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U.S. Department of the Interior
Bureau of Land Management

Decision Record - Memorandum

Vya PMU Habitat Restoration and Fuels Reduction Project

August 21st, 2013

PREPARING OFFICE

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Decision Record - Memorandum
Vya PMU Habitat Restoration and Fuels Reduction Project

CA-N070-2013-0016

Prepared by
U.S. Department of the Interior
Bureau of Land Management
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Cedarville, CA

August 21st, 2013

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Chapter 1. Vya PMU Habitat Restoration and Fuels Reduction Project

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1.1. INTRODUCTION

The BLM Surprise Field Office (SFO) is proposing hazardous fuels reduction and habitat restoration treatments on BLM-managed lands in the Vya Sage-Grouse Population Management Unit (PMU) that lies in the vicinity of northern Surprise Valley, Barrel Springs and Long Valley. The Proposed Action would utilize a mix of hand clearing, mechanical thinning, broadcast burning, and pile burning to remove invasive juniper trees on up to 100,000 acres of sage-steppe ecosystems.

The Vya Sage Grouse Population Management Unit (PMU) encompasses 501,247 acres of sage-grouse habitat in northwestern Washoe County in Nevada and a small portion of northeastern Modoc County in California (Map 1 in EA). Sage-grouse population estimates based on ten years of lek counts indicate relatively stable numbers with a spring breeding population of 1,500 to 2,000 within the Vya PMU. Sagebrush is a dominant vegetation type in this PMU with low sagebrush, Wyoming big sagebrush and mountain big sagebrush occurring in similar amounts. Large stands of juniper also occur within this PMU.

The purpose of the action is to contribute to healthy and resilient sage-steppe landscapes by enhancing and restoring sage-grouse habitat, restoring vegetation conditions that resemble historic plant community mosaics, and reducing risks of catastrophic wildfire associated with high fuel loading from juniper encroachment. The primary purpose of using an Integrated Vegetation Management (IVM) approach is to implement treatments consistent with and to meet the restoration objectives identified by the Sage Steppe Ecosystem Restoration Final Environmental Impact Statement (SSER FEIS).

The need for the action is to address juniper encroachment within Preliminary Priority sage-grouse habitat at a landscape scale to ensure large blocks of habitat remain intact and connected.

Objectives of the Vya PMU Habitat Restoration and Fuels Reduction Projects

- Increase heterogeneity of fuels across the landscape by reducing the canopy cover of juniper by at least 75 percent on sagebrush ecological sites on approximately 75,000 acres.
- Improve sage-grouse habitat by implementing habitat improvement projects that are consistent with the Vya PMU Conservation Strategy.
- Reduce vertical fuel loading within juniper stands to increase the herbaceous understory within sagebrush sites.
- Maintain sagebrush cover greater than 10 percent on low sage and Wyoming big sagebrush ecological sites.
- Maintain herbaceous vegetative composition on dominant ecological sites consistent with achieving land health standards.
- Improve the ecological health (i.e. resilience and resistance) of sites currently dominated by juniper to provide for improved wildlife habitat.
- Maintain old growth juniper stands on portions of the landscape where they occur.

This is a Programmatic Approach for juniper reduction treatments within the Vya PMU using an integrated Vegetation Management Approach that is tiered to and consistent with the SSER

FEIS. Projects consistent with activity descriptions and project design features as described in this EA will be available for implementation across the project area. Treatments will be limited to a maximum of 10,000 acres per year for a total of 100,000 acres over a 10-year period. It is expected that treatments would be dispersed across the Vya PMU, and no more than 2% of lands within the PMU would be treated under this EA in any one year. Actual acres treated in a given year will depend upon funding availability and other field office workloads and priorities. Projects proposed under this Programmatic EA may either be part of a larger landscape planning effort or be implemented as stand-alone projects. It is expected that streamlining the planning process through a programmatic project development and analysis will greatly improve management efficiencies.

Once approved, the EA and Decision Record (DR) will become available for the Surprise Field Office (SFO) to use for development of specific projects. The SFO resource specialists will propose and develop individual projects consistent with descriptions and stipulations in the EA. Individual projects would require preparation of a Documentation of Land Use Plan Conformance and Documentation of National Environmental Policy Act Adequacy (DNA), tiered to this programmatic document, to identify specific project areas and select appropriate treatments based on management direction in this programmatic document. Additional on-the ground surveys and clearances for special status wildlife, plants, and cultural resources would be required for each project plan area prior to implementing treatments. All projects will meet current direction for land management and appropriate consultation under the Endangered Species Act and National Historic Protection Action (NHPA) will be completed as necessary for each project. If, during the DNA process, it is determined that effects will exceed those disclosed in this EA, separate NEPA analysis would be required or the project will not be implemented. Project proposals/draft Decision Records would be written and posted on the SFO BLM website and available for at least 30 days for public review. Following public review, Decision Records would be subject to Administrative Remedies in accordance with 43 CFR Chapter 4 regulations.

1.2. DECISION

It is my decision to authorize the Vya PMU Habitat Restoration and Fuels Reduction Project as described in the Proposed Action of the Programmatic Environmental Assessment CA-N070-2013-0016 incorporating the Standard Resource Protection Measures, Standard Operating Procedures (SOP's), Mitigation and Monitoring Measures outlined in the aforementioned EA and this DR for the identified project area. This decision is contingent on meeting all stipulations and monitoring requirements listed below.

1.3. DESCRIPTION OF THE SELECTED ALTERNATIVE

The BLM Surprise Field Office (SFO) is proposing hazardous fuels reduction and habitat restoration treatments on BLM-managed lands in the Vya Sage-Grouse Population Management Unit (PMU) that lies in the vicinity of northern Surprise Valley, Barrel Springs and Long Valley. The Proposed Action would utilize a mix of hand clearing, mechanical thinning, broadcast burning, and pile burning to remove invasive juniper trees within sage-steppe ecosystems. These projects are proposed to enhance and restore sage-grouse habitat by treating juniper in sage-steppe plant communities which are declining in vigor as a result of competition. The projects will also improve hydrologic conditions, enhance the forage base for wildlife and domestic animals, and reduce hazardous fuels.

The Project Area comprises 195,578 acres within the Vya PMU. The Project Area represents portions of the Vya PMU that have varying phases of juniper encroachment ranging from very low densities of juniper to high densities of juniper. Of the 195,578 acre Project Area, no more than 100,000 acres would be treated under the Proposed Action over a 10-year period, and a maximum of 10,000 acres could be treated each year. See Table 1 below for a breakdown of treatment types and associated acres for the Project Area. See Map 1 below for the Project Area.

Table 1.1. Treatment Types and Potential Associated Acres within Project Area

Treatment Type	Acres
Hand Treatment only*	107,107
Mechanical only	58,335
Broadcast burning or Hand Treatment	7,371
Broadcast Burning or Mechanical Treatment	2,890
Maintenance **	19,876
TOTAL	195,578 (up to 100,000 acres will be treated)

Note

*All sites can be treated by hand methods; acreage in this column reflects areas where hand treatment is the only option due to lack of roads and juniper density

** Maintenance acres are areas within the Project Areas where juniper has previously been removed via implementation of juniper projects or wildfire, and treatments would occur to reduce newly established juniper.

