



United States Department of the Interior

BUREAU OF LAND MANAGEMENT
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Ellison Ranching

c/o Bill Hall

HC 32, Box 240

Tuscarora, NV 89834

FINAL MULTIPLE USE DECISION FOR THE SPANISH RANCH AND SQUAW VALLEY ALLOTMENTS

Dear Mr. Hall:

The Rock Creek (Spanish Ranch and Squaw Valley) and Andrae Allotment Evaluations as well as the 2003 Management Action Selection Report (MASR), analyzed monitoring data from 1983 through 2003. Monitoring was conducted to determine if current management practices and grazing systems are meeting the Land Use Plan (LUP), Rangeland Program Summary (RPS), Resource Management Plan (RMP), Standards and Guidelines for Rangeland Health for Northeastern Nevada, and allotment specific multiple use objectives. A 30-day comment period was provided for the interested public to submit written comment and concerns regarding the evaluation.

Following the 30 day public comment period for the evaluation, the Elko Field Office carefully considered the comments received which prompted changes to the evaluation and proposed management actions. Upon completion of these changes, the management actions to be implemented within the Spanish Ranch and Squaw Valley Allotments were selected. The actions selected for implementation were described in the "Squaw Valley and Spanish Ranch Allotments Management Action Selection Report (MASR)".

On October 2, 2003, the Proposed Multiple Use Decision (PMUD) for the Spanish Ranch and Squaw Valley Allotments was issued. The Elko Field Office did not receive any protests on the PMUD.

In order to ensure progress towards and achieve the standards for rangeland health and multiple use objectives, changes in current livestock and wild horse management are required.

Therefore, my final decision is to implement the management actions identified below for livestock, wild horses, wildlife and other management in the Spanish Ranch and Squaw Valley allotments. These management actions will become effective at the end of the appeal period for

this decision.

LIVESTOCK GRAZING MANAGEMENT DECISION

**SELECTED MANAGEMENT ACTIONS FOR LIVESTOCK GRAZING
WITHIN THE SPANISH RANCH AND SQUAW VALLEY ALLOTMENTS**

The following management actions have been determined appropriate to establish significant progress toward attainment of the multiple use objectives for the Squaw Valley and Spanish Ranch Allotments and the Standards for Rangeland Health approved for the Northeastern Great Basin Area of Nevada. These actions will be implemented through the issuance of this Final Multiple Use Decision.

Implement all of the following selected management actions for the Spanish Ranch and Squaw Valley allotments:

CARRYING CAPACITY RECOMMENDATIONS

1. Establish carrying capacities for the Spanish Ranch and Squaw Valley Allotments by proposed or existing pastures.

Table 1. Estimated Carrying Capacity by Proposed Pasture for the Spanish Ranch Allotment

SPANISH RANCH ALLOTMENT (see map 1)		
Pastures (see map 2)	% of Allotment Carrying Capacity from Adjudication Maps (using public and private lands for % calculation) ¹	Pro-rated Carrying Capacity ² (AUMs)
Burner Hills	19.6	5,399
Winters Creek	9.7	2,672
Red Cow	24.7	6,803
Cornucopia	9.4	2,589
Big Cottonwood Upland	31.2	8,594
Big Cottonwood Riparian	1.9	523
Hot Creek	3.5	964
TOTAL	100%	27,544

¹Grazing use is licensed based on public land capacity expressed as a percentage of the total capacity (public and private). The Spanish Ranch Allotment is licensed at 74% public land. However, the total number of Animal Unit Months (AUMs) of specified livestock grazing shown in this table reflects only those AUMs from public lands. An AUM is the amount of forage a cow and her calf consume during a 30 day period.

²Calculated AUMs may change based on the design and location of proposed pasture fences.

Table 2. Estimated Carrying Capacity by Proposed Pasture for the Native Pastures in the Squaw Valley Allotment.

SQUAW VALLEY ALLOTMENT (see map 1)		
Pastures (see map 2)	% of Allotment Carrying Capacity from Adjudication Maps (using public and private lands for % calculation) ¹	Pro-rated Carrying Capacity ² (AUMs)
Horseshoe	8.5	3,041
Indian Springs	5.7	2,039
Upper Clover	0.4	143
Lower Squaw Field	4.9	1,753
Lower Gorge Pathway	1.7	608
Frazer Creek Riparian	7.1	2,540
Soldier Field	6.4	2,289
Trout Creek Riparian	22.1/TBD	7,905/TBD ³
Toe Jam Riparian	TBD	TBD ³
Rock Creek Riparian	9.7	3,470
Willow Creek Reservoir	Before split 30.9	11,053
Nelson Field	2.6	930
Total	100%	35,771
TBD = To be determined ¹ Grazing use is licensed based on public land capacity expressed as a percentage of the total capacity (public and private). The Squaw Valley Allotment is licensed at 80% public land. However, the total number of AUMs of specified livestock grazing shown in this table reflects only those AUMs from public lands. An AUM is the amount of forage a cow and her calf consume during a 30 day period. ² Calculated AUMs may change based on the design and location of proposed pasture fences. ³ The AUMs for the Trout Creek and Toe Jam Pastures will be determined once the fence line is constructed.		

Rationale: Although data indicated that there is sufficient carry capacity to support an increase in total numbers of Animal Unit Months (AUMs) of specified livestock grazing on both the Spanish Ranch and Squaw Valley Allotments, not all of the multiple use objectives have been met on both allotments. Failure to meet some of these objectives can be attributed to livestock grazing. Until those objectives that are directly related to livestock management are met, no increase in total number of specified livestock grazing is recommended.

The estimated carrying capacity figures for the Native Pastures of the Spanish Ranch and Squaw Valley Allotments were pro-rated to the new pastures based on the relative carrying capacity of each pasture. For the native pastures within the Squaw Valley and Spanish Ranch Allotments, an additional step was required. From 1983 through 1990, actual use was reported for the entire

Rock Creek Native Pasture. From 1991 through 1995, actual use was reported separately for each allotment. Therefore, the average estimated carrying capacity for the Rock Creek Native Pasture was pro-rated to the Squaw Valley and Spanish Ranch Allotments based on the total number of AUMs of specified livestock grazing outlined in the Elko Resource Management Plan.

Note: The average estimated carrying capacity for the **Native Pasture** of each allotment (for the period 1990-1995) was then averaged with the pro-rated average for the Rock Creek Native Pasture (for the period 1983-1990). The relative carrying capacity for each pasture was calculated from the Tuscarora, Taylor, and Owyhee Adjudication Maps. The total number of AUMs of specified livestock grazing for the Squaw Valley Allotment outlined in the RMP included the three seeded pastures. Carrying capacities for the seeded pastures in the Squaw Valley Allotment were calculated using the utilization levels observed and the actual use recorded, and are displayed in the appendix of the MASR. Calculations and explanation of the methods used to derive carrying capacity are also displayed in the MASR.

TOTAL NUMBER OF AUMS OF SPECIFIC LIVESTOCK GRAZING AND TERM PERMIT CONDITIONS

2. Establish the total number of AUMs of specified livestock grazing at 22,201 AUMs for Ellison Ranching Co. on the Spanish Ranch Allotment and 26,518 AUMs for Barrick Goldstrike on the Squaw Valley Allotment. Maintain permitted use on the Elevenmile Flat Allotment at 1,542 AUMs. Modify term grazing permits for Ellison Ranching Company and Barrick Goldstrike as shown below:

Note: The season of use for Elevenmile Flat Allotment is outlined to incorporate this allotment into the management of the Squaw Valley Allotment and implementation of the grazing system.

Ellison Ranching Company's term permit for the Spanish Ranch Allotment and Barrick Goldstrike's term permit on Squaw Valley and Elevenmile Flat will be modified as shown below:

Issue new ten-year grazing permits for the Squaw Valley, Spanish Ranch, and Elevenmile

Flat Allotments as follows:

<i>Allotment/ Pasture</i>	<i>Livestock Number & Kind¹</i>	<i>Begin Period</i>	<i>End Period</i>	<i>%PL</i>	<i>Type Use</i>	<i>AUMs</i>
Spanish Ranch						
Native	3,818 Cattle	3/25	11/15	74	active	21,921
Native	950 Sheep ²	6/10	7/15	74	active	166
Native	640 Sheep ²	10/05	10/31	74	active	84
FFR	3 Cattle	3/1	2/28	100	custodial	<u>30</u>
Total						22,201
Squaw Valley						
Native	2,766 Cattle	3/16	11/30	80	active	18,914
Native	17 Horses	5/1	11/30	80	active	96
Midas Sdg.	105 Cattle	3/16	11/20	85	active	733
Rock Ck Sdg.	84 Cattle	3/16	11/20	100	active	690
Horseshoe Sdg.	226 Cattle	3/16	11/20	100	active	1,861
Horseshoe Sdg.	10 Horses	3/16	11/20	100	active	82
FFR	12 Cattle	3/1	2/28	100	custodial	142
Native	Sheep ²	3/16	11/30	80	active	<u>4,000</u>
Total						26,518
Elevenmile Flat						
	1,720 Cattle	3/16	4/30	39	active	1,014
	844 Sheep	4/1	11/30	39	active	<u>528</u>
Total						1,542

¹ The total active use is based on the maximum number of AUMs allowed during any one year of the four year grazing cycle. Therefore, depending on the year and pasture being rested, the active use will vary annually. Those AUMs scheduled for rest will be placed in suspension each year.

² Sheep will not be allowed to bed on the same bedding grounds more than two nights in a row. Sheep will not graze or trail along streams, springs, or aspen stands. Each band will use alternate trailing routes and different bedding areas. Sheep, *when trailing*, will be trailed at least five miles per day. Movement to and from bedding sites will be random to avoid the creation of trails. Sheep bands would not occupy the same bedding sites used in the summer during the fall.

**Terms and Conditions:
Squaw Valley Allotment**

PART I

Adopt the Reasonable and Prudent Measures (RPMs) and implement the terms and conditions outlined in the Final Biological Opinion (1-5-04-F-05). The RPMs, terms and conditions, and reporting requirements are described below.

A. REASONABLE AND PRUDENT MEASURES

1. Minimize utilization of riparian vegetation and streambank alteration by livestock along LCT streams with the Squaw Valley Allotment.
2. Assess compliance with the reasonable and prudent measures, terms and conditions, for minimizing utilization of riparian vegetation and streambank alteration (RPM 1), and ensure compliance with reinitiation requirements contained in the biological opinion.

B. TERMS AND CONDITIONS

To implement RPM 1, BLM shall fully implement the following terms and conditions:

1. Under provisions of the Final Agreement for Fire Closure and Management on the Squaw Valley and Spanish Ranch Allotments effective April 2002, and the 2003 Upper Willow Creek Habitat Enhancement Plan, livestock (cattle and/or domestic sheep) grazing and/or trailing shall not be reauthorized in the Frazer Creek Riparian Pasture or the Upper Willow Creek Habitat Enhancement Area until all stream and riparian objectives have been met. For Frazer Creek, the average riparian condition class must meet a rating of 65%, an average aspen regeneration height of at least 7 feet, and achieve proper functioning condition (PFC). For the Upper Willow Creek Habitat Enhancement Area, Lewis Creek must have an average riparian condition class of 70%, average stream width/depth ratio of 15:1, and must achieve PFC. Nelson Creek must have an average riparian condition class of 70%, an average stream width/depth ratio of 16:1, and must achieve PFC. Upper Willow Creek must meet an average riparian condition class of 65%, an average stream width/depth ratio of 20:1, and must also achieve PFC.
2. Under the proposed short-term livestock grazing system, livestock (cattle and/or domestic sheep) grazing and/or trailing within Soldier Field/Trout Creek/Toe Jam Riparian Field/Pasture and the Frazer Creek Riparian Field/Pasture shall be in accordance with the following resource criteria/restrictions:
 - a. Cattle grazing and/or trailing shall not be allowed.
 - b. Domestic sheep bands¹ shall avoid as much as possible grazing/bedding along streams, and next to springs, and/or aspen stands.
 - c. When trailing, domestic sheep shall be restricted to existing roads/trails where possible

¹ A domestic sheep band is a grouping of about 1,000 ewes plus lambs or 1,000 to 1,500 dry ewes without lambs.

and sheep bands must travel at least 5 miles/day.

