, eliminating, or preventing construction of any features (electrical transmission lines, roads, interstate highways, buildings, fences, pipelines, mines, irrigation canals, stock water tanks, etc.) that impact the landscape (7-1). One respondent stated that they were glad to see the BLM moving to improve riparian and wetland conditions as improvements in these vegetative communities would result in improved instream habitat conditions for associated aquatic species, especially Lahontan cutthroat trout (12-14). One comment suggested considering stream/riparian enclosures on other streams (in addition to Lower Roberts Creek) within the 3-Bars Ecosystem to enhance riparian recovery (12-20). One comment respondent requested that the BLM focus on keeping wild horses on the range while maintaining other wildlife species (11-1).

One respondent expressed concern that the BLM would place livestock interests above other uses, and accommodate an endless series of new energy corridors, geothermal and other energy projects, as well as gold mining activities. This individual stated that they did not see any reason for believing that the actions of the 3-Bars Project are truly aimed at restoring the land and ecosystem processes (21-41).

#### 3.1.2 Purpose and Need for Proposed Action

Only one individual commented on the purpose and need for the proposed action. This respondent noted that key findings reported in the scoping document are indicative of non-native ungulate grazing being out of balance with the capacity of the natural systems to accommodate such use, or the BLM’s ability to manage such use to prevent damage to the natural resources (4-12). This respondent suggested that the emphasis of the project should be focused on ecological restoration and increasing the viability of native species, rather than for “subsidizing grazing for non-native species such as cattle and wild horses.” This respondent suggested that rangeland health be evaluated in terms of ecological health – natural communities falling within a range of historical conditions that are evaluated against properly functioning natural processes and riparian areas (4-13).

#### 3.1.3 Relationship to Statutes, Regulations, and Policies

A few individuals commented on the relationship of the project to statutes, regulations, and policies. One individual was generally concerned with whether the project would comply with the Migratory Bird Treaty Act and other federal laws (21-236). One respondent was especially concerned with the relationship between the project and off-road vehicles, citing Executive Order (EO) 11644, as amended by EO 11989 which provides clear and explicit direction to the BLM regarding the use of off-road vehicles on the public lands (4-23) and 43 Code of Federal Regulations (CFR) Section 8342.1 which requires that the authorizing officer designate off-road vehicle routes in accordance with “minimization criteria” (4-27). This respondent noted that the EOs are intended to “ensure that the use of off-road vehicles 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” (4-24). Additionally, this respondent cited specific sections of these EOs and regulations. The provisions cited in relation to the EOs included:

- Section 3 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 off-road vehicle use and other uses of the federal lands; are minimized (4-25).
- Section 9, “Special Protection of the Public Lands,” of Executive Order 11989 states:



- “(a) Notwithstanding the provisions of Section 3 of the Order, the representative 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 representative 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” (4-26).

The provisions related to the 43 CFR Section 8342.1 regulations included:

- “(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” (4-27).

This individual also noted a court case, the *Center for Biological Diversity, et. al. v. the Bureau of Land Management, et. al.* (C 06-4884 SI, filed 9/28/2009), where the court found that the BLM must abide by the minimization criteria, but also must document how it does so specifically for the designations being considered, and analyze the effects of the designations. The court found that the BLM must show a “rational connection” between the facts considered and decisions made, and the use of tools such as decision trees, is not sufficient unless they specifically address the criteria. This respondent noted that this ruling also elaborated on the meaning of the word “minimize,” 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 (4-28).

Additionally, one individual was concerned that the project would destroy options for multiple uses on federal lands and the opportunity to develop resources and generate revenues. This respondent was also concerned that this could lead to a decrease in development on other adjacent properties (7-3).

### 3.1.4 Interrelationships and Coordination with Agencies

A number of comments related to interrelationships and coordination with agencies, with the majority of these comments consisting of offers and requests to be involved in the EIS process. The National Mustang Association submitted a comment that they are interested in participating in the project to improve and maintain wild horse habitat in a partnership with the BLM (11-2). The Nevada Department of Wildlife submitted a comment that they are interested in partnering with BLM in the funding of specific restoration and habitat enhancement work within the 3-Bars Ecosystem (12-1). The Western Watersheds Project commented that they would like to be involved in this effort and volunteered to provide a list of names of scientists that could be also be involved. The Western Watersheds Project group requested a meeting and a site tour as well as inclusion of a broad range of passive and targeted active restoration alternatives (21-238). The Western Watersheds Project also requested the opportunity to work with the BLM on minimizing the adverse effects of disturbance actions as well as recovery actions for sensitive and imperiled species that do not raze one habitat in the name of “saving” another (21-299). Eureka County submitted a comment stating their intent to coordinate with the BLM in the scoping process, citing the requirements of the Federal Land Policy and



Management Act (FLPMA; 43 USC 1712) and the National Environmental Policy Act (NEPA; 42 USC 4331) to coordinate with county governments and other concerned public using “all practicable means and measures,” as well as the Eureka County Code and the Eureka County Master Plan which mandate the involvement of Eureka County in the management of federal lands. This comment stressed that the proposed action and alternatives should be consistent with the Eureka County Land Use and Natural Resource Plan, and ensure consistency by soliciting the views of Eureka County and forming a joint task force between Eureka County and the BLM. This comment also stressed the importance of initiating coordination at the earliest possible time (15-4).

Eureka County also stressed that due to its reliance on the activities conducted on public lands it will be important to develop local support for the project, and suggested that the EIS draw on the experience of current permitted users and local managers to develop analysis and suggest solutions. The County noted that this may be difficult when it appears that everything done on the entire 3-Bars Ecosystem has been harmful, when in fact the majority of permitted users on these lands are working to manage these lands in a sustainable manner (15-55).

A respondent suggested that the project be planned and implemented in a collaborative manner, especially with local stakeholders, in order to move forward in a positive manner and provide long term benefits to all multiple use interests. This respondent stated that a collaborative process could also serve as an arena and catalyst to improve communications and relationships between the Battle Mountain District of the BLM, area ranchers, and Eureka County government, or if not done collaboratively could exacerbate already untenable and unproductive relationships (18-2). This respondent suggested using the Northeastern Nevada Stewardship Group and the Shoesole Resource Management Group as a model for the level and breadth of involvement of partners and stakeholders, stating that these efforts have helped to inform and educate the public and resource management agencies, achieve balanced collaborative approaches for rangeland issues, and develop appropriate adaptive management strategies. This respondent also suggested the formation of a coordinated resource stewardship group early in the planning process and provided the following references related to coordinated resource stewardship and coordinated resource management:

<http://www.unce.unr.edu/programs/natural/index.asp?ID=21> and [http://www.rangelands.org/education\\_crm.shtml](http://www.rangelands.org/education_crm.shtml) (18-3). One individual stressed that permittee input and cooperation is imperative to any project being a success (19-4).

One respondent suggested that BLM consider partnering with the U.S. Department of Agriculture, Agricultural Research Service as they have uncovered many dynamics that could come into play with the project and could save a tremendous amount of time, effort, and funding in the long run. This respondent also suggested review of the following web pages: [http://www.ars.usda.gov/research/projects/projects.htm?ACCN\\_NO=415230](http://www.ars.usda.gov/research/projects/projects.htm?ACCN_NO=415230) and the work by Charlie Clements at <http://www.ars.usda.gov/pandp/people/people.htm?personid=1033> (15-32).

One comment was focused on outside scientific assessment of the project. This individual requested that an independent assessment by qualified ecologists, fire scientists, and foresters be completed which addresses the need for the proposed actions and the risks of undertaking new disturbance be conducted as part of this process. This respondent was concerned with working to ensure the use of the best possible science based on current ecological science and the science of arid lands, noting that this is an important part of a collaborative process as discussed in the Healthy Forests Initiative (21-238).

The Environmental Protection Agency (EPA) reviewed the Notice of Intent to prepare an EIS for the proposed 3-Bars Project, pursuant to NEPA, the Council on Environmental Quality regulations (40 CFR Parts 1500-1508), and their NEPA review authority under Section 309 of the Clean Air Act, and had no formal comments (5-1, 5-2).

One respondent requested information identifying private cooperators (25-10).

### **3.1.5 Public Involvement and Analysis of Issues**

Numerous comments were related to public involvement and analysis of issues, with the majority of these respondents requesting hard copies or compact disks of the scoping documents or to be included on the list of interested parties regarding this project (2-1, 3-1, 5-2, 8-1, 10-1, 23-1). The Nevada State Clearinghouse reviewed the Notice of Intent to



prepare an EIS for the proposed 3-Bars Project and submitted a comment stating that it supported the proposal as written (14-1).

One individual was concerned with the ability to provide public comments, noting that multiple dates were provided as the public comment deadline for the scoping document. This respondent requested that in the future, accurate information concerning deadline dates and email addresses for public comment be provided (20-14).

One respondent wanted to commend the BLM for preparing a well done assessment and scoping summary document, noting that the project has created an opportunity to address ecological problems that have been accumulating over the past 150 or more years (4-1).

## **3.2 ALTERNATIVES INCLUDING THE PROPOSED ACTION**

### **3.2.1 Vegetation Treatment Planning and Management**

A number of comments were related to vegetation treatment planning and management, with the majority of these comments serving as suggestions and requests related to the project approach. A couple of respondents were concerned with the 3-Bars Project boundaries. One respondent was concerned that the boundaries of the 3-Bars Ecosystem may not match up with grazing allotments occurring in the area, and that if rangeland conditions are degraded within the planning area, the adjacent lands on the other side of the 3-Bars Ecosystem are likely in similar conditions. This respondent suggested that the BLM structure all proposed management plans and necessary changes in one, complete document (EIS) versus attempting to negotiate each action separately such as requiring individual Final Multiple Use Decisions for each allotment occurring within the planning area (8-77). Another respondent suggested that an ecosystem restoration project such as the 3-Bars Project should be based on ecological units as opposed to administrative ones, noting that divided landscapes could hinder the ability to manage for the ecological processes necessary for restoration. This respondent observed that the delineation of the 3-Bars Project boundary was based on administrative features such as BLM or county boundaries and roads and urged the BLM to reconsider the 3-Bars Ecosystem boundaries to base them on legitimate ecosystem boundaries (4-2). Another respondent questioned how this area was selected over other areas (25-2).

Other comments were concerned with the scientific approach of the process. One respondent requested that the BLM use current and consistent ecological concepts and terminology to describe both existing and desired conditions, stating that the underlying rangeland science and terminology used in the scoping document is a hodgepodge mixture of some current science (ecological site descriptions) and a great deal of outdated traditional concepts of equilibrium and deterministic succession (18-7). Another individual was concerned that agencies have often not used a scientific understanding of disturbance in the Great Basin when deriving models, desired conditions, and predicted outcomes of treatments, and requested that this effort minimize the use of fire, chemicals, and large tree killing and sagebrush crushing apparatus (21-110). This respondent also requested that the BLM consider more conservative stubble height standards for riparian protection, utilization levels necessary for successful sage-grouse nesting, and grazing systems that protect microbiotic crusts (21-120). This individual requested that the BLM base its analysis on current ecological understandings of disturbance and climate change in arid lands, and was concerned that the project relies on the hope that fire or other treatments proposed would result in a “natural” outcome in many of the disturbed systems in the 3-Bars Ecosystem (21-146). This individual further requested that the BLM develop a rigorous protocol for determining all lands in need of “treatment,” and provide a comprehensive detailed explanation, with supporting science, of the rationale for why these lands need treatment (21-142). This respondent requested that the BLM prepare honest and accurate assessments of “risks of” and “need for” various treatment disturbances or treatments to the affected lands, as well risks of invasions with continued livestock grazing under the old BLM land use plan paradigms, and under any updated paradigms under the alternative actions developed for this process (21-149). Additionally, this individual requested that a careful scientific evaluation and assessment of past treatments on Battle Mountain District lands be prepared, including information regarding how many acres have been burned in prescribed fires, what post-fire management was done, where the management was completed and over what land area, what the results of post-fire management were, what the current vegetative communities are, what past herbicide treatments have been done, where herbicide treatments took place and over how many acres, and what the results of the treatments were. This respondent



also requested that the BLM provide maps that adequately depict this information (21-215). Another respondent questioned whether there is a land restoration template for other BLM lands (25-1).

The majority of the comments were focused on treatment methods and management strategies. One respondent suggested the investigation and utilization of adaptive management, the use of prescription grazing, and other prescribed activities, and the incorporation of benefits of properly managed and implemented uses and activities throughout the project (18-9). Another individual was concerned with potential unintended consequences of poorly planned and executed restoration projects. This comment suggested that the project must allow for streamlined permitting, timely environmental review, and management flexibility in completing restoration projects, stressing the importance of allowing for innovative solutions (15-8). Another respondent suggested that prior to identifying specific treatments for specific areas, attributes of the area to be treated, including the vegetation composition, soils, slope, aspect, elevation, geology, and ecological setting should be completed in order to match the treatment and reach the long-term goals and objectives for the site. This respondent stated that this should also include the setting of long-term ecological goals and conditions for the sites, as well as vegetation management prescriptions to guide the current and future management of the sites (4-6). One respondent requested that pre-treatment soil bioassays be used to get a handle on the seed bank present before a treatment is pursued. This respondent also noted that having an understanding of soil properties and what seeds are present can increase treatment success by helping managers make decisions regarding treatment methods, reclamation seeding strategies, and likelihood of success (15-31). Another individual was concerned that a request was made to the BLM to provide funding 6 years ago, but treatment of areas in need of aspen treatments has not occurred (25-26).

One respondent requested that a component of the analysis be an assessment of risks of new, additive, or cumulative disturbances associated with the project, on top of existing disturbances. This respondent stated that if an area was continually subjected to livestock grazing and had been previously thinned by the use of herbicides or fire, the impact of a new treatment disturbance on soils, vegetation, watersheds, water quality, and native wildlife would need to be assessed (21-239). Another respondent requested clarification as to why BLM was proposing this large scale “treatment,” stating that the BLM has been successfully using crews of “at risk” youth to selectively hand cut junipers near sage-grouse leks and other specific areas. This respondent questioned why this program could not just be expanded with Native American aid (16-41). One respondent was concerned that the Battle Mountain and Ely Districts of the BLM, and the Humboldt-Toiyabe Forest in central Nevada, are conducting a large number of highly invasive, often ecologically damaging, and very expensive fuels and other habitat disturbance projects, and that the Battle Mountain District’s Seven Mile project represents an example of large-scale use of taxpayer dollars in destroying sagebrush and pinyon-juniper habitats including occupied pygmy rabbit habitats and ancient forests (21-1).

One respondent drew a distinction between “rehabilitating” in the agency sense, and restoration to a full component of native vegetation and ecological processes. This respondent requested clarification as to the degree of “restoration” that the BLM would undertake, and under what circumstances. This respondent also requested clarification as to whether this NEPA document is intended to cover “restoration” and how Emergency Stabilization and Rehabilitation (ESR) activities relate to “restoration” (21-288). Another individual suggested that projects be designed to manage resources to meet desired objectives and improve resource values within the current capability for the site, rather than “restoring” rangelands to any historic or prehistoric condition (15-16). This respondent was concerned that restoration would preclude certain technologies, such as the use of non-native plants in fire breaks, which could benefit the ecosystem on the whole. This respondent suggested that as long as management tools provide opportunity to regain attributes of rangeland health, they should be considered (15-17).

One respondent provided a couple of comments regarding the areas targeted for treatment. This individual requested that the BLM focus on actual interfaces with human habitation, and not the large-scale wildland disturbance proposed (21-240). This respondent requested that any human habitation interface projects focus on projects at the actual interface with inhabited lands, an area of 1/8 mile or less. This respondent requested that any interface projects be tied to private landowners taking strict efforts to control any fire danger on their own private lands. This respondent requested that intensive wildland-urban interface treatments, including thinning, pruning, mowing, roof cleaning, replacement of flammable landscape and building materials, be limited to the interface, private property, and be used to



create 1/8 mile of defensible space (21-251). This respondent also requested that the interface be the area where most federal fire funds are spent, rather than roaming far from any real interfaces in projects being conducted (21-252).

A number of comments were related to native and non-native species. One respondent requested that restoration of native vegetation communities and ecological processes must be the goal of all treatments by restoring and maintaining the ability of an ecosystem to support and maintain a balanced, adaptive community of organisms having a species composition, diversity, and functional organization comparable to that of natural habitats within the region (21-172). This respondent suggested that lands of primary focus for most active restoration should be lands that have been invaded by exotics such as cheatgrass, medusahead, knapweed, and white top, and lands purposefully seeded to exotics such as crested wheatgrass following past agency vegetation manipulation or fire. This respondent suggested that these lands should be prioritized for treatment on the basis of geographic location and continuity/connectivity of native habitats that restoration would provide for native species (21-173). This respondent also suggested that the current abundance of federal fire funds be used to follow-through on post-fire rehabilitation actions that have failed in the past, by evaluating all seedings or areas now dominated by invasive species and identifying failures and the causes of failure, or where crested wheatgrass and other exotics were planted as a first step in arid lands rehabilitation (21-175). This individual was concerned that past proliferation of purposeful seedings of exotic species by agencies in ESR situations has led to millions of acres dominated by huge sterile monocultures of exotic species which have had disastrous consequences for native ecosystems. Further, this respondent was concerned that instead of restoring lands seeded immediately after fire to exotics, agencies have allowed these lands to remain in a highly altered and unnatural condition as a permanent sacrifice to the livestock industry (21-179). This respondent requested that the BLM commit to restoration of native vegetation on all lands seeded to exotics as part of past or future activities (21-181) and that no additional acreage be treated by the haphazard methods applied here until prescribed fire-ravaged or other treated lands are fully restored with native species (21-209). Finally, this respondent requested that lands capable of providing habitat for sustaining viable and healthy populations of native wildlife be protected as part of all treatment activities and decisions. This respondent noted that this is particularly important for declining shrub-steppe species that are facing accelerated habitat loss and fragmentation (21-278).

A couple of respondents provided comments related to fire and fuels. One respondent was concerned that the BLM is working under the false assumption that it can impose fire and other treatments to bring about historical ranges of fire occurrence and achieve an artificially desired future condition. This respondent was concerned that this does not consider the last 150 years of disturbance including cattle and sheep grazing, treatments, and other human activities, that have created an unnatural environmental setting often with massive topsoil loss, lowered site potential, depletion of large-sized native grasses, desertification, degradation or loss of microbiotic crusts, and great vulnerability of these lands to weed invasion following disturbance (21-109). Another individual stressed that the EIS should be used to develop and evaluate an actionable plan for prescriptive reduction of fuel loads for the long-term, including persistent pre-suppression fuel management on rangelands (15-38). This respondent also emphasized that fuels management should continue to fully utilize management of livestock grazing, what they consider to be the most cost-effective and valuable tools to achieve continued fuels reduction (15-39).

A few respondents provided comments related to livestock and grazing. One respondent was concerned that taxpayers would be funding increased livestock forage under the guise of fuels projects, while receiving only tiny amounts of grazing fee dollars in return. This respondent cited the example of the Jim Sage BLM Environmental Assessment (EA) where the BLM planned to spend 6 million dollars to kill junipers across an entire mountain range, despite widespread weed problems throughout the lower and middle elevations, and increase grazing on treated lands (21-255). This respondent requested that the BLM sharply limit the use of federal fire funds in construction of post-fire or treatment related livestock facilities that become longer term fixtures on public lands. This respondent was concerned that the typical response to fire is to place a fence, often permanent, around the perimeter of a fire and often to develop additional water facilities. This respondent considered these actions to be part of livestock management on surrounding lands rather than part of post-fire rehabilitation. This respondent was concerned that such projects inflict, in an unplanned and unnecessary manner, a new array of disturbances to wildlife habitats already impacted by fire disturbance (21-270). This respondent was further concerned that current agency enforcement of grazing closure restrictions is often lax and the problems of dealing with trespass livestock in Nevada are enormous. This respondent



was concerned that there are no assurances that any livestock-related post-treatment measures would be followed and these cannot be used as mitigation for treatments (21-247).

A respondent requested that the BLM manage lands so that leases continue for future generations (25-27). Another individual requested that all projects should be planned so as not to destroy the viability of each grazing permit (19-2). Another respondent stated that cheatgrass monocultures (or “near monocultures”) can provide an important forage resource when managed with targeted grazing and suggested that the EIS discuss how this biomass can be used and provide treatment and management options that allow cheatgrass to be grazed, or otherwise utilized (15-43). This respondent also suggested that targeted grazing of cheatgrass could reduce the need for herbicide treatments and requested that the EIS compare grazing with herbicides and other treatments (15-44).