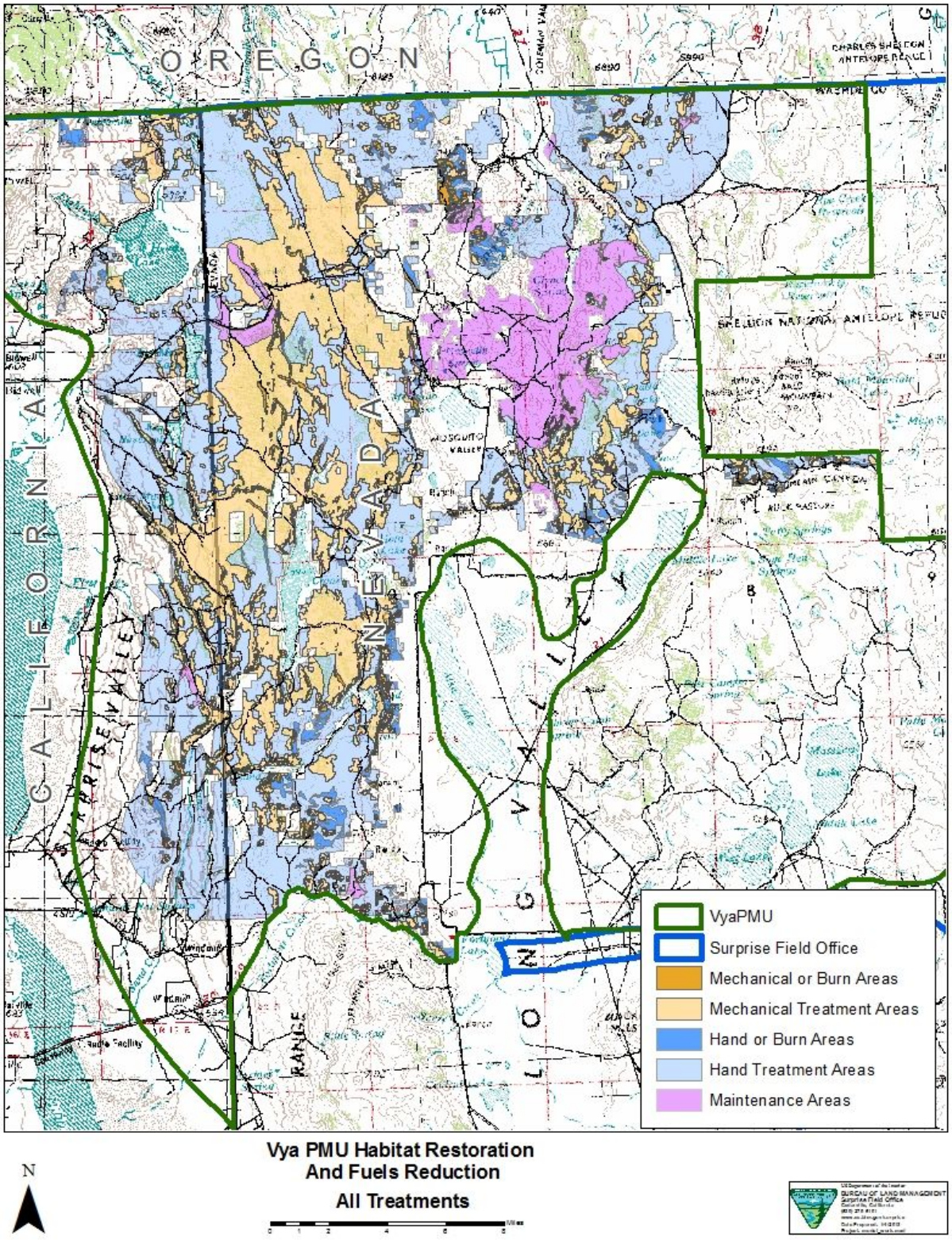

Figure 1.1. Map 1- Treatment Types within the Project Area
Chapter 1 ***Vya PMU Habitat Restoration and Fuels Reduction Project***
DESCRIPTION OF THE SELECTED ALTERNATIVE

Note

*This map reflects changes in the treatments types as a result of removing prescribed fire treatments from south slopes.

Treatments would take place between 2013 and 2022, and would be completed by either BLM employees or contractors. No new permanent roads would be constructed to complete work associated with the Proposed Action. It is anticipated that a maximum of one mile of temporary roads per year would be needed to access heavy juniper areas.

Due to the large size of the restoration area, treatments will occur across the Project Area over several years. Implementation of juniper reduction treatments within the Project Area on any given year will occur in smaller treatment areas within the Project Area (typically from 20 to 1000+ acres) based on prioritization of habitat (see Figure 1 and Table 2 below) and ability to secure funding for a certain project area. Funding is often secured to implement restoration work for a specific reason, such as mule deer habitat enhancement, sage-grouse habitat restoration, or fuels reduction, and treatments within the Project Area will often reflect these priorities. Crews completing juniper reduction projects will follow the Standard Operating Procedures (SOP's), Standard Resource Protection Measures (SRPM's) and mitigation measures outlined in this document. Additionally, more intensive cultural and wildlife surveys will be completed in a treatment unit to inform the decision making process. Cultural and wildlife staff will outline additional mitigation measures, as needed, to ensure resources within a specific treatment area are not negatively and/or adversely affected. The SFO Field Manager will review and approve all additional mitigation measures.

Treatments will be designed based on the site-level phase of juniper encroachment. On Phase 1 sites, juniper canopy cover is less than 6% and the understory vegetation (shrubs and perennial grasses) dominates ecological processes. These sites are characterized by vigorous intact sage-steppe communities that are becoming invaded by young juniper, generally trees less than 50 years old. Phase 2 and 3 sites are characterized by a mixture of both younger juniper trees (less than 50 years old) and older juniper trees (greater than 50 years old). Juniper is co-dominant at these sites, and both the juniper canopy and understory vegetation drive ecological processes. These sites are at risk of crossing an ecological threshold where juniper dominates ecological processes and restoration of sage-steppe vegetation cannot occur without extensive efforts. Within the Project Area, Phase 3 sites are generally small components of Phase 2 areas of juniper encroachment. In these sites, older juniper trees (greater than 50 years old) dominate ecological processes. Some Phase 3 sites have already crossed ecological thresholds and little herbaceous vegetation exists. In these areas, reseeding and/or removing biomass is needed for successful vegetative response after treatment. Phase 3 areas are of lower priority due to increased time and expense required for treatment and reduced probability of successful restoration.

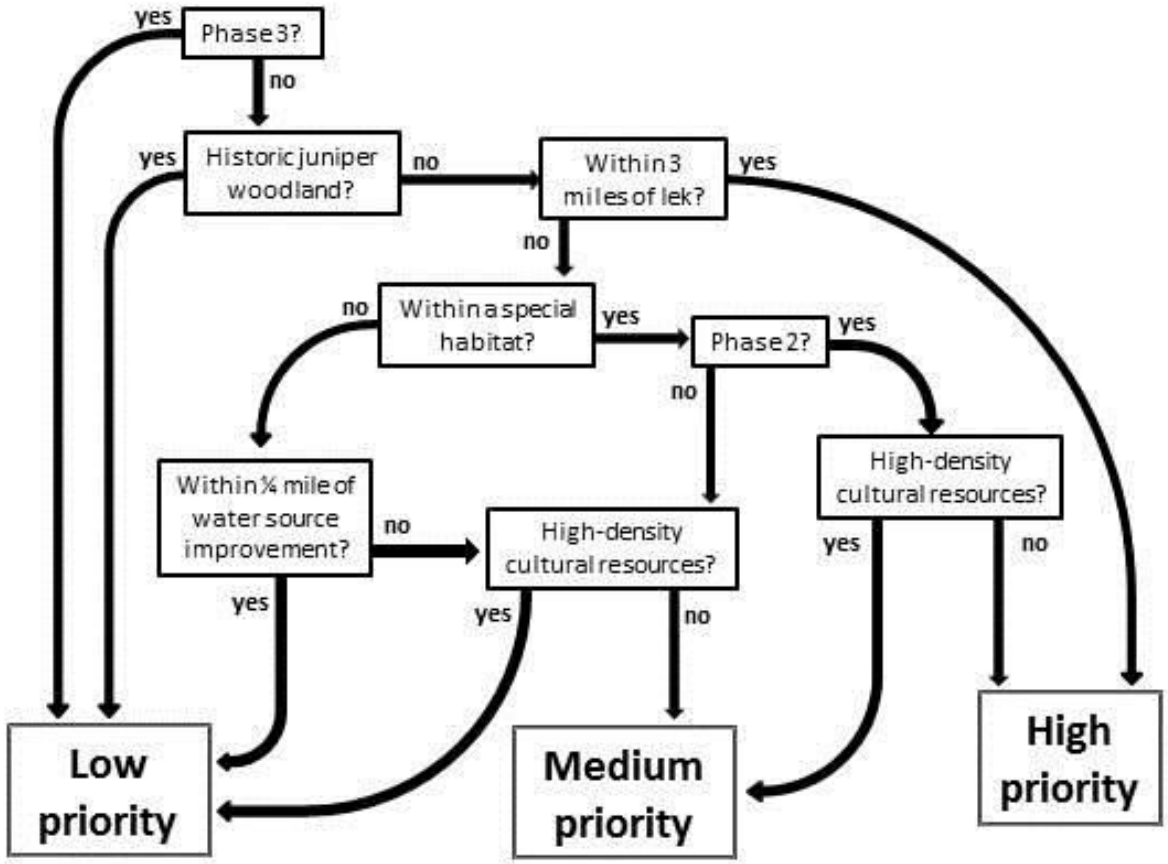

Figure 1.2. Priority Ranking of Treatment Areas

Table 1.2. Justification of Priority Rankings in Figure 1.1

Prioritization criteria	Justification
Within 3.0 miles of active sage-grouse lek sites	Important areas for sage-grouse breeding and nesting habitat/use areas
Phase 2 juniper sites	Herbaceous understory layer and juniper canopy are both influencing ecological processes, could transition to phase 3.