- d. Domestic sheep bands shall not occupy the same bedding site more than two nights in a row.
- e. Domestic sheep bands shall not occupy the same bedding sites used in the summer in the fall.
- f. Domestic sheep movement between bedding sites shall be random.

OR

- g. Cattle grazing and/or trailing shall be permitted in Frazer Creek Riparian Field/Pasture under the resource criteria/restrictions of the proposed long-term livestock grazing system as outlined under Reasonable and Prudent Measure Number 1, Term and Condition Number 3 and Reasonable and Prudent Measure Number 2, Term and Condition Number 1.
3. Under the proposed long-term livestock grazing system, livestock (cattle and/or domestic sheep) grazing and/or trailing shall be permitted within the Frazer Creek Riparian, Trout Creek and Toe Jam Fields/Pastures and the Upper Willow Creek Habitat Enhancement Area under the following resource criteria/restrictions:
- a. Domestic sheep bands shall avoid as much as possible grazing/bedding along streams, and next to springs, and/or aspen stands.
 - b. When trailing, domestic sheep shall be restricted to existing roads/trails where possible and sheep bands must travel at least 5 miles/day.
 - c. Domestic sheep bands shall not occupy the same bedding site more than two nights in a row.
 - d. Domestic sheep bands shall not occupy the same bedding sites used in the summer in the fall.
 - e. Domestic sheep movement between bedding sites shall be random.
 - f. Any cattle that are trailed through these fields/pastures/areas shall be continuously herded until they reach their final destination in one day. No over night stops shall be permitted.
 - g. Livestock (cattle and/or domestic sheep) grazing shall be permitted in the following fields/pastures/areas under the following resource criteria/restrictions:
 - (1) A *Hot Season* prescription shall only occur once within a 4-year grazing cycle

within the Frazer Creek Riparian, Trout Creek and Toe Jam, Fields/Pastures.

- (2) Two consecutive years of *Hot Season* prescriptions shall not be permitted within the Frazer Creek Riparian, Trout Creek and Toe Jam Fields/Pastures.
 - (3) A minimum of one year of rest shall be required within a 4-year grazing cycle within the Frazer Creek Riparian, Trout Creek and Toe Jam Fields/Pastures. A request to waive this requirement will be considered by BLM in the absence of *Hot Season* grazing during a 4-year grazing cycle.
 - (4) A *Hot Season* prescription shall not occur within the Upper Willow Creek Habitat Enhancement Area.
 - (5) Rest shall occur every other year within the Upper Willow Creek Habitat Enhancement Area.
- h. Livestock (cattle and/or domestic sheep) off dates for spring, fall, winter and/or hot season prescriptions shall not be extended in any field/pasture/area unless annual and/or 4-year monitoring evaluations demonstrate attainment of riparian objectives and/or woody vegetation utilization and/or bank alteration (bank trampling and sheering) criteria shall not be jeopardized.
 - i. Livestock (cattle and/or domestic sheep) grazing along Upper Rock, Toe Jam, Frazer, Lewis, Nelson, and Upper Willow Creeks under the proposed long-term livestock grazing system, shall be contingent upon the achievement of: 1) four of six 4-year stream riparian objectives for Upper Rock, Toe Jam, Frazer Creeks listed in Table 6 of this decision; and all stream riparian objectives for Lewis, Nelson, and Upper Willow Creeks listed in Table 7 of this decision.
 - j. BLM shall monitor LCT stream riparian habitats within the Frazer Creek Riparian (Frazer Creek), Trout Creek (Toe Jam and Upper Rock Creeks), Toe Jam (Toe Jam and Upper Rock Creeks) Fields/Pastures and the Upper Willow Creek Habitat Enhancement Area (Lewis, Nelson, and Upper Willow Creeks) throughout the course of the 4-year grazing cycle. Riparian woody utilization, streambank alteration shall be monitored to document and evaluate grazing impacts. Additional information collected by Trout Unlimited, Nevada Department of Wildlife, and Barrick Goldstrike Mines, Inc. including trout surveys, habitat surveys, green line monitoring, low level color photography, and water temperature monitoring will also be used to evaluate the effectiveness of the grazing system. Monitoring would occur following each year of grazing within the Frazer Creek Riparian, Trout Creek and Toe Jam Fields/Pastures and the Upper Willow Creek Habitat Enhancement Area to ensure that all or a combination of the criteria listed below are not exceeded. BLM shall determine which criteria are applicable based on site potential and stream characteristics:
 - (a) Maximum allowable riparian woody utilization does not exceed 30 percent on

willow species greater than 5 feet tall and/or 20 percent on willow species less than 5 feet tall; and/or 10 percent on aspen species of any height (percentages are based on an average measurement from all stations for each LCT stream); and/or

(b) Livestock streambank alteration (bank trampling and sheering) does not exceed 10 percent (percentages are based on an average measurement from all stations for each LCT stream).

k. Salt and/or mineral blocks shall not be placed within 1/4 mile of springs, streams, riparian habitats, or aspen stands.

To implement Reasonable and Prudent Measure Number 2, BLM shall fully implement the following Term and Condition:

1. Under the proposed long-term livestock grazing system, livestock (cattle and/or domestic sheep) grazing and/or trailing shall be permitted within the Frazer Creek Riparian, Trout Creek and Toe Jam Fields/Pastures and the Upper Willow Creek Habitat Enhancement Area under the following resource criteria/restrictions:
 - a. Prior to turnout each year, the SVA lessee(s) or permittee(s) shall notify BLM Elko Field Office in writing with the following:
 - 1) The kind and number of AUMs of livestock they propose to graze in each field/pasture/area.
 - 2) Which grazing prescription (spring, hot season, fall, winter) they propose to use in each field/pasture/area.
 - b. Annually, following each year of grazing use within the Frazer Creek Riparian, Trout Creek and Toe Jam Fields/Pastures and the Upper Willow Creek Habitat Enhancement Area, BLM shall evaluate the monitoring data collected from Upper Rock, Toe Jam, Frazer, Lewis, Nelson, and Upper Willow Creeks to determine if adequate progress is being made toward achieving short and long-term stream riparian objectives as outlined under Reasonable and Prudent Number 1, Term and Condition Number 3i and if any of the riparian woody vegetation utilization and/or bank alteration criteria as outlined under Reasonable and Prudent Number 1, Term and Condition Number 3j have been exceeded.
 - c. BLM shall ensure that short-term and/or long-term riparian objectives as outlined under Reasonable and Prudent Number 1, Term and Condition Number 3i are not jeopardized and that riparian criteria as outlined under Reasonable and Prudent Number 1, Term and Condition Number 3j are not exceeded. If adequate progress towards meeting stream and riparian objectives cannot be demonstrated in any given year and/or if any of the riparian woody vegetation utilization and/or bank alteration

criteria have been exceeded, then the lessee(s) or permittee(s), BLM, and the Service will address any needed changes in grazing use on an annual basis informally prior to the initiation of any formal consultation. All parties shall address current data, and trends in the determination of making significant progress towards meeting rangeland health standards and specific allotment objectives. If the BLM, the Service, and the lessee(s) or permittee(s) can not reach an agreement as to the appropriate corrective action(s), livestock grazing shall not be allowed in the affected field/pasture/area during the next grazing season.

- d. At the end of each 4-year grazing cycle within the Frazer Creek Riparian, Trout Creek, Toe Jam Field/Pasture and the Upper Willow Creek Habitat Enhancement Area, BLM shall evaluate the monitoring data collected from Upper Rock, Toe Jam, Frazer, Lewis, Nelson, and Upper Willow Creeks to determine if the achievement of any applicable short-term and/or long-term riparian objectives have been jeopardized. If the achievement of any of these applicable riparian objectives have been jeopardized within an affected field/pasture/area, BLM, after the completion of consultation, cooperation, and coordination with the lessee(s) or permittee(s) and interested publics, shall determine which changes in the proposed grazing system are necessary within the affected field/pasture/area to ensure the achievement of the applicable riparian objectives. If BLM and the lessee(s) or permittee(s) can not reach an agreement as to the appropriate corrective action(s), BLM shall issue a decision regarding the proposed change in grazing management in the affected field/pasture/area.
- e. An annual monitoring summary shall be prepared and provided to all of the interested publics including the Service, outlining riparian objectives and criteria for each pasture grazed, how the allotment was grazed, any problems encountered and how they were resolved, the effectiveness of LCT minimization measures, any proposed changes for the following year(s), and an assessment of what progress toward improvement in resource conditions occurred.
- f. BLM shall monitor SVA to determine if or when a portion of the 4,000 available domestic sheep AUMs could be converted to cattle AUMs. No more than 2,000 domestic sheep AUMs (50 percent of 4,000 sheep AUMs) shall be converted and phased in at 4-year increments. However, the conversion of these domestic sheep AUMs shall be contingent on showing progress in meeting stream riparian objectives outlined in Reasonable and Prudent Measure Number 1, Term and Condition Number 3i (Table 9) over each 4-year increment.

REPORTING REQUIREMENTS

Upon locating dead, injured, or sick threatened or endangered species during the time when livestock are authorized to be in SVA, initial notification must be made to the Service's Division of Law Enforcement in Las Vegas, Nevada at telephone number (702) 388-6380 and NFWO at telephone number (775) 861-6300 within three working days. Instructions for proper handling and disposition of such specimens will be issued by the Division of Law Enforcement. Care must be taken in handling sick or injured LCT to ensure effective treatment and care, and in handling dead specimens to preserve biological material in the best possible state. In conjunction with the care of sick and injured fish or wildlife, the preservation of biological materials from a dead specimen, the BLM and the lessee(s) have the responsibility to ensure that information relative to the date, time, and location of the wildlife, when found, and possible cause of injury or death of each must be recorded and provided to the Service.

CONSERVATION RECOMMENDATIONS

Section 7(a)(1) of the Act directs Federal agencies to use their authorities to further the purposes of the Act by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, to help implement recovery plans, or to develop information.

BLM should implement following Terms and Conditions for Trout Creek, because this stream is an unoccupied potential LCT recovery stream identified in the 1995 LCT recovery plan:

Reasonable Prudent Measure Number 1, Term and Condition Number 3.

Reasonable Prudent Measure Number 2, Term and Condition Number 1.

In order for the Service to be kept informed of actions minimizing or avoiding adverse effects or benefiting listed species or their habitats, the Service requests notification of the implementation of any conservation recommendations.

PART II

“Authorized grazing use will be in accordance with the Final Multiple Use Decision for the Spanish Ranch and Squaw Valley Allotments dated_____.”

ALLOTMENT	CATTLE AUMs	SHEEP AUMs	TOTAL ACTIVE USE	TOTAL PREFERENCE
Squaw Valley	26,518	4,000	26,518	26,518
Elevenmile Flat	1,014	528	1,542	1,542

The grazing system will be performance driven: if criteria, standards, objectives are not met,

then additional rest or adjustments in livestock numbers will be required in subsequent year. This may also include a 40% utilization restriction in the native pastures during the active growing season. If objectives and standards for rangeland health are being met, potential does exist for consideration of an increase in livestock use.