A few respondents commented on industries or various other uses related to the project. One respondent requested that interruptions of grazing, timber, mining, and recreational uses, even for highly beneficial ecological treatments, be carefully considered, planned, and implemented such that the viability of the dependent enterprises and industries are not jeopardized and are sustained over time (18-4). Another individual suggested considering projects that allow for responsible use of biomass, especially opportunities to use biomass created in encroaching pinyon-juniper woodlands to create energy or other benefits (15-40). This commenter suggested that there are innovative uses available for pinyon-juniper biomass that should be analyzed in the EIS and suggested that the EIS to include mechanisms that allow for the use of new technologies as they become available without the preparation of a new EIS (15-41, 15-42). However, another respondent was concerned with these uses in the 3-Bars Ecosystem. This respondent was concerned that by targeting areas for treatment where extensive and controversial hard rock mining, aquifer mining and withdrawals, geothermal exploration, oil and gas exploration, wind energy development, solar development, and utility corridor projects are proposed or foreseeable, agencies may be opening up lands for easier mining and energy exploration and destroying native vegetation and reducing or diminishing habitat for native species (21-4). Further, this respondent was concerned about the use of federal or other public funds on projects in remote areas that are biased by livestock industry mindsets, especially in an economic downturn (21-84).

One respondent was concerned about roads and requested that the BLM conduct a travel planning process as part of the EIS that would identify roads for closure and spend some of the scarce tax dollars it proposes to spend on destroying native vegetation on the active restoration action of closing roads and rehabilitating the site. This respondent suggested that the BLM could fund the Tribal parties to help do this as part of active restoration efforts (21-13).

### **3.2.2 Description of Treatment Methods**

A large number of comments were received related to the description of treatment methods. One respondent requested that the BLM develop new goals, objectives, and allocations that better address the pressing habitat needs of many important species and that address root causes of hazardous fuels problems, and thus provide better and more cost-effective protection from hazardous fuel problems (21-151). Additionally, one respondent stated that the Potential Treatment Methods and Resources that Could be Affected section of the scoping document is lacking detail and needs to be expanded to give a brief description of each method and how the environment would be affected (12-8). Another respondent requested that the BLM provide their methods (25-11). Other comments were for the most part related to specific resources or treatment methods.

A number of respondents provided comments related to livestock and grazing. One comment focused on continuing to exclude livestock on Lower Roberts Creek and suggested using this as a showcase to highlight the stream/riparian recovery potential within the 3-Bars Ecosystem (12-18). Another respondent suggested that removal of livestock grazing and trampling disturbance would maximize positive ecological outcomes from any “treatments” that may occur and would protect remaining areas that have not yet become invaded by cheatgrass (16-11). This respondent also suggested that BLM give highest priority for immediate removal of livestock from all native salt shrub, sagebrush, and pinyon-juniper communities that do not yet have a significant component of cheatgrass or other weeds. This respondent suggested that this removal would allow passive restoration to occur and “treatments” could be minimally invasive and would save the taxpayers’ money while employing more people in a more sustainable manner (16-12). Another individual requested that the BLM act to minimize and remove grazing from sensitive areas in the landscape as well as



any treated areas, rather than try to eke out more cattle grazing in the landscape where sagebrush communities, pinyon-juniper communities, springs, and streams are already being irreparably damaged by domestic livestock grazing. This respondent also requested that no new fencing should be built and livestock should be removed from allotments, or at a minimum from pastures as any treatment occurs. This respondent requested that passive restoration (allowing natural recovery in the absence of livestock use) be fully analyzed as a treatment under all alternatives (21-16). This respondent was also concerned that the current path of livestock use shifting onto upland sites to take pressure off riparian areas is an ecologically destructive path, and requested that prevention be conducted in an integrated way (21-187).

This respondent stressed that by closing larger areas to livestock grazing, better grass cover and habitat for species like sage-grouse, who face habitat loss and fragmentation as lands burn, would be provided. This respondent noted that a long-term closure of the pasture or allotment would result in un-grazed areas that help to provide grasses of sufficient height, or other necessary habitat components, for sage-grouse and other native wildlife. This respondent stressed that recovery of sagebrush takes 50 to 200 years or more. This respondent requested that only temporary facilities should be allowed and primarily electric fences, if any are used at all. This respondent requested that all post-fire rehabilitation plans specify removal dates for any livestock facilities that result from fire rehabilitation activities. This respondent was concerned that temporary electric fences have a long record of failure and requested that the BLM review information in their files concerning trespass of burned areas or sensitive riparian areas that resulted from the use of temporary fences, rather than removing livestock to existing pasture or allotment boundary fences (21-274).

This respondent requested that Animal Unit Months not be shifted from treated lands to other areas and that all AUMs from burned lands be placed in temporary suspension until rehabilitation or restoration success occurs. This respondent also requested that the BLM explain in detail what would be done with any displaced livestock in the aftermath of treatments and provide full and detailed actual use information by pasture to serve as a basis for understanding how and where particular stocking levels have occurred (21-275). This respondent requested that livestock not be considered a tool for mowing weeds, but instead as a temporary stop-gap measure. This respondent was concerned that simply mowing weeds to ground level as is done by livestock does not address the fundamental problem of eliminating weeds and getting native species to grow (21-217).

However, another commenter suggested that the use of temporary fencing is key to maintaining the viability of permits, as some treatments may comprise only a small percentage of a pasture, or may vary by season (19-7). Another individual noted that if properly managed and utilized, grazing can provide a tremendous biological tool to efficiently and economically treat plant communities. This respondent stated that potential new enterprises such as alternative energy and new biomass products should be given serious consideration in order to reduce the cost of treatment (especially pinyon-juniper removal; 18-5). This respondent suggested considering the use of prescribed grazing of cheatgrass by cattle in the fall for fuel breaks. This respondent cited Schmelzer (2009; L. Schmelzer. 2009. Reducing fuel load of key cheatgrass [*Bromus tectorum*] dominated range sites by the use of fall cattle grazing. M.S. Thesis, University of Nevada-Reno, Reno, Nevada) and McGuin et. al. (2010; McGuin, G., J.A. Young, C.D. Clements, and B. Perryman. 2010. Managing for the best of the worst: what do we do with cheatgrass? *In* Fourth National Conference on Grazing Lands, 2010 Proceedings. Reno, Nevada.) as examples of how this can be an effective and cost effective method (18-10).

One respondent provided a couple of comments related to non-native vegetation. This individual was concerned that re-seeding would be completed using non-native species, citing the example of the BLM Elko District Tuscarora sagebrush restoration where forage kochia, an aggressive Asian shrub, was used and has prevented sagebrush recovery. This respondent requested that forage kochia not be used in the 3-Bars Ecosystem (21-15). Additionally, this respondent requested information regarding the location of lands overrun by cheatgrass and crested wheatgrass and requested that experimentation with new techniques, especially new chemicals, be limited to these areas (21-177). This respondent requested that fuel reduction in sage-steppe communities focus on restoration of cheatgrass-invaded sites and damaged understories. Further, this respondent requested that this be the primary active restoration measure/treatment that be taken (21-201).

A couple of respondents provided specific treatment suggestions. One commenter requested that practices that have worked in the past, such as crested wheatgrass seeding, rest rotation of pastures, and exclosures of riparian areas, be



considered in the assessment (19-5). Another respondent requested that herbicide use be kept to an absolute minimum (21-219). This respondent was concerned that herbicide use is only a temporary measure or intermediate step to be used and it does not address the basic causes of weed problems. This respondent requested that sulfonylurea and acetolactate synthase-inhibiting herbicides not be used due to their demonstrated ability to damage non-target plant species (21-225). Additionally, this respondent was concerned about the effects of multiple chemicals in the same project area and requested information regarding whether multiple chemicals would be used in the same areas and if so, what the effects would be (21-228).

This respondent focused most comments on prevention and passive restoration suggestions. This individual stressed that prevention is especially critical in upland communities, as they are less resilient to recovery following site disturbance than are riparian areas. This respondent noted that the greater the aridity of the site, the greater the difficulty of recovery. This respondent noted that the ability to recover may even vary within the same geographic area, as south and west faces are more likely to face cheatgrass invasion following treatments. This respondent was concerned that global warming and climate change only decreases resiliency and increases risk of weed invasion and disturbance (21-185). This respondent requested that for lands still in reasonable health and retaining reasonable ecological integrity, passive treatments should primarily be applied, including techniques which minimize soil and native vegetation disturbance (21-178). This respondent suggested that near-pristine and better ecological condition areas should be protected using all possible techniques, especially passive restoration techniques such as immediate removal of all livestock disturbance as they typically serve as important habitats for native species and protection of biodiversity. This respondent noted that it is more cost-effective to keep lands from becoming degraded than it is to conduct wide-scale treatments after they have become degraded (21-284). This respondent suggested that passive treatments primarily minimize site disturbance and generally remove or minimize an environmental irritant that is affecting the health of the plant community, thus having less risk of soil erosion, weed invasion or proliferation and other negative impacts associated with them. This respondent noted that passive treatments have a high probability of being beneficial to watersheds, native wildlife habitats and populations, and the economic well-being of western communities that are increasingly dependent on tourism and recreational uses of public lands (21-160). This respondent also suggested the following specific passive treatments that they believe would enable the BLM to treat many of the affected lands (21-161):

- Limiting livestock grazing can reduce spread of flammable invasive species, heal damaged understories so that more natural, cool-burning fires can occur, and reduce the proliferation of doghair thickets of dense young trees which serve as ladder fuels. Treatments include significant reductions in livestock numbers accompanied by prudent utilization and trampling standards in plant communities found to have damaged understories vulnerable to invasion by flammable exotic species (21-162).
- Closure of pastures with known exotic/invasive species infestations. Closure of lands to grazing that have known exotic species infestations is a prudent first step toward control of spread of flammable, watershed-altering exotics (21-163).
- Closure of pastures “at risk” to weed invasion such as any big sagebrush or juniper communities that still contain relatively intact understories. This process should map and identify such areas in the allotments/watersheds/important habitats, as well as all areas where cheatgrass already dominates the understory (21-164).
- Livestock removal treatment including grazing permit buyout and permit retirement using federal fire funds is a very reasonable treatment that would heal damaged lands, help restore natural fire cycles, and minimize the spread of exotics and other hazardous fuels (21-165).
- Livestock facility removal treatment: Livestock facilities (fences, artificial watering sites, water haul sites, and corrals) serve as zones of livestock concentration, and result in areas of severe disturbance zones colonized by highly flammable exotic species. Removal of these facilities and restoration of disturbed zones would limit the spread of invasive flammable species, and help to develop healthy understories necessary to carry cool, light fires in surrounding lands.
- Road/OHV trail closure and rehabilitation/restoration treatments, including closures and restoration treatments, quell the spread of flammable invasive species from disturbed road and trail edges. Roads are known to serve as conduits for weed invasion, and motorized and OHV use is increasingly setting fires across public lands. These would greatly benefit sage-grouse, pygmy rabbit, and other sensitive species (21-167).



- Road closure coupled with grazing reductions can have large-scale positive effects on invasive species and hazardous fuels problems, as roads that are weed conduits can be closed, and livestock reductions minimize spread of weeds already present within the area (21-168).
- Allowing natural successional processes and healing processes to occur in plant communities that are still relatively intact is the most cost-effective method of attaining natural fire cycles and reducing buildup of hazardous fuels over time. Natural mortality occurs in sagebrush, sagebrush-bitterbrush, and other vegetation types. Allowing natural processes to play out, while removing or minimizing those agents that are disturbing natural ecological processes takes patience, but minimizes risks of exotic invasion that accompany aggressive intervention such as fire or mowing (21-169).

A couple of respondents provided comments related to the science that should be used in the analysis as well as suggestions of additional resources. One respondent was concerned that pinyon-juniper woodlands are being treated as if they are all alike and homogenous in terms of community ecology. This respondent noted that rather than all pinyon-juniper woodlands being alike, at least three fundamentally different types (ecological settings) of pinyon-juniper vegetation based primarily on canopy structure, understory characteristics, and historical disturbance regimes have been identified including persistent woodlands, savannahs, and woody shrublands. The respondent stated that throughout the scoping document, reference is made to “phase class” and “fire regime condition,” but only a mention with very little discussion was given to ecological condition classes within the concept of the range of natural variability or the place of old-growth/persistent pinyon-juniper on the landscape (4-4). This respondent noted that a field guide, developed by Tausch et al. (2009; Tausch, R.J., R.F. Miller, B.A. Roundy, and J.C Chambers. 2009. Piñon and juniper field guide: Asking the right questions to select appropriate management actions. Circular 1335. U.S. Geological Survey, Corvallis, Oregon), is available to assist land managers in selecting appropriate management actions in the pinyon-juniper vegetation type. This respondent stated that removal by chainsaw and the use of prescribed fire are among the management actions included in the guide, but where and how they are used should be determined by careful site analysis on how the vegetation, hydrologic function, and wildlife would respond to actions (4-5). Another respondent was concerned that the BLM would expend large sums of taxpayer dollars on “hazardous fuels reduction” when the hazard is uncertain. This respondent requested clarification as to who or what is threatened by the woody vegetation termed hazardous fuels and whether cheatgrass is a hazardous fuel. This respondent requested that the BLM develop a methodology to prioritize any treatments of hazardous fuels, including outside the Battle Mountain District, in order to effectively spend scarce taxpayer dollars and to best protect habitations and areas that truly are “at risk.” This respondent is concerned that the BLM is actually conducting projects that are aimed at killing woody vegetation with an underlying goal of promoting use of lands by livestock or elk, which are questionably native in many of these lands (21-170).

A couple of respondents provided comments related to pinyon-juniper and other woodlands. One respondent suggested that only younger age class trees should be cut and should be hand marked and cut with chain saws. This respondent also stated that the BLM should leave many areas of dense trees, as they provide important habitats for several forest-dependent species (16-14). Another respondent also requested that any treatment should focus on selective hand-cutting of younger age-class trees and permit retirements, or at a minimum, removal of livestock for a decade or more to allow some recovery of understory herbaceous vegetation and microbiotic crusts post-treatment (21-63). This respondent voiced support for cutting or thinning of trees in discrete areas, to serve as fire breaks as long as competent fire scientists and foresters determine the degree necessary to slow down fires (21-211). This individual also requested that the use of pinyon and juniper or sagebrush material for biomass fuels not be allowed, as biomass projects export nutrients from often nutrient-deficient sites, and is an extractive, commercial use of public lands with widespread harmful ecological impacts (21-237). Another respondent suggested drilling pinyon and juniper to kill these trees (25-24).

One respondent voiced support for the development of water as a method to improve livestock distribution, but noted that efforts should be made to minimize diversion impacts and insure that the majority of the flow stays at the natural source (12-22). This respondent requested that the BLM conduct projects to recover incised channels, secure existing headcuts and improve overall channel stability throughout the watersheds in order to help reestablish a more natural hydrograph, improve stream temperature regimes, and decrease sediment loads (12-23). This commenter requested a plan to deal with the mining exploration roads and overall road location relative to streams and meadows, noting that



rehabilitation and revegetation of identified problem areas would help minimize erosion and sediment transport. The commenter also noted that restoration and rehabilitation of previous, inactive mine disturbances would also benefit many user groups, including wildlife (12-24).

One respondent inquired about whether a desert varnish treatment (used to restore the natural patina to disturbed areas of rock) would be considered in the EIS. This respondent was concerned that another company (Permcon) would be named in the EIS without mention of the respondent's company, Natina. The respondent stated that "Natina has been approved as an 'equal or better' desert varnish by every agency that has reviewed it" and wanted to make sure that if Permcon is mentioned in the EIS, Natina would also be mentioned (9-1).

### **3.2.3 Description of Action Alternatives**

A couple of comments were related to the range of alternatives that will be addressed in the EIS. One respondent requested that alternatives be provided that issue sufficient forage and provide critical habitat resources such as water to support self-sustaining genetically viable horse herds (8-21). Another individual noted that the scoping document states that the EIS will "define a range of reasonable alternatives." This respondent requested an explanation of how it is determined if an alternative is "reasonable" and how the "range" of those alternatives is determined. This respondent encouraged correlating the range of alternatives to reported data or other sources (15-53).

One respondent was concerned with past treatments in the 3-Bars Ecosystem and requested that all treatments that have occurred in these landscapes be carefully detailed and mapped and that information be provided regarding the ecological outcomes of past treatments both here and across the region. This respondent requested that the Austin "fuelbreaks" be examined as an example of where sagebrush mowing and thinning resulted in a proliferation of cheatgrass (21-77). This respondent also requested maps of older treatments across the landscape (21-51).

Two comments were related to the 3-Bars Ecosystem boundary. One individual requested that the expansion of the Roberts Mountain Herd Management Area be explored to be in conformance with the historical herd area acreage identified in 1971 (8-22). Additionally, one respondent suggested that the overall 3-Bars study area be expanded to encompass the Simpson Park Range including Bates Mountain. This respondent was concerned that these areas provide important habitats to a wide variety of species including mule deer and sage-grouse (12-2).

#### **3.2.3.1 No Action Alternative – Alternative A**

A couple of respondents were concerned with past treatments. One respondent requested that a detailed and complete history of previous range manipulations that have occurred within the planning area in the last 20 years such as areas previously burned to reduce hazardous fuels, acres of pinyon-juniper thinning, and acres already treated with herbicides be provided. This respondent also requested that the years these actions were implemented be included, as well as monitoring information that measured impacts, timelines of recovery, vegetative response, and impacts to local wildlife populations (8-62). Another respondent requested that the BLM present detailed information and analysis of past vegetation treatments and manipulations conducted by the Battle Mountain District office as well as the Ely District BLM, noting that they have observed severely degraded past vegetation treatments, and large-scale problems with hazardous fuels treatments conducted in the region. This respondent requested that the BLM review Western Watersheds Project letters and e-mails of 2005 to 2007 regarding Blue Mass/Antelope Range and Cherry Creek-McGill area Ely BLM lands for examples (21-85).

#### **3.2.3.2 Proposed Action – Alternative B**

One respondent was concerned that if an alternative that focuses on large-scale treatment is chosen, the proposal would end up consisting of expensive heavy equipment contractor projects involving juniper chipping and sagebrush mowing to promote cattle forage in an extraordinarily depleted landscape. This respondent was concerned that instead of focusing on long-term sustainability, a hand full of contractors would work for a brief period at a very high price and in the end, only a very small area would be treated (21-14).



A couple of other respondents requested clarifying information. One respondent requested information as to how this proposal might be linked to stripping woody cover and thus making it easier for cross-country mining, geothermal, oil and gas, or other exploration to occur (21-91). Another individual requested clarification as to the type of Native American involvement in management under this alternative as well as the role of the BLM in future management and assurance of a transparent and full NEPA process. This respondent requested clarification as to whether the BLM would potentially turn over some management actions to other parties, and whether Tribes would act as mentors of the existing wood cutting crew. This respondent also suggested that the BLM consider Native American involvement in active restoration such as road closures and re-planting (21-114).

### 3.2.3.3 Other Possible Alternatives

A number of respondents were concerned with the range of alternatives considered. One respondent was concerned that much of what BLM is proposing would cause major site disturbance and is likely to exacerbate all of the conditions BLM claims it is “treating (16-10).” Based on these concerns, a couple of respondents suggested less invasive treatments. One individual suggested that the BLM consider greatly expanded alternatives which focus primarily on passive restoration, with active restoration focused on removing non-native vegetation, roads, and livestock facilities like fences and troughs, and planting of locally grown native vegetation in disturbed areas (16-10). This respondent further suggested that the BLM consider a large reduction in grazing and various minimally invasive “treatment” alternatives (16-9). Another respondent requested that a permanent grazing permit retirement alternative be examined, along with a sagebrush restoration proposal that removes created wheatgrass from sagebrush or other pinyon-juniper habitats (21-158). This individual requested that removal of livestock, including through use of funds to permanently buy out grazing permits, be evaluated as a treatment under all alternatives. This respondent also suggested that lands be prioritized for buyouts based on the need for passive and active treatment measures to be applied (21-194). This respondent suggested that removal of created wheatgrass and planting of sagebrush and local ecotypes should be considered as one of the alternatives in the EIS (21-40). This individual requested that a full range of alternatives, including passive restoration and actions that address existing cheatgrass infestations and minimize the spread of cheatgrass be developed and that these alternatives deal with all disturbance factors, including livestock, which contribute to any fuels or habitat problems, and significantly change management direction (21-100). This respondent also requested that the BLM develop alternatives that use preventative measures, address casual agents of fire, fuels, and vegetation problems such as livestock and OHV use, and which minimize risks of invasive species spread stemming from any treatment that is applied (21-257). This respondent requested that alternatives focus on selective mechanical removal of younger trees, or treating hazardous fuels like cheatgrass, be developed (21-112). This respondent also requested that BLM map all areas where livestock use has been expanded due to artificial water and develop an alternative to remove the facilities (21-58).