Phase 1 juniper sites	Juniper encroachment into habitat has begun but herbaceous understory layer still dominating ecological processes.
Phase 3 juniper sites	Juniper canopy is dominating ecological processes, extensive restoration techniques, e.g. seeding is often required to meet objectives.
Special Habitats (See Table 2.1.4 below)	Important for completion of life cycle/important use areas for many sage steppe obligates.
≥ .25 miles away from water source improvement (e.g. pit reservoir, windmill, trough)	Heavier use from livestock is not as evident, key upland species e.g. bunchgrasses are more likely to be present.

Early Juniper Encroachment: Phase 1 and Early Phase 2 Juniper Areas

Phase 1 and early Phase 2 juniper sites have low densities of juniper cover, and would be treated to remove young juniper invading intact sage-steppe communities. Mechanical treatments would not be conducted in early juniper encroachment sites due to the small stature of trees and the absence of large groups of trees across the landscape. Hand treatments would usually involve leaving cut trees in place and un-limbed; cut trees would occasionally be limbed if site conditions and tree sizes warrant. There would be limited pile burning following treatment. Broadcast burning would be used as a treatment tool where site conditions allow.

Advanced Juniper Encroachment: Phase 2 and Early Phase 3 Juniper Areas

Phase 2 and early Phase 3 juniper sites have increasing densities of juniper and the goal of treatment would be to reduce the canopy cover of juniper by at least 75 percent on invaded mountain brush communities. Additionally, projects would be designed to increase shrub and herbaceous cover in areas where juniper trees would be removed. Mechanical treatments would be limited to areas with low to moderate slope and near an existing road. Hand treatments options would resemble those used in early juniper encroachment sites, except that fewer cut trees would be left unlimbed in advance encroachment sites. Pile burning would be more widespread on advanced encroachment sites, while broadcast burning would be less commonly used in areas with high juniper densities.

STANDARD RESOURCE PROTECTION MEASURES, MITIGATION MEASURES, STANDARD OPERATING PROCEDURES AND REQUIRED MONITORING FOR TREATMENT ACTIVITIES

The Vya PMU Habitat Restoration and Fuels Reduction project would require certain precautions during project implementation. Defined Standard Operating Procedures (SOPs) would ensure that identified resources within the project boundary would be protected and/or preserved. All project activities would be coordinated with the appropriate resource specialist and/or the SFO Interdisciplinary Team. Areas identified within the project boundaries as having important cultural, botanical, hydrological, recreation, and wildlife resources that require protection would be protected from treatment impacts as described in the SOP's, SRPM's, and Mitigation Measures.

Where applicable to the Proposed Action, standards for proposed management activities have been identified based on resource concerns. In addition, standards specified by the SSERS FEIS and the Surprise Field Office Resource Management Plan and EIS have been included as relevant to implementation of the Proposed Action. The following conservation measures are proposed to be implemented by the Proposed Action to avoid and/or minimize effects to resources within the Action Area.

Standard Resource Protection Measures (SRPM) for Cultural Resources for the Vya Habitat Restoration and Fuels Reduction Project

For all those cultural properties recommended eligible or are unevaluated to the National Register:

1. Cultural Resource Staff will brief crew personnel on avoidance areas within a defined cutting area before project implementation occurs. (See inadvertent discovery procedures).

2. Prior to project initiation, in mechanical treatment areas, all archaeological sites will be flagged with a 10 meter (11 yards) protection buffer. Flagging will be the standard BLM Northeastern California Archaeology shops' black and red striped flagging.

a. Flagged sites will be avoided for roads, staging areas, and any other unforeseen use by mechanical or large equipment.

b. New roads and staging areas for the Project Area (but located outside the Project Area) will be surveyed at a Class III level prior to project initiation.

3. All standing juniper within 20 meters (60 feet) of the toe or rim of rimrock outcroppings around rock art panels will be removed to prevent fire damage to rock art sites. Exceptions include when a tree is a significant cultural component of the site. Mitigation measures in these instances will be based on field survey results and will be approved by the Field Office Manager before implementation occurs. These mitigation measures will be generated and approved by a qualified Archaeologist and will be documented in the project file.

4. Areas with high densities of identified archaeological sites will be left untreated (i.e. lithic sources, rock art, etc.).

5. At this time, only hand treatment and/or prescribed fire will be utilized within National Register sites, significant (sites eligible for the National Register) sites, and unevaluated sites (which are afforded the same protection as National Register sites) at the discretion of the Field Office Archaeologist. This action will prevent an oasis effect where livestock can congregate and limit the creation of islands which would increase public/animal congregation. All lop and scatter materials will be removed from archaeological sites. Those sites deemed not eligible or significant may be subjected to mechanical treatment.

a. If trees are left on the site, then an island of trees will be left off site in a location most likely to deter livestock from shading under the tree(s) on the site. In most cases, this is between the site and the nearest utilized water source. Trees on the island will be limbed up in order to attract livestock to that location. Ideal locations for islands include areas where the livestock are already shading.

b. In regards to sites with rock features, hand treatment will not be utilized within a 45 feet (15 meters) radius of a rock feature or concentration of rock features. These areas will be flagged with non-"red and black striped flagging"; the color of flagging used will be documented in the DNR and made clear to the tree-cutters. This is to protect rock features from falling trees.

c. If possible, trees around structures will be directly felled in order to avoid damaging the structure. If directional falling is not possible, then the trees will be avoided.

6. Historic arborglyphs, generally found in aspen stands, will be preserved in place, will not be cut or damaged, and burnable materials will be removed from a 15 feet diameter area to avoid impacts of prescribed burning. However, the diameter around the arborglyph may increase

depending on slope and aspect. Cut juniper 15 feet away will be piled no more than 5 feet high to avoid heat damage to the tree (aspen trees are vulnerable to fire damage as their bark does not offer sufficient protection against heat). Heat resistant wrap and/or colorless foam may also be used in order to protect the tree.

7. All temporary roads will have a Class III survey prior to construction initiation.

8. Mitigation measures for prescribed burns will follow the SRMPs outlined in the California Statewide Protocol Agreement (Appendix E).

9. If fencing is required in order to rest areas from livestock after juniper have been removed, then all fences will avoid eligible or unevaluated archaeological sites and culturally sensitive areas. Additional survey at a Class III inventory is required before fence building is initiated if proper Class III inventory was not accomplished in the proposed fence line area in the initial survey.

10. Additional mitigation measures will be put in place as needed to avoid adverse impacts to cultural resources. These mitigation measures will be based on field survey results and will be approved by the Field Office Manager before implementation occurs. These mitigation measures will be generated and approved by a qualified Archaeologist and will be documented in the project file.