The permittee is responsible for ongoing observations to ensure that utilization criteria associated with livestock use are not exceeded. The BLM will provide information and or training to the permittee on the standard methodology used to monitor utilization if necessary or requested. The BLM will continue to monitor to ensure that the permittee complies with the criteria. If problems are identified, the BLM and the permittee will work together to find solutions that address the problems and the annual grazing system will be adjusted the following years as needed.

Livestock numbers identified in this permit are a function of seasons of use and the total number of animal unit months of specified livestock grazing. Deviations from those livestock numbers and seasons of use may be authorized on an annual basis where such deviations would not prevent attainment of multiple use objectives. The terms and conditions of the permit (or lease) may be modified if additional information indicates that revision is necessary to conform with 43 CFR 4180.

Flexibility – The livestock permittee will have the flexibility to adjust his livestock numbers within the grazing system outlined as long as the total number of AUMs of specified livestock grazing for the allotment and target AUMs for each pasture are not exceeded. Moves between pastures can vary by five days before or after the scheduled dates, except for the riparian pastures listed below. Because of riparian concerns, no flexibility in off dates for early or hot season use grazing treatments will be permitted for the following pastures, unless monitoring demonstrates on extension in off dates will not jeopardize attainment of objectives:

Squaw Valley Allotment

- ⚡ Frazer Creek Riparian Pasture
- ⚡ Soldier Creek Riparian Pasture
- ⚡ Trout Creek Riparian Pasture
- ⚡ Toe Jam Riparian Pasture
- ⚡ Rock Creek Riparian Pasture

Permittees on the Squaw Valley and Elevenmile Flat Allotments will have “after the fact” billing privileges. Prior to the grazing season, the livestock permittee will apply for grazing use in conformance with their term permit and any multiple use decisions or allotment management plans. The livestock permittee will submit accurate actual use records by pasture to the Elko District within 15 days after closure of the authorized grazing season. One billing notice, based on the actual use report, will be issued within two weeks of receipt of the actual use report. Payment of grazing fees must be made within 15 days of the bill due date. Failure to pay the grazing bill within 15 days of the due date specified in the bill shall result in a late fee assessment of \$25.00 or 10 percent of the grazing bill, whichever is greater, but not to exceed \$250.00. Repeated delays in payment of “after the fact” billings or noncompliance with the

terms and conditions of the permit (including failure to submit actual use report within 15 days) shall be cause to revoke “after the fact” billing privileges (43 CFR 4130.8-1(f)).

Pursuant to 43 CFR 10.4(G), the holder of this authorization must notify the authorized officer, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(C) and (D), you must stop activities in the immediate vicinity of the discovery and protect it from your activities for 30 days or until notified to proceed by the authorized officer.

Supplemental feeding is limited to salt, mineral and/or protein supplements in block, granular or liquid form. Such supplements must be placed at least ¼ mile from live waters (springs, streams), troughs, wet or dry meadows, and aspen stands.

All riparian exclosures, including spring development exclosures, are closed to livestock use unless specifically authorized in writing.

Spanish Ranch Allotment

“Authorized grazing use will be in accordance with the Final Multiple Use Decision for the Spanish Ranch and Squaw Valley Allotments dated_____.”

ALLOTMENT	CATTLE AUMs	SHEEP AUMs	TOTAL ACTIVE USE	TOTAL PREFERENCE
Spanish Ranch	21,951	250	22,201	22,201

The grazing system will be performance driven: if criteria, standards, objectives are not met, then additional rest or adjustments in livestock numbers will be required in subsequent year. This may also include a 40% utilization restriction in the native pastures during the active growing season. If objectives and standards for rangeland health are being met, potential does exist for consideration of an increase in livestock use.

The permittee is responsible for ongoing observations to ensure that utilization criteria associated with livestock use are not exceeded. The BLM will provide information and or training to the permittee on the standard methodology used to monitor utilization if necessary or requested. The BLM will continue to monitor to ensure that the permittee complies with the criteria. If problems are identified, the BLM and the permittee will work together to find solutions that address the problems and the annual grazing system will be adjusted the following years as needed.

Livestock numbers identified in this permit are a function of seasons of use and the total number of animal unit months of specified livestock grazing. Deviations from those livestock numbers and seasons of use may be authorized on an annual basis where such deviations would not prevent attainment of multiple use objectives. The terms and conditions of the permit (or lease) may be modified if additional information indicates that revision is necessary to conform with 43 CFR 4180.

Flexibility – The livestock permittee will have the flexibility to adjust his livestock numbers within the grazing system outlined as long as the total number of AUMs of specified livestock grazing for the allotment and target AUMs for each pasture are not exceeded. Moves between pastures can vary by five days before or after the scheduled dates, except for the riparian pastures listed below. Because of riparian concerns, no flexibility in off dates for early or hot season use grazing treatments will be permitted for the following pastures, unless monitoring demonstrates an extension in off dates will not jeopardize attainment of objectives:

Spanish Ranch Allotment

- ⊘ Winters Creek Riparian Pasture
- ⊘ Red Cow Riparian Pasture
- ⊘ Big Cottonwood Riparian Pasture

Permittees on the Spanish Ranch Allotment will have “after the fact” billing privileges. Prior to the grazing season, the livestock permittee will apply for grazing use in conformance with their term permit and any multiple use decisions or allotment management plans. The livestock permittee will submit accurate actual use records by pasture to the Elko District within 15 days after closure of the authorized grazing season. One billing notice, based on the actual use report, will be issued within two weeks of receipt of the actual use report. Payment of grazing fees must be made within 15 days of the bill due date. Failure to pay the grazing bill within 15 days of the due date specified in the bill shall result in a late fee assessment of \$25.00 or 10 percent of the grazing bill, whichever is greater, but not to exceed \$250.00. Repeated delays in payment of “after the fact” billings or noncompliance with the terms and conditions of the permit (including failure to submit actual use report within 15 days) shall be cause to revoke “after the fact” billing privileges (43 CFR 4130.8-1(f)).

Pursuant to 43 CFR 10.4(G), the holder of this authorization must notify the authorized officer, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(C) and (D), you must stop activities in the immediate vicinity of the discovery and protect it from your activities for 30 days or until notified to proceed by the authorized officer.

Supplemental feeding is limited to salt, mineral and/or protein supplements in block, granular or liquid form. Such supplements must be placed at least ¼ mile from live waters (springs, streams), troughs, wet or dry meadows, and aspen stands.

All riparian exclosures, including spring development exclosures, are closed to livestock use unless specifically authorized in writing.

Rationale: An evaluation of current grazing management practices has indicated that some of The Standards for Rangeland Health approved for The Northeastern Great Basin area of Nevada, as well as some of the multiple use objectives, have not been achieved and changes in grazing management are necessary.

Modifications of term grazing permits, including dates and numbers of livestock and terms and conditions, will allow implementation of the grazing system(s) outlined to meet multiple use objectives and rangeland health standards on the Spanish Ranch and Squaw Valley Allotments, therefore a new ten year permit will be issued for the Spanish Ranch, Squaw Valley, and Elevenmile Flat Allotments.

Collecting and reporting information on stream and riparian habitat conditions and fish populations, along with livestock use activities, is important to assess the impacts of livestock grazing on LCT and their habitat, ensure that significant progress is being made towards attainment of the Standards for Rangeland Health for the Northeastern Great Basin Area of Nevada.

Barrick Goldstrike's current livestock use within the seeded pastures on the Squaw Valley Allotment has been limited to 2,088 AUMs in the Horseshoe seeding, 735 AUMs in the Midas Seeding, and 821 AUMs in the Rock Creek Seeding. Livestock use in the Native Pasture was limited to 23,010 AUMs. Based on monitoring data collected from 1983 to 2000, use on the seeded pastures should be changed to the capacities outlined in Appendix 4 within the MASR. Although carrying capacity calculations show an increase in total number of AUMs of specified livestock grazing, no increase would be made in the existing Native Pasture due to multiple use objectives not being met.

The Elevenmile Flat Allotment is used in conjunction with the Squaw Valley Allotment to trail cattle and sheep from wintering areas to the spring range. Modifying the date of entry on the Elevenmile Flat Allotment to coincide with the on-date for Squaw Valley simplifies management and recognizes the suitability for early spring use on Elevenmile Flat Allotment.

Due to the size of the pastures and the complex terrain of the allotments, five days flexibility on either side of the move dates between pastures (except for spring and hot season grazing treatments in riparian pastures) is permitted to ensure the removal of all livestock from the pastures. The permittees are allowed flexibility in their operations in order to adjust for climatic conditions and annual fluctuations in their livestock operation. However, flexibility must be limited in the riparian pastures to maintain short-duration or reduction of hot season grazing to achieve multiple use objectives.

Ellison Ranching Company and Barrick Goldstrike have requested "after the fact" billing privileges. Ellison has annually provided actual use reports in a timely manner, have paid their grazing fees on time, and closely coordinated management on their allotments with the BLM. They are in compliance with the terms and conditions of their grazing permit. Based on grazing regulations which allow "after the fact" billing and compliance with terms and conditions, Ellison Ranching Company on the Spanish Ranch and Barrick Goldstrike on Squaw Valley and Elevenmile Flat should be granted this privilege for those allotments managed under an allotment management plan or multiple use decision. In additions, the administrative time required for billing for the permittees on those allotments will be reduced. Their annual billings are complex and require a great deal of administrative time. Issuing one bill based on actual use for their allotments will shorten this time.

This management selection would implement Guidelines 1.1, 2.1, 2.4, 3.1, 3.2, and 3.3 which have been developed for the Northeastern Great Basin Area of Nevada to establish significant progress toward conformance with the Standards for Rangeland Health for Upland Sites, Riparian and Wetland Sites, and Habitat.

GRAZING SYSTEMS

3. Implement the grazing system on the Spanish Ranch Allotment outlined in the table below and with the following grazing stipulations:

Table 3. Spanish Ranch Allotment Grazing System.

FIELD (see map 2)	YEAR 1	YEAR 2	YEAR 3	YEAR 4
Burner Hills (4,346 AUMs)	3/25-6/30c	3/25-6/30c	3/25-6/30c	3/25-6/30c
Winters Creek (2,151 AUMs)	3/25-6/30c	Rest	3/25-6/30c	3/25-6/30c
Red Cow (5,476 AUMs)	3/25-7/15c ¹ (2,753 AUMs)	3/25-7/15c	3/25-7/15c	3/25-7/15c
Cornucopia (2,084 AUMs)	3/25-5/31c	3/25-5/31c	3/25-5/31c	3/25-5/31c
Big Cottonwood Uplands (6,917 AUMs)	7/1-11/15c *sheep use	7/15-11/15c **sheep use	7/15-11/15c **sheep use	7/15-11/15c **sheep use
Big Cottonwood Riparian (421 AUMs)	Limited fall gather ²	Limited fall gather ²	Limited fall gather ²	Limited fall gather ²
Hot Creek ³ (776 AUMs)	4/15-6/15 10/1-10/31 *sheep use	4/15-6/15 10/1-10/31 *sheep use	4/15-6/15 10/1-10/31 *sheep use	4/15-6/15 10/1-10/31 *sheep use

¹All livestock will be removed by 6/30 from the Red Cow Pasture if monitoring conducted by or around 6/15 shows any of the following: streambank trampling in excess of 5%, willow utilization in excess of 10%, or riparian herbaceous stubble heights of less than 4".