One individual requested that the BLM use a sound methodology to determine needs for treatment, focusing on the areas within approximately 1/8-mile of interfaces with human habitation, or where it can be conclusively shown that positive outcomes for the public would result, and that an alternative be developed that does this (21-171). Another respondent suggested that another alternative might be a habitat alternative (25-3).

One respondent requested that as part of any sagebrush restoration project, cessation of grazing use and retirement of permits through the inclusion of language in a land use plan amendment should be fully considered in the EIS process. This respondent stated that domestic livestock grazing in western arid lands has long been known to promote weeds, alter vegetative composition, and in many other ways, adversely affect sagebrush and pinyon-juniper ecosystems (21-72). This respondent stressed that livestock trampling disturbance to microbiotic crusts and livestock grazing disturbance to herbaceous understories should be a key component of this restoration action. This respondent suggested review of Belsky and Gelbard (2000; Belsky, A.J., and J.L. Glebard. 2000. Livestock grazing and weed invasions in the arid West. Oregon Natural Desert Association. Bend, Oregon); Fleischner (1994; Fleischner, T.L. 1994. Ecological costs of livestock grazing in Western North America. *Conservation Biology* Vol. 8 (3): 629-644); and Fleischner (2010; Fleischner, T.L. 2010. Livestock grazing and wildlife conservation in the American West. Pages 235-265 *in* Wild rangelands: conserving wildlife while maintaining livestock in semi-arid ecosystems [J.D. duToit and J.C. Deutsch, editors]. Blackwell Publishing; 21-72).



### 3.2.4 Treatment Standard Operating Procedures

One respondent provided a number of comments related to treatment standard operating procedures (SOPs). This respondent stated that it is important that the information and analysis included in the EIS be sufficient to make decisions necessary to mitigate negative impacts of projects and minimize the impacts of unintended consequences (15-57). Further, this individual provided comments related to the use of native species, periods of rest and livestock exclusion following treatment, OHV use, wildlife, and the removal of woody vegetation.

This individual requested that only native species be used in any planting effort and that the BLM commit to using all local ecotype, non-cultivar native species in any post-treatment plantings (21-145). This respondent requested the use of all native seed with commitments to reseed repeatedly be part of the planning and funding for all projects, noting that planned development of reliable supplies of native seed is essential (21-250). This individual requested that sagebrush and other appropriate native shrubs be included in all seedings, and repeated efforts be made to establish native shrub cover due to its importance to many native wildlife species (21-267). This respondent suggested that the BLM use some of its fire funding to set up a reliable network and system for supply and storage of native seed of locally adapted ecotypes, so that this native seed is readily available in the wake of fire. This respondent was concerned that if these seeds were not available, this would be used as an excuse to plant exotic species such as crested wheatgrass (21-268). This respondent was further concerned that in the past, agencies have used exotic, soil depleting crested and Siberian wheatgrass, and aggressive, invasive, weedy forage kochia and intermediate wheatgrass. This respondent requested that instead of focusing on larger exotic plants (primarily because they produce livestock forage, no matter how limited its palatability), natives, especially species like Poa bluegrass, Indian ricegrass, bottlebrush squirreltail, and native (not cultivar) bluebunch be planted on lower elevation sites. This respondent was concerned with the invasiveness of plantings and requested that native vegetation that does not have sufficient understory to recover on its own without reseeding not be treated invasively. This individual stressed that many higher elevation sites require no seeding of herbaceous species at all and requested that only sagebrush or other native shrubs be seeded in these lands (21-269). This respondent requested that the BLM focus significant treatment and restoration efforts and spending of federal funds on restoration of crested wheatgrass that has been rampantly seeded following sagebrush removal or as post-fire "rehab," as well as lands overrun by cheatgrass, to return these areas to native species composition and function (21-174).

This respondent also requested that these lands receive adequate rest from livestock grazing so that the understory components, including microbiotic crusts, can recover and seeded vegetation can be established (21-269, 21-273). This individual was concerned that agency fire Environmental Assessments, land use plans, EFRs, and other activity plans are deficient in providing adequate periods of rest from livestock grazing following treatments (21-196). This respondent was concerned that the two grazing season rest may not be sufficient and requested that a minimum of 10 years (21-269). Further, this respondent requested that all alternatives include after a period of post-treatment rest of a minimum of 10 years, a 15 percent or less allowable utilization of upland vegetation, no grazing during critical growing periods for native species, no grazing during nesting periods for migratory birds and sage-grouse, measurement of livestock trampling damage to native vegetation and microbiotic crusts and identification of ways to minimize trampling damage, and no movement of livestock from lands infested with exotics to more intact communities (21-158). This respondent was concerned that this would be necessary to allow for successful establishment and recovery of native species (21-263). This respondent suggested that in order to determine necessary rest periods, the condition of the community pre-treatment must be understood. This respondent requested that specific time periods be applied, along with measurable recovery standards for soils, microbiotic crusts, and herbaceous and woody vegetation recovery before livestock grazing is resumed (21-196, 21-269). This respondent was concerned that this time period may be much longer than typically required and is often dependent on the condition and health of vegetation communities pre-fire. This respondent requested that a closure of a minimum of 10 years, or permanently following treatment or wildfire, be required in order to minimize the risk of livestock disturbance fostering and promoting weeds (21-286). This respondent suggested that the BLM use existing unburned pasture or allotment boundary fences as the structures that restrict livestock from treated lands (21-273). This respondent stressed that resting sufficient areas, both burned and unburned and treated and untreated, is essential for watershed protection (21-282).



This respondent requested that all OHV travel be minimized and any roading or soil disturbance be rehabilitated with native vegetation. This respondent requested that the BLM commit to undertaking emergency closures in the federal register if roading or OHV use proliferate, as a result of treatment (21-232).

This individual requested that no treatments of any kind be allowed during nesting periods of migratory birds or in important critical wildlife habitats during sensitive times of the year (21-233) and that at least 2 years of year-round surveys for sensitive species and important wildlife species use be conducted prior to disturbance (21-71). This individual requested that the BLM take protective measures, not only on the fire-affected allotments, but also on surrounding lands, and to buffer habitat loss until the habitat that has been lost can be restored (21-281).

This respondent also requested that any mechanical removal of woody vegetation be carefully conducted and that removal of trees be based on individual tree marking, with younger age class trees targeted for removal while older trees are retained (21-230).

One other individual simply requested that the BLM provide the standard operating procedures (SOPs; 25-13).

### **3.2.5 Special Precautions**

One respondent stated that the primary goal of this restoration project should be to provide for the recovery and viability of listed, rare and imperiled species found in the 3-Bars Ecosystem. This respondent was especially concerned with impacts and effects of this project on the Lahontan cutthroat trout, sage-grouse, pygmy rabbit, least phacelia, and Beatley's buckwheat as well as potential watershed level impacts from proposed treatments on the Diamond Valley speckled dace, which may have been extirpated from the area. This respondent stressed that project activities should be consistent and compatible with conserving and enhancing the populations and habitats of these species (4-11).

### **3.2.6 Studies and Monitoring**

A number of comments were concerned with monitoring prior to and after any treatments. A few of these comments were focused on clarification of specific monitoring planned, the importance of monitoring in general, and the importance of funding for monitoring. One respondent requested that the EIS clearly specify how and when progress toward long-term objectives or desired plant communities would be monitored. This respondent stressed that without regular ecologically-based monitoring information and flexibility in management, there is no way to know whether the management prescriptions set forth would be successful (15-34). This respondent suggested a monitoring based feedback mechanism to adapt management as projects are implemented. This respondent also requested that the EIS disclose and analyze mechanisms for BLM and project partners to determine if primary resource values (i.e., high elevation riparian areas) remain at risk during or after project implementation, and analyze timelines and mechanisms to make changes to management schemes if data indicate the project is not creating the desired result (15-35). One commenter stressed that monitoring should be a key component of all projects (12-25). This commenter stressed that all projects would need to be monitored to determine if they have achieved their desired results and to measure the effects to wildlife (12-11). Another individual requested that monitoring be quantitative, objective, and include both site-specific and landscape-level data correlated to management objectives and desired outcomes (15-36). This respondent suggested that objective setting and monitoring would be important for setting time tables for opening project areas to multiple use following treatment (15-37).

A couple of respondents were concerned with the funding of monitoring. One individual emphasized that adequate funding and resources must be allocated and the commitment made to monitoring, as this the crucial to adaptive management and ultimate success. This respondent also suggested that every effort should be made to include cooperative permittee monitoring to increase the amount of monitoring data collected and increase the level of communication between the agency and permittees (18-11). Another respondent requested that the BLM develop a comprehensive monitoring plan with all monitoring to be funded as part of the original treatment cost. This respondent was concerned that otherwise timely and necessary monitoring would not occur (21-249).



One respondent requested the source of the monitoring data provided in the scoping document and inquired whether it was taken from the Nevada Department of Wildlife, the U.S. Fish and Wildlife Service, ranchers, private individuals, environmental groups, or the BLM. Additionally, this respondent inquired as to whether the data regarding the 3-Bars Ecosystem was collaborated by any other source (8-73). Another respondent requested a list of reference areas, and their location including maps, that were used in developing soil surveys and vegetation models for the project (21-266).

A couple of respondents were concerned about a lack of monitoring. One individual was concerned that monitoring and mitigation would not be adequate and do not even begin to address the large-scale disturbance of plant and animal community composition, function, and structure that undertaking the large-scale treatments would affect (21-244). Another respondent noted that according to the scoping summary, the BLM stated they would be monitoring and collecting data throughout the proposal area from October 2009 through July 2010. This respondent was concerned that August and September, the 2 months that BLM did not intend to monitor, are considered the driest, hottest months of the year and urged the BLM to re-evaluate the monitoring program to continue to collect monitoring data throughout August and September and subsequent months when feasible and incorporate the data into the EIS (8-72). Another respondent requested that the BLM complete a baseline soil study for the seedbank (25-34).

A number of comments were concerned with collection of baseline data to be used in monitoring. One respondent requested that BLM systematically collect adequate baseline data on the current health of these lands and waters, and the role of livestock as a causal agent in any habitat loss, hazardous fuels, understory depletion, desertification, rangeland health, woody species invasion, and other problems that may exist on these lands (21-81). This respondent further requested that a current ecological assessment be conducted that accurately reveals the ecological condition of the land, which is critical to understanding the impacts of vegetation treatments to soils, waters, watersheds, special status species, important wildlife species, cultural sites, recreational values, and aesthetic values (21-86). This respondent requested that the BLM conduct a number of systematic baseline surveys, including for all special status species including pygmy rabbit, pinyon jay, loggerhead shrike, raptors, rare bats, and rare plants over the course of all seasons for 2 years so that all habitat uses can be understood (21-102); for old growth and mature pinyon and juniper trees in the 3-Bars Ecosystem (21-115); vegetation species composition; current ecological condition; livestock grazing regimen and standards of use; wildlife habitats and populations; and periods of rest, trespass, and other livestock factors (21-139). This respondent requested that the BLM determine the current condition of all the vegetation communities in the affected lands in the planning area in order to understand the risks of any treatment disturbance to these lands. This respondent requested that this information be newly collected as part of this process since most systematic vegetation inventories are nearly 25 years old or more (21-198).

Further, this respondent was concerned with the current ecological condition of the lands in the 3-Bars Ecosystem and requested that the assessment include a study of the current ecological condition and health of soils, vegetation, important wildlife habitats and other important values of the affected lands, and a comparison of these conditions to conditions at the time of disturbance (12-19, 21-138). This respondent requested information regarding the presence of weeds and other exotic species on all lands within the allotments, watersheds, and habitats, as well as current information across the District and adjacent forest lands (21-140). This individual was concerned with whether the lands claimed to be in need of treatment may already be providing important habitats for native wildlife and/or may be inhabited by the natural vegetation community for the site (21-111). This respondent requested that large blocks of land (greater than 10,000 acres) be established within watersheds where no fuels treatments are conducted as reference areas for the outcomes, effectiveness, or damage of the treatments that are proposed. The respondent requested that these lands be identified in the EIS. This respondent also requested that other mitigation include termination of grazing post-treatment and termination of grazing on reference areas (21-246). This respondent was concerned with the impacts of past treatments and disturbance. This individual requested that the BLM provide a complete record and detailed monitoring necessary to understand short, mid- and long-term impacts of all past vegetation manipulations and treatments in this region from 1960 to the present. This respondent also requested that the BLM assess the current ecological condition and rangeland health of these sites, provide maps of all livestock facilities and salting sites for this allotment and its neighbors, and conduct a systematic baseline survey for invasive species including in the understory of plant communities (21-88). This respondent further requested that the BLM acquire and assess data and maps of past disturbance events on the affected allotments, watersheds, and habitats (fire – prescribed or wild, chemical treatment, mechanical treatment); seedings or any other post-disturbance treatments that have occurred; current condition of



seedings, including cheatgrass and other fine fuels and weeds in interspaces; comparison of current seeding condition, productivity and stocking rate based on good or better condition seeding; location of all livestock facilities and developments; location of all livestock water haul and salting sites; location of all roads; and relation of roads to past vegetation projects or treatments (21-137). This respondent requested that the BLM assess all of its post-fire rehabilitation efforts and treatments in the past 30 to 40 years, or however long records have been kept. This respondent requested that the BLM collect site-specific data on the current condition, health, wildlife, recreational and other values of these areas seeded post-fire, as well as the number of new fences, pipelines, troughs, and other facilities that have been built using ESR funds, or were put in place along with treatments and the impacts that these facilities have had (21-289). This respondent stressed that fully assessing the impacts of past actions is necessary in order to understand the context of the current decision-making process, as well as to assess environmental impacts and reasonably foreseeable outcomes (21-180).

This respondent was concerned with post-treatment or disturbance monitoring and requested that the BLM provide necessary monitoring and decisive actions that would occur post-treatment if treatment protocols and livestock exclusions are violated. This respondent requested that the BLM establish weekly post-treatment monitoring for livestock trespass, sound studies of soil health and stability, and vegetation community recovery and health post-treatment (21-245). This individual requested that the BLM provide a list of non-trespassed exclosures that can serve as reference sites and comparative examples and that the BLM visit these sites and quantify the differences between vegetation inside and outside these exclosures. This individual requested that the BLM use this information in developing a realistic time frame for livestock exclusion from treated lands (21-265). This respondent requested that the BLM conduct special status species population viability, persistence, and extinction/extirpation models for important, special status, and threatened and endangered species of native wildlife under all alternatives (21-134). This respondent also requested clarification regarding the agency Migratory Bird Treaty Act protocols. This respondent was concerned that the protocols appear to be aimed only at searching for raptor nests and no other bird nests and are typically one-point-in-time surveys or are merely using records in databases (21-235). Another respondent requested that the Lower Roberts Creek exclosure area should be repaired, enlarged, and monitored to show recovery through time (12-19).

### **3.2.7 Coordination and Education**

One commenter suggested a stewardship program to harvest wood for firewood and lumber on Roberts Mountain, if the site permits (17-1). This respondent was also interested in other fuels reduction and replanting programs to better the area's wildlife habitat and range productivity (17-2). Another respondent noted that based on a survey conducted throughout Eureka County by the Eureka Extension office, some of the top concerns of county residents are securing an adequate and reliable supply of water for residents and industries, rangeland health, riparian health, and control of invasive weed species. This respondent noted that these concerns are very similar to those of the BLM and suggested that these concerns could be addressed, at least partially, through this project (18-1). Another individual requested that if chemicals are used, the treated lands and surrounding areas be posted with signs that warn the recreational public of chemical use and possible exposure. This respondent was concerned that there is uncertainty associated with the use of chemicals in wild land settings and that wind erosion or water runoff may transport chemicals to unintended areas with unintended consequences (21-285). Finally, one individual offered partnering opportunities with the BLM on the 3-Bars Project, including provision of labor and machinery on an "as available" basis (6-1).

### **3.2.8 Mitigation**

One respondent suggested a number of potential mitigation suggestions. This respondent suggested that mitigation include acquisition and retirement of grazing permits so that microbiotic crusts, understories, and sagebrush can be restored. This individual requested information regarding which mines or developers hold permits in the 3-Bars Ecosystem and on which allotments (21-38). This respondent suggested that the BLM undertake permanent closure of disturbed lands to domestic livestock grazing disturbance, noting that the typical 2 growing seasons following even major fire disturbance is known to be inadequate as recovery of sagebrush communities from disturbance takes several decades or longer, depending on habitat type and climate change. This respondent stated that this is a significant reason why lands in the BLM Battle Mountain District are so degraded following wild fire and past treatments (21-66).



Further, this respondent requested that agencies develop adequate mitigation for fuels activities, so that if an agency wants to burn or chemically treat 10,000 acres of sage-grouse habitat or pinyon jay habitat, it should be removing livestock use from a nearby 10,000 acres of land to provide better quality nesting, wintering, and food-producing habitat (21-248).

### **3.3 AFFECTED ENVIRONMENT**

One comment requested that the BLM provide a detailed scientific analysis of “historic” conditions, “historic impacts,” and the legacy of “historic” impacts in the 3-Bars Project Ecosystem as well as how this has altered site potential (21-127). Another respondent requested that the BLM provide information regarding their desired conditions and functionality parameters (25-12).

#### **3.3.1 Introduction and Study Area**

A few respondents provided comments related to the introduction and study area. One respondent suggested that the 3-Bars Project Ecosystem is in better condition than it has been in the past century and requested that the EIS include areas that are functioning and analyze what has occurred in these areas, including the lessons learned from these areas (15-20). Another individual requested that a full accounting be provided of all projects that have occurred for all periods of time in which records have been kept in the offices of this region, including a full and detailed assessment of the adverse ecological effects of treatments, based on thorough and systematic baseline inventories of biological occurrence, populations, and ecological condition (21-2). The respondent also requested that detailed mapping and analysis be provided, including the promises that were made when treatments were conducted, what the treatments entailed, what was seeded, what is the current ecological condition based on a current Ecological Site Inventory, how livestock use was dealt with, how current vegetation on the site compares to the composition, function, and structure of the native vegetation community, how diminished are the microbiotic crusts, and what levels of livestock use have been allowed on these lands. This respondent emphasized that actual use and results of monitoring should be examined (21-3). Another respondent was concerned that there is no current inventory of areas of critical importance to native species, or where special management is needed to protect lands from irreversible losses (16-32).

#### **3.3.2 Land Use**

A couple of respondents provided comments related to concerns of land uses such as mining, roads, utilities, grazing, development, and ranches. One respondent requested that historical mining operations and use within the planning area be included in the EIS (8-49). Additionally, this respondent requested that the EIS include current mining impacts, acres affected on site, the length of roadways and acreage used necessary for mining operations, and specific inventory data on pipelines, fences, and daily water consumption necessary to sustain operations, expected duration of operations affecting the planning area, and any additional expansion activities or construction proposals in the reasonably foreseeable future (8-50). This respondent also requested that the EIS include a current inventory of all exploration activities implemented in the 3-Bars Ecosystem, including roadways and length, number of acres disturbed and drill pads, and provide maps indicating these areas of disturbance (8-51). Another respondent requested identification of grazing permit holders, base property owners, and lessees. This respondent was interested as to whether these are held by mines, developers, hobby ranchers or others (21-124). This respondent also requested that the BLM provide discussions of links between utility corridors and wind energy, geothermal, or other projects on public lands (21-18). Further, this respondent requested that a full and detailed analysis be provided of the current footprint of all roading in this landscape, the amount of roading present during the days when the old land use plan was finalized, and the road density then versus now (21-10).

#### **3.3.3 Climate and Air Quality**

One respondent was concerned that science increasingly shows that big fire years are a result of climate change and climatic and precipitation conditions in years preceding and during the fire event, events that are beyond agency control (21-68).



### 3.3.4 Soil Resources

A couple of respondents were concerned about the validity of the soil information included in the scoping document. One respondent was concerned that the recent Nevada Soil Survey information does not accurately reflect the historical occurrence of forested vegetation, and in fact is strongly biased towards shrub-grass sites as soil surveys were based on what was present in the past few decades, not taking into account if trees had been removed or were re-occupying sites (21-30). This respondent was also concerned that the current soils information is being used as a justification for massive deforestation and sagebrush killing and does not accurately reflect ecological conditions, either historic or current. This respondent noted that University of Nevada Reno, Eastern Nevada Landscape Coalition, and agricultural extension programs have misused the “state and transition” model and misapplied it to native communities to promote the destruction of woody vegetation in the service of the livestock industry. This was done, in part, through claiming that the sites were not forested sites if they did not have trees on them when the recent soils surveys occurred and by extrapolating the soils information across a broad area. This respondent was concerned that the soils information ignores the role of historic mining, agency treatment, and other deforestation (21-95). Another respondent stated that the BLM cannot rely on the Nevada soil survey information to proclaim that a site should have sagebrush versus trees. This respondent was concerned that the soil surveys were biased to promote maximizing cattle forage grasses at the expense of many other values of public lands and if there were not trees on the site at the time of the recent survey, it was not classified as a forested site. This respondent noted that some reference sites were selected, but the respondent was unable to find what the locations of these sites were. The respondent was concerned that historical surveyor records, presence of charcoal and stumps, and other material were not taken into account. In addition, this respondent was concerned that because sagebrush is seral to pinyon and juniper, the presence of sagebrush in some areas at the time of the soil surveys may likely have been the result of past deforestation or BLM treatments (16-45).