Cultural Resources- Inadvertent Discovery

In the event of inadvertent discovery of un-flagged and/or undocumented cultural resources during implementation of an undertaking, the following procedure shall be undertaken: Field Office Cultural Staff and the Field Office Manager shall be immediately notified by personnel responsible for project implementation. All work shall cease immediately at the site of discovery and all other work which may damage the cultural resource shall also cease. The Field Office Cultural Staff shall make an assessment of the situation and, in consultation with the Field Office Manager, may prescribe the emergency implementation of appropriate physical and administrative conservation measures as enumerated in BLM Manual Series 8140. The Field Office Cultural Staff shall notify the SHPO, as needed, in order to develop an agreement on the appropriate course of action, and such agreement shall reflect the intent of BLM Manual Series 8140.28B. The agreement shall be memorialized in writing and documented in project files. The Field Office Cultural Staff shall document implementation of the agreed-upon steps and shall report the discovery event and the manner of its resolution in the annual accomplishment reporting required under this Protocol.

For all of the ineligible cultural properties no mitigation measures are recommended.

Mitigation Measures

Vegetation, Including Threatened and Endangered Plant Species

The mitigation measures presented in the following section for wildlife are proposed to also reduce potential effects to vegetation.

Wildlife; Migratory Birds; Special-Status Species (Federally-Listed, Proposed or Candidate Threatened and Endangered Species); State Protected Species; BLM Sensitive Species

The following mitigation measures are proposed to reduce potential effects to wildlife:

- Pretreat fuels around bitterbrush and mountain mahogany to prevent loss during prescribed burning. This would prevent large patches of important deer fall forages from being burned.

To maintain bird habitat, prescribed burn areas shall be minimized to 200 acres, with burn units not occurring adjacent to one another.

- Any active raptor nest found should be reported to the wildlife biologist and project activities ceased in the area (generally ¼ to ½ mile buffer) until surveys indicate that project activities would not disturb breeding activities.
- Additional seasonal restrictions will be put in place as needed as described in Table 2.22-1 **"**General Guidelines for Seasonal Restrictions and Distance Buffers in Special Wildlife Habitats" in the 2008 SFO RMP and FEIS. The SFO wildlife biologist will determine seasonal restrictions in coordination with the applicable state wildlife agency.

Visual Resource Management

The following mitigation measures are identified to reduce potential visual effects related to implementation of the Proposed Action and to ensure Class II VRMs are maintained within the Project Area:

- Where slash occurs in the foreground of the Barrel Springs Back Country Byway, dispose of slash through burning, grinding or chipping.
- Locate slash in areas not visible from foreground and middle ground views along Surprise Valley and Barrel Springs Roads.
- Locate temporary roads along routes that minimize cut and fill slopes.
- Decommission temporary roads following treatment with boulders or other access-restricting methods to prevent public use.
- Reseed areas cleared for temporary roads and staging grounds with native species.
- Flush-cut stumps in immediate foreground (within 200 feet) adjacent to the road (Barrel Springs Road treatment area).
- Preserve clumps of juniper scattered throughout the treatment area (5-10 trees per acre).
- Create openings in stands of trees that are irregular and natural in appearance.

Avoidance and Minimization — Standard Operating Procedures

The following SOPs would be implemented by the Proposed Action to avoid and/or minimize effects to resources within the Project Area. In addition, seven SOP's were added to address public comments related to the Vya PMU project.

Additional SOP's from Public Comment

- Prescribed fire treatments within the project area will not be implemented on south facing aspects due to the higher likelihood of cheatgrass invasion.
- All stumps will be flush cut to a height of 8 inches.
- All slash that is not going to be removed or burned, will be lopped and scattered to a height of no more than three feet.

- BLM will provide project inspection at least once weekly during the implementation phase when contractors are completing project implementation.
- Hand piles will not exceed a size of 6'x6'x5' tall. Mechanical piles will not exceed 50 feet in diameter and will be reseeded following burning.
- Larger piles can be left in place and not burned to provide cover of wildlife species. The SFO wildlife biologist will determine the number of piles to be left but will not exceed 5 piles per acre.
- The SFO BLM will wait a minimum of two growing seasons following cutting projects to implement broadcast burns of cut trees or burning of individual cut whole trees to reduce cheatgrass invasion.

Air Quality

- A Prescribed Burn Plan would be developed, reviewed and approved by SFO Fire Management Officer, SFO Manager, NOR CAL Fire Management Officer and the BLM State Fire Management Officer before any prescribed burns occur as required by BLM Standards.
- All prescribed fire projects would be completed pursuant to the standards specified by the Clean Air Act and would comply with all federal, State and local air pollution requirements.
- The prescribed fire burn plan would be adhered to throughout the project. Emissions would be managed by timing and atmospheric dispersal.
- Prescribed burning would be concentrated in spring (mid-April through mid-June) and fall (mid-September through mid-November) to avoid coinciding with peak summer levels of air pollutants from other human-caused activities in the area and the winter inversion potential.
- Computer modeling to assess smoke dispersion, and related smoke management techniques would be implemented where practical.

Woodcutting

- The areas excluded from woodcutting would be signed to indicate that woodcutting is not allowed. The SFO would make maps available to the public indicating areas open and closed to woodcutting within the Project Area.
- Wood cutting would not be allowed in areas where wood gathering would have the potential to have adverse effects on cultural resources as determined by the SFO archaeologist and Field Manager.

Hydrology

- Entry into wet spring areas would be limited to hand treatments with chainsaws and broadcast/pile burning.
- Crossings over ephemeral stream channels would be identified by the Contracting Officer's Technical Representative (COTR) and be limited to dry, rocky and stable areas. Crossing channels with mechanized equipment would be at locations that are stable and naturally armored with rock. Stream channels would be crossed at right angles and number and width of crossings would be limited to areas that have cobble and naturally occurring rocky areas to

protect the channel. A minimal amount of passes over dry stream channels would be allowed and would be monitored by the project COTR.

Soils

- Adverse effects on soil resources would be minimized through management practices and adherence to Standard 1 of the Standards and Guidelines.
- Damage to high shrink-swell soils will be prevented by limiting compacting activities to periods when soils are sufficiently dry to resist damage from the activity.
- Water bars on temporary roads and scattered juniper material would be used to reduce sedimentation during high rainfall and or snow melt. Rehabilitating areas of compacted soil would be accomplished by ripping the soil with mechanized equipment to increase infiltration and reduce runoff, and encourage vegetative growth.

Livestock Grazing

- Treatment units would be rested from livestock grazing for a minimum of one growing season prior to and two growing seasons following broadcast burns through adjustments in the pasture/use area grazing schedule, and herding. All other treatments would be rested for at least one full year the first season of treatment and one growing season the following year. Decisions to resume grazing will be objective based.
- Rest requirements can be waived on Phase 1 juniper areas and treatment maintenance projects (removing newly established trees from old treatments) due to these areas already having sufficient native understory vegetation that rest will not result in any improved response.
- Compliance for resting of treatments will be based on utilization limits, with 20% or more utilization during a required rest period resulting in extending the rest by an additional growing season.
- Grazing can resume in treatments following rest periods after the following objective has been met: 2/3 of key native grass plants within the dominant ecological site in the treatment site have produced full seedheads. This objective will be measured annually at the end of the growing season at the designated SSER FEIS monitoring point(s) for the treatment.
- BLM would seek all opportunities to minimize the impacts on grazing permittees due to livestock removal to facilitate rest. These efforts would include but not be limited to:
- design of projects to minimize rest on non-treated acres;
- use of identified turnout areas, modified salting practices and herding to provide growing season rest in broadcast burn sites;
- Modified allotment management plans during rest periods.

Riparian Areas

- Treatments within perennial or intermittent creeks, springs and wet meadows would be limited to hand treatments within the 250 yard buffer zone. Crews would use chainsaws to fall juniper trees, which would then be piled for burning at a later date.

SSER Treatment Monitoring and Adjustment

Monitoring and data collection will follow the Sage Steppe Ecosystem Restoration Strategy protocols and will be made available on the database for other agencies and the public. Where appropriate, the results would be used to make adjustments and corrections to ongoing projects.

Old Growth Juniper

Individual old growth trees in restoration areas would be identified using morphological characteristics (Miller *et al*. 2005) and preserved for their many social and ecological values. These characteristics would include:

- Rounded or unsymmetrical tops that may be sparse and contain dead limbs.
- Deeply furrowed, fibrous bark on the trunk that can be reddish or grayish in color.
- Branches near the base of the tree that may be very large and covered with fruticose lichens.
- Limited terminal leader growth on branches in the upper 25 percent of the canopy.