²Stocking rates and/or timing and duration of grazing will be adjusted downward in subsequent years if monitoring in year 1 shows streambank trampling in excess of 10%, willow utilization in excess of 20%, or riparian herbaceous stubble heights of less than 4".

³The public land portion of Hot Creek may be fenced depending on the results of monitoring.

Limited trailing will be authorized in Red Cow Pasture during year 1 to get cattle from Winters Creek and Burner Hills Pasture to the Upland Pastures. Trailing will be from Winters Creek Pasture to a private holding field on Fourmile Creek in one day, and the private holding field on Fourmile Creek to the upland pastures the next day.

*Refer to the following dates for authorized sheep use:

6/10-6/28

7/9-7/15

10/5-10/31

Sheep will not be allowed to bed on the same bedding grounds more than two nights in a row. Sheep will not graze or trail along streams, springs, or aspen stands. Each band will use alternate trailing routes and different bedding areas. Sheep, *when trailing*, will be trailed at least five miles per day. Movement to and from bedding sites will be random to avoid the creation of trails. . . Sheep bands would not occupy the same bedding sites used in the summer during the fall.

AUM calculations may change pending the design and location of pasture fences.

Rationale: On high priority stream habitats, implementation of the grazing system outlined above will eliminate hot season use on riparian areas and will allow for regrowth in all years. A combination of short duration grazing coupled with rest and removal dates which allow for regrowth has been shown to be an effective strategy for improving riparian areas (Myers 1989). Implementation of this grazing system will allow improvement in riparian conditions and enhancement of fisheries habitat conditions on high priority streams, particularly for redband trout, a State of Nevada BLM sensitive species. Improvement in riparian conditions will also enhance mule deer and sage grouse habitat. The upland conditions are expected to be maintained or to improve with this proposed grazing system in all of the Spanish Ranch Allotment. On upland pastures, utilization restrictions will provide residual forage for the following year, enough ground cover for soil stability during runoff, and prevent over grazing of critical seeps, springs, wildlife forage, and sage grouse habitat.

Exclosures around important riparian habitats on public lands (seeps, springs, aspen stands, and possibly stream segments) may be built to protect these areas in the Big Cottonwood Uplands Field. Additional preliminary field work, survey, and design are needed before specific locations are identified.

If standards and objectives are not met within Burner Hills, Red Cow, and Cornicopia Pastures, then changes in season of use or adjustments in livestock numbers will be required in subsequent year. This may also include a 40% utilization restriction in the native pastures during the active growing season.

Sheep trail from the Squaw Valley Allotment through the Spanish Ranch Allotment to the summer range on the Forest Service grazing allotments. As shown on the permit, spring sheep use is from mid-June until mid-July. In the fall, sheep trail through for approximately one week total (about one-half to one day per band).

This management selection would implement Guidelines 1.1, 2.1, 2.4, 3.1, 3.2, and 3.3 which have been developed for Northeastern Great Basin Area of Nevada, to establish significant progress towards conformance with the Standards for rangeland health for Upland Sites, Riparian and Wetland Sites, and Habitat.

4. Implement the grazing system on the Squaw Valley Allotment outlined in the table 4. below and with the following grazing stipulations:

Rationale: All five proposed riparian pastures (Rock Creek, Frazer Creek, Soldier Field, Trout Creek Field, Toe Jam) include high priority riparian habitat, with Frazer, Trout, and Toe Jam pastures also supporting high priority LCT habitat. The proposed grazing strategies, based on limiting hot season use, are designed to improve stream and riparian habitats within the context of stream type and potential. The grazing strategy proposed for all five riparian pastures has proven to be effective elsewhere on the District and is supported by literature (Myers 1989). Limited hot season grazing would also improve seeps and springs. Improvement in riparian

conditions will enhance habitat for many species of wildlife as well.

The upland conditions are expected to be maintained or to improve with this system in most of the Squaw Valley Allotment. Horseshoe and Indian Springs will be early use due to the crucial deer winter range and important forage for wildlife. This will ensure significant amount of forage for wildlife during the critical time of the year.

Sheep trail from the Elevenmile Flat Allotment through the Squaw Valley Allotment in an eastward pattern. In the spring sheep typically stay close to water while lambing. As shown on the permit, spring sheep use is from early April until mid-July. Sheep are slowly moved along the trail from the winter/spring range en route to the summer range on the Forest. In the fall, sheep trail much more quickly from the Forest to the winter range. Use in the fall is generally only three to four weeks. In the long-term sheep grazing will be required to follow the same dates as cattle as outlined above. Other restrictions on trailing will also prevent further degradation of riparian habitat.

This management selection would implement Guidelines 1.1, 2.1, 2.4, 3.1, 3.2, and 3.3 which have been developed for Northeastern Great Basin Area of Nevada, to establish significant progress towards conformance with the Standards for rangeland health for Upland Sites, Riparian and Wetland Sites, and Habitat.

RANGE IMPROVEMENTS

5. Construct the following range improvements for the proposed grazing systems as funding, feasibility, and manpower allow. These improvements are necessary for the implementation of the selected management actions. Reconstruct the Winters Creek Pasture fence to 4-wire, 16.5 foot post spacing, as necessary. Additional range improvements will be implemented as they make sense and as funds are available.

Table 5.

Range Improvements on the Spanish Ranch Allotment

Range Improvements	Units	Estimated Cost	Priority for Construction
Red Cow Pasture Fence (east end)	~ 11 miles	\$55,000	1

Winters Creek Reconstruction	~15 miles	\$30,000	2
Winters Creek Corridor Fence	~6	\$30,000	3
Big Cottonwood Canyon Riparian Fence	~ 14 miles	\$70,000	4
Cornucopia Fence	~ 8.5 miles 2 cg.	\$42,500	5
Burner Hills/Winters Creek Holding Field	~ .5 miles	\$2,500	6

Range Improvements on the Squaw Valley Allotment

Range Improvements	Units	Estimated Cost	Priority for Construction
SV/SR Allotment Boundary Fence	~ 28 miles	\$150,000	1
Lower Squaw Creek Fence	~ 2 miles 1 cg.	\$15,000	2
Upper Willow Creek Fence	~ 5 miles 2 cg.	\$30,000	3
Trout Creek Fence	~ 10 miles 1 cg.	\$50,000	4
Toe Jam Fence	~ 8 miles	\$40,000	5
Willow Creek Division Fence	~9 miles	\$45,000	6

Rationale: The range improvements listed are needed to implement the grazing systems outlined above. The Allotment Boundary Fence between Spanish Ranch and Squaw Valley and the Lower Squaw Field Fence are first priority. These fences are needed to divide the allotments and control livestock from crossing the boundary and to allow scheduled rest periods within riparian pastures. The allotments may have different livestock operators, as well as different schedules within the pastures adjoining each other. The Trout Creek Riparian Fence, Toe Jam Fence, Big Cottonwood Riparian Fence and the Red Cow Riparian Fence are the next priority. Management of livestock and the ability to prescribe rest to these pastures will allow for achievement of riparian and fisheries objectives following construction of these fences. The second priority is construction of the Winters Creek Corridor Fence, Cornucopia Fence, and the

holding pens in Burner Hills and Winters Creek. The Corridor fence will facilitate movement of livestock through Winters Creek into Red Cow during periods of rest. This fence will also allow movement of wild horses through Winters Creek to reach Red Cow. The holding pens will allow the livestock operator to adequately gather and hold livestock during moves between pastures. The Cornicopia Fence is needed for the management of livestock to achieve riparian and fisheries objectives. This would complete all of the proposed pasture fencing associated with the grazing systems.

A recent inventory in 2003 of the Winters Creek Pasture fence showed extensive damage caused by high population levels of wild horses. It is apparent that the 3-wire, 22 foot post spacing was inadequate to keep horses from going through it. In order to properly manage for livestock grazing this fence must remain intact and maintained. A 4-wire fence with 16.5 foot post spacing will better handle the pressure caused by wild horses.

Site specific EA's will be completed for all range improvement projects. Schedules for implementation of range improvements will be based on feasibility, funding, and manpower.

6. Complete vegetative treatments within the Horseshoe, Midas, and Rock Creek seedings to reduce the amount of foliar cover by big sagebrush and increase the amount of forage available to livestock. Techniques to be considered would include mechanical treatment, prescribed burning, and herbicidal treatment. Treatments will be selected based on the ability to meet management objectives. Seeding the area after treatment may also be considered.

Rationale: This action would increase forage for livestock and would help protect large blocks of rangelands from large-scale block burns. By increasing livestock forage in the seeding areas, pressure from livestock grazing in the native pastures may decrease over time.

7. Ascertain that the permittee is aware of BLM standards for fence specifications where cooperative agreements designate permittee fence maintenance of BLM projects. On an annual basis, reiterate the special conditions for fence specifications prior to grazing authorization.

Rationale: Unauthorized modifications of permittee-maintained BLM fence projects have been a problem within allotments in the Elko Resource Area; the restriction of big game movements is a concern. A major problem has been the addition of a fifth strand of barbed-wire to where the bottom wire is six to seven inches above the ground or top wire is over 50 inches above the ground.

This management selection would implement Guideline 3.3 which has been developed for the Northeastern Great Basin area of Nevada, to establish significant progress towards conformance with the Standard for rangeland health for Habitat.

8. Within the Spanish Ranch and Squaw Valley Allotments under the proposed grazing system, identify, prioritize, fence, and develop (as necessary), selected non-stream riparian

habitats as funding and manpower limitations permit. Areas considered first will include sites in pastures receiving the majority of the hot season grazing, such as Willow Creek Reservoir Field, Cottonwood Uplands, and Lower Squaw Creek. Sites for fencing and/or development may also be considered in pastures receiving stream-grazing treatments if those treatments prove ineffective for non-stream riparian habitats in upland range sites that would benefit from development projects.

Rationale: Some non-stream riparian areas may require protection or exclusion from grazing, even when grazed under a system designed to improve stream riparian habitats. Within proposed pastures including those in the wild horse herd area, livestock and wild horses would be more apt to utilize water available in troughs, which could potentially decrease direct use of undeveloped seeps/springs and stream riparian areas in a given pasture. Spring developments with water piped away from spring sources would benefit riparian areas. Increased availability of water will also increase livestock distribution and will help facilitate the implementation of the grazing system. Restoration of identified riparian areas would help to achieve multiple use objectives.

Emphasis has been placed on stream riparian habitats, particularly those that support or provide habitat for threatened Lahontan cutthroat trout. With limited funding and manpower, priorities have to be set in those areas with the most potential for improvement and/or that are most at risk for irreversible degradation or loss.

This management selection would be consistent with the Standards for Rangeland Health for Riparian and Wetland Sites and Habitat developed for the Northeastern Great Basin Area of Nevada and allows implementation of Guidelines 2.1, 2.4, 3.2, and 3.3 to establish significant progress towards conformance with the Standards for Rangeland Health for Upland Sites, Riparian and Wetland Sites, and Habitat.