One individual also made a couple of specific requests related to soils. This respondent requested basic information be provided regarding soil stability, erosion hazard, and wind and water erosion risks related to lands in the EIS area in order to understand likely sedimentation into streams, site soil stability post-treatment, likelihood of increased gullyng, and other factors (21-242). Additionally, this respondent was concerned that the actions proposed would bring about widespread microbiotic crust loss and soil erosion from wind and water. This respondent requested that the current condition of all lands be thoroughly assessed in order to understand the impacts of the actions (21-258).

### 3.3.5 Water Resources (Quantity and Quality)

A number of comments were focused on current conditions of water resources and the impacts of various uses. One individual questioned whether the BLM Battle Mountain District had developed a watershed analysis, at least in draft if not final form, for many areas of the District landscape, and if so, that a copy be provided to help inform review and understanding of the proposal (21-75). A single comment noted that any water developments constructed and utilized for a beneficial use, whether surface or underground, must be completed in compliance with Chapters 533 and 534 of the Nevada Revised Statutes for the subject parcels of land wholly situated within the State of Nevada (13-1). Another comment states that appropriate consultation with the Nevada Division of Environmental Protection (NDEP) and accurate interpretation of State laws and regulations is critical for citizens to maintain their water rights and suggested that the EIS disclose how BLM worked with the NDEP to evaluate water quality parameters, develop standards, and determine compliance (15-45).

A number of respondents requested information regarding the current status of water resources. One respondent requested that detailed maps be provided of the 335 spring/seeps, 102 miles of perennial streams, and 66 acres of meadow within the planning area (8-57). Additionally, this respondent requested that the EIS provide specific dates and times of year when data from water sources were collected that determined their current status of proper functioning, functioning at risk with upward trend, functioning at risk with trend not apparent, etc. (8-58). This respondent also requested that photographic evidence be provided of the conditions of water sources and vegetative communities in the 3-Bars Ecosystem, with dates and times the photographs were taken, and these be made available to the public for inspection in electronic formats such as CDs or online on BLM’s website in a photo gallery (8-59). Another respondent requested information regarding the current condition of watersheds in the 3-Bars Ecosystem including intermittent and ephemeral drainages, springs, and seeps, how flows have changed over time, what waters have been developed or



altered, and what the effect of development or alteration on water resources has been. This respondent also requested all actual use and livestock utilization, and stubble height or other monitoring data for the allotments for the period since recordkeeping began to the present (21-123). Another respondent requested an inventory of historical and current water sources be included in the EIS, including the kind used and location within each allotment in the planning area. This respondent requested that if water sources are the result of a range improvement, such as a well, seasonal periods this water source is utilized and/or available for wildlife and/or wild horse use be identified (8-40). This respondent also requested that an estimate of all available water sources located within the 3-Bars Ecosystem at the passage of the Free-Roaming Wild Horse and Burro Act of 1971, in order to determine cumulative impacts to water sources and availability in the 3-Bars Ecosystem since its passage and to provide baseline data as to the scope of potential mitigation measures necessary to return water availability to its historic levels (8-2). This individual requested that the current number and kind of water sources, as well as their locations, within each Herd Management Area be incorporated into the EIS (8-3). Additionally, this respondent requested that the percentage of water sources the BLM estimates are solely impacted by wild horses or livestock occurring in the planning area be included in the EIS (8-18, 8-45).

Another individual requested that an inventory be completed of all big game water developments within the 3-Bars Ecosystem as well as any proposed water developments to disperse livestock, decrease competition with other rangeland users, and/or promote habitat expansion (8-31). This respondent also requested that the BLM provide water quality data for the 3-Bars Ecosystem as well as the relationship of this data to vulnerable wildlife species and ecosystem recovery (8-74). Another respondent was concerned that in much of central Nevada, the primary grazing permits are held by mine entities or various speculators and there is clear evidence that large-scale gold mining is a cause of aquifer drawdown (16-27). This respondent requested that the BLM provide full and detailed analysis of the current and predicted status of surface and groundwater supplies and loss in the 3-Bars Ecosystem, noting that the less water there is, the less resilient the drainage networks would be and the more jeopardized sage-grouse, Lahontan cutthroat trout, and other wildlife would be (16-28). Another respondent stated that they would support vegetation management to restore water, but was concerned that the BLM would claim the new water (25-33). Another individual was concerned that vested water rights are from 100 years ago, when no vegetation was present and the land was denuded, noting that these conditions are not applicable today (25-32).

One respondent requested that the demands on, and status of, the local and regional aquifer be fully examined to understand the feasibility of any Lahontan cutthroat trout introductions, the status of sage-grouse brood rearing habitats, and migratory bird riparian habitat loss concerns (16-20). One respondent requested that the Lahontan cutthroat trout map provide information on how much water is present and where, including in Vinini and other restoration creeks, how mining is affecting waters, and how mining will affect aquifer depletion (21-52).

### **3.3.6 Wetlands, Riparian Areas, and Floodplains**

A couple of respondents submitted comments regarding wetlands, riparian areas, and floodplains. One respondent was concerned with the way these areas were addressed in the scoping document and suggested that key findings regarding the condition of riparian areas be reported quantitatively and that all findings be included, even for riparian areas that are in proper functioning condition (PFC; 15-19). This respondent also noted that the scoping document used PFC data, which are traditionally used to evaluate the condition of riparian systems, from seeps, springs, and seasonally wet areas that have no direct connection to perennial waters and questioned the appropriateness of this measure. The respondent requested that the EIS reference the sources and protocols for data collection, reporting and analysis (15-50). Another respondent was concerned that willows are not indicative of a PFC (25-21).

Another respondent was concerned with the current condition of these areas and requested information regarding the location and the current condition of all riparian areas (springs, streams, intermittent and ephemeral drainages) in the 3-Bars Ecosystem and surrounding lands, as well as how any treatment would affect them and the differing effects with different treatments (21-126). This individual was concerned that throughout the region, wetlands (springs, seeps, streams, playas, etc.) have been heavily damaged by livestock grazing and trampling activity, altering their morphology, areal extent of water tables/wetted soil area, plant and animal species composition, plant and animal ecology (21-186). Another respondent was concerned that trees remove water from drainages (25-23).



### 3.3.7 Vegetation Resources

A number of comments were received regarding vegetation resources. A couple of comments were focused on clarifications and definitions. One individual requested that the EIS include definitions of the shrub-steppe landscape and sagebrush steppe habitat. This respondent noted that the sagebrush communities of the valleys are much different from the sagebrush communities at the upper elevations of Roberts Creek Mountain and requested that these distinctions be defined (12-6). Another individual stressed that Potential Natural Vegetation and Ecological Sites are not the same, as is suggested in Figure 2.4.3 of the scoping document (15-28). This respondent also noted that the areas identified as pinyon-juniper areas on Figures 2.1.2, 2.2.1, 2.4.1, and 2.6.2 of the scoping document differ in the extent of pinyon-juniper stands, and requested an explanation of these differences (15-54).

A few comments were focused around the science presented in the scoping document. One respondent was concerned that the scoping document does not provide adequate information on vegetation communities in the affected lands and their surroundings, or the purpose and need for the project (21-135). Another individual stated that successional theory is an inappropriate model of vegetation change on rangelands. This respondent suggested working with the Natural Resources Conservation Service to establish Ecological Site Descriptions for the 3-Bars Ecosystem with an understanding of current and sound rangelands science before analyzing any individual treatment (15-22). This respondent also suggested that focusing on potential natural (or native) communities limits the managers ability to manage for objectives and suggested a state and transition model which demonstrates that there are many dynamically stable communities on a given ecological site (15-23). This respondent emphasized the need for assessment of thresholds between states and what these thresholds mean for potential new communities. This respondent suggested that there may be multiple desired plant communities for each ecological site depending on which community currently occupies a site and which thresholds have been crossed (15-26). Further, this respondent encouraged consideration of terminal thresholds, where returning to a previous state is not possible with current knowledge (15-24) and provided the example of cheatgrass monocultures where sites may not return to sagebrush-bunchgrass communities through grazing management and removal of frequent fires (15-25).

A number of comments were received relating to livestock and forage resources. One respondent was concerned that there are no adequate livestock grazing analyses that show the seriously impaired current condition of many of the BLM lands in the region from chronic livestock grazing disturbance effects and that the BLM is managing lands based on a long-outmoded mindset that woody vegetation is undesirable, and grass (even crested wheatgrass) is preferable (21-82). This respondent requested that an analysis of age, seral status, and other elements of soils and vegetation communities be conducted based on an understanding of changes in composition, function, and structure that exist in the real world as a result of livestock grazing and other disturbances and past vegetation treatments followed by livestock grazing (21-147). This respondent was concerned that livestock grazing has fundamentally altered (and continues to alter and degrade) native understories by killing and weakening native grasses and forbs and harming microbiotic crusts. This respondent noted that as native bunchgrasses have been replaced by cheatgrass and other exotics in the wake of livestock grazing, and upland plant communities are subject to hot, early season fire instead of cooler, late-season fires. This respondent was concerned that cheatgrass provides dense, continuous fuel that causes fires to flash across the landscape and results in frequent re-occurrence of fire, preventing re-growth of native vegetation. This respondent was concerned that cheatgrass litter chokes soil surfaces, preventing germination of native shrubs (sagebrush, rabbitbrush; 21-200). This respondent was also concerned that native species will not recover if sites are grazed by livestock. This respondent noted that the extreme disturbance caused by livestock will make sites more fire prone and in most instances it would be just as effective to mow weeds as to use livestock and this would have far less impact to soils. This respondent was concerned that the possibility of introduction of new weedy species as a result of livestock disturbance would be minimized with mowing. This respondent also requested that the BLM review the fire history of lands in Idaho such as those managed by the Jarbidge Field Office, and assess how seeding of crested wheatgrass, heavy grazing, and high stocking rates have resulted in more extensive and larger acreage fires (21-218).

Another respondent requested that a comprehensive overview and percentage of forage consumption estimates be provided within the planning area and be categorized by user (8-65). This respondent requested that data and methodology used to distinguish forage consumption rates and utilization levels between cattle, sheep, wild horses, and big game species such as mule deer, pronghorn, elk and/or bighorn sheep also be provided (8-66). This respondent



requested that maps be provided of all key areas used to monitor forage utilization levels and impacts and when they were initially established. This individual requested that the BLM distinguish whether key monitoring areas are used exclusively by one species (livestock, wild horses, big game) or if there are multiple users. Further, this respondent requested a description of why each key area was chosen as a monitoring site; if there are different monitoring sites established for wild horse use, wildlife use and/or livestock use; and if any changes in use patterns since the establishment of these key monitoring areas have been observed and if additional sites are necessary to measure rangeland impacts (8-67).

A number of comments were received related to woodland resources. A couple of respondents were concerned that young woodland areas are actually re-forested areas rather than woodland expansion areas. One respondent noted that the Roberts Mountain area and other portions of the 3-Bars Ecosystem are within the area of large-scale Eureka mining deforestation and so trees are very likely re-occupying these sites (16-43). Another respondent was concerned that agencies often justify treatment proposals on claims of juniper or pinyon invasions, but these claims are based on flawed interpretations of soil survey data that only reflected vegetation present on such sites at the time of the surveys, not the historic, or climax, vegetation appropriate to the site. This respondent requested that BLM examine the full role of mining deforestation in removing forested vegetation so that an accurate understanding of site history and invasion can be obtained (21-90). This individual was concerned that the pinyon-juniper encroachment map actually shows areas of re-occupation rather than encroachment and is concerned that the trees are holding these mining and grazing damaged watersheds together at present (21-53). This respondent requested that BLM carefully identify and map all areas where pinyon and juniper may have been removed and/or altered by historic mining deforestation (21-78). This respondent cited Dr. Ron Lanner's *The Pinyon Pine* and Dr. David Charlet's Shah-kan-daw paper as examples of providing a baseline for understanding forested versus non-forested lands (21-27). This respondent further suggested that the BLM consider recent work by Dr. William Baker and others on the very long return intervals for pinyon-juniper (21-29). This individual was concerned about the scientific approach of determining pinyon-juniper old growth, stating that many of the Nevada pinyon-juniper studies have not aged the junipers because they are too dense and have only aged pinyon pine, which biases the results to show a much younger age class of any stand. The respondent stated that this is the case because juniper is very slow growing and trees that are several hundred years old may be very short in stature whereas pinyon is less resistant to decay, more readily logged, faster growing on many sites, easier to cut, and easier to age (21-33). Another respondent questioned whether it is known what pinyon and juniper were like and where they were located historically (25-6, 25-7). This respondent questioned what the BLM is managing for, including what time frame (25-8). This respondent also suggested that the BLM depict old growth, persistent woodland, and encroachment areas (25-9).

One respondent requested that BLM specifically identify all forest and "woodland" sites based on charcoal, stumps, surveyor's records, trees present, and precipitation zones to gain a baseline understanding and to differentiate between juniper, pinyon-juniper and pinyon zones including diversity related to aspect and slope (21-35). This respondent requested that BLM provide detailed maps and analysis that show the complex differences between forested vegetation types that are present in all areas of the 3-Bars Ecosystem and cumulative effects area, including juniper, pinyon-juniper, and pinyon pine. Further, this respondent was concerned that the microbiotic crusts, which stabilize soils, aid water infiltration, fix nutrients, and play an important part in fixing carbon dioxide, are ignored or downplayed in the Nevada range studies and reports (21-34). Another respondent requested that the BLM prepare an inventory of pinyon-juniper stands in the planning area and identify those stands and areas that meet the definition of "persistent woodlands" described by Romme et al. (2007; Romme, W., C. Allen, J. Bailey, W. Barker, B. Bestelmeyer, P. Brown, K. Eisenhart, L. Floyd-Hanna, D. Huffman, B. Jacobs, R. Miller, E. Muldavin, T. Swetnam, R. Tausch, and P. Weisberg. 2007. Historical and modern disturbance regimes of pinon-juniper vegetation in the Western U.S. Colorado Forest Restoration Institute and The Nature Conservancy, Colorado State University. Fort Collins, Colorado), and remove these areas of pinyon-juniper from units to be treated (4-10).

One respondent requested that the BLM consider the full range and value of forestry products found on these lands and act to conserve these values. This respondent requested information regarding the economic value of the trees, pine nuts, and firewood found here and how this compares to the livestock forage value. This respondent was interested in whether the BLM had developed a forestry management plan for the area (21-113). This individual was concerned that juniper and other woody vegetation throughout Nevada and the West have been vilified by the ranching industry and



their management tainted by the application of range science lacking in ecological understanding of forested systems and range-oriented researchers, often tied to funding from land grant institutions, and with commodity-based biases against forested lands. This respondent was concerned that this had led to pinyon-juniper being greatly fragmented in many areas by purposeful fire, escaped prescribed fire, and wildfire (21-207). This respondent was concerned that due to recent drought, insect infestations, climate change, and grazing degradation/desertification of sites, there have been recent larger-scale die-offs of pinyon, increasing juniper and sagebrush in many western lands (21-212). This individual was concerned that due to large die-off of pinyon pine in the Southwest, Nevada's pinyon are an increasingly important resource for pinyon jays and other dependent native biota as well as for production of pine nuts for human uses. This respondent stressed that retention and protection of forested and other evergreen vegetation is essential for buffering climate change effects (21-213). Further, this respondent was concerned that recent research in the Southwest showed that standing dead pinyon and juniper may pose fewer fire risks than live trees, and hazardous fuels projects that target such trees may be flawed (21-214).

One respondent was concerned that the BLM Battle Mountain District appears to be planning to thin, chop, kill, crush, or otherwise alter sagebrush, especially areas where sagebrush has recovered from past removal or thinning. This respondent requested that the full degree and severity of sagebrush habitat loss and degradation from crested wheatgrass and other livestock forage seedings, prescribed fires, chaining, railings, herbicide treatment and other eradication or fuelbreak efforts across the landscape be assessed (21-39). One respondent was concerned that critical information was missing from the mapping with the scoping document, including a map of all remaining better condition sagebrush communities of each of the several varied types as well as a map of all old growth pinyon-juniper (21-49). One respondent requested that the BLM identify all dense sagebrush vegetation, and act to preserve and protect them and keep them all intact for the pygmy rabbit. This respondent also requested that BLM restore sagebrush habitats between these occupied areas, suggesting that livestock removal in lands where sagebrush is still present would over time allow sagebrush to recover better structural attributes for pygmy rabbits (21-117). One respondent requested information regarding the number of acres of Wyoming big sagebrush communities or treated juniper or sagebrush communities that have a significant component of cheatgrass in the understory as well as how many acres of these lands have already crossed thresholds where succession is truncated, how many acres are at risk of crossing these thresholds, and how rapidly cheatgrass is moving into higher elevation sites in the Great Basin. This respondent also requested information on the location and acreage of each vegetation type which is in good or better ecological condition (21-141).

One respondent submitted a number of comments related to fire. This respondent stressed that it is important to properly understand historical ranges of variability and natural fire cycles (21-28). Further, this respondent was concerned that the BLM Battle Mountain District estimates of fire intervals are out of date as it has been recognized that pinyon-juniper forests historically burned very infrequently (perhaps once every 200-400 years). This respondent was concerned that with deforestation from mineral extraction, the forested sites have moved away from any "natural" range by having been disturbed too frequently (21-56). This respondent was concerned that the potential for anything resembling a natural fire regime has been drastically altered by 150 years of livestock grazing and chronic disturbance, mining activity, deforestation, and other disturbances that natural fire regimes no longer exist in many areas. This respondent requested that agencies do not use natural fire regimes, historical ranges of variability, and other models as a basis for any fire planning (21-197), but suggested implementation of a cautious and prudent fire suppression plan until effective answers are found for the vexing problems of noxious weeds and exotic annual grasses (21-199). This respondent noted that before Euro-American settlement, periodic fires cleared ponderosa pine and Douglas-fir understories, and the build-up of fuels was too slow to create hot canopy fires. With Euro-American settlement, and continuing to the present, selective logging of large trees occurred, and small, highly flammable trees were left, fire control was instituted, domestic livestock consumed grasses that carried low-intensity fires, and such fires became less frequent, and woody fuels built up (21-203). Further, this respondent noted that hot fires occurred in the past and were a part of natural forested ecosystems and in many areas away from human habitation, fuel reduction may not be necessary (21-204). This respondent noted that fires are natural in pinyon-juniper and any effort to alter this takes BLM further from the historical range of variation (21-56). This individual requested that the BLM develop a range of actions to sustain forests and allow stands to mature in many areas (21-36). This respondent was concerned that the text associated with fire mapping in the scoping document fails to discuss that the areas where big fires occurred were often highly degraded and heavily grazed sagebrush (21-55). This individual was concerned that the map of fire danger,



which shows everything as being high risk or higher, is natural and that it is unnatural to thin, poison, chop or otherwise destroy trees based on a fire scheme that brands anything that is not bare ground as a high risk. This respondent also requested a more reality-based analysis that is not based on a fear of fire (21-60).

A few respondents were especially concerned with cheatgrass and other non-native species. One respondent stated that cheatgrass and other weeds increase wildfire risk and therefore requested that BLM highlight this relationship. This respondent also stated that the BLM's current post-fire/post treatment disturbance "rest" policy provides woefully inadequate rest from livestock disturbance (16-7). This respondent stated that livestock grazing promotes cheatgrass and conifer density and disrupts and semblance of a natural fire regime. This respondent suggested that in order to address fire and bring the system into any semblance of a "natural" balance, the BLM must focus on greatly improving the condition of remaining native vegetation communities (16-8). This respondent noted a study, conducted by Dr. Tausch and others, where a prescribed burn had been rested for 5 years or so, followed by grazing and then cheatgrass exploded. This respondent requested that these studies be incorporated into the analysis (16-36). Another respondent requested the EIS provide an estimate of the percentage of crested wheatgrass that comprises the planning area (8-61). Another respondent requested that the BLM demonstrate where a good native seedbank exists (25-36) and requested that the BLM analyze native and non-native seedbanks (25-37).