In addition to preserving individual old growth trees, efforts would be made to maintain functioning ecosystems in historic juniper woodlands, especially those with a significant old growth component. These sites are typically present in areas with shallow, rocky soils surrounded by limited fine fuels, which historically were relatively protected from stand-replacing fire. Soils data could be used to identify potential historic juniper woodlands, but on-the-ground verification of their presence would be completed before project implementation.

Juniper woodlands would be low priority for treatment because they are generally not considered outside the historic range of variability, and juniper reduction in these sites would not be expected to enhance sage steppe ecosystems. Any treatments proposed in such sites would be designed to mimic natural fire processes given the specific topography, such as the removal of pockets of young trees in drainages. The following categories provide general guidance for treatments:

- In stands where more than 75% of trees exhibit old growth characteristics, no juniper will be cut
- In stands with 50-75% old growth, up to 25% of young trees may be removed
- In stands with 25-50% old growth, up to 50% of young trees may be removed

Special-Status Plants

- Site specific management of all special-status species habitats and occurrences (populations) would be in accordance with conservation plans, recovery plans, habitat management plans, conservation recommendations, and best management practices, as appropriate for the species.
- Allow for no more than 20 percent (by plant species) elimination of occupied habitat and no greater than 20 percent total decrease in any plant species occurrence, except as directed in biological assessments, biological evaluations, habitat management plans, and conservation strategies/species management guides for specific species.
- In accordance with BLM IM CA-2009-026, all proposed treatment sites would be surveyed for special status plants during the time of year when such plants can be positively identified.

The Nevada Natural heritage database and the SFO Sensitive Plant Species and soils GIS data will be consulted to identify any potential sensitive plant species sites.

- Special-Status Plant species within the project area would be identified, flagged, and would not be disturbed with any treatment activities. Buffer zone sizes around sensitive plant sites would be identified at the discretion of the botanist.

Vegetation

- No prescribed fire (does not include pile burning) in low sagebrush and Wyoming sagebrush sites, on south facing slopes, in predominate mahogany stands, and in sites below 5,500 feet elevation on north slopes. No Rx fire in Phase 3 juniper sites unless reseeding is planned.
- Reseed as needed on Phase 3 juniper sites where the upper canopy is dominating ecological processes and sage-steppe vegetation is not expected to positively respond to treatment.
- No mechanical treatments will occur within aspen stands.
- No mechanical treatments will occur within mahogany stands.
- No prescribed fire within mahogany stands, pile burning is allowed within mahogany stands.

Wildlife

- No mechanical treatments within ¼ mile (½ mile if project is within line of site of nest) of an active raptor nest site from March 1- August 31 depending on species. Distances can be expanded depending on species.
- No prescribed fire within ¼ mile (½ mile if project is within line of site of nest) of an active raptor nest site from March 1- August 31 depending on species, Pile burning is allowed.
- No hand and mechanical treatments within ½ mile of active sage-grouse lek sites from March 1-May 15.
- No broadcast burning within 2 miles of active lek sites; pile burning is allowed.
- Additional Limited Operation Periods (LOPs) and buffer zones would be implemented as necessary to reduce disturbances to wildlife so that they do not conflict with the life history of resident species.
- Close and rehabilitate cherry stem and temporary project roads after project implementation to reduce disturbances to wildlife.
- Leave all snags greater than 10 inches standing and create additional snags.
- All fencelines within 1 mile of an active sage-grouse lek where juniper is cut will be marked with dark brown and white fence markers.
- All fencelines around riparian areas within 2 miles of an active sage-grouse lek where juniper is cut will be marked with dark brown and white fence markers.
- All active bird nests within juniper trees will be avoided and left standing during the breeding season (March 1-June 30).

Ungulates

- Implement seasonal protection measures and buffer zones as appropriate for permitted activities in accordance with conservations plans and the SFO RMP.

Sagebrush-Obligate and Associated Species

- Locally developed conservation strategies or plans developed for sage-grouse, pygmy rabbit, burrowing owl and other special-status species would be used to identify high-priority treatment and fire suppression areas.
- To the extent possible, utilize local native plants and seeds in seeding, restoration and rehabilitation projects, in accordance with BLM California's Native Seed Policy.

Other Native Wildlife Species

- Manage migratory birds in accordance with the Migratory Bird Treaty Act and Migratory Bird Executive order 13186, *Responsibilities of Federal Agencies to Protect Migratory Birds*.

Federal State and BLM Listed Terrestrial and Aquatic Species

- Follow management guidelines within applicable biological opinions and conservation strategies.
- Implement seasonal protection measures and buffer zones as appropriate for permitted activities.

Currently there are no federally threatened or endangered species known to be within or adjacent to the project area. If, during the implementation of the Proposed Action, threatened, endangered, BLM Sensitive species, or other species of interest are found, then areas of important or necessary habitat in the project area would be identified, flagged and protected from project activities in coordination with the SFO wildlife biologist. Project activities may be subject to seasonal restriction dates and buffer zones to protect specific wildlife species and their habitats. Project activities would be implemented consistent with the local Conservation Strategy for Sage-Grouse (*Centrocercus urophasianus*) and the Sagebrush Ecosystems within the Vya and Massacre Population Management Units.

Noxious Weed Species

- Activities associated with the Proposed Action that are prone to noxious weeds, such as temporary roads, landings and skid trails would be monitored post treatment for new occurrences for three years.
- Newly discovered populations of noxious weed species would be mapped and treated using management techniques outlined in SFO Integrated Weed Management EA.
- To minimize the potential spread of noxious weed species the equipment associated with project implementation would be pressure washed prior to engaging in project activities and before transport to new work areas.
- Equipment operators and project inspectors would be provided with a noxious weed identification guide for species that are known to occur in northeast California. If a noxious weed site is discovered, project activities should cease and the Noxious Weed Coordinator

notified of the occurrence. Project activities should not resume in the area until treatments and prevention procedures are in place.

Recreation

- To the extent possible, roads that provide access to developed recreation sites for safety concerns would be used minimally. If necessary to use them for treatment activities, these roads would be avoided during weekends.

- Areas where undeveloped hunting campsites occur would be excluded from mechanized treatment. Buffer zones would be established around these areas to maintain aesthetic values and would be coordinated with SFO recreation specialist. Hand treatment in these areas would include use of chainsaws to thin juniper densities and hand pile construction for later burning.

1.4. DECISION RATIONALE

As a result of the analysis in the Vya PMU Habitat Restoration and Fuels Reduction Project

EA and the Finding of No Significant Impact, the BLM has determined that the decision to implement a combination of treatments described by the Proposed Action will not result in unnecessary or undue degradation to public lands or cause significant impacts to public health and safety.

Implementation of juniper projects consistent with the EA design features would improve the ecological health (i.e. resilience and resistance) of sites currently dominated by juniper and provide for improved wildlife habitat. The Proposed Action would contribute to healthy and resilient sage-steppe landscapes by enhancing and restoring sage-grouse habitat and restoring vegetation conditions that resemble historic plant community mosaics. Greater sage-grouse habitat would be improved by implementing habitat improvement projects that are consistent with the Vya PMU Conservation Strategy. Large blocks of habitat would remain intact and connected within Preliminary Priority sage-grouse habitat at a landscape scale.

Implementation of the Proposed Action would increase heterogeneity of fuels across the landscape and reduce vertical fuel loading within juniper stands while increasing the herbaceous understory within sagebrush sites. The Proposed Action would reduce risks of catastrophic wildfire associated with high fuel loading from juniper encroachment. Old growth juniper stands would be retained on portions of the landscape where they occur.

1.5. CONSULTATION AND COORDINATION

The area in the vicinity of the proposed action is inhabited by a variety of terrestrial and aquatic species including BLM sensitive species and several important game species. Major habitat types within the Action Area include: big sagebrush, low sagebrush, juniper woodland, timber, bitterbrush, and wetland meadows, with important habitat inclusions including curleaf mountain mahogany, intermittent and ephemeral drainages, and seasonal wetlands. No known federally-listed or BLM sensitive species are known to occur within the Action Area. The BLM consulted with Federally Recognized tribes and state agencies responsible for management of wildlife resources in addition to other interested publics.