Decision Authority

The authority for the livestock decision is contained in Title 43 of the Code of Federal Regulations; pertinent citations are below:

- 4100.0-8 “The authorized officer shall manage livestock grazing on public lands under the principle of multiple use and sustained yield, and in accordance with applicable land use plans. Land use plans shall establish allowable resource uses (either singly or in combination), related levels of production or use to be maintained, areas of use, and resource condition goals and objectives to be obtained. The plans also set forth program constraints and general management practices needed to achieve management objectives. Livestock grazing activities and management actions approved by the authorized officer shall be in conformance with the land use plan as defined at 43 CFR 1601.0-5(b).”
- 4110.3 "The authorized officer shall periodically review the permitted use specified in a grazing permit or grazing lease and shall make changes in the permitted use as needed to manage, maintain, or improve rangeland productivity, to assist in

restoring ecosystems to properly functioning condition, to conform with land use plans or activity plans, or to comply with the provisions of subpart 4180. These changes must be supported by monitoring, field observations, ecological site inventory or other data acceptable to the authorized officer.

- 4130.3-1(a) “The authorized officer shall specify the kind and number of livestock, the period(s) of use, the allotment(s) to be used, and the amount of use, in animal unit months, for every grazing permit or lease. The authorized livestock grazing use shall not exceed the livestock carrying capacity of the allotment.
- 4130.3-2 “The authorized officer may specify in grazing permits or leases other terms and conditions which will assist in achieving management objectives, provide for proper range management or assist in the orderly administration of the public rangelands.
- 4130.3-3 “Following consultation, cooperation, and coordination with the affected lessees or permittees, the State having lands or responsible for managing resources within the area, and the interested public, the authorized officer may modify terms and conditions of the permit or lease when the active grazing use or related management practices are not meeting the land use plan, allotment management objectives, or is not in conformance with the provisions of subpart 4180. To the extent practical, the authorized officer shall provide to affected permittees or lessees, States having lands or responsibility for managing resources within the affected area, and the interested public an opportunity to review, comment and give input during the preparation of reports that evaluate monitoring and other data that are used as a basis for making decisions to increase or decrease grazing use, or to change the terms and conditions of a permit or lease.
- 4160.1(a) Proposed decisions- Proposed decisions shall be served on any affected applicant, permittee or lessee, and any agent and lien holder of record, who is affected by the proposed actions, terms or conditions, or modification relating to applications, permits and agreements (including range improvements permits) or leases, by certified mail or personal delivery. Copies of proposed decisions shall also be sent certified to the interested public.
- 4160.2 Protests - Any applicant, permittee, lessee or other interested public may protest the proposed decision under 4160.1 of this title in person or in writing to the authorized officer within 15 days after receipt of such decision.
- 4180.1 “The authorized officer shall take appropriate action under subparts 4110, 4120, 4130, and 4160 of this part as soon as practicable but not later than the start of the next grazing year upon determining that existing grazing management needs to be modified to ensure that the following conditions exist:

(a) Watersheds are in, or are making significant progress toward,

properly functioning physical condition, including their upland, riparian-wetland, and aquatic components; soil and plant conditions support infiltration, soil moisture storage, and the release of water that are in balance with climate and landform and maintain or improve water quality, water quantity, and timing and duration of flow

(b) Ecological processes, including the hydrologic cycle, nutrient cycle, and energy flow, are maintained, or there is significant progress toward their attainment, in order to support healthy biotic populations and communities.

(c) Water quality complies with State water quality standards and achieves, or is making significant progress toward achieving, established BLM management objectives such as meeting wildlife needs.

(d) Habitats are, or are making significant progress toward being, restored or maintained for Federal threatened and endangered species, Federal Proposed, candidate species and other special status species.

Additional authority is contained within the pertinent sections of the Endangered Species Act (ESA) and in 50 C.F.R. part 402, which identifies the procedures for complying with the act.

Section 7 (a) (2) of the ESA states in part “Each Federal Agency shall, in consultation with and with the assistance of the Secretary, ensure that any action authorized, funded, or carried out by such agency...is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species...”

Under Section 7 (b) (4) (A) of the ESA of 1973 as amended, it states in part that the Secretary will offer the Agency after consultation”...reasonable and prudent alternatives which the Secretary believes would not violate...” Section 7 (a) (2) of the ESA.

Title 50 CFR, sub part B, section 402.14(i) (1) (iii) states that the U.S. Fish and Wildlife Service will provide in the Opinion to the Agency requesting a formal consultation a statement that, “Sets forth the terms and conditions...that must be complied with by a Federal Agency or any applicant to implement the measures specified...” as reasonable or prudent measures.

APPEAL PROCEDURES

In accordance with 43 CFR 4.470, 4160.3(d), and 4160.4, any person whose interest is adversely

affected by a final decision of the authorize officer may appeal the decision for the purpose of a hearing before an administrative law judge. The appeal must be filed within 30 days after receipt of the final decision. In accordance with 43 CFR 4.470, the appeal shall state clearly and concisely the reason(s) why the appellant thinks the final decision of the authorized officer is wrong.

Pursuant to 43 CFR 4.471 and 4160.3(d), an appellant also may petition for a stay of the final decision pending appeal by filing a petition for stay along with the appeal within 30 days after the date receipt of the final decision.

The appeal and any petition for stay must be filed at the office of the authorized officer at Bureau of Land Management, Clinton R. Oke, Assistant Field Manager for Renewable Resources, 3900 E. Idaho St., Elko, Nevada, 89801. Within 15 days of filing the appeal and any petition for stay, the appellant also must serve a copy of the appeal and any petition for stay on any person named in the decision and listed at the end of the decision (see attachment 4), and on the Office of the Solicitor, Regional Solicitor, Pacific Southwest Region, U.S. Department of the Interior, 2800 Cottage Way, Room E-1712, Sacramento, California 95825-1890.

Pursuant to 43 CFR 4.471(c), a petition for stay, if filed, must 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.

43 CFR 4.471(d) provides that the appellant requesting a stay bears the burden of proof to demonstrate that a stay should be granted.

Any person named in the decision from which an appeal is taken (other than the appellant) who wishes to file a response to the petition for a stay may file with the Hearings Division in Salt Lake City, Utah, a motion to intervene in the appeal, together with the response, within 10 days after receiving the petition. Within 15 days after filing the motion to intervene and response, the person must serve copies on the appellant, the Office of the Solicitor and any other person named in the decision (43 CFR 4.472(b)).

At the conclusion of any document that a party must serve, the party or its representative must sign a written statement certifying that service has been or will be made in accordance with the applicable rules and specifying the date and manner of such service (43 CFR 4.422(c)(2)).

WILD HORSE MANAGEMENT DECISION

SELECTED MANAGEMENT ACTIONS FOR WILD HORSE MANAGEMENT WITHIN THE SPANISH RANCH AND SQUAW VALLEY ALLOTMENTS

1. Set an Appropriate Management Level (AML) of 150-250 wild horses within the Rock Creek Herd Management Area (HMA).

Rationale: In accordance with 43 CFR Subpart 4700, it has been determined through the evaluation of monitoring data that a thriving ecological balance will be obtained by providing wild horses 3,000 AUMs annually within the Rock Creek HMA. This decision will result in maintaining the population between 150-250 wild horses (1,800-3,000 AUMs).

This management selection would be consistent with the Standards for Rangeland health for Upland Sites, Riparian and Wetland Sites, Habitat, and Healthy Wild Horse and Burro Populations developed for the Northeastern Great Basin Area of Nevada and allow implementation of Guideline 1.1, 2.1, 2.4, 3.1, 3.2, 3.3, 5.2, and 5.3 to establish significant progress towards conformance with the Standards for Rangeland Health.

Maintaining wild horses within the AML will result in a thriving, natural, and ecological balance between wild horses and other resource values. Continued monitoring within the allotments will show if any adjustment to AML is needed. The establishment of AML as a range is in conformance with BLM's 2001 Wild Horse Strategy, where all HMA's will be gathered over a four (4) year cycle plan to manage horses Bureau wide.

Population adjustments will occur when data indicates the population is not consistent with the established AML. The AML will remain unchanged until data indicates a change is necessary to reach HMA objectives including maintenance of a thriving natural ecological balance and multiple-use relationship in the HMA.

2. Following the attainment of AML, prepare a Herd Management Area Plan (HMAP) to guide the management of wild horses within the Rock Creek HMA.

Rationale: Management strategies are necessary to ensure that wild horse populations maintain their free-roaming, self-sustaining, genetically viable status. All HMAPs would be prepared in accordance with Bureau regulations, policies, and National Program Office Guidance.

Decision Authority

The authority for this decision is contained in Sec. 3(a) and (b) of the Wild-Free-Roaming Horse and Burro Act (P.L. 92-195) as amended and in Title 43 of the Code of Federal Regulations, which states:

- 4700.0-6(a) Wild horses and burros shall be managed as self-sustaining populations of healthy animals in balance with other uses and the productive capacity of their habitat.

- 4710.3-1 Herd Management Areas-...In delineating each herd management area, the authorized officer shall consider the appropriate management level for the herd, the habitat requirements of the animals, the relationships with other users of the

public and adjacent private lands, and the constraints contained in 4710.4.

- 4710.4 Management of wild horses and burros shall be undertaken with the objective of limiting the animals' distribution to herd areas. Management shall be at the minimum level necessary to attain the objectives identified in approved land use plans and herd management area plans.
- 4720.1 Upon examination of current information and a determination by the authorized officer that an excess of wild horses or burros exists, the authorized officer shall remove the excess animal immediately...

APPEAL PROCEDURES

Within 30 days of receipt of this wild horse decision, you have the right to appeal to the Board of Land Appeals, Office of the Secretary, in accordance with regulations at 43 CFR 4.4. If an appeal is taken, you must follow the procedures outlined in the enclosed, "Information on Taking Appeals to the Board of Land Appeals". Please also provide this office with a copy of your Statement of Reasons. An appeal should be in writing and specify the reasons, clearly and concisely, as to why you think the decision is in error.

In addition, within 30 days of receipt of this decision you have a right to file a petition for a stay (suspension) of the decision together with your appeal in accordance with the regulations at 43 CFR 4.21. The petition must be served upon the same parties identified in items 2, 3, and 4 of the enclosed form titled "Information on Taking Appeals to the Board of Land Appeals". The appellant has the burden of proof to demonstrate that a stay should be granted.

WILDLIFE MANAGEMENT DECISION

SELECTED MANAGEMENT ACTIONS FOR WILDLIFE MANGEMENT WITHIN THE SPANISH RANCH AND SQUAW VALLEY ALLOTMENTS

- 1. Complete needed fence modifications in crucial deer winter and intermediate habitat; identify and prioritize any needed fence modifications in crucial deer summer habitat.**

Rationale: Fences that are not constructed to BLM standards might pose problems for big game movement. Modifying these fences would facilitate big game movements.

This management selection is consistent with the Standard for rangeland health developed for Habitat in the Northeastern Great Basin Area of Nevada.

- 2. Manage critical mule deer winter range within the Squaw Valley Allotment through the use of vegetative treatments including fuel breaks to protect intact stands of sagebrush communities, and vegetative seedings to increase forage and cover for wintering mule deer. Types of vegetative treatments may include the following: disk/drill seeding, aerial seeding,**

shrub planting, prescribed fire, and the use of herbicides to reduce cheatgrass.

Rationale: Depending on the severity of the winter, the area provides winter range for several hundred to 2,000-3,000 mule deer. By implementing appropriate vegetative treatments, the projects would provide forage for wildlife and livestock, help restore a functioning healthy ecosystem, provide a fuels break to help reduce the fire frequency, size, and intensity in the area, and will help protect critical mule deer winter range. Seeded species will be selected based on their ability to establish under drought conditions and in marginal soils, provide aggressive competition to cheatgrass and noxious weeds, and provide forage value for wildlife and livestock.

This management selection would implement Guideline 3.4 which has been developed for Northeastern Great Basin Area of Nevada, to establish significant progress towards conformance with the Standard for rangeland health for Habitat.