One individual was concerned that cheatgrass would return following chemical treatment, stating that they had discussed cheatgrass presence from burns near the Ruby Refuge with the manager, who stated that they had sprayed cheatgrass controlling chemicals for 5 to 6 years, including Plateau, but one year it was not applied and the cheatgrass returned (16-38). Another respondent requested that before any additional hazardous fuels treatments that lead to cheatgrass increases are conducted, the BLM demonstrate to the public that it can control cheatgrass in post-fire treatment and other disturbance environments. This respondent also requested that BLM provide a full range of alternatives for reducing cheatgrass or other weeds as hazardous fuels and that a map of these areas be provided, including all areas of past vegetation manipulation. Further, this respondent requested that the risk of expanded cheatgrass or other weed invasion in any treated areas be examined and that the BLM focus any treatment on restoring cheatgrass or other highly fragmented areas by planting sagebrush or pinyon and juniper (21-105). This respondent requested that the BLM identify all areas that currently have minimal cheatgrass or other invasive species in understories, and requested that any disturbance to these lands be avoided, which they suggest be restored passively (21-118).

This individual requested that the BLM identify all lands where post-fire rehabilitation or "emergency" stabilization with crested wheatgrass, intermediate wheatgrass, and other exotics was conducted, and prioritize treatment of these lands to return them to native vegetation and restore natural fire cycles (21-176). This respondent was concerned that exotic species are invading lands in the Great Basin and Interior Columbia Basin at an alarming rate, altering western ecosystems by increasing fire frequency, disrupting nutrient cycling and hydrology, increasing erosion, altering soil microclimates, reducing biodiversity, and reducing wildlife habitat (21-189). This respondent was concerned that disturbance related to livestock grazing, the agency's existing treatments/manipulations, livestock grazing facilities, OHVs, and extensive road networks are causes of weed invasion and suggested that removing these sources of disturbance from "at risk" lands, and any lands that have been treated, is a vital and integral part of any treatment, as well as prevention and restoration (21-190). This respondent was concerned that livestock are weed seed vectors, carrying weed seeds in fur, feces, and mud on hooves, and disturbing soils and creating ideal sites for weed seed establishment (21-191). This individual was concerned that recent observations show that exotics like cheatgrass and medusahead may be only the first in a wave of exotics, and that new infestations of aggressive species such as white top or knapweed occur in areas overtaken by cheatgrass and medusahead. This respondent was concerned that the current agency practice of failing to treat areas dominated by weeds, and using these weeded areas as "sacrifice zones" for excessive levels of livestock use only increases chances of invasion by new and even more aggressive exotic species (21-192).

This respondent was concerned that federal agencies are not using scarce taxpayer dollars to treat the extensive cheatgrass or wheatgrass seedlings invaded by flammable exotics, or to close roads that are leading to increased human-caused fire across the rangeland. This respondent noted that many crested wheatgrass seedlings have become infested with cheatgrass, halogeton, or other weeds and now contain continuous fine fuels which are not acting to stop fires, but



instead are susceptible to burning. This respondent requested that harm and fragmentation of native species habitats caused by these seedings be assessed in order to understand their role in habitat fragmentation on top of the excessive alterations of habitat that have been conducted, and which are highly foreseeable in the future. This respondent was concerned that past treatments have removed much of the sagebrush habitat interfacing with pinyon-juniper and replaced it with crested wheatgrass, fragmenting sage-grouse habitat across middle to lower elevations. This respondent was concerned that agencies would continue to promote the killing of native vegetation (juniper, mountain big sagebrush, pinyon, and other species) in higher elevations, or those that have re-colonized sites, while ignoring the habitat loss, and weed and fire risks posed by the degraded seedings and other purposefully altered lands, including those agencies “treated” with fire, chaining, etc. and which have become dominated by invasive vegetation (21-143).

A number of respondents made specific requests for information and analysis related to vegetation resources. One respondent requested that the date be provided for each Rangeland Health Assessment that was performed within the planning area since the implementation of the current land use plan (8-64). This respondent also requested that the BLM complete Rangeland Health Assessments for the Roberts Mountain and Three Bars allotments and make them available to the public for inspection and comment prior to completion of the EIS (8-70). Another respondent requested information on how the rangeland health data is being collected (25-40). One respondent requested that all monitoring data, actual use data for the past 20 years, all capability, suitability, Ecological Site inventory, and any other basis for livestock stocking be provided. This respondent also requested that a current Ecological Site Index, and a current capability and suitability/“capacity” analysis, be conducted using current ecological science (16-4). Another respondent stated that the habitat conditions within the 3-Bars ranch are improving (25-29).

#### **3.3.7.1 Noxious Weeds**

One commenter requested that the projected percentage of invasive and/or exotic plants occurring in the planning area from wild horse use, big game species, or livestock operations be included in the EIS (8-19, 8-30, 8-44).

#### **3.3.8 Fish and other Aquatic Resources**

A couple of respondents provided comments related to fish and aquatic resources. One individual recommended the removal of fish passage barriers on Lower Roberts Creek, including a culvert and a large headcut (the respondent offered to provide locations of the barriers; 12-16). This respondent also noted that they have a key interest in seeing improvements on Birch, Pete Hanson (occupied Lahontan cutthroat trout streams), Vinini, Henderson (Lahontan cutthroat trout recovery streams), Roberts, and McClusky Creeks (sport fish waters) and noted that recent reports of trout in Willow Creek should result in increased awareness within the drainage as it is unknown whether these are Lahontan cutthroat trout bearing streams (12-15). Additionally, this respondent requested that historical population estimates of Lahontan cutthroat trout for the 3-Bars Ecosystem be included in the EIS as well as current population estimates for both the 3-Bars Ecosystem and statewide to determine species trend and recovery status and desired population objectives within the 3-Bars Ecosystem (8-33). Additionally, one respondent requested that areas of known and/or potential conflicts with Lahontan cutthroat trout and livestock and wild horses be included in the Draft EIS including the reasons for the conflicts and what measures can be implemented to mitigate them (8-35). Another individual requested that the BLM determine the likely effect of a fire on special status species and other important biota (21-280). One individual was also concerned that there has historically been trout fishing in some drainages within the 3-Bars Ecosystem (25-22).

#### **3.3.9 Wildlife Resources**

A number of comments were related to wildlife resources, with a few of these comments being focused on general wildlife issues and study concerns and a larger number focused on specific species or habitats. One respondent requested that the BLM assess the status of populations and habitats within the larger landscape area (21-279). This respondent requested that the EIS fully examine the degree and severity of sensitive and imperiled species habitat degradation that currently exists, and the significant risk of soil erosion, cheatgrass invasion, and sensitive species habitat losses from the proposed actions. This individual requested that systematic baseline surveys be conducted across the District and contiguous lands for sensitive species habitats and populations, current degree and severity of



cheatgrass and other weed infestation, and ecological condition of sagebrush and pinyon-juniper and other vegetation communities (21-76). This respondent requested that thorough and comprehensive baseline studies and surveys for sage-grouse, pygmy rabbit, loggerhead shrike, ferruginous hawk, golden eagle, pinyon jay, rare bats that may roost in or forage over forests, and other important species be conducted. This respondent requested that these studies include a full analysis of viability and occur over all portions of the landscape and affected populations, taking into account the existing and foreseeable stressors and fragmentation that would result from utility corridor, mining, renewable energy development such as geothermal or wind, oil and gas, and other development (21-64). This respondent requested that the BLM provide information regarding the methods used to determine which lands were or are historic and current habitat for wildlife species such as sage-grouse (21-101). This respondent also requested information on whether there are fewer than 500 birds in any of the Battle Mountain Population Management Units or in the 3-Bars Ecosystem as well as what number constitutes a viable population (21-42). Another respondent requested that an inventory of fencing and/or developments occurring in the 3-Bars Ecosystem that have or may cause habitat fragmentation and disruption of migratory patterns be included in the EIS (8-32). One individual was concerned with issues regarding seral states and cover for wildlife (25-38).

A few comments focused on pinyon-juniper and/or sagebrush habitats. One individual noted that pinyon-juniper encroachment into the upper elevations of the mountain brush communities is negatively affecting the habitat for sage-grouse, mule deer, and other wildlife species and needs to be addressed (12-9). However, this respondent noted that pinyon-juniper woodlands and pine nuts from these woodlands are important to several species of birds and mammals for their survival, including mule deer (12-7). Another respondent was concerned that old growth wildlife habitat is not being considered or provided for in the planning. This respondent noted that old growth pinyon-juniper is a resource in itself as well as wildlife habitat and protection for watersheds and old growth pinyon-juniper was not mentioned in the scoping document, nor did the BLM inventory or disclose which old growth dependent species are present in the planning area. This respondent requested that the BLM adequately assess the impacts on old growth dependent wildlife species as well as other species that may nest in the area or migrate through it (4-7). This individual requested that the BLM prepare a complete list of species found in the planning area that are dependent on old growth and old trees as well as species that may be directly, indirectly, or cumulatively impacted by this proposal (4-9). Another respondent was concerned that extreme degradation of sagebrush and pinyon-juniper lands would occur on treated areas, noting that BLM Elko District lands to the north in the Spruce and Valley allotments as well as projects being conducted by the Ely District, are examples where treatment projects have resulted in habitat loss (21-87).

One respondent was concerned that BLM described sagebrush as “monocultures,” stating that this is how sagebrush naturally grows and in fact is critical habitat for pygmy rabbit, sage sparrow, and other sagebrush species (21-62). This respondent requested information regarding the current status of pygmy rabbit habitats and populations and how these have changed over time (21-104).

A number of comments were focused on the sage-grouse populations. One respondent was concerned that fragmenting remaining patches of sagebrush by mowing and chopping would hasten the decline of the sage-grouse population. This respondent requested information on the number of sage-grouse currently inhabiting central Nevada and the 3-Bars Ecosystem (21-42). This respondent requested information on the effects of the placement of giant power lines (like Falcon-Gonder) on sage-grouse in central Nevada, including a description of all active and historic leks, and changes in populations over time from the start of when records were kept in the area (25-16). This respondent noted that the scoping map does not differentiate between active, inactive, or historical leks, nor gives any information on populations or current bird numbers, or trends of all leks and populations over time (21-17). This respondent requested that the sage-grouse lek map identify the status of each lek, counts of birds over the years at each lek, and last year counted (21-50). This respondent requested information on where all studies have been conducted to determine sage-grouse seasonal use of the landscape in the 3-Bars Ecosystem (21-20). This respondent requested that BLM provide a full and detailed analysis of all affected sage-grouse Population Management Units, and their habitats and populations, including estimates of population viability with continued rates of habitat loss and the accelerated mining and energy development fragmentation in the region (21-22). This respondent requested information regarding the current status of the sage-grouse population in the 3-Bars Ecosystem, how its numbers have changed over time, locations of wintering, nesting, brood rearing, and lekking habitats, and the viability of the population in the short, mid, and long term. This respondent additionally requested that the BLM identify and track changes in leks, populations, and habitat



fragmentation over time (21-103). Another respondent requested that all factors affecting sage-grouse (including predators and hunters) be considered, not just loss of habitat (19-6). Additionally, one commenter requested that estimates of historical populations of sage-grouse populations and lek sites and desired objectives for the 3-Bars Ecosystem be included in the EIS (8-36). Another respondent was concerned that the BLM may be trying to create sage-grouse habitat in areas where there is none (forested vegetation areas and steep rocky slopes), while ignoring restoration of the areas that need to be restored including valley floors, past degraded seedings and treatments, and weed wastelands (21-59). One individual stated that there are movements of sage-grouse hens with broods from valley nesting and early brood rearing sites to upper elevation sagebrush and riparian communities on Roberts Creek Mountain. This commenter stated that initial research indicates that movement corridors along creeks from the valley to the mountain may be important to sage-grouse (12-12), especially as leks likely move up in elevation during summer months (25-18). Another respondent voiced concern regarding sage-grouse leks on Roberts Mountain (25-15). This respondent stated that sage-grouse in the west valley move to the mountain to the west (25-20). Another respondent also suggested that the BLM review sage-grouse studies being conducted at the University of Reno by Dr. James Sedinger (25-17).

A few respondents provided comments related to cattle, sheep, wild horses and big game animals. One commenter noted that there are historical records from early pioneers of Nevada of bighorn sheep on Roberts Creek Mountain the Simpson Park Mountains and Lone Mountain. This commenter noted that the Nevada Department of Wildlife has no plans of the reintroduction of bighorn sheep into these mountains (12-4). Another comment was submitted noting that the Nevada Department of Wildlife classifies mountain lion as big game in Nevada (12-3). One respondent requested that information be included in the EIS regarding historical populations and background of big game species, including mule deer, pronghorn, elk, and bighorn sheep in the 3-Bars Ecosystem for both the pre-European time period and at the turn of the 19<sup>th</sup> century (8-24); hunt Units occurring within the 3-Bars Ecosystem and most recent population estimates for each of the big game species (8-25); forage allocations for each of the big game species as set in the current governing land use plan (8-26); the percentage of the planning area BLM estimates big game species are contributing to degraded range conditions, reduction in plant diversity and vigor, and failure to achieve desired plant community conditions (8-27); seasonal and/or migratory movements that may cause increased populations and potential resource competition in either the winter or summer months (8-28); and the maximum desired population targets and goals for each of the big game species occurring within the proposal area and the estimated forage consumption of these species necessary to achieve those population objectives (8-29). This respondent also requested that data and methodology used to distinguish forage consumption rates and utilization levels between cattle, sheep, wild horses, and big game species such as mule deer, pronghorn, elk, and/or bighorn sheep be provided (8-66). Another respondent was concerned that the BLM is using declines in habitat for mule deer as a justification for killing trees for livestock, and to placate trophy hunting interests who do not seem to understand the value of these forests for big game security and other habitats (21-54).

### **3.3.10 Livestock**

A number of comments were received regarding livestock in the 3-Bars Ecosystem. One individual recommended coordinating livestock management goals in order to allow management across ranges with few limits (25-25). Other comments were generally focused around the impacts of livestock on ecosystem health. One respondent was concerned that livestock grazing and trampling are the major causes of damage to arid upland plant communities and western ecosystems as well as the major factor preventing recovery of these systems (21-193). This respondent was further concerned that livestock grazing had fundamentally altered (and continues to alter and degrade) native plant understories, stating that by creating abundant areas of bare soils, livestock grazing creates ideal conditions for increased densities of young trees which then become the fire-prone doghair thickets of young trees that create ladder fuels and other incendiary conditions in arid forests (21-202). This respondent was concerned that the utilization limits allowed (typically 40, 50, or 60 percent utilization limits) contribute to degradation of native forage, and plant community changes that result in fuel and weed problems. This respondent requested that the BLM provide information regarding how such use limits have affected any hazardous fuels or rangeland health problems in the 3-Bars Ecosystem (21-159). Another individual suggested that each allotment be treated uniquely as each is in a different state of incline or decline (19-3).



Many of the comments received consisted of requests for further information, both current and historic. One individual requested that information be included in the EIS regarding historical livestock grazing authorizations for the 3-Bars Ecosystem at the passage of the Free-Roaming Wild Horse and Burro Act of 1971 (8-16); historical changes in livestock authorizations for each allotment affecting the 3-Bars Ecosystem since the implementation of the current land use plan including increases or decreases in forage allocation adjustments and seasons of use (8-37); estimates of the percentage overlap for each livestock allotment occurring within the 3-Bars Ecosystem boundaries (8-38); current pastures for each livestock allotment, authorizations, and seasons of use (8-39); and the percentage of the planning area that the BLM estimates livestock operations are contributing to degraded range conditions, reduction in plant diversity and vigor, and failure to achieve desired plant community conditions (8-43). This respondent also requested inclusion of a 10-year history of any temporary non-renewable grazing authorizations approved and implemented in the planning area by allotment and total number of Animal Unit Months issued for this period under Temporary Non-Renewable status (8-41). Further, the respondent requested a 10-year history of actual grazing use within each allotment affecting the planning area versus combined totals and/or averages in order to determine actual use, trend and site specific impacts (8-42). Another respondent was concerned that not allowing hot season grazing would end operations (25-30).

One individual requested classification of permittees who live on their base properties, are involved in hands-on management of their operations, derive their primary income from these livestock operations, and contribute revenue flow in Nevada versus permittees who live away from base properties, manage livestock operations by proxy, and may not contribute to revenue flow in Nevada (8-47). This respondent requested that data be provided for all forage production and carrying capacity analysis completed within each grazing allotment since the implementation of the current land use plan (8-63). Finally, this individual requested the data and methodology used to distinguish forage consumption rates and utilization levels between cattle, sheep, wild horses, and big game species such as mule deer, pronghorn, elk, and/or bighorn sheep be provided (8-66).

Another respondent requested that the BLM provide information on the current average weight of cows, calves, and sheep turned out on the allotments in the 3-Bars Ecosystem to determine appropriate forage allocations (4-46). One respondent requested that the BLM provide a full and detailed analysis of all grazing permits that may be held by gold mines, molybdenum mines, or other mines. This respondent suggested that all livestock monitoring data, actual use data, basis for stocking, current Ecological Site Index, current capability and suitability, and a current "capacity" analysis be factored into allowing any continued grazing use (16-2). Another individual requested that the BLM provide scientific information and analysis necessary to understand the role of livestock in causing fuels problems, including the role of ongoing livestock grazing across these lands (21-108). This respondent requested data on the current suitability, capability, carrying capacity and productivity of lands in affected watersheds for livestock in order to understand the current status and causes, of any understory deficiencies, rangeland health, or fuels problems as well as to understand the environmental risks of the potential actions here (21-122).

This respondent was very concerned with continued grazing within the 3-Bars Ecosystem, especially following any kind of treatment, and requested a large amount of information regarding livestock use and impacts. One respondent was concerned that BLM post-fire or post-treatment policies do not adequately address the impacts of livestock and do not provide for protections necessary to slow down or halt weed invasions and alterations of the fire cycle, noting that the current scientific literature overwhelmingly shows that livestock grazing is a primary cause of problems affecting native vegetation, including altered fire frequencies and altered fuel situations (21-129). This respondent noted that it is outside the historical range of variation to provide water for livestock where there is no surface water, stating that there needs to be more areas without livestock water rather than fewer (21-57). This respondent was also concerned that much lower levels of livestock utilization are required to provide adequate nesting cover for sage-grouse. This respondent requested that the BLM review the papers by Dr. John Carter reviewing current range science (21-122). This individual requested that agencies address livestock grazing as a casual agent in fire regimes and analyze the impacts of livestock grazing in causing "unnatural" fire cycles, as well as the impact of livestock grazing on the ultimate outcome and effectiveness of any treatments. This respondent was concerned that without including significant changes in livestock grazing practices, including reduced stocking rates and/or removal of livestock from lands at risk to cheatgrass invasion, or where restoration actions may be undertaken, and more protective levels and standards of use, the agency would be wasting taxpayer dollars on this effort (21-130). This respondent requested that the BLM fully address livestock as a casual agent in ecosystem disruption, and alteration of composition, structure, and function



of native ecosystems in the arid lands including all direct, indirect, and cumulative impacts of past and ongoing livestock use on rangeland health problems associated with fire, hazardous fuels, and flammable weeds. This respondent requested that a wide range of up-to-date livestock management alternative components accompany all alternatives in a new NEPA analysis, including analysis of a range of reductions in stocking rates, and their effects on ecosystem processes, fire, fuels, weeds, restoration, and rehabilitation efforts (21-131). Further, this respondent requested that the BLM fully update the livestock grazing and vegetation allocation components of all affected grazing allotments in conjunction with the restoration process, based on a current capacity, capability, and suitability model (21-119). This respondent requested information regarding current livestock stocking rates (average actual use as well as active permitted use) in all pastures, in all treatments areas of the allotments, and in all the vegetation types/communities; utilization levels allowed in all allotments and in all vegetation types; presentation and analysis of all monitoring data (utilization, use pattern mapping); season of grazing use; condition of soils, waters (ground and surface), watersheds and vegetation communities; condition of habitats related to stocking rates and levels of use allowed; trailing activity and effects; and all facilities, water hauling, silt/mineral sites and associated roading and other disturbances (21-133).

This respondent was concerned that current stocking rates in many areas, and the actions needed to sustain them, results in grazing unsuitable lands and is a major contributing factor to rangeland health woes, and fuels and weeds problems (21-156). In order to address this concern, this respondent requested that the BLM provide an evaluation of the “capability” of these lands by determining the number of acres that are “capable” of livestock grazing, based on specific slope, distance from water, rockiness, and other factors. This respondent further requested that from the “capable” lands, a determination be made about which acres are “suitable” for grazing, based on considerations such as special management areas, fragile ecological resources, or other considerations. This respondent then requested that after this analysis is done, then the remaining lands that are both “capable” and “suitable” be assessed to determine grazing levels by setting proper stocking rates and that these be considered as part of the determination under various alternatives of the impacts or effects of the outcomes of any of the many large-scale disturbance treatments or fuels projects such as this. This respondent is concerned that to effectively address any fuels problems, the agency must get to the root of the problem, which this respondent sees largely as chronic livestock grazing disturbance (21-155).