1.6. PUBLIC INVOLVEMENT

Public participation was encouraged throughout the development of the Vya PMU Habitat Restoration and Fuels Reduction Programmatic Environmental Assessment. Collaboration included representatives from Tribes, local representatives from Federal and State agencies, local governments, landowners, permittees, other interested persons, community-based groups, and other nongovernmental organizations. Two scoping letters were sent out to identified interested publics. The first public scoping of the Proposed Action went out via mailings to interested members of the public on November 10, 2011. The second public scoping of the Proposed Action went out via mailings to interested members of the public on March 6, 2013. A Draft Environmental Assessment and unsigned FONSI were sent out for a 30 day public comment period and review on June 26, 2013. Comment analysis of the EA is below.

1.7. COMMENT ANALYSIS

Table 1.3.

Comment Number	Commenter	Comment	Response
1.	WWP	The BLM does not clearly establish that there is any need for large-scale action.	See page 3 and 4 for Purpose and Need and objectives for the project and the Vya PMU Conservation Strategy which rated the risk factor of juniper encroachment into Greater sage-grouse habitat as high.
2.	WWP	The EA does not provide data establishing the "historic plant community mosaic" for the action area. Nor does the EA establish that the proposed action will reduce risks of catastrophic fire.	The EA tiers to the SSERS FEIS which includes a discussion of the both a historical and current vegetation within the project area. The EA discusses vegetation on pages 62-69 the EA. The proposed action would reduce fuel loading by reducing biomass on the landscape by burning and removal of juniper which would reduce fire intensity and the risk of catastrophic fire. A discussion on the impacts of the proposed action on fuel loading and the risks of catastrophic fire is on page 37-42 of the EA.

3.	WWP	The BLM has also ignored science showing that under natural conditions, juniper and sage-brush burn only rarely, and when these vegetation types do burn, they burn under "catastrophic" conditions, i.e. "catastrophic" fire in these landscapes is the normal state. The BLM argues that reduced fire frequencies have resulted in a landscape dominated by late seral developmental stages, and that this increases the risk of large scale wildfire with potential negative consequences. But it ignores crucial data showing that fire-return intervals may be much longer than 140 years. Under natural conditions, juniper, pinyon and sage-brush burn only rarely, and when these vegetation types do burn, they burn under "catastrophic" conditions, i.e. "catastrophic" stand-replacing fire in these landscapes is the normal state (Bukowski and Baker, 2013).	The EA tiers to the SSERS FEIS, and uses much of the same scientific literature. The SFO BLM reviewed literature provided and incorporated relevant references into the EA. Although there is some scientific uncertainty about historic fire regimes in sagebrush and juniper ecosystems, the EA relies upon the best science available for the geographic region in which the Project Area is located. Components of an ecosystem, including fire regime, are a function of abiotic factors (precipitation, temperature), land use history, and ecological legacy, all of which are geographically specific. While pinyon-juniper systems on the Colorado Plateau may be compositionally similar to the Project Area, it is inappropriate to assume they are ecologically identical.
4.	WWP	The BLM has failed to consider a range of reasonable alternatives, and in fact has not considered any action alternatives at all. It has dismissed from consideration the two alternatives we suggested without justification.	The SFO BLM proposed action tiers to the SSERS FEIS and encompasses a variety of different treatments outlined in the SSERS FEIS. The BLM considered but dismissed alternatives that would not address the purpose and need for action and address the identified resource issues and concerns.

5.	WWP	We proposed a Hand Treatments Only Alternative that would selectively target of younger trees in the vicinity of sage-grouse leks or important sage grouse use areas for hand-cutting. The BLM has inappropriately dismissed this saying it wants to use a variety of treatment methods. But hand-cutting would allow protection of sage-grouse leks and the surrounding nesting areas without large-scale degradation of sage-brush.	The SSERS identified a variety of treatment techniques to treat juniper in encroached sage-steppe communities to address differing stages of juniper encroachment. The EA does not allow prescribed fire within 2 miles of an active sage-grouse lek to conserve existing shrub cover in the areas of the PMU where sage-grouse use is the highest. The Hand Treatment Only Alternative would not address the resource concerns and issues identified in the EA because it would not address post-treatment slash and fuel buildup in higher-density juniper areas. In areas where juniper encroachment is in late phase II and phase III, hand cutting alone would result in not meeting habitat objectives, sage-grouse avoidance of heavy slash areas would occur, and there would be an increased potential for extreme fire behavior following treatment due to heavy fuel loads.
6.	WWP	The BLM has dismissed our proposed Reduced Grazing/Habitat Restoration Alternative as "outside the scope of analysis" and "would not address the purpose and need for action". EA at 23. But as both EA and the SSRS assert, 140 years of livestock grazing has changed fire-frequencies. EA at 66. Eliminating or reducing livestock grazing would allow these changed frequencies to move towards natural rates.	The proposed Reduced Grazing/Habitat Restoration Alternative is outside the scope of the EA. Changes in permitted livestock use occurs through the grazing permit renewal process. Rest of treatments from livestock use is described in the EA on page 19. Additionally, this alternative would not address the purpose and need for action, which is to treat sage-steppe communities that are already encroached and declining in vigor as a result of juniper.

7.	WWP	In this EA, the Field Office has ignored high quality rigorous science that is directly relevant to the proposed action. It has even ignored the papers that we submitted with our scoping comments.	Please review the reference section in the EA on pages 115-120 for scientific literature that was cited in the EA. The SFO BLM reviewed literature provided during the public comment period and incorporated relevant literature into the EA. Literature that was not directly relevant to the proposed action such as mowing in Wyoming sagebrush communities where juniper encroachment is not an issue on SFO BLM lands, was not used in environmental analysis.
8.	WWP	The EA has failed to provide background information on the historical extent of juniper woodland communities in the project area. It has also failed to review current science related to fire return intervals in sage-steppe habitat.	The EA tiers to the SSERS FEIS, and uses much of the same scientific literature for determining the historic extent of juniper woodland communities and the fire return intervals for this eco-region. Please refer to the SSERS FEIS reference section and the reference section in the EA for a list of scientific literature. The EA contains a discussion on the historical extent of juniper woodland communities and fire return intervals on page 37-40 and 64-65 of the EA.
9.	WWP	We are extremely concerned that the BLM is ignoring or underestimating the risks the proposed action will have in spreading cheatgrass and other dangerous non-native invasive species. The EA's claim that restricting burning to above 5,500 feet on north slopes and 6000 feet south slopes will protect against cheatgrass is completely baseless.	The restrictions on burning outlined in the EA are based on scientific literature reviews, fire recovery data from the SFO, BLM interdisciplinary team specialist's knowledge and expertise, and observations by SFO BLM specialists from wildfires and prescribed fires within the SFO. In addition, for this project, the SFO BLM is not going to complete any prescribed burning on south facing slopes. This decision will be incorporated into the Decision Record.

10.	WWP	Please consider the following, relevant recent scientific papers relating to sage-grouse, sage-brush obligates such as pygmy rabbit, fire return intervals and sage-steppe vegetation manipulation in your revised NEPA analysis for this risky project:	Comment Noted.
11.	WWP	An EIS must be prepared for this project. The scope (treatments over a 100,000 acre project area) and duration (10 years) of the project themselves warrant preparation of an EIS. 40 CFR 1508.25. There is clear scientific uncertainty and controversy regarding the fire-return intervals and science that underlies this project. 40 CFR 1508.27 (b)(4) & (5).	The EA is tiered to the SSERS FEIS. A FONSI is prepared to determine if an EIS is required.
12.	Davis	Information and maps based upon on the ground inventories and specific locations of old growth juniper woodlands within the Project Area should have been provided during this EA process.	Project specific information will be provided when individual projects are proposed.
13.	Davis	Since old growth juniper areas are not usually flagged (even during the removal projects) the public has no real way of evaluating whether old growth juniper and old growth juniper communities will be adequately protected BEFORE the removal projects are implemented. Maps indicating the locations of the old growth juniper woodlands could help a lot with this problem. Maps and flagging around the old growth woodlands would, of course, be ideal.	The EA included a discussion of how old growth communities will be protected before, during and after project implementation. The BLM works with contractors and BLM personnel implementing projects to identify and preserve old growth juniper.