3. Per management actions for the RMP wildlife habitat objective and Memorandum of Understanding with NDOW, jointly evaluate and analyze availability and condition of habitat areas identified by NDOW for the augmentation of mountain quail populations following improvement of riparian conditions through implementation of appropriate management selections.

Rationale: Native populations of mountain quail have historically inhabited suitable habitat in the allotment. Although no recent documentation of habitat use by this species has been made in the allotments, remnant populations exist in the adjoining Little Humboldt and Bullhead Allotments within the Snowstorm Mountains; use could be occurring at the present time within suitable habitat in the western portions of the Spanish Ranch and Squaw Valley Allotments. The management selection for improving riparian and range conditions would help to improve mountain quail habitat.

This management selection would implement Guidelines 3.2 and 3.3 which have been developed for Northeastern Great Basin Area of Nevada, to establish significant progress towards conformance with the Standard for rangeland health for Habitat.

4. Increase forage diversity and herbaceous cover for wildlife and herbaceous forage for livestock by creating a mosaic pattern of vegetational succession stages through vegetative manipulation practices. Prioritize and complete treatments on selected areas in the Spanish Ranch and Squaw Valley Allotments. Target vegetation types in the allotment where vegetative data have indicated that big and low sagebrush shrub cover is excessive or at upper limits that would restrict herbaceous growth, existing native herbaceous plants would respond to reduced shrub competition, and livestock utilization has been documented ranging from slight (1-20%) to moderate (41-60%). Stimulate younger age class shrub recruitment through a reduction of excessive mature or decadent shrub cover. Treatments would replicate natural small-scale disturbances. Desired Plant Community objectives for treated areas would be established based on range site potentials and response objectives. Any vegetation manipulation treatment would be coordinated with the grazing schedule to rest the subject area through the growing season following the

given treatment. The treatments should not include any more than 10% of the entire allotment to be treated in any one-treatment period (approximately 10 years). Specific treatments would be determined on a case-by-case basis with full National Environmental Policy Act documentation and compliance.

Rationale: Based on comparisons with range site potentials, shrub cover has been documented as being excessive or at the upper limit where herbaceous cover is limited due to shrub competition at some key areas and is potentially excessive at other range sites in the allotment. Range sites with excessive shrub cover have generally been documented as having poor forage diversity which would not be improved through only a change in the grazing system. Recent studies have documented that shrub cover in healthy stands of Wyoming big sagebrush is generally less than 15%; as shrub cover increases over 15%, the grass and forb cover decreases. For the mountain or basin big sagebrush vegetation type, healthy stands generally have less than 20% shrub cover. For the big sagebrush-bitterbrush vegetation type, healthy stands generally have less than 30% shrub cover.

The treatment objective would be to reduce shrub canopy cover in a mosaic pattern within irregular shaped 20-40 acres blocks and allow the treated areas to replicate shrub cover in early to mid successional stages for given range sites. Denser cover would remain in the untreated areas to allow wildlife habitat diversity. A prescribed mosaic of cover on said vegetation types would help to enhance mule deer, pronghorn and sage grouse habitat by increasing forage diversity and herbaceous cover. Shrub manipulation would release moisture to stimulate herbaceous plant and younger age class shrub growth relative to sage grouse nesting and summer use habitat. Habitats that contain 8-12% shrub cover in Wyoming big sagebrush and less than 20% shrub cover in mountain or basin big sagebrush stands coupled with the sufficient amount and type of grass cover are factors that increase sage grouse nesting success. Thinning dense stands could also increase the palatability and leader growth of sagebrush for mule deer, pronghorn and sage grouse by inducing plant physiological changes related to competition for moisture, nutrients and lower monoterpene levels. Sage grouse selection for plants with lower monoterpene levels has been observed.

Techniques to be considered would include mechanical treatment, prescribed burning, and herbicidal treatment. The treatment methodology would be tailored to the vegetative type at each specific site where stands are dominated by mature age class and decadent shrubs.

This management selection would implement Guideline 3.4 which has been developed for Northeastern Great Basin Area of Nevada, to establish significant progress towards conformance with the Standard for rangeland health for Habitat.

5. Develop two guzzlers for wildlife in the Squaw Valley Allotment. Each guzzler would be constructed to incorporate fenced water sources and separate water storage for wildlife. One guzzler would be located on Willow Creek Ridge and the other guzzler would be located between Rock Creek Ranch and Governor's Mine southwest of Ivanhoe Creek. Construct these guzzlers in phases if contributed funds for wildlife habitat improvement are available.

Wildlife Habitat Improvement	Units	Estimated Cost/each	Expected Date of Construction	Potential Funding Source
Guzzlers on Willow Creek Ridge & Ivanhoe area (2 total)	apron & 2 wildlife troughs (each)	\$ 20,000	2005	Bighorns Unlimited/ Challenge Cost Share

Rationale: These guzzlers would provide water sources away from perennial stream sources that have been identified in the RMP and evaluation as priority streams that either require long-term protection or restricted livestock use to help meet resource objectives. The guzzlers would benefit wildlife species in areas where water sources are limited in suitable habitat.

This management selection would implement Guideline 3.3 which has been developed for Northeastern Great Basin Area of Nevada, to establish significant progress towards conformance with the Standard for rangeland health for Habitat.

6. Delay initiating reintroduction plans of bighorn sheep pending any future cooperative agreement with the permittee that either specifies a designated domestic sheep trail route away from potential bighorn habitat or specifies other actions that would preclude the possibility of bighorn-domestic sheep interaction.

Rationale: The Spanish Ranch and Squaw Valley Allotments have been historically licensed for domestic sheep and cattle. The RMP recognized this domestic sheep use. Current BLM guidelines state that bighorn ranges should be managed so that bighorn never come in contact with domestic sheep. Bighorn sheep should not be reintroduced into the Squaw Valley Allotment until actions to preclude domestic sheep-bighorn interactions can be developed and a cooperative agreement between the BLM and the grazing permittee is completed.

A contract study completed for the BLM in 1980 by the Nevada Department of Wildlife "*Potential Bighorn Sheep Habitat in Northern Nevada*" identified potential bighorn sheep habitat within the Squaw Valley Allotment portion of the Izzenhood Range study area. The cooperative effort between the BLM and NDOW to reintroduce bighorn sheep into suitable historic habitat is an objective in the Elko Resource Management Plan; reintroduction plans are to be accommodated through cooperative agreements. Several studies indicate bighorn are fatally susceptible to diseases contracted during interaction with domestic sheep.

This management selection would implement Guideline 3.3 which has been developed for Northeastern Great Basin Area of Nevada, to establish significant progress towards conformance with the Standard for rangeland health for Habitat.

APPEAL PROCEDURES

Within 30 days of receipt of this wildlife decision, you have the right to appeal to the Board of Land Appeals, Office of the Secretary, in accordance with regulations at 43 CFR 4.4. If an appeal is taken, you must follow the procedures outlined in the enclosed, "Information on Taking Appeals to the Board of Land Appeals". Please also provide this office with a copy of your Statement of Reasons. An appeal should be in writing and specify the reasons, clearly and concisely, as to why you think the decision is in error.

In addition, within 30 days of receipt of this decision you have a right to file a petition for a stay (suspension) of the decision together with your appeal in accordance with the regulations at 43 CFR 4.21. The petition must be served upon the same parties identified in items 2, 3, and 4 of the enclosed form titled "Information on Taking Appeals to the Board of Land Appeals". The appellant has the burden of proof to demonstrate that a stay should be granted.

OTHER MANAGEMENT DECISIONS

SELECTED MANAGEMENT ACTIONS FOR OTHER DECISIONS WITHIN THE SPANISH RANCH AND SQUAW VALLEY ALLOTMENTS

Through the consultation, coordination, and cooperation process (CCC), your input, as well as input from the interested public, has been considered in the allotment evaluation process. As a result of the evaluation conclusions and after consideration of input received through the CCC process, it has been determined that: 1) some of the multiple use objectives and Standards for Rangeland Health for the Spanish Ranch and Squaw Valley allotments are not being met, 2) changes in current livestock grazing management and wild horse management are required, 3) existing management of wildlife has not contributed to the non-attainment of multiple use objectives and standards for rangeland health, and 4) deletions, modifications, and/or requantification of some allotment multiple use objectives are required as follows:

1. Modify and/or requantify the allotment specific and key area objectives for the Spanish Ranch and Squaw Valley Allotments as described below. The general land use plan objectives and Standards for Rangeland Health developed for the Northeastern Great Basin Area remain unchanged.

General Land Use Plan (Elko RMP/ROD) Objectives:

1. Maintain or improve the condition of the public rangelands to enhance productivity for all rangeland values.
2. Conserve and enhance terrestrial, riparian, and aquatic wildlife habitat.
3. Manage wild horse populations and habitat in the established herd areas consistent with other resource uses.

Standards for Rangeland Health Developed for the Northeastern Great Basin Area:

1. Upland Sites: Upland soils exhibit infiltration and permeability rates that are appropriate to soil type, climate, and landform.
2. Riparian and Wetland Sites: Riparian and wetland areas exhibit a properly functioning condition and achieve state water quality criteria.
3. Habitat: Habitats exhibit a healthy, productive, and diverse population of native and/or desirable plant species, appropriate to the site characteristics, to provide suitable feed, water, cover and living space for animal species and maintain ecological processes. Habitat conditions meet the life cycle requirements of threatened and endangered species.
4. Land use plans will recognize cultural resources within the context of multiple use.

5. Wild horses and burros exhibit characteristics of a healthy, productive, and diverse population. Age structure and sex ratios are appropriate to maintain the long-term viability of the population as a distinct group. Herd management areas are able to provide suitable feed, water, cover and living space for wild horses and burros and maintain historic patterns of habitat use.

Allotment Specific Objectives:

Spanish Ranch and Squaw Valley Allotments:

Note: Some of the objectives listed below might not be attainable without management actions that include efforts to thin any “heavy” shrub foliar cover and increase perennial native herbaceous cover to allow a balanced understory similar to those for affected ecological sites listed in the NRCS site descriptions in late seral or better condition. [See given ecological site description - plant community dynamics for potential cause and effects.] The increase in perennial native herbaceous cover might occur by native release after vegetative manipulation, as a result of livestock grazing system, or combination of both. Otherwise, artificial seeding with native plant species-emphasis should be considered as any priority to do so arise. Follow-up livestock management would need to be completed in a manner that would help maintain the balance. This includes, in part, efforts to mitigate the effects of any livestock use on a given pasture during the critical growth period of perennial grasses and forbs during the spring period and considerations for maintaining ecological site dynamics for any given grazing system. Any management actions would be implemented based on monitoring efforts at key areas throughout the allotment.

Terrestrial Wildlife Habitat (with emphasis on Sage Grouse Habitat and Seasonal Big Game Habitat per RMP)/Rangeland

Note: The intent of the key area objectives are to consolidate any new or former wildlife habitat and rangeland objectives. There may be cases where wildlife habitat key browse objectives are solely monitored.

1. Excerpts from Rock Creek (Spanish Ranch and Squaw Valley) and Andrae Allotment Evaluations (April 16, 1997) pages 131 and 132:

“Manage rangelands to achieve or exceed a late seral stage of ecological condition at existing key area monitoring locations (or additional key area monitoring locations selected in consultation with affected interests) where appropriate to site potential, except where Desired Plant Community objectives have been developed to achieve multiple use objectives”.