This respondent recommended a complete cessation of livestock grazing within the 3-Bars Ecosystem. This respondent requested that the BLM fully analyze cessation of livestock use and grazing permit retirement as part of the treatment analysis that is conducted. This respondent requested that federal fire funds or Clark County land sale funds be used to buy out grazing permits on lands that are treated, or determined to be at risk to weed invasion, or determined to be at risk or crossing thresholds from which recovery may not be possible. This respondent requested that the inextricable link between fire/fuels problems and livestock grazing effects be assessed (21-132).

This respondent was also concerned that agency offices shift may livestock use elsewhere, and thus the impacts of livestock on watersheds, wildlife, and habitat are magnified and amplified to the detriment of native species and the ecosystems upon which they depend. This respondent was concerned that the BLM has not assessed the impacts of these shifted Animal Unit Months (21-277). Another respondent was concerned about livestock off the land as well as water rights (25-31).

### **3.3.11 Wild Horses**

A few respondents provided comments related to wild horses. One respondent requested that historical data or documents linking the current wild horse population to this piece of Americana and western culture be provided (8-78). This respondent requested that an estimate of miles of fencing within the planning area, the estimated miles of fencing proposed for removal, the estimated miles of “temporary” fencing and when it was erected, the miles of fencing in Heard Management Areas (HMAs) that may be restricting free-roaming behavior, and the miles of fencing surrounding water sources in the planning area be included in the EIS (8-4). This individual requested the EIS to include information related to the percentage of overlap from each livestock allotment affecting each HMA (8-7); the removal history of wild horses from each HMA since 1971 (8-8); the history of fertility control implemented within each HMA (8-9); the historical background and herd descriptions of each HMA (8-10); the topographical range of wild horses seasonal and migratory routes occurring in the proposal area (8-11); the areas of conflict, if any, between livestock,



wild horses, and big game for resources (8-12); the results of any genetic tests performed on the wild horses in the planning area (8-13); known historical movements, if any, outside the current HMA boundaries (8-14); and the percentage of the planning area BLM estimates wild horses are contributing to degraded range conditions, reduction in plant diversity and vigor, and failure to achieve desired plant community conditions (8-17). This individual requested clarification and additional information regarding the BLM desired wild horse population levels in the planning area (8-20). Further, this respondent requested an explanation of how the desired “average” body condition of wild horses occurring in the area would be met, and clarification of whether this average would allow wild horses to be managed to considerably higher levels of body fat in some instances. This respondent also requested data as to the percentage of wild horses removed from the range that have fallen under a body condition score of 5 (8-23).

One respondent was concerned that the wild horse conditions desired by the BLM include maintaining the wild horse populations in the Whistler Mountain, Fish Creek, Rocky Hills, and Roberts Mountain Herd Management Areas below the established Appropriate Management Levels (20-1). This respondent did not believe that the 3-Bars Ecosystem could not support the herd of wild horses (20-8), or that the wild horses are degrading the rangelands. This respondent was concerned that an excessive number of cattle are the culprit of degradation and the way to ensure adequate forage resources for the wild horses is to stop leasing the rangelands for cattle grazing (20-9). Further, this respondent was concerned that the claims that wild horses are starving and suffering from “poor body conditions” are false, stating that they have seen documented proof of healthy, even fat, horses being rounded up (20-11). Additionally, this respondent was also concerned that chasing the wild horses is cruel, stating that they are chased for miles over hazardous terrain and in extreme weather causing miscarriages in pregnant mares and babies’ underdeveloped hooves to fall off (20-12).

### **3.3.12 Wilderness and other Special Areas**

A couple of comments were related to wilderness and other special areas. One individual inquired as to the estimated length of time it would take to inventory the complete location and historical landmarks associated with the Pony Express Trail (8-79). Another respondent was concerned that the mapping in the scoping document shows that the 3-Bars Ecosystem includes the Wilderness Study Area. This respondent requested that detailed mapping of all roadless areas greater than 2,000 acres and also 5,000 acres be provided. This respondent also requested that these areas be protected from all motorized intrusion (21-44).

### **3.3.13 Cultural Resources**

One individual provided comments on cultural resources. This respondent was concerned that the project crosses over valuable mineral deposits where the Pony Express Trail crosses the Eureka-Battle Mountain Mineral Belt (24-1). This respondent stated that the Pony Express trail was a direct consequence of mining and that the mining connection to the Pony Express goes back to the trail’s inception in the 19<sup>th</sup> century (24-2). This respondent further stated that when the trail was active, riders were simply detoured around mines and the same should be done today (24-4).

### **3.3.14 Social and Economic Values**

A couple of individuals provided comments related to social and economic values. One commenter requested that revenue generated from each livestock operation within the planning area be included in the EIS in order to determine their contribution to the local and state economy. Additionally, this respondent requested that the estimated cost of administering management for each allotment be included to determine the costs and benefits to the taxpayer as a whole (8-48). This respondent also requested that the EIS include the number of people employed by mining operations in the planning area as well as any projected labor growth from expansion activities in the reasonably foreseeable future (8-54). Additionally, this respondent requested that the EIS include estimated annual revenue generated for the State of Nevada due to the employment of those working on a daily basis in the mining operations or exploratory efforts, their estimated contributions to the local community and economy (8-55), and the annual revenue generated for the State of Nevada based exclusively from the companies issued the mining permits (not including employees and/or labor contributions) and data on annual tax contributions from these mining efforts to the State of Nevada (8-56). Another respondent was also concerned with viability of the local economy as it is dependent on access to public lands for mining and grazing. This commenter noted that private land makes up only 13 percent of Eureka County’s land area,



making the economy dependent on public land. Further, the commenter stated that government programs aimed at offsetting the economic limitations of public land counties (e.g., payments in lieu of tax) do not address the core social and economic issues of the counties (15-1).

### 3.4 ENVIRONMENTAL CONSEQUENCES

One respondent provided a few comments regarding the environmental consequences in general of the project and requested further information and/or analysis of some specific aspects of the project. This respondent was concerned that there was a lack of analysis of the impacts of the various alternatives on the integrity of, ecosystem processes within, an important and special features of Wilderness Study and other un-roaded lands; relevant and important values of Research Natural Area/Areas of Critical Environmental Concern (ACEC)-worthy lands; and integrity and values to society and watersheds of roadless lands. This respondent was concerned that the proposal may cause irreparable harm to values ranging from recreational, spiritual, and aesthetic values, to un-roaded watersheds that do not currently release large amounts of road, or disturbance-caused sediment into streams (21-152). This individual requested that the BLM conduct assessments of the risks of treatment failure/habitat loss, watershed drainage, loss of surface flows, disturbed microbiotic crusts, increased depletion, and weed invasions, under various post-treatment grazing strategies and across a broad range of alternatives. This respondent was concerned about the risks of seedling weakening and depletion if grazing is allowed to resume too soon after treatment (21-283). This respondent requested that the BLM strive to minimize the use of chemicals in wild land settings. This individual was concerned that an increasing segment of the public has health problems related to chemical sensitivities and chemicals may leach into water or be blown with eroding soils onto other sites. This respondent noted that wind erosion is far more significant in post-fire environments, as dark bare soil surfaces heat up, with the result of funnel-cloud erosion and dust devils blowing soils away. This respondent was concerned that cancer, respiratory problems, and many other human health effects of herbicides and other treatment chemicals are well known (21-284). This respondent requested that the BLM provide extensive analysis of impacts of any post-fire salvage logging or thinning including the impacts to soils, vegetation, weed invasion risks, wildlife habitats, fisheries, and recreational and other uses of the affected lands. This respondent further requested information regarding impacts to, and current conditions of, lands where post-fire salvage logging or thinning has occurred in the past (21-293). This respondent was also concerned that many factors in the 3-Bars Ecosystem have impacted lands (21-216). Another respondent requested that a full detailed analysis of the direct, indirect, and cumulative effects of all activities be undertaken (16-5).

#### 3.4.1.1 Assumptions for Analysis

A number of comments were received regarding assumptions for the analysis. One respondent was concerned with making sure the requirements of the EIS process will be met. This individual stressed that the EIS should include an assessment of the impact of projects on each of the 10 categories of resource concerns identified in the scoping summary and an assessment of the interaction of these resources upon one another (15-10). Further, this respondent suggested that the EIS should also consider a range of use for each resource as well as innovative management rather than a simple dichotomy of use which is damaging to the resource versus protective of the resource by limiting or eliminating use (15-13). This respondent noted that objectives appear to differ between different resources, and the EIS must balance these differing demands and provide users sufficient information to properly balance demands on a project basis (15-15). This individual also suggested that the EIS include site-specific analysis, and for projects that cannot be evaluated in the EIS, the EIS should provide sufficient information for projects to adequately be evaluated on a site-specific basis (15-9). Another respondent stated that the scoping document only briefly outlined the potential treatment methods that might be used in implementing the restoration projects envisioned and requested that that draft EIS be site specific as to the treatment to be proposed and where it would be applied. This respondent stated that this is necessary to fulfill the site specific analysis required by NEPA as well as to allow for analysis of the cumulative effects and impacts from the set and series of projects across the landscape in a spatial and temporal context (4-29).

A couple of comments were related to concerns with the information provided in the scoping document. One individual was concerned that the scoping document creates the impression that the entire 3-Bars Ecosystem is in poor condition, whereas portions of the ecosystem are in fact functioning. This respondent suggested including the conditions of both the functioning and degraded areas in future documents (15-18). Another respondent requested that the BLM provide



an analysis of the positive values of clean and abundant water, pine nuts, and recreational uses of restored springs where cattle water piping is removed and more water left naturally on the ground (21-291). This respondent also requested that the BLM assess impacts of poor pre-treatment land conditions and management on the outcomes of any post-fire recovery, and the likelihood of success of any post-fire rehabilitation (21-292).

One respondent was concerned with the use of chemicals in the 3-Bars Ecosystem and requested that the BLM not rely on its Vegetation Treatments on BLM Lands in 17 Western States Programmatic EIS and Programmatic Environmental Report (PER) document for this project, stating that the chemicals, and especially the multiple types of chemicals in the same landscape, were not adequately examined in that process. The respondent was concerned that many of the chemical effects were not tested in a wild aridland setting and requested that information on wind transport effects of Oust and its relatives, chemical potency in non-target areas, and other adverse effects of chemical use in wildlands be fully examined, including the exposure of wildlife, aquatic species, wild horses, and recreational users to these chemicals. This respondent was concerned that Plateau reduces forbs and harms remaining natives (16-37). This respondent requested that the BLM fully examine the adverse ecological impacts of all chemicals to be used in conjunction with this or related projects on BLM lands, including the effects on grasshopper and cricket poisons. This respondent also requested that BLM examine in depth all of the information on methods of treatment (chopping, burning, use of herbicides, mowing, crushing, hacking, etc.) that were not analyzed under NEPA in the Vegetation Treatments PER (16-44).

### **3.4.2 Land Use**

A few comments were received regarding the use of lands within the 3-Bars Ecosystem. One respondent was concerned that the project would place almost 1,200 square miles of country “off limits” to further development. This respondent was concerned that the project could have a negative impact on the economy and people of central Nevada (7-2). Another individual encouraged the BLM to work to balance the requirements and demands of multiple users of the land in line with federal multiple-use policies, making sure that the 3-Bars Ecosystem does not become the exclusive use area of any one group, be it conservationists, miners, recreationists, ranchers, or hunters. Additionally, this respondent urged the BLM to consider and balance the interests and demands of the non-human users of the area, including wildlife and wild horses (15-2). This respondent further requested that economic, social, and environmental sustainability be considered in the EIS, and treated as independent, not mutually exclusive goals (15-3).

One comment stated that the EIS should include consideration of the objectives of Eureka County’s plans and policies, an assessment of the interrelated impacts of these plans and policies, a determination of how the proposed action should deal with the impacts identified, and consideration of alternatives to resolve conflicts among the plans. Further, where the BLM’s plan or proposal may not be consistent with the local plan, the EIS should explain how and why its plan is not consistent and explain why it cannot be made consistent with local plans (15-6).

Additionally, one comment was submitted requesting verification that there would be no conflict with the proposed project and an existing high pressure pipeline which crosses Battle Mountain, Nevada (1-1).

One individual requested that the EIS include the projected percentage of acreage from historical and current mining operations and exploratory activities that have contributed to soil compaction and erosion in the planning area and if any additional expansions are projected in the reasonably foreseeable future, the total acres expected to be impacted (8-53).

### **3.4.3 Climate and Air Quality**

One respondent provided a few comments related to impacts of climate change and air quality. This respondent requested that the BLM provide a risk analysis and examine a worst-case scenario related to weed invasion of “treated” hotter, drier, more desertified areas, both with and without grazing and trampling disturbance resulting from treatments. This respondent requested that the adverse effects of climate change and increasing temperatures, including on weed problems, alterations in runoff, and reduction in perennial flows, and changes to upland conditions, be analyzed (21-24). This individual requested that the BLM examine the important value of large un-grazed areas to better buffer lands



and sensitive and listed species from climate change adversity (21-25). This respondent questioned whether 3-Bars Project actions may actually promote desertification, global warming, and climate change processes (21-69). This respondent requested information on the current degree of desertification that exists across the District and adjacent lands and how climate change may exacerbate effects of deforestation and/or sagebrush removal or eradication effects. This respondent suggested that the BLM review Sheridan (1981; Sheridan, D. 1981. Desertification of the United States. Council on Environmental Quality. Washington, D.C.), Dregne (1986; H.E. Dregne. 1986. Desertification of arid lands. *In* Physics of Desertification [F. El-Baz and M. H. A. Hassan, editors]. Dordrecht, The Netherlands: Martinus, Nijhoff.), and Steinfeld et. al. (2006; Steinfeld, H., P. Gerber, T. Wassenaar, V. Castel, M. Rosales, and C. DeHaan. 2006. Livestock's long shadow: Environmental issues and options. Food and Agricultural Organization of the United Nations. New York, New York. ) in relation to this question (21-80). This individual requested that the BLM fully factor in the effects of global warming and climate change, and increased risk of site desertification and weed invasion following treatment, grazing, or other and overlapping disturbances (21-157). Finally, this respondent requested that the current air quality be assessed and the impacts to air from multiple or overlapping treatments be assessed (21-260).

#### **3.4.4 Topography, Geology, and Minerals**

One respondent was concerned that there are valuable mineral resources where the Pony Express trail crosses the Eureka-Battle Mountain Mineral Belt. This respondent requested that preservation of the Pony Express trail not be used as a justification to stop exploration and mining activities, as this trail has historically been used for mineral extraction and even a very large mining operation would only affect approximately 4,000 feet of the trail (24-3, 24-5). This respondent was concerned that the historical path is being treated as more important than modern economic activity, which would positively affect the lives of residents of the region (24-6). This respondent stressed that the conflict with the trail needs resolution and was concerned that exploration along the trail is in a "land of limbo" due to uncertainty (24-8).

#### **3.4.5 Soil Resources**

One respondent requested that the impacts of multiple or overlapping treatments on soils be assessed (21-259). This respondent requested that BLM provide a full and detailed list including locations of all sites that are claimed to be reference areas in soil surveys for the region as this respondent wishes to visit these sites and verify whether they are forested sites (21-31).

#### **3.4.6 Water Resources (Quantity and Quality)**

A few comments were received regarding water resources, with the majority of these comments requesting clarification of aspects of the project, requesting additional information, or suggesting potential mitigation measures. One respondent requested a description of the kinds of water developments that are being considered for the planning area, projected water flow production rates, and availability to wild horses, wildlife, and livestock. This individual also requested that the creation of man-made natural habitats capable of supporting a variety of wildlife such as insects, reptiles, bats, birds and small mammals to compensate for continued habitat loss, fragmentation, and development that has cumulatively impacted the entire West be considered (8-68). This respondent also requested that the EIS include the number of miles of stream located in the 3-Bars Ecosystem that are being considered and/or proposed for fish re-introductions, the necessary mitigation measures to ensure fish populations reach objectives, and the estimated length of time to reach these goals (8-34). Further, this respondent requested that a timeline be provided for what constitutes short-term and long-term trend objectives as well as estimates of how much time each alternative, management plan, and/or action would require after being implemented in order to achieve the desired conditions (8-60). Another respondent requested information on the current level, condition, and demands on the aquifer underlying the 3-Bars Ecosystem that may be deforested, as well as how this is projected to change with proposed Southern Nevada Water Authority aquifer depletion in the region, various mines depleting waters, oil and gas and other energy, and de-watering and aquifer mining proposals. This respondent additionally requested information on whether the removal of woody vegetation would exacerbate site drying and desertification processes (21-107).



A couple of comments were also received related to concerns of impacts of the project. One respondent was concerned that many herbicides migrate into soils and infiltrate water supplies (21-221). This respondent was also concerned that new water sources lead to rapid disturbance and depletion of lands in the areas surrounding them, placing additional stress on native ecosystems and dependent species (21-272).

### **3.4.7 Wetlands, Riparian Areas, and Floodplains**

A couple of comments were related to concerns regarding wetlands, riparian areas, and floodplains. One respondent was concerned that both riparian and upland areas are undergoing desertification processes, which ultimately make them less resilient and less likely to be able to be restored to native systems (21-188). Another individual noted that the Callaghan Complex Wild Horse Gather Plan (September 2008) states that new grazing rotation plans had been issued “to reduce or eliminate hot season use of riparian and wetland areas in many of these allotments.” This respondent noted that she was unable to locate significant reductions or changes for these allotments by reviewing the Allotment Authorization Plans found on the BLM’s website, and requested that the BLM clarify which riparian and wetland areas it was referring to, and detail the changes that were implemented. This respondent also requested that any additional riparian and wetland meadows that are still receiving hot season use be included (8-69). Another respondent requested that the BLM remove horses, cut trees, and construct enclosures in meadow areas (25-28).

### **3.4.8 Vegetation Resources**

The largest number of comments received was related to vegetation resources. One respondent stressed that moderately degraded communities can become severely degraded if preventative action is not taken (21-183).

A number of comments were focused on non-native vegetation. One individual requested that the projected percentage of invasive and/or exotic plants occurring in the planning area from mining operations be included in the EIS (8-52). One respondent was concerned about the BLM underplaying the risks from cheatgrass and requested information on the costs of ongoing herbicide treatments, the non-target effects of these treatments, and the indirect and cumulative effects of these treatments (16-39). Another respondent was concerned that cheatgrass, red brome, Sahara mustard, and other invasive plants are becoming increasingly common in Nevada, stating that these species tend to become more common along linear features such as roads and trails because of transport of seed from infested areas to non-infested areas (4-22). Another respondent was concerned that mowing of sagebrush is causing rampant cheatgrass invasion in areas across Nevada, citing the BLM Elko District Owyhee fuel breaks and Battle Mountain Austin BLM “greenstrips” as examples (21-231). This respondent requested that the BLM address the role of continued livestock grazing post-treatment contributing to weed invasions (21-229). This respondent also suggested that all exotic crested wheatgrass seedlings with less than 15 percent sagebrush cover be targeted for increased sagebrush and that any cheatgrass or crested wheatgrass monoculture of dominated areas should be targeted for restoration with natives (21-144). Another respondent requested that the BLM avoid burning in areas with large amounts of cheatgrass (25-35).

One respondent provided a few comments related to herbicides and other chemicals. This respondent was concerned about the potential negative impacts of herbicides and requested that the agency reject any further analysis of tebuthiuron (an herbicide) or other harmful chemicals. This respondent drew attention to a situation in Idaho where federal agency application of the herbicide Oust blew into neighboring fields and inhibited crop germination, as well as instances where Oust has created “dead zones” in areas such as Rice Canyon (Burley area) and the Jarbidge Wilderness Study Area (21-222). This respondent was concerned that tebuthiuron and other chemicals are being aggressively promoted by Dow-Elanco and used by the BLM Ely and Winnemucca Districts to kill sagebrush. This respondent was concerned that these chemicals may move into water, kill non-target species, and kill vegetation over long periods of time causing adverse impacts for a decade or more to animals that rely on burrows or waters (21-224). This respondent stated that she had often encountered areas on public lands, such as white top or knapweed sprayed areas, where all native vegetation has been killed by herbicides, but weeds continue to thrive (21-226). This respondent requested that the BLM assess the likelihood that treatment disturbance would increase invasive species for which chemical control would be largely ineffective (21-227).



A couple of respondents provided comments regarding vegetation thresholds. One respondent requested that the BLM make every effort to keep plant communities from crossing thresholds where topsoil has been lost, dominant species have become locally extinct, and introduced species have become so dense that weedy annuals become the climax species. This respondent noted that these lands require massive amounts of funding and elaborate treatments to attempt restoration. This respondent also suggested that this is the proper application of a “state and transition” model, and not the University of Nevada Reno/Eastern Nevada Landscape Coalition version of the model (21-182). Another individual suggested that the analysis should evaluate the costs and probability of success for transitions of communities back across thresholds, focusing restoration first on economically viable actions with the highest probability of success (15-27).