14	Davis	"Detailed site information will be provided during project development." But it is not specific as far as exactly what information regarding old growth juniper communities will be provided.	Information provided during project development will include a discussion of the vegetation communities, including old growth present within the project area. A discussion of the proposed treatment, SOP's and mitigation measures will be provided.
15.	Davis	When and how will the public have access to the above information, and what exactly will it consist of? It should include both the "potential" historic old growth juniper woodlands AND the old growth juniper woodlands that are in areas where they are supposedly "not expected to occur". The DNA and Pre-Project Clearances in Appendix G also say nothing about this issue.	The public will be provided all information relevant to a project proposal through the public involvement process. The BLM will provide a discussion of the vegetation communities, including old growth juniper present within the project area. A discussion of the proposed treatment, SOP's and mitigation measures will also be provided.
16.	Davis	On page 80, the EA states that "There are no WSAs or designated Wilderness Areas in the Project Area." Even so, it should be acknowledged that the Massacre Rim WSA, the Sheldon Contiguous WSA and the Sheldon National Refuge are all contiguous to the Project Area.	Comment Noted.
17.	Davis	We are quite concerned regarding the impacts that some of the juniper removal methods described in the current EA would have on the visual and recreational resources that we currently use, and on our continued enjoyment of them. We believe that our public agencies should always seek to minimize such impacts on all of the public lands, not just on those parts of the lands that are adjacent to certain "important" roads or within certain "important" view-sheds.	The proposed project design features including SOP's, SRPM's and mitigation measures are designed to reduce impacts to a number of impacted resources including visual and recreational resources.

18.	Davis	As stated in the Project Description, the majority of cut trees would remain in place and unlimbed for all treatment areas." Generally speaking, the BLM needs to do better-looking projects. To leave the majority of cut trees unlimbed for all treatment areas would be an unnecessary shame. We have seen many treatment areas over the last several years, and formed some definite opinions about which juniper removal methods look best over time, as follows: 1. All stumps should be cut to a height of 12 inches or less across the entire treatment areas, not just in certain buffers along well-traveled roads. 2. In areas where piling and burning (or removal by other means) of trees will not take place, all trees within entire treatment areas should be cut, lopped and scattered to a height of no more than 30 inches. We have seen this work out quite well as long as the trees on a site were not too dense. See Photo 1.	The BLM requires that all stumps be cut to a height of 8 inches or less. This was not mentioned in the EA however it will be incorporated into the SOP's in the Decision Record. In addition, all slash that is not going to be removed or burned will be lopped and scattered to a height of three feet or less. This will be incorporated into the SOP's in the Decision Record.
19.	Davis	Where the canopy density of encroaching juniper is too high, even with careful lopping and scattering, there will be so much slash left on the ground that the site will be very unattractive visually. Walking is difficult or impossible, vegetation is smothered, and the increase in fuel loading will be excessive. See Photo 2.	The SFO BLM is planning on removing slash when build-up is too high. This generally occurs in late Phase II and Phase III areas. Decisions on how to address slash will be made according to the SOP's in the EA. Decisions on how to address slash buildup for individual project proposals would be based on identified resource concerns.

20.	Davis	Whole juniper trees that have been cut and left without lopping or scattering are the worst. They can limit access and look especially awful when left on rocky hillsides or rocky outcrops and/or close to the remaining old growth trees, where they also provide ladder fuels. See Photo 3.	See Comment 18. The BLM will require all trees where biomass is not going to be removed or burned to be cut to a height of three feet or less.
21.	Davis	Where juniper density is too high, use "pile and burn" or remove the cut juniper for biomass or other purposes. Do not use "cut and leave" in any treatment area. Our public lands deserve better.	See Comment response to Comments 18 and 20.
22.	Davis	On page 72, the EA states that "Class II and III allow for moderate changes to the landscape." However, the Visual Resource Management Classes definitions on page 70 clearly state that the Class II Objective is "To retain the existing character of the landscape. The level of change to the characteristic landscape should be low."	Treatments occur within three VRM classes however most treatments fall within Class II and III. Vegetation treatments are not expected to change the characteristics of the landscape beyond what the current VRM classes allow. SOP's and mitigation are put in place to reduce the impacts to Visual Resources and in the long term, treatments are expected to produce increases in native grasses and shrubs and shift plant communities towards a more natural ecological state.
23.	Davis	On page 89, the EA states that "Woodland species such as juniper offer nesting and foraging opportunities for many of these species." None of the birds listed on pages 88-89 in the EA are cavity nesters. The EA does not state the critical importance of the cavities/holes found in many old growth junipers to various cavity nesting species such as western and mountain bluebird, juniper titmouse, kestrel, screech owl, chickadee, flicker and other woodpeckers.	The BLM agrees that old growth juniper provides habitat for a number of cavity nesting birds however old growth trees and trees with active bird nests (in Wildlife SOPs, page 21) would not be cut and therefore no direct impacts are expected to occur.

24.	Davis	Page 90 states that "Pronghorn Antelope are known to kid in open expanses near playa lakes and in large low sagebrush flats." Some pronghorn also kid at the edges of juniper woodlands, close to open areas of low sagebrush. We see this occur every year on our property in Modoc County.	Comment Noted.
25.	Davis	On Page 129. SRPM #3, states that "All standing juniper within 20 meters (60 feet) of the toe or rim of rimrock outcroppings around rock art panels will be removed to prevent fire damage to rock art sites. Exceptions include when a tree is a significant cultural component of the site." In the Final Home Camp EA (June 14, 2012), on page 121, this SMRP reads "All standing juniper (that does not exhibit old growth characteristics) within 20 meters (22 yards) of the toe or rim of rimrock outcroppings where rock art sites occur will be removed to prevent fire damage to rock art sites." Please insert the phrase "that does not exhibit old growth characteristics" into the Vya PMU EA SRPM #3 as well."	Comment noted. While rock art are cultural resources, juniper trees can also be cultural resources in some instances. Some rock art in the Surprise Field Office dates to about 10,000 years old and juniper trees are a traditionally used plant by Native American tribes. The SFO BLM discourages the cutting of old growth junipers trees but still provides for the protection of rock art by limiting the potentially cut trees to those around a rock art panel (instead of the entire site) and also by protecting the old growth trees that appear to have influenced past peoples' behavior at the site.
26.	Davis	Under SOP, page 136, Woodcutting. The EA states that "The areas excluded from woodcutting would be signed to indicate that woodcutting is not allowed." Woodcutting areas should be selected that do not include the temptation of old growth juniper present on the site or directly contiguous.	Wood cutting areas will be selected in areas where resource concerns including old growth concerns can be addressed. In addition, wood-cutting permits specify that old growth juniper cannot be cut.

27.	Davis	In the case of old growth juniper retention, this SSER "monitoring" method would obviously not be able to "…make real time adjustments and corrections within the scope of the ongoing project…" possible. Only adequate project inspections by BLM staff during active juniper removal projects can change the course of a badly implemented project before it is too late.	The BLM will provide project inspectors during project implementation to provide real time adjustments and address resource concerns and questions as they arise.
28.	Davis	Juniper removal projects, including the hand-cutting treatments, progress quite rapidly. Regular, at least weekly, project inspections by BLM staff are especially important when old growth juniper is present on a treatment site in order to ensure old growth juniper retention. Please state the periodicity expected for regular required project inspections while juniper removal projects are actually in active progress. This is not listed in the EA SOP.	See comment 27. The BLM will provide a minimum of at least one project inspection weekly for projects where contractors are implementing the project. This will be incorporated into the Decision Record as an SOP.
29.	Davis	On page 136, under Old Growth Juniper, one of the listed old growth characteristics is: "Deeply furrowed fibrous bark on the trunk that is reddish in color." Please change the wording of the above characteristic to something like "Deeply furrowed fibrous bark on the trunk that can be reddish in color". Otherwise, this statement makes it seem as though ALL old growth juniper trunk bark is reddish in color, which is erroneous.	Comment noted and SOP modified in Decision Record.