2. Squaw Valley Allotment existing/proposed key areas and key area objectives:

Squaw Valley Allotment
Existing Key Areas:

Key Area Location	Utilization Objective
All key areas on native range	Average of 50% of current year's growth on native grass key species, not to exceed 55% in any one year.
Horseshoe, Midas and Rock Creek Seedings	Average of 55%, not to exceed 60% in any one year.

Willow Creek Reservoir Field

1. **Key Area RC-07 (DI-T-88-33) - Willow Creek Ridge.** Mule deer intermediate range, pronghorn summer range and sage grouse nesting/early brood-rearing habitat. Claypan 10-12" P.Z. ecological site. Low sagebrush vegetation type. Potential vegetative composition is about 60% grasses, 10% forbs and 30% shrubs by air dry weight. 1994 (latest) composition was rated at "upper" (numerical rating at 50) mid seral status with 28% grasses, 14% forbs and 60% shrubs (over 100% due to rounding)*. 1994 followed the banner 1992-1993 winter precipitation year.

Short Term (by spring 2007) make progress towards, and Long-Term (by spring 2015) achieve the following:

- ⚡ Maintain satisfactory age and form class of low sagebrush as measured by Cole Browse Method.
- ⚡ Provide a minimum of 15% to 18% basal cover of native perennial grasses**.
- ⚡ Provide lateral sage grouse nesting cover and a minimum of 15% perennial native grass canopy cover and 10% perennial native forb cover.
- ⚡ % foliar canopy cover of shrubs not to exceed 20-25% with no less than 8-10%.
- ⚡ % foliar canopy cover of shrubs on any shrub manipulation areas: 8-10% or less***.
- ⚡ Improve to, or maintain, late seral status or better status (numerical rating at least 51) on ecological site as indicated by forage production monitoring, with at least 5-10% "allowable" native forbs*.

*The Ecological Status write-up and Ecological Site Description includes present versus allowable percentages of forbs. This helps to provide for forb diversity where percentages are allowable compared to where present percentage might only solely include disturbance-associated forbs such as Hood's phlox, as an example. Therefore, Hood's phlox would only be allowed two percentage points versus any larger percentage

which would not represent a semblance of the potential diversity on the site. The allowable forb percentages sampled in 1994 was seven percent.

**An increase in “tall genera” grasses such as bluebunch wheatgrass and Thurber’s needlegrass (important as nesting cover) is likely in the long term. These species were not sampled during 1994 forage production; Sandberg’s bluegrass and bottlebrush squirreltail were the two perennial grass species sampled. Bluebunch wheatgrass is present in the vicinity of the key area and overall Willow Creek Ridge area with observations on September 5, 2003 varying from isolated to scattered plants, to plant densities more uniformly represented in upland areas.

***Potential short and long term management actions coupled with grazing system: 1) Mosaic shrub manipulation, followed by low ground impact interseeding of native “tall genera” grasses (e.g. bluebunch wheatgrass, Snake River wheatgrass and Great Basin wildrye) and native forbs; 2) fuelbreak along west and south side of primary Willow Creek Ridge road to slow down or stop potential block-burn wildfires.

2. Proposed Browse Utilization Transect/ Key Area on Willow Creek Ridge

Establish a browse utilization transect/key area west of Nelson Creek in the vicinity of T 39 N., R 49 E., sections 6, 7, and 18. Mule deer intermediate range, pronghorn summer range and sage grouse nesting/early brood-rearing habitat. Big sagebrush-bitterbrush vegetation type. Loamy Slope 10-12” P.Z. Ecological Site. Potential vegetation composition (air dry weight) is about 65% grasses, 10% forbs and 25% shrubs. Area exhibited (ocular estimate) satisfactory age and form class, and slight to light utilization on September 5, 2003. At a minimum, collect bitterbrush utilization data and age and form class condition data with the following objectives:

Browse Transect:

Short Term (by spring 2007) and Long Term (by spring 2015):

- A. Utilization of current year’s growth of bitterbrush will not exceed 50% (25% livestock during 5/1 to 10/14 and 25% big game during 10/15 to 5/1).
- B. Maintain age and form class of bitterbrush in satisfactory condition or improve to satisfactory condition.

Note: This browse transect would represent an area where bitterbrush condition and utilization can be evaluated within intermediate (transitional) mule deer habitat and pronghorn summer habitat. Bitterbrush is fair to good forage for mule deer, pronghorn and livestock during the spring to fall period. Data collection would allow an analysis of any potential conflicts that might occur with livestock grazing.

Key area:

Short Term (by spring 2007) maintain, or make progress towards, and Long-Term (by spring 2015) achieve the following:

Short Term (by spring 2007) and Long Term (by spring 2015):

- ⊘ Utilization of current year's growth of bitterbrush will not exceed 50% (25% livestock during 5/1 to 10/14 and 25% big game during 10/15 to 5/1).
- ⊘ Maintain age and form class of bitterbrush in satisfactory condition or improve to satisfactory condition.
- ⊘ Provide sage grouse lateral nesting cover and a minimum of 15% perennial native grass canopy cover and 10% perennial native forb cover.
- ⊘ Provide a minimum of 15% to 18% basal cover of native perennial grasses with emphasis on representation of "tall genera" species**.

- ⊘ % foliar canopy cover of shrubs not to exceed 30% with no less than 8-10%.
- ⊘ Achieve or maintain at least late seral status (numerical rating of 51) of ecological site as indicated by forage production monitoring, with at least 5-10% "allowable" native forbs*.

*Representation by "tall genera" grasses such as bluebunch wheatgrass and Idaho fescue (important as nesting cover) within "allowable" 25-35% range is likely (ocular estimate) in the long term and would help meet this objective.

Trout Creek Field*

1. Key Area RC-11 (CDS-T-88-35) – Pole Creek*. Deer intermediate range, pronghorn summer range and sage grouse nesting/early brood-rearing habitat. Low sagebrush vegetation type. Claypan 12-16" P.Z. Ecological Site. Potential vegetative composition is about 60% grasses, 15% forbs and 25% shrubs by air dry weight. 1994 (latest) composition at "low" late seral (numerical rating of 58) status was 31% grasses, 1% forbs (includes trace composition on several species) and 66% shrubs (under 100% due to rounding)**. 1994 followed the banner winter 1992-spring 1993 winter precipitation year.

Short Term (by spring 2007) maintain, or make progress towards, and Long-Term (by spring 2015) achieve the following:

- ⊘ Maintain satisfactory age and form class of low sagebrush as measured by Cole Browse Method.
- ⊘ Provide sage grouse lateral nesting cover and a minimum of 15%

perennial native grass canopy cover and 10% perennial native forb cover.

- ⚡ Provide a minimum of 15% to 18% basal cover of native perennial grasses with emphasis on representation of “tall genera” species***.
- ⚡ % foliar canopy cover of shrubs not to exceed 20-25% with no less than 8-10%.
- ⚡ % foliar canopy cover of shrubs on any shrub manipulation areas: 8-10% or less****.
- ⚡ Maintain at least late seral status (numerical rating of 51) of ecological site as indicated by forage production monitoring, with at least 10% “allowable” native forbs**.

*Depending on any final approval and layout to create another field (Toe Jam Field), it is unknown if this existing transect would be in Trout Creek Field or any approved additional field. If so, a new key area transect would be needed with proposal on Loamy 10-12” P.Z. Site east of Trout Creek where bitterbrush or serviceberry would be the key browse species and utilization criteria would be 50% on mule deer summer range and 25% livestock/25% big game on mule deer intermediate range (see Soldier Field below).

**The Ecological Status write-up and Ecological Site Description includes present versus allowable percentages of forbs. This helps to provide for forb diversity where percentages are allowable compared to where present percentage might only solely include disturbance-associated forbs such as Hood’s phlox, as an example. Therefore, Hood’s phlox would only be allowed two percentage points versus any larger percentage which would not represent a semblance of the potential diversity on the site. The allowable forb percentages in 1994 was one percent.

***Representation by “tall genera” grasses such as bluebunch wheatgrass and Idaho fescue (important as nesting cover) within “allowable” (see ** above) 25-35% range is likely in the long term and would help meet this objective; the composition in 1994 was 27%.

****Ecological site dynamics maintenance or improvement should be noted in concert with livestock grazing system proposed to improve riparian habitat. However, potential short and long term management actions coupled with grazing system could help to improve vegetative diversity: 1) Mosaic shrub manipulation, followed by low ground impact interseeding of native “tall genera” grasses (e.g. bluebunch wheatgrass, Snake River wheatgrass and Great Basin wildrye) and native forbs, could be completed as deemed necessary.

2. Proposed Key Area/Browse Transect: Establish a browse utilization transect/key area approximately 1.5 miles north of Toe Jam Creek on, or in the vicinity of, T40N, R48E, section 25 E1/2. At a minimum, collect bitterbrush utilization data and age and form class condition data within mule deer intermediate range, pronghorn summer range and sage grouse nesting/early brood-rearing habitat. Big sagebrush-bitterbrush vegetation type. Loamy Slope 10-12" P.Z. Ecological Site. Potential vegetative composition (air dry weight) is about 65% grasses, 10% forbs and 25% shrubs. (Late 1980s ecological status inventory indicates that, at sampling points, the area was in late seral ecological status. Trend is undetermined at this time in light of present livestock management, severe to extreme fifth-year drought from 1999-2003 and wild horse issues in various states of resolve.)

Short Term (by spring 2007) maintain, or make progress towards, and Long-Term (by spring 2015) achieve the following:

- ⚡ Utilization of current year's growth of bitterbrush will not exceed 50% (25% livestock during 5/1 to 10/14 and 25% big game during 10/15 to 5/1.
- ⚡ Maintain age and form class of bitterbrush in satisfactory condition or improve to satisfactory condition.
- ⚡ Provide for lateral sage grouse nesting cover and a minimum of 15% perennial native grass canopy cover and 10% perennial native forb cover.
- ⚡ Provide a minimum of 15% to 18% basal cover of native perennial grasses with emphasis on representation of "tall" genera species.
- ⚡ % foliar canopy cover of shrubs not to exceed 30% with no less than 8-10%.
- ⚡ Maintain or achieve at least late seral status (51 numerical rating) of ecological site as indicated by forage production monitoring with at least 5-10% "allowable" native forbs.

Trout Creek Field (potential option as Toe Jam Creek Field*)

1. Key Area RC-05 (CDS-T-88-38) Toe Jam Creek - Crucial deer summer habitat.

South Slope 14-18" P.Z. Ecological Site. Mountain big sagebrush-montane shrub vegetation type. Potential vegetative composition is about 65% grasses, 10% forbs and 25% shrubs by air dry weight. 1980s ocular ecological status inventory indicates that the area was in late seral ecological status at specified ocular/quantified sampling points. Trend is undetermined at this time in light of livestock management since this time coupled with severe to extreme drought from 1999 to 2003.

Short Term (by spring 2007) maintain, or make progress towards, and Long Term (by spring 2015) achieve the following:

- ⊘# Maintain satisfactory age and form class of snowberry and chokecherry as measured by Cole Browse Method.
- ⊘# Provide a minimum of 15% to 18% basal cover of native perennial grasses.
- ⊘# % foliar canopy cover of shrubs not to exceed 30% with no less than 8-10%.
- ⊘# % foliar canopy cover of shrubs on any shrub manipulation areas: 8-10% or less**.
- ⊘# Maintain or exceed late seral status of ecological site as indicated by forage production monitoring with at least 5-10% “allowable” native forbs***.

*This existing transect would be located in “Toe Jam Field” pending any final approval and layout to create a new field to help meet overall allotment objectives.

** Potential short and long term management actions coupled with grazing system would include shrub manipulation completed in mosaic patterns targeting any reduction of “excessive” mountain big sagebrush cover to help meet objectives.

***Ecological site maintenance or improvement should be noted in concert with livestock grazing system proposed to improve riparian habitat.

2. Proposed Key Area/Browse Transect in Dry Creek Mountain/Rock Creek

Headwater area: Establish a browse utilization transect/key area in the vicinity of T40N, R48E, sections 5 and 8. At a minimum, collect serviceberry utilization data and age and form class condition data within mule deer crucial summer range. Mountain brush vegetation type; South Slope 14-18” P.Z. Ecological Site. Potential vegetative composition is about 65% grasses, 10% forbs and 25% shrubs by air dry weight. 1980s ecological status inventory indicates that the area was in late seral ecological status at specified ocular sampling points. Trend is undetermined at this time in light of livestock management since this time coupled with severe to extreme drought from 1999 to 2003. However, use on serviceberry has consistently been severe (81% to 100% as noted on field trips in 1990s) likely as a result of domestic sheep trailing and cattle concentrations on upper Rock Creek.

Short Term (by spring 2007) maintain, or make progress towards, and Long-Term (by spring 2015) achieve:

- ⊘# Utilization of current year’s growth of serviceberry will not exceed 50%.
- ⊘# Maintain age and form class of serviceberry in satisfactory condition or improve to satisfactory condition.
- ⊘# % foliar canopy cover of shrubs not to exceed 30% with no less than 8-10%.
- ⊘# Provide a minimum of 15% to 18% basal cover of native perennial

- grasses.
- ⌘ % foliar canopy cover of shrubs on any shrub manipulation areas: 8-10% or less.
- ⌘ Maintain or achieve at least late seral status (51 numerical rating) of ecological site as indicated by forage production monitoring with at least 5-10% “allowable” native forbs.

Note: Ecological site maintenance or improvement should be noted in concert with livestock grazing system proposed to improve riparian habitat. Potential short and long term management actions coupled with grazing system would include shrub manipulation completed in mosaic patterns in efforts to reduce “excessive” mountain big sagebrush foliar cover to help meet objectives.

Horseshoe and Indian Springs (ESR Seeding) Fields

Proposed Key Area Transects to be determined per site visits on Clover I and II Seeding portion of fields. Crucial deer and pronghorn winter range; Pre-disturbance Wyoming big sagebrush and salt desert shrub vegetation types that receive 5 to 8 inches to 8 to 10 inches of precipitation a year. Trend is undetermined at this time in light of recent seeding efforts, past and present livestock management, and severe to extreme drought from 1999 to 2003 on some of the driest ecological sites on the Elko District. The 1980s ecological status inventory indicated that the areas were in early to mid seral ecological status. Four-wing saltbush was seeded separately within seed drill equipment. Therefore, four-wing saltbush browse transect might be separate, but in the same area as perennial grass/forage kochia transects.

Short Term (by spring 2007) maintain, or make progress towards, and Long-Term (by spring 2015) achieve the following:

- ⌘ Utilization of current year’s growth of forage kochia and perennial grasses (crested wheatgrass, Siberian wheatgrass and Russian wildrye) would not occur during the May 1 to June 30 critical active growing period*, with authorized livestock use starting no earlier than March 15.
- ⌘ Maintain age and form class of forage kochia and four-wing saltbush in satisfactory condition or improve to satisfactory condition.
- ⌘ Provide for a minimum of one seeded shrub or “half-shrub” (forage kochia) and three to five perennial seeded species per 10 square feet**.
- ⌘ Satisfactory soil percolation tests compatible with predominate ecological site(s) measured after spring grazing period***.

* If grazing occurs during the active growing season when apical meristem can be harvested (estimated May 1st to June 30th), then no grazing would occur during the active growing season the following year; fall use would be limited to alternate year trailing with Indian Springs Field with utilization restrictions of 50% of the current year's growth on crested wheatgrass and forage kochia.

**Success of recent seeding efforts, including presence of four-wing saltbush, is pending –it could take at least four years for some species to be represented on these droughty sites.

***Follow-up monitoring will be completed to ensure that seeded species, native plant species, and soils/soil hydrology on seedings are not impacted per BLM-specified sampling protocol. If seeded species and soils are being impacted, carrying capacities and stocking rates might be adjusted accordingly or the pasture will receive one of two years rest or a rotation with Indian Springs Pasture. Small exclosures (consider satellite “pixel”-compatible size) would be constructed as comparison areas where no grazing would occur.

Rock Creek Riparian Area Field (Portion east of Rock Creek Gorge*)

Key Area RC-14 (DI-T-88-34) – Ivanhoe Creek - Deer intermediate range and pronghorn summer range, sage grouse nesting/early brood-rearing habitat. Loamy 10-12” P.Z. Ecological Site. Potential vegetative composition (air dry weight) is about 65% grasses, 10% forbs and 25% shrubs. June 25, 1994 (latest) composition at mid seral status (43 numerical rating) was 14% grasses (includes 2% cheatgrass), 0.1% forbs and 86% shrubs. 1994 followed the banner 1992 fall-1993 winter precipitation year.

Short Term (by spring 2007) maintain, or make progress towards, and Long-Term (by spring 2015) achieve the following:

- ⚡# Maintain satisfactory age and form class of basin big sagebrush as measured by Cole Browse Method.
- ⚡# % foliar cover of shrubs at 8-20%**.
- ⚡# Provide sage grouse lateral nesting cover and a minimum of 15% perennial native grass canopy cover and 10% perennial native forb cover .
- ⚡# Provide a minimum of 15% to 18% basal cover of native perennial grasses with emphasis on representation of “tall” genera species***.
- ⚡# Maintain or achieve at least late seral (51 or higher numerical rating) status of ecological site as indicated by forage production monitoring with at least 5-10% “allowable” native forbs****.
- ⚡# Management that does not result in cheatgrass over 2% composition with efforts to reduce it to 1% or less****.
- ⚡# Satisfactory soil percolation tests compatible with predominate

ecological site(s) measured after any spring grazing period*****.

*A second key area would be considered, as deemed necessary, on the west side of Rock Creek within the Field on a representative site.

**Key area was within 2001 Hot Lake Fire perimeter and was included in perimeter of post-fire rehabilitation seeding of Wyoming big sagebrush, basin big sagebrush, forage kochia and Western yarrow. Shrub foliar cover is expected to measure above 10% by Year 2015 with respect to recovery potential of the affected ecological site.

***Representation by “tall genera” grasses such as bluebunch wheatgrass and Great Basin wildrye (important as nesting cover) within the “allowable” 15-25% range is likely and would help meet this objective in the long term.

****This objective is attainable with potential flush of native perennial herbaceous vegetation after the 2001 Hot Lake Fire if key area was burned in part, or in entirety; however, any increase in cheatgrass above 1994 composition could compromise objectives.

*****Area was affected by the 2001 Hot Lake Fire. Follow-up monitoring will be completed to ensure that seeded species, native plant species, and soils/soil hydrology on seeded/burned areas are not impacted per BLM-specified sampling protocol. If seeded species and soils are being impacted, carrying capacities and stocking rates might be adjusted accordingly or the pasture will receive one of two years rest on a rotation with adjacent pasture(s). A small enclosure (consider satellite “pixel”-compatible size) would be considered as a comparison area where no grazing would occur.

Lower Squaw Creek Field

Proposed New Key Area – Deer intermediate range, pronghorn summer range, sage grouse nesting/early brood-rearing habitat. Loamy 8-10” P.Z. ecological site (approx. 80% of Field). Potential vegetative composition is about 60% grasses, 5% forbs and 35% shrubs. 1980s ecological status inventory indicates that, at ocular sampling points, the area was in mid seral ecological status. A portion of the Field was affected by the 1999 Squaw Fire where no rehabilitation was completed; consider key area within this burn area to ensure natural rehabilitation to a semblance (“upper” mid seral status)* of potential native community.

Short Term (by spring 2007) maintain, or make progress towards, and Long-Term (by spring 2015) achieve the following:

≠# Maintain satisfactory age and form class of Wyoming big sagebrush and basin big sagebrush as measured by Cole Browse Method.

- ⊘ % foliar cover of shrubs at 5-15%**.
- ⊘ Provide sage grouse lateral nesting cover and a minimum of 15% perennial native grass canopy cover and 10% perennial native forb cover.
- ⊘ Provide a minimum of 15% basal cover of native perennial grasses***.
- ⊘ Maintain or achieve at least “upper” (40-50 numerical rating) mid seral status of ecological site as indicated by forage production monitoring with at least 5-10% “allowable” perennial forbs*.
- ⊘ Management that does not result in cheatgrass domination above baseline values with efforts to reduce it to 1% or less.
- ⊘ Satisfactory soil percolation tests compatible with predominate ecological site(s) measured after given grazing period****.

* The Ecological Status write-up and Ecological Site Description includes present versus allowable percentages of forbs, grasses and shrubs. This helps to provide for plant diversity where percentages are allowable compared to where present percentage might only solely include disturbance-associated forbs such as Hood’s phlox, as an example. Therefore, Hood’s phlox would only be allowed two percentage points versus any larger percentage which would not represent a semblance of the potential diversity on the site.

**Shrub foliar cover is not expected to measure above 15% by Year 2015 with respect to inherent slow recovery of the affected ecological site if key area is established within the Squaw Fire burn area; additional intensive seeding/seedling transplant efforts might otherwise help. Management that results in establishment/maintenance of perennial grasses and forbs help provide interspace areas for shrub establishment.

***Sandberg bluegrass and bottleneck squirreltail was observed in the understory in summer 2001 on the Squaw Fire burn area and periphery of the burn area; however, cheatgrass was present and any moderate densities could compromise long term composition of perennial grass, forb and shrub species.

****Area was affected, in part, by the 1999 Squaw Fire. Follow-up monitoring will be completed to ensure that native plant species, and soils/soil hydrology on burned areas are not impacted per BLM-specified sampling protocol. If seeded species and soils are being impacted, carrying capacities and stocking rates might be adjusted accordingly or the pasture will receive one of two years rest or a rotation with adjacent pasture(s). A small enclosure (consider satellite “pixel size) would be considered as a comparison area where no grazing would occur.

Willow Creek South (Proposed long-term field)

1. Key Area RC-09 – Antelope Spring - Deer intermediate range and pronghorn summer range, and sage grouse nesting/early brood-rearing habitat. Loamy 10-12” P.Z. Ecological Site. Potential vegetative composition (air dry weight) is about 65% grasses, 10% forbs and 25% shrubs. July 15, 1994 (latest) composition at mid seral status (46 numerical rating) was 48% grasses (includes 2% cheatgrass), 7% forbs and 45% shrubs. 1994 followed the banner 1992-1993 winter precipitation year.

Short Term (by spring 2007) maintain, or make progress towards, and Long-Term (by spring 2015) achieve the following:

- ⌘ Maintain satisfactory age and form class of Wyoming big sagebrush as measured by Cole Browse Method.
- ⌘ Provide sage grouse lateral nesting cover and a minimum of 15% perennial native grass canopy cover and 10% perennial native forb cover.
- ⌘ Provide a minimum of 15% to 18% basal cover of native perennial grasses with emphasis on representation of “tall” genera species*.
- ⌘ % foliar cover of shrubs at 8-15%.
- ⌘ Maintain or achieve at least late seral status (51 numerical rating) of ecological site as indicated by forage production monitoring with at least 5-10% “allowable” perennial forbs**.
- ⌘ Manage in a manner that does not result in cheatgrass over 2% composition with efforts to reduce it to 1% or less