One respondent was concerned that altering vegetation opens paths for development and may eliminate sensitive species, facilitating expanded mining and other exploration and development (21-6). Additionally, this respondent was concerned that creating more bare, open areas through burns and chemicals would only propel expanded roading and weed infestations, especially with chronic livestock grazing disturbance (21-43).

A large number of comments were related to sagebrush. A couple of respondents were concerned with the destruction of sagebrush. One requested that sagebrush not be burned (25-14). Another stated that the last thing that any sagebrush in the 3-Bars Ecosystem needs is to be thinned, treated with herbicides, burned, or otherwise destroyed (21-47). This respondent requested that the BLM act to restore sagebrush in areas where it has been removed or highly degraded in lower elevations and valley floors, not by burning trees on 60 degree rocky slopes of ranges (21-37). This respondent was concerned that low elevation sagebrush-steppe communities may require a decade or more, and repeated seeding efforts during periods of favorable weather, to allow minimal re-establishment of some native vegetation, noting that sagebrush recovery may take 100 to 200 years. This respondent also requested that the BLM address these necessary periods of rest, and not base its actions on the convenience of the livestock industry (21-287). Another respondent was also opposed to any further alteration of sagebrush (16-21), noting that sagebrush is critical for sage thrasher, loggerhead shrike, Brewer’s sparrow, sage sparrow, and sage-grouse nesting and where sagebrush has been destroyed and other woody vegetation has been piecemealed in, sagebrush habitats have been lost, reduced, fragmented, simplified, or increasingly desertified and invaded by weeds (16-22). This individual was concerned that purposeful destruction of sagebrush has been conducted with funds from the sale of BLM lands in Las Vegas and occurred in areas targeted by the Southern Nevada Water Authority for aquifer/water mining facilities (pipelines, wells, well fields). This respondent requested that the full direct, indirect, and cumulative effects of all such treatments in Nevada and sagebrush dependent species be examined (16-23). Further, this respondent requested that the BLM fully examine the outcomes and current ecological conditions of all its existing sagebrush alteration/destruction projects, stating that removal of sagebrush creates hotter drier sites more prone to cheatgrass (16-35).

Other comments were focused on sagebrush monocultures. One individual suggested that the EIS incorporate assessments of sagebrush monocultures in terms of site potential, and noted that ecological site descriptions provide analysis and discussion of dynamic stable states such as sagebrush monocultures (15-29). Another respondent was concerned that eliminating “sagebrush monocultures” is not a legitimate ecologically based goal, that a mixture of sagebrush age and condition classes are needed across the landscape for ecological health and for sagebrush obligate species such as the sage-grouse and pygmy rabbit (4-20). Another individual stated that current models show that sagebrush dominated communities (up to the point of near monocultures) are a predictable result of long-term lack of fire regardless of other management on the site and while this may be accelerated by improper management, the progression to shrub domination would not be reversed by a change in livestock management (15-30).

A few comments were related to general woody vegetation types. One respondent was concerned that the thinning, killing, removal, or eradication of native woody vegetation in Nevada may in part be driven by, and aimed at, trying to increase “yield” of diminishing waters (16-24). This respondent was concerned that mature forests and sagebrush, which act to moderate site conditions (making sites more moderate, cooler, and may aid in moderating weather and holding water on-site), are perhaps being destroyed to reduce competition for water in systems under great stress from both grazing, mining, marginal hay agriculture, or other aquifer depleting and drawdown activities (16-25). Another respondent was concerned that it could be decades or longer until woody vegetation may re-grow to its former density or occurrence and in many cases such re-growth may never be achieved if weeds invade, if accelerated soil erosion



occurs and the potential to support vegetation becomes diminished, if concentrated livestock use occurs in cleared and opened areas, or if cheatgrass or other weeds come to dominate the hotter drier livestock degraded and desertified cleared sites. This respondent was concerned that any of these conditions would promote more frequent flashy fires as cleared or thinned sites would dry out earlier and the fire season would become longer. This respondent was also concerned that cheatgrass, which thrives in hotter and drier sites, would increase flammability (21-12).

A number of comments were related to pinyon-juniper and other woodlands. One respondent was concerned that trees would be killed in areas where that are actually recovering from earlier deforestation during past mining booms, or as a result of past BLM chaining, fire use, use of herbicides, or other treatment (21-26). This respondent was also concerned that there may be a bias against forested vegetation from range departments at some colleges and requested that a broad range of foresters be consulted, including Dr. Ron Lanner of California, Drs. William Baker and Shinneman of Wyoming, and others, to determine just what natural processes and any natural range of fire intervals may have been. This respondent noted that it is increasingly understood that catastrophic fires are natural in pinyon-juniper forests and attempts to alter this by widespread manipulation are unnatural, stressing that keeping lands in the best shape pre-wildfire may be the best insurance against “unnatural” circumstances (21-32). Another respondent was concerned that the emphasis on reducing hazardous fuel loads and fuel ladders could result in an insensitivity to the need and value of persistent, old growth pinyon-juniper in the 3-Bars Ecosystem (4-16). This respondent stated that crown thinning/spacing may reduce fire hazard, but is also inconsistent with maintaining mature and old growth characteristics of persistent pinyon-juniper stands (4-19). Another respondent was concerned that BLM’s proposed use of fire to kill woody vegetation would have serious adverse weed and watershed effects on the Wilderness Study Area and that the BLM would fail to identify mature and old growth trees, or sites that are naturally forested (16-42).

Another respondent was concerned that management solely for pinyon may result in excessive killing of Utah juniper (16-16). This respondent was also concerned that mechanical disturbance and injury to trees may promote insects that kill remaining pinyon on a site, noting that this has taken place at Spruce Mountain as well as in association with wood chipping in the Mount Wilson area. This respondent suggested that only minimal removal of any pines should be allowed (16-16). Another respondent requested that BLM provide information on how deforestation, removal, or killing of trees and sagebrush would alter ecological processes on these sites and whether mechanical injuries to trees would promote insects or other problems (21-79). This individual also requested that tree removal be highly selective and consist of individual tree removal of smaller-sized trees. This respondent was concerned that fire or extensive soil disturbance paves the way for weedy species invasion in juniper communities and grazing causes juniper expansion by destroying and weakening native understories and altering natural cool burning fires and fires cycles (21-210).

A couple of respondents provided concerns regarding the science used in the scoping document and/or recommended alternative methods for the analysis. One respondent stated that the use of phase and condition class is based on current observable conditions rather than on an ecological basis and could lead to unintended negative consequences regarding ecological health and condition (4-17). Another respondent requested that the BLM provide a science-based (not livestock-forage-based, but ecological science-based) assessment of predicted establishment times for seedings of native vegetation under the various environmental settings and include in this predictions of “success” with and without livestock grazing. This respondent also requested that the BLM thoroughly describe and assess the ecological impacts of the existing seedings, including impacts on soils, waters, vegetation, weeds, native biota, recreational, and cultural concerns (21-264). Further, this respondent requested that BLM review Western Watersheds Project’s photos and emails for the BLM Ely District Cave Valley sagebrush destruction projects. This respondent was concerned that these projects were funded by sale of public lands under the Southern Nevada Public Lands Management Act and claimed to be restoration projects but instead destroyed occupied pygmy rabbit and sage-grouse habitats, opened up lands to increased weed invasions, and were located in the same area where the Southern Nevada Water Authority proposes to conduct various invasive activities related to aquifer mining (21-5). Another individual was concerned that the scoping document stated a desire to reduce pinyon-juniper stocking rates by “208 to 1,200 stems per acre” without clarification as to where and how extensive such a reduction would occur. This respondent was also concerned that there was no scientific justification provided for such a prescription. Further, this respondent was concerned that having zero trees per acre in important wildlife habitats within Phase I and II of woodland succession ignores concerns regarding persistent woodlands and may reduce the biological diversity and habitat niches that could otherwise be maintained with low tree stocking in brush and grassland types. This respondent was concerned that calling for “20 to 200” pinyon-



juniper trees per acre dependent on management objectives for a given stand is arbitrary and capricious and without scientific justification (4-18). Another respondent requested a detailed analysis of how BLM intends to achieve their desired results of production of the dominant and/or native perennial grass and forb components on all range sites and achieve a minimum of 50 percent of the range potential, as well as data as to what the range site potential is believed to be (8-75). This respondent also requested a detailed analysis of how BLM intends to promote upward trends in plant species frequency, production, and composition where the dominant and/or co-dominant species is missing, and data as to what objectives this includes, which species are the target species, and how long each plan is approximately expected to take to begin an upward trend (8-76).

A couple of respondents provided comments that were focused on vegetation treatments. One individual requested that the full direct, indirect, and cumulative effects of past, current, and foreseeable cutting, burning, hacking, chipping, and use of herbicides on all vegetation types, including trees as well as native shrubs must be examined on Nevada BLM and Forest Service lands including the adjacent BLM Ely and Elko District's lands (16-6). Another respondent was concerned that recent U.S. Forest Service reporting shows that with climate change, any claimed historical range of variation or effects of imposing a disturbance regime may have unpredicted consequences (21-206). This respondent requested that the BLM fully examine the likelihood that the proposed fuels and other "active" treatments, especially highly invasive treatments like mowing, fire, chemical treatments, and logging with heavy equipment moving cross-county, would result in a hotter, drier site more prone to weeds and wildfire than existed before (21-67). This respondent was concerned that vegetation efforts would be limited to disturbance-style treatments alone and requested that plant communities which are still healthy be managed in a way to effectively prevent their conversion to weed-dominated communities; prevent loss of biodiversity; prevent changes in their fire frequencies and intensities; and prevent the conversion shrub lands to woody thickets. This respondent requested that the BLM not plant hybrid cultivars or other non-natives and instead select local ecotypes of native plants. This respondent was concerned that many of the so-called "native" grasses being used have been extensively bred to produce livestock forage and no longer resemble any native grasses (21-148). This individual was concerned that fire is indiscriminant and non-selective and carries with it significant risks, including cheatgrass or weed invasion following burning. This respondent urged the BLM to avoid use of prescribed fire given observations of significant cheatgrass problems in burned areas in the BLM Ely District. This respondent was concerned that it appears agencies are willing to burn even when knowing that cheatgrass could dominate the post-fire landscape in order to provide more livestock forage, even though cheatgrass is not sustainable forage (21-99). This individual suggested that to prevent buildup of woody, highly flammable fuels in arid forests, these fuels need to be allowed to burn at times under carefully controlled conditions. This respondent requested that this take place only on lands that are not at risk from exotic species invasion in the post-fire environment. This respondent also requested that selective logging of old, fire-tolerant trees be halted and domestic cattle and sheep grazing be decreased or ceased (21-205).

The same respondent was concerned about development in the 3-Bars Ecosystem. This respondent was concerned that the proposal may seek to deforest steep slopes, forest sites, and other areas not essential to sage-grouse; may seek to kill and thin sagebrush to promote cattle and domestic sheep forage grasses, under the guise of fuels reduction, and end up promoting cheatgrass and other hazardous fuels; or may clear vegetation to aid mining exploration, geothermal or wind development, or utility corridors (21-94). This individual also requested information as to whether this project is linked to any biomass use or development in the future, noting that biomass from forests is highly controversial, could have negative impacts on carbon dioxide and climate change processes, and that burning results in chronic health impacts to the exposed human population (21-98).

### **3.4.9 Fish and other Aquatic Resources**

One respondent provided a couple of suggestions related to fish and aquatic resources. This respondent suggested conducting an inventory to identify barriers to fish passage for future projects (12-17). Additionally, this individual recommended minimizing (or intensively monitoring if implemented) hot season livestock grazing in allotments with riparian/fisheries values (12-21).



### 3.4.10 Wildlife Resources

A couple of respondents provided comments related to wildlife resources, the majority of which were concerned with the potential impact of the project on these resources. One respondent was concerned that all of the proposed actions actually represent habitat fragmentation and requested that a full and intensive landscape-level survey of the existing and foreseeable components of fragmentation be obtained for use in understanding the effects of various alternatives (21-70). This respondent requested that the EIS detail the full degree and severity of habitat degradation that is occurring so that the risk of adding new disturbance on top of the livestock desertification of the landscape and the plethora of harmful fences can be better understood (21-93). This respondent requested that all past and proposed treatments be assessed in relation to habitat fragmentation and the necessary mapping and analysis to do this be conducted. This respondent suggested Knick et. al. (2003; Knick, S.T., D.S. Dobkin, J.T. Rotenberry, M.A. Schroeder, W.M. Vanderhaegen, and C. Van Riper, III. 2003. Teetering on the edge or too late? Conservation and research issues for avifauna of sagebrush habitats. *Condor* 105:611–634) and Connelly et. al. (2004; Connelly, J.W., S.T. Knick, M.A. Schroeder, and S.J. Stiver. 2004. Range-wide conservation assessment for Greater Sage-Grouse and sagebrush habitats. Western Association of Fish and Wildlife Agencies. Cheyenne, Wyoming. Available at: <<http://sagemap.wr.usgs.gov>>) as references to understand the tremendous fragmentation that exists (21-234). This respondent was concerned that the project actions could have large-scale effects ranging from increased sedimentation of streams to major fragmentation of pinyon jay, Virginia's warbler, as well as sage-grouse, Brewer's sparrow and other sensitive species habitats. This respondent requested that the BLM address this fragmentation, on top of the fragmentation that already exists (21-241). Additionally, this individual was concerned that there are many harmful impacts of barbed wire or electric fences and other livestock facilities, including posts serving as perches for predators or observation points for brown-headed cowbirds and fences can cause avian mortality from collisions, including significant sage-grouse mortality (21-271).

This respondent requested information on whether the sage-grouse, pygmy rabbit, pinyon jay, loggerhead shrike, and other species in the 3-Bars Ecosystem would be present at levels that provide viable populations in the short, mid, and long term, especially under continued livestock degradation of habitats, utility corridor developments, mining and energy developments, and the spread of cheatgrass and other weeds that would be promoted by the various de-vegetation and deforestation schemes the BLM may be contemplating (21-65). Another respondent requested that the BLM disclose what set of management measures or guidelines the BLM would use to ensure protection of northern goshawks and other species that nest in the 3-Bars Ecosystem (4-8). One respondent questioned how the project would be impacted if sage-grouse were listed under the Endangered Species Act (25-4). This respondent noted that creating habitat for sage-grouse does not guarantee their use of this habitat (25-5). This respondent recommended thinning of pinyon and juniper along drainages to bring water down and open up corridors on the south and east side of drainages (25-19).

### 3.4.11 Special Status Species

A couple of respondents provided comments related to special status species. One respondent was concerned that destruction of sagebrush from this project would further alter, reduce, and fragment any connectivity between sage-grouse and pygmy rabbit populations across much of the District, and between the various sage-grouse Population Management Units (21-21). Another individual also noted that the proper size, shape, and design of vegetation treatments to create an edge effect would be critical in the success of the project for wildlife. This comment notes that vegetation treatments have historically been of a block design to get the maximum area treated for the lowest cost but have not benefitted wildlife to the extent possible (12-10). This respondent suggested that a thinning of the pinyon-juniper woodlands along creek bottoms may be beneficial to the survival of sage-grouse (12-13). Another comment focused on bighorn sheep, noting that there may be the opportunity for reintroduction of bighorn sheep into the 3-Bars Ecosystem if domestic sheep operations voluntarily relinquish their permits, a change of livestock occurs, or further research is conducted into bighorn sheep diseases (12-5).



### 3.4.12 Livestock

A large number of comments were received regarding livestock impacts on vegetation, water resources, riparian areas, etc., and are discussed in those resource sections. Several other comments were provided related to livestock. One comment encouraged the BLM to ensure that cattle grazing is permitted only to the extent that it does not jeopardize ecological goals and conditions (4-14). However, another individual encouraged the BLM to consider that all treatments would financially impact the grazing permittees more than any other affected parties (19-1). Another respondent questioned what ranchers are supposed to do when they have only one pasture and need to exclude livestock to restore treated land (25-39).

A couple of comments were received related to livestock use following treatment. One respondent was concerned that it does not make sense to spend hundreds of dollars an acre on “restoration” or 40 dollars an acre on prescribed fire treatment if livestock grazing disturbance would be allowed to re-enter these areas. This respondent was concerned that livestock are the primary cause of vegetation and fuels problems, and allowing them to return to treated lands would create a need for future treatments. This respondent also noted that if the federal agencies receive around 13 cents or less an acre annually for livestock grazing on these lands, allowing livestock to return does not make ecological or economic sense (21-195). Another individual was concerned that control of livestock following fire is uncertain and even a onetime trespass can greatly promote cheatgrass (16-40).

One respondent was concerned that any further development of waters would promote expanded livestock use in a landscape that already has a very high level of livestock disturbance. This respondent also noted that removal of livestock and facilities would greatly enhance surface water availability for horses and wildlife. This individual noted that they have seen more impacts due to cattle compared to horses (21-61).

### 3.4.13 Wild Horses

A number of comments were received related to wild horses. Many of these comments consisted of clarifying questions or requests for further information related to the 3-Bars Project. One comment requested clarification of the desired goal of “protection of Herd Management Area foaling areas during foaling season.” This respondent requested clarification as to what this entails, how long a time period it covers, and what actions would be taken to implement it (8-6). This respondent requested the inclusion of a detailed map or maps of fencing within the 3-Bars Ecosystem, which fences are targeted for removal, and the estimated time necessary to complete their removals (8-5). This individual also requested information be included in the EIS outlining any management actions that have caused disruption of free-roaming behaviors and/or reduced availability of critical resources, including when pasture gates are closed, OHV use, and roads built for mining exploration and/or operations (8-15). Another respondent requested that development of water for wild horses should be analyzed to consider impacts of such developments on wildlife and livestock (15-48), as well as including how development of water for wild horses meets state water laws (15-49).

A few comments were related to the approach of the project and concerns regarding the EIS. One respondent requested information on how determinations would be made regarding whether a fence is “unnecessary” and the criteria for the “necessity” of each fence (15-51). Another respondent was concerned that if the BLM fails to provide a Rangeland Health Assessment for Roberts Mountain, there can be no valid baseline data to make appropriate determinations and/or decisions for establishing an Appropriate Management Level range (which was included in the scoping summary). This individual questioned what other criteria can be used to establish an Appropriate Management Level range and how valid that criteria is for determining appropriate use (8-71). Another respondent suggested that wild horse management within the appropriate management levels be prioritized in order to avoid a high risk of failure of all other vegetative management actions within Herd Management Areas (15-46). This respondent recommended that the EIS provide more flexibility for managers to gather wild horses more frequently, if necessary, to maintain herds within Appropriate Management Levels (15-47). Another individual requested that the BLM implement plans to ensure that actions are taken in a timely manner to reduce and manage wild horse population numbers so that they would not jeopardize ecological goals and conditions (4-15).



One comment was also received providing suggestions for dealing with wild horses. This individual requested a description of how the BLM sees wild horses currently contributing to the value of the historic landscape and landmarks associated with the Pony Express Trail (8-81). This respondent suggested exploring alternatives that promote tourism and identify the contributions horses have made to the nation and western heritage (8-82).

One respondent provided a number of comments related to the protection of wild horses. This respondent was strongly opposed to any roundups of wild horses and burros on public lands, especially using taxpayer dollars. This individual considered any roundup and removal for the four wild horse Herd Management Areas (Roberts Mountain, Whistler Mountain, Rocky Hills, and a portion of the Fish Creek Herd Management Areas) to reduce the wild horse population unnecessary, believed this would leave the herd non-viable (20-2), and suggested that all captured animals should be released back into the rangelands (20-6). This respondent indicated that wild horses prevent wildfires by consuming the rough dry vegetation that cattle will not eat and enhance the ecosystem in many ways including seed dispersal, soil building, and accessing food and water with their hooves for both themselves and other species, unlike livestock who strip the land and destroy riparian habitats. This respondent stated that these animals should be left where they are can do nothing but improve the ecosystem (20-3). This respondent suggested that tearing down fences to give the wild horses access to water and conducting cattle roundups should be strongly considered as a means to deal with limited water resources (20-4). This respondent was concerned that the BLM is more concerned with “saving” game animals for hunters than preserving American icons, wild equines, from extinction by systematically eradicating them from their rightful range in favor of special interests. This respondent stated that looking into improving habitat for mule deer, pronghorn antelope, and sage-grouse, pushing to protect streams currently occupied by the threatened Lahontan cutthroat trout, and adding two new streams to stock them in, demonstrates this preference (20-5). This individual was concerned about the use of fertility drugs to render horses non-fertile and stated that the BLM should not use these drugs (20-7). This respondent was concerned that the management of the wild horse herds is pushing them toward extinction, stating that the BLM should stop “running them to death (or running their hooves off) in extreme weather” (20-10). Finally, this individual was concerned that BLM management of wild horses could lead them to extinction through zeroing out their herds, rendering them non-viable with fertility drugs, and stealing their rangelands for special interests (cattle industry, Ruby Pipeline, gold mining, uranium mining, and oil and gas drilling; 20-13).

One respondent was concerned that significant resource problems associated with additional range facilities are often the result of treatment projects. This respondent cited an example of a BLM project where cheatgrass was sprayed and a fence was built around the treated area but unwise fence construction led to the death of wild horses (21-223).

#### **3.4.14 Wilderness and other Special Areas**

One respondent provided comments related to wilderness and other special areas. This respondent was concerned that landscapes worthy of the ACEC designation are at stake, and irreversible losses may occur (21-96). This respondent was concerned that herbicide drift and weeds from treatment disturbance may significantly impair the Wilderness Study Area. This respondent was also concerned that expanded ease of livestock movement in cleared country may shift and intensify livestock use on the adjacent un-cleared/unburned wilderness lands (21-46).

#### **3.4.15 Cultural Resources**

One respondent suggested that most of the Pony Express Trail across Nevada should be preserved as part of its natural heritage, but every segment of it should not be regarded as off-limits (24-7). Another respondent was concerned with the Pony Express Trail and questioned how long the BLM proposes to protect the Pony Express Trail, once inventoried, from disturbance from wild horses and/or livestock and what mitigation measures are currently available for consideration (8-80).

#### **3.4.16 Recreation**

A few comments were received relating to recreation, with the majority of the comments focused on off-highway vehicles (OHVs) and other motorized uses. One respondent requested that the BLM establish a plan for properly managing the motorized uses of the area. This respondent was concerned that OHV use could damage and jeopardize



the restoration work that has been accomplished and suggested that the BLM identify legitimate open trails and close the rest and un-trailed land to motorized use, especially in riparian areas and where land disturbing activities have occurred (4-21). Another respondent was concerned with how this project might promote OHV use and new route proliferation. This respondent was concerned that the BLM cannot control OHV use and extensions of existing roads (21-92). This respondent was concerned that clearing and removing woody vegetation greatly opens up lands for expanded OHV use and just to the north of the 3-Bars Ecosystem is a controversial OHV trail network, some of which may even extend into the 3-Bars Ecosystem. This respondent was concerned that the 3-Bars Project would cause deforestation and sagebrush killing, opening up new lands and areas, and promoting more roading. This respondent was concerned that the current land use plan is so outdated that nearly all lands are open to OHV use and clearing and removal of trees and sagebrush would facilitate cross-country motorized use, disturbance of wildlife, disturbance to watersheds, and weed spread (21-11). This individual was concerned that roading and livestock facility roads are major contributors to fires. This respondent requested information regarding the location of all roads and what roads can be closed and restored as part of the project. This respondent requested information regarding how the project might increase or be related to OHV use in the 3-Bars Ecosystem and in central Nevada (21-125). This respondent requested information regarding the costs to recreational users of public lands of large-scale treatments and the impact this would have on the local and regional economy. This respondent noted that they had been repeatedly contacted by hunters, hikers, and birdwatchers who have had recreational outings or favorite recreational sites ruined by agency treatments (21-254).

### 3.4.17 Social and Economic Values

A number of respondents were concerned about the economic and social impacts of the project and stressed that the EIS include analysis of impacts on these resources (especially on a local basis). One commenter suggested that emphasis should be placed on local economies because actions that benefit the local economy would create social benefits for the citizens of Eureka County (15-11, 15-12). This respondent encouraged the BLM to consider design of projects that provide local economic opportunities and keep project dollars within the county when possible. The respondent suggested that careful project planning to avoid large allotments being closed to grazing or other access in order to facilitate a project on a small portion of the allotment could minimize the economic impact in the local community (15-56). Eureka County requested to be included in all of the EIS process, but particularly in the development and analysis of the economic section of the EIS. The commenter states that Eureka County is willing to provide data and feedback regarding historic uses of the land including grazing, timber, mining, and hunting as well as to collect and analyze information on increasingly important uses like alternative energy and recreation (15-7).

One respondent was concerned that the 3-Bars Project would hurt the economy and is a waste of taxpayer dollars. This respondent requested that the 3-Bars Project be ceased and staff reassigned (7-4). Additionally, one respondent was concerned that the 3-Bars Project would value the Pony Express trail over mining and economic activities (8-6). However, another respondent stated that employment would result from a diversity of active restoration being conducted, including hand cutting of trees in all instances where any mechanical action is done, removal of harmful facilities, closure and rehabilitation of roads, local seed collection, nurseries, and replanting of native vegetation in many disturbed sites. This respondent suggested that these actions replace the BLM helicopters, four-wheelers, and contracts for a hand full of large contractors with tree choppers. This respondent requested that a full and detailed ecological effects analysis, as well as economic effects analysis be conducted (16-13).

Other comments were related to the funding of the project. One respondent requested information on how the 3-Bars Project is being funded and what it would cost. This respondent was especially interested in whether the funding was coming from the sale of Clark County public lands or from tax dollars. This respondent was concerned that if the funds are coming from the sale of Clark County lands, that these funds were supposed to be used to acquire more public lands. This respondent questioned why the Clark County funds would not be used to buy out grazing permits (21-74). This respondent requested that the BLM provide an adequate cost-benefit analysis of all actions including the costs of all treatments under all alternatives (21-253). This individual requested that the BLM complete an analysis of the costs and benefits of the proposal or others that may be slated, including the per-acre dollar cost of all actions under all alternatives as well as the ecological costs and benefits of these actions (21-290). This respondent was concerned that



the neighboring BLM Ely District is contemplating large-scale alteration of landscapes across hundreds, thousands, or even millions of acres of Ely District lands (21-121).

This respondent was concerned that these alterations are based on assumptions derived from flawed range science perspectives and soil inventories that were flawed in their examination of forested versus non-forested sites (21-121). Another respondent requested that the EIS provide analysis of expected combinations of projects and tools for project proponents to use the EIS to properly analyze combinations of projects within the 3-Bars Ecosystem, including the cumulative effects related to the Mount Hope Project (15-14).

#### **3.4.18 Human Health and Safety**

One respondent was concerned that herbicides are known carcinogens (21-220).

#### **3.4.19 Cumulative Effects Analysis**

A number of comments were received related to cumulative effects within the 3-Bars Ecosystem. One respondent requested that the interrelationships of all ongoing or planned BLM activities in this region, including across ownership boundaries, be fully explored (21-262). Another respondent stressed the need to include cumulative effects analysis for expected combinations of projects within the 3-Bars Ecosystem, including effects related to the Mount Hope project (15-14). One individual requested that the BLM provide a full accounting of all fuels/fire/habitat projects conducted by the District in the past 10 years, as well as all older projects, and all foreseeable projects over the next decade, including land area and acreages to be treated (21-208). This respondent also requested that the BLM provide information to tie proposed treatments to lands in “low” ecological condition, are greatly at risk to cheatgrass invasion, or are already invaded, and assess the role (and ecological condition) of past treatments that have been conducted across the landscape, and past and current livestock management (especially under out-dated paradigms; 21-15).

A number of comments were received related to the cumulative effects of development and treatment in the 3-Bars Ecosystem. One respondent requested information on what historic mining activity occurred within the 3-Bars Ecosystem and surrounding watersheds (21-294). This respondent also requested information on what current or recent mining exploration proposals, mining, geothermal, oil and gas, or other exploration or disturbance has occurred in the 3-Bars Ecosystem (21-295). This respondent requested that the BLM research original surveyor’s records and other historical information to understand mining and other post-settlement deforestation, collect and analyze extensive baseline information on past fire and vegetation conversion or manipulation projects in the affected lands, and evaluate other factors that result in weed corridors, habitat fragmentation, and increased likelihood of human-caused fires or disturbance. This respondent also requested that data and maps be compiled and assessed that indicate where all past treatments have been conducted by state and federal land managers (and private where known) within the watersheds and allotments where projects are planned. This respondent was concerned that without understanding the past dispersion and impacts of treatments and disturbance across the landscape, an agency cannot adequately assess the impacts of various alternatives related to treatment, land health, and hazardous fuels reduction (21-136).

This respondent was concerned that the proposed projects greatly ignore the needs of important and sensitive species including pinyon jay, sage-grouse and pygmy rabbit, which are undergoing precipitous habitat losses in Nevada through relentless grazing and other disturbances, cheatgrass and weed effects, as well as a legion of new utility corridor, energy, mining, industrial geothermal or wind farm, and other proposals that the BLM must thoroughly analyze in a cumulative impacts assessment (21-83). This individual was concerned with large-scale regional development changes in central Nevada’s sagebrush and pinyon-juniper landscapes, with de-watering of aquifers to export water to Las Vegas, power lines, potential pollution from coal-fired power plants, and large-scale new and expanded mining disturbance for gold, copper and other minerals (21-97). Further, this respondent requested that the EIS examine the full array of habitat alteration, disturbances, and fuels treatments being proposed or that are foreseeable on U.S. National Forest and BLM lands in the region. This respondent noted that the BLM Ely District Resource Management Plan proposes massive alteration and destruction of nearly all the sagebrush communities as well as pinyon-juniper communities in the region and requested that the BLM review Map 4.5-1 of the Ely District Resource Management Plan (21-48).



This respondent noted that there is a proposal for a large molybdenum mine in Eureka near (or within) the 3-Bars Ecosystem and the McGinniss Hills geothermal development lies in this area as well. This respondent requested clarification as to whether most of the region is a Known Geothermal Resource Area (21-8). This respondent noted that the 3-Bars Ecosystem is just south of a portion of the BLM Battle Mountain, Winnemucca, and Elko District's lands that are being disturbed by hard rock mining, the 3-Bars Ecosystem is itself now targeted for molybdenum mining and geothermal exploration and development, and the Falcon-Gonder transmission line has adversely affected habitats in the past decade. This respondent requested that a full and detailed analysis be provided of the results of the Atamian et. al. (2006) and other studies on the effects of power lines in promoting sage-grouse nest predators, losses of leks, or sage-grouse population reductions over time (21-7). This individual requested that the BLM provide a detailed analysis of the reductions in sage-grouse that have occurred as a result of the Falcon-Gonder power line, what are the affected Population Management Units, and what populations in this region may no longer be viable (21-19). This respondent requested that the BLM provide a full and detailed analysis of the exact land areas, authorizations, and numbers of all mining and energy exploration proposals that have been undertaken in or near the 3-Bars Ecosystem for the past 20 years, including the dates and effects to resources. This respondent additionally requested that information be provided on where they have been conducted, where development has occurred, and where it is foreseeable (21-9). This individual requested information regarding how this project related to other agency actions, including development proposals that may be underway in or near the area; geothermal, corridor, wind, mining, oil and gas, exploration or development may be underway; and energy or power infrastructure or development slated to occur. This respondent was especially interested in actions which would take place in the area of various sage-grouse Population Management Units (21-106). This respondent was concerned that special status species habitats are faced with a broad array of escalating synergistic and cumulative impacts to habitats and populations ranging from development of new livestock infrastructure and expanded water-hauling to energy developments such as wind or geothermal and associated roading and disturbance across public and private lands of southern Idaho (21-243). Further, this respondent requested that recently discovered mercury contamination of lands from gold roasting operations be considered in this analysis (21-261).

This respondent requested clarification as to whether the BLM would potentially be burning trees so as to dry out standing trees for future use in biomass in relation to various energy developments. This respondent requested information as to the potential effects of development of a power plant on the affected lands and resources of the 3-Bars Ecosystem (21-296). This respondent was also concerned of the possibility of an expanded biomass plant in the Ely area and the possibility that the project may be tied to some development in the Battle Mountain area. This respondent requested that the BLM fully explain and reveal any biomass proposals, or power plant proposals, or discussion underway regarding this type of development (21-298).

### 3.5 REFERENCES

A few respondents made an effort to provide resources to the BLM for use in this analysis as well as requested clarification of resources used by the BLM in the scoping document. One individual noted that there were numerous comments throughout the scoping document referring to "data," "surveys," and "monitoring" that are not referenced. This respondent suggested that reviewers can better provide input if the sources are cited and the data made readily available (15-21). This respondent further suggested that the EIS should report the source of data analyzed and reference the protocols used for inventory, analysis, and reporting data. This respondent noted that review of the scoping document suggested that different data sources were used to analyze different resource concerns, and requested that the EIS fully disclose data sources, explain why different sources were used, and document the differences in those data sources. This respondent noted that this would streamline the review and implementation process by allowing reviewers and stakeholders to be able to intelligently participate in the planning and implementation process (15-33).

A number of references were provided in comments to assist the BLM in determining current rangeland science, including:

- C.S. Boyd and T.J. Svejcar. 2009. Managing Complex Problems in Rangeland Ecosystems. *Rangeland Ecology and Management* 62(6): 491-499.
- D.D. Briske, S.D. Fuhlendorf, and F.E. Smeins. 2006. A Unified Framework for Assessment and Application of Ecological Thresholds, *Rangeland Ecology and Management* 59(3): 225-236.



- M. Vavra and J. Brown. 2006. Rangeland Research: Strategies for Providing Sustainability and Stewardship to the Rangelands of the World. *Rangelands* 28(6):7-14. (18-8).

Additionally, one respondent provided numerous references related to the EIS proposal and process (22-1).

### 3.6 GLOSSARY, ACRONYMS, AND ABBREVIATIONS

One comment stated that the Terminology section of the scoping document was very helpful and requested that this section be expanded or a glossary be included in future documents. This respondent suggested offering the technical definition accompanied by an explanation of what the term means in the NEPA context. This respondent also suggested inclusion of the following terms: appropriate mitigation measures, ecological site, ecological site description, alternative (NEPA definition), and restoration (15-52). Another respondent requested clarification of the terms “encroached” or “invaded” as well as information regarding the evidence of these processes (21-297). Another respondent stated that the use of the word “restoration” in the document, although technically accurate, can be misleading. This respondent noted that the Merriam Webster dictionary definition of restoration is “a bringing back to a former position or condition,” whereas rehabilitation is defined as “to restore to a former capacity.” This respondent suggested that rehabilitation is then more in line with the goal of the Healthy Lands Initiative (2007) to preserve the diversity and productivity of public and private lands across the landscape, as well as more appealing to the local stakeholders to restore and preserve productivity and diversity of rangelands rather than to try to restore an ecosystem to an arbitrary historical ideal (18-6).

### 3.7 COMMENTS NOT EVALUATED IN THIS EIS

A couple of respondents provided comments on issues that are outside of the scope of the EIS. A couple of comments were concerned with the current Battle Mountain District Plan and its relationship to the project. Two respondents were concerned that the Battle Mountain BLM does not have a current Resource Management Plan (RMP) for the area, stating that the old RMP is outdated and cannot be considered an adequate current inventory of these lands (16-30, 21-45), and one commenter requested that a new inventory of public lands be completed (21-45). This respondent was concerned that because the RMP is old and in recent years only a series of piecemeal grazing decisions and new fencing, water haul, and water piping decisions have been conducted, there has not been a current analysis of the cumulative adverse affects of livestock stocking, management, and facilities, yet the individual decisions have further altered sage-grouse, pinyon jay, and other habitats (21-128). One respondent was concerned that numerous large-scale gold mining and other mining operations have been developed, or are proposed, since the RMP was prepared (16-31). This respondent was also concerned that the old RMP allows wide-open commodity uses almost everywhere and that the Visual Resource Management analysis is outdated (16-33). This individual was also concerned that the BLM would rely on the old RMP worldview and requests that they update the plan and complete a thorough inventory to minimize commodity uses (16-34). To address the concerns, the Battle Mountain District plans to update its RMP beginning in late 2010. Grazing management decisions, except for range improvements, will not be addressed in the EIS but will be addressed in the RMP and other decision documents.

One respondent requested that the BLM fully address and recognize that the Herd Management Areas are protected and not shift or intensify livestock use or disturbance into them. This respondent requested that a new Appropriate Management Level that more honestly examines the relative impacts of horses versus livestock be provided (21-276). This respondent also requested that the BLM remove livestock competition and set new Appropriate Management Levels based on accurately examining the relative effects of horses versus livestock (21-61). Another individual requested that BLM provide a full and detailed analysis of the current facilities and land area of the Herd Areas/Herd Management Areas as compared to the time of the passage of the Wild Horse and Burro Act. This respondent also requested detailed mapping that shows where and how livestock facilities have proliferated into, and disrupted, Herd Management Areas and asked that BLM consider combining Herd Management Areas where possible and removing and fence impediments to horse movement. This respondent also provided a case study of the Calico-Black Rock Horse situation for reference (16-3).



One respondent was concerned with aquifer drawdown. This respondent requested that the analysis consider all demands on, and alteration of, the aquifer including the effect of all the mining activity near Cortez-Beowawe and other areas, the molybdenum mine, extensive drilling, “fracing” and other explosions and disruptions used in potential geothermal projects like the McGinniss Hills, and other activities. This respondent also requested an assessment of the ways in which these impacts to the aquifer would further deplete scarce waters, alter watersheds, promote weeds, cause power line proliferation, and impose a battery of intensive stresses on native ecosystems, and the species like sage-grouse that inhabit them (16-29). This respondent was concerned about aquifer drawdown in the 3-Bars Ecosystem from gold mining as well as irrigation of marginal agricultural land in the valleys (16-17). This respondent also noted that the impending large-scale water use for the molybdenum mine will be added on top of all the other ongoing aquifer depletion (16-18). This respondent was also concerned that aquifer losses amplify the effects of the livestock and BLM treatment-caused desertification of the landscape and requested a full and detailed analysis of the ground and surface waters as well as all historical information and water record summaries, including any spring inventories, in order to determine if water resources have been over allocated in the 3-Bars Ecosystem. Further, this individual requested all water survey records, and all evidence from location of meadow or floodplain soils, to determine the extent of water losses, the reduction in surface waters, the impact of past and ongoing mining or energy development, and the potential impact of planned and foreseeable mining (including Tenabo, if it occurs) on aquifers. This respondent further requested information regarding whether the 3-Bars Ecosystem is linked to the Cortez area aquifer, and if so, the impact it would have on the Cortez area known geothermal resource area (16-19). This respondent noted that destruction of native woody vegetation is what water miners are promoting. This respondent recommended a series of articles by Emily Green in the Las Vegas Sun as a reference, which describe how in the neighboring Ely BLM lands, the Southern Nevada Water Authority proposes to pump hard and fast at first, to kill the woody phreatophytes that transpire the water that the Southern Nevada Water Authority seeks to mine (16-26). These issues are not covered in the Project EIS because the proposed actions would not impact aquifers associated with the 3-Bars Ecosystem or these issues have been or will be evaluated in NEPA assessments done for these projects.

One respondent suggested that if the BLM wants to protect sage-grouse in the Battle Mountain District, it should establish a series of Areas of Critical Environmental Concern (ACEC) or reserves as part of this process and act to leave large areas undisturbed (21-41). Another respondent requested that the BLM work to conserve resources, including through designations of ACEC as well as by placing mature and old growth sagebrush communities “off limits” to any fragmentation or manipulation (21-116). Another respondent suggested that the BLM conduct a full analysis and examine expanding the Wilderness Study Area, and protecting roadless areas of 200 acres or greater in size as WSAs upon conducting a new suitability analysis as part of this process. This respondent also requested that a series of large ACEC be examined as well to protect both sagebrush and pinyon-juniper values (16-1). These issues will not be evaluated in the Project EIS but would be evaluated in the Battle Mountain District Resource Management Plan that will be updated beginning in late 2010.

One respondent requested that the BLM analyze alternatives based on sound economics. This respondent also requested that all alternatives include use of federal fire funds to purchase grazing permits and permanently remove livestock from degraded lands, as this is a very foreseeable action during the life of this plan (21-256). This individual requested that the BLM use Clark County land sale funds to purchase grazing permits. This respondent suggested that mines should fund removal of grazing as mitigation for their substantial impacts on the environment and terrestrial and aquatic ecosystems (21-73). These issues will not be evaluated in the Project EIS but would be evaluated in the Battle Mountain District Resource Management Plan that will be updated beginning in late 2010.

One respondent requested a full analysis of the worst case scenario for mining and energy development here, and the effects this would have on sensitive species, perennial flows, recreational uses, and cultural sites (21-23). This respondent also requested a detailed accounting of all projects undertaken in all of central Nevada that have occurred from the 1950s up to the present (21-3). This individual also requested that all historical sources be reviewed, from surveyor’s records to accounts of mining deforestation, to provide a baseline for understanding forested versus non-forested lands (21-27). These issues are not covered in the Project EIS unless the actions impact the 3-Bars Ecosystem; these issues have been or will be evaluated in NEPA assessments done for these projects.