30.	Davis	It is also important to make sure that contractors and cutting crews understand that size should not be used as a factor in the identification of old growth juniper. We have seen juniper removal projects in which the smaller pre-settlement trees in old growth juniper communities were destroyed because the cutting crews did not understand this fact. Various morphological characteristics are used to identify old growth juniper, but size is not a factor. See Photos 5 and 6.	THE SFO BLM agrees that size is not a reliable indicator of tree age, and the SFO BLM works with contractors and cutting crews to identify old growth juniper based on morphological characteristics.
31.	Davis	On page 137, the SOP states that "In addition to preserving individual old growth trees, efforts would be made to maintain functioning ecosystems in historic juniper woodlands, especially those with a significant old growth component." Three different approaches to treatment are then described, ranging from stands with 75% of trees exhibiting old growth characteristics, to stands with 25% of trees exhibiting old growth characteristics. We very much appreciate the SFO's apparent intention to preserve the old growth woodlands as communities and maintain them as functioning ecosystems. Thank you!	Comment Noted.
32.	NDOW	The Nevada Department of Wildlife (NDOW) appreciates the opportunity to comment on the Bureau of Land Management (BLM) Surprise Field Office's (SFO) Vya PMU Habitat Restoration and Fuels Reduction Projects. With conifer encroachment being a high risk to sage-grouse habitat quantity and quality in this area and given the birds pending listing status, it is especially important	Comment Noted.

		management actions be taken to reduce this threat. Therefore, we support the BLM SFO's efforts to improve wildlife habitat within the Vya Sage-grouse Population Management Unit (PMU). To preface our comments, we appreciate BLM incorporating our scoping comments into the planning document.	
33.	NDOW	We commend the BLM for prioritizing treatments in areas that are most cost effective and based upon important sage-grouse use areas. We support this landscape-scale project approach that attempts a variety of treatments (including both mechanical and prescribed burning) across the landscape. Implementing these treatments across a large scale and through time breaks-up the landscape into heterogeneous patches with differing vegetation states. These heterogeneous mosaics can improve wildlife habitat quality and quantity as well as improve fuel load conditions to prevent catastrophic wildfires from occurring.	The EA contains a prioritization flowchart and table on page 13 and 14.
34.	NDOW	We support your approach to treat encroached areas, but to leave juniper woodland sites intact. We generally support treatments in Phase I and II areas, but not in mid-to-late phase III areas unless: a. It is high value habitat and an agency priority (e.g. next to spring important to sage-grouse brood use). b. Biomass will be removed. c. Sites will be seeded and seeding success is likely. d. Invasive annuals are not expected to dominate the site following treatment	The SFO BLM prioritizes treatments in sage-grouse habitats (see page 13 and 14 of EA). The SFO BLM will remove biomass as needed in areas of dense juniper (Phase II and Phase III).

		(e.g. high cover on site or in adjacent areas).	
35.	NDOW	Mechanical methods alter the fuel structure but do not reduce fuel loading. Therefore, leaving fuels on the site increases the likelihood of a catastrophic fire following treatment compared to broadcast burns; therefore, we support broadcast burns. As long as desirables vegetation (especially deep-rooted perennial bunchgrasses) are on site, the function, ecological processes and health will be maintained and improved. In one of the Joint Fire Science's project sites that were mechanically treated and then wild fire occurred, generally resulted in high intensity fires that resulted in an undesirable vegetation response. While in prescribed burned sites that experience wild fires shortly after treatment, the burn intensity was low and sites responded favorably.	Comment Noted.
36.	NDOW	We support taking a conservative burn approach only burning in those areas that will respond positively and during conditions that will accommodate low intensity burns. High intensity burns typically kills the desirable vegetation onsite, allowing for resources (e.g. water, nutrients) to remain available to undesirable species like cheatgrass. Therefore, we support your management approach and hope that burn plans are written with the objective of low intensity burns. For example, burning during unfavorable burning conditions typically result in low intensity burns. Additionally, we support burning piles during the late fall through early spring to ensure a low intensity burn occurs at the pile site to the	Comment noted and SOP developed and incorporated into Decision Record.

		extent practical. We also recommend burning several small piles as opposed to one large pile. Furthermore, we recommend spot seeding after piles have burned.	
37.	NDOW	When implementing a cut and broadcast burn (as opposed to spot burning) in phase I and II areas consider waiting greater than three and four years post cutting to conduct the burning to allow for onsite desirable species to increase resource allocation commensurate with resource availability. Tree removal increases the time of available soil water in the spring. The extra water made available by treatment is a significant resource pulse. As long as this water resource is available there is a potential for cheatgrass invasion. Allowing the desired species to respond and fully allocate this resource will reduce the likelihood of an undesirable species expression in the vegetation community.	Comment noted and SOP developed and incorporated into Decision Record.
38.	NDOW	Consider chaining as it can be very cost effective when compared to mastication's. For example, three times the amount of area can be chained compared to mastication for the same cost. For chaining to be successful we recommend ensuring you have experienced operators that will keep the chain tight so that it rolls over brush and grass leaving it alive in place. We recommend utilizing Ely chains (welded triangle) as opposed to smooth chains as they better remove trees. Chaining in cold weather can be effective as it snaps-off Juniper trees and less soil impacts occur when the ground is frozen. Based upon our observations, five years post	Comment Noted.

		chaining equipment scars are no longer visible. In areas where mastication is preferred, we recommend leaving less than 4 inches of debris/slash on site.	

1.8. PLAN CONSISTENCY

Based on information in the EA, the project record, and recommendations from BLM specialists, I conclude that this decision is consistent with the Sage Steppe Ecosystem Restoration Strategy Record of Decision (ROD) and Final Environmental Impact Statement and the Surprise Resource Management Plan/Final Environmental Impact Statement (RMP/ROD/FEIS), April 2008. This decision is also consistent with the Endangered Species Act; the Native American Religious Freedom Act; other cultural resource management laws and regulations; Executive Order 12898 regarding Environmental Justice; and Executive Order 13212 regarding potential adverse impacts to energy development, production, supply and/or distribution.

1.9. ADMINISTRATIVE REMEDIES

This decision may be appealed to the Interior Board of Land Appeals, Office of the Secretary, in accordance with the regulations at Title 43 of the Code of Federal Regulations (CFR) Part 4, and the information provided in BLM Form 1842-1.

If an appeal is taken, your notice of appeal must be filed in the Surprise Field Office, Bureau of Land Management, U.S. Department of the Interior, 602 Cressler Street, Cedarville, CA 96104, within 30 days from receipt of this decision. The effective date of this decision (and the date initiating the appeal period) will be the date this notice of decision is posted on BLM's internet website (http://www.blm.gov/ca/st/en/fo/surprise.html).

The appellant has the burden of showing that the decision appealed is in error.

If you wish to file a petition for a stay of the effectiveness of this decision during the time that your appeal is being reviewed by the board, pursuant to Title 43 of the Code of Federal Regulations, Part 4, Subpart E, the petition for a stay must accompany your notice of appeal. A petition for a stay is required to show sufficient justification based on the standards listed below. Copies of the notice of appeal and petition for a stay must also be submitted to the Interior Board of Land Appeals and to the appropriate Office of the Solicitor (see 43 CFR 4.413) at the same time the original documents are filed with this office. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted.

Standards to Obtaining a Stay:

Except as otherwise provided by law or other pertinent regulations, a petition for a stay of a decision pending appeal shall show sufficient justification based on the following standards:

(1) the relative harm to the parties if the stay is granted or denied,

(2) the likelihood of the appellant's success on the merits,

(3) the likelihood of immediate and irreparable harm if the stay is not granted, and

(4) whether the public interest favors granting the stay.

1.10. Authorizing Official:

Timothy J. Burke Date
Field Manager, Surprise Field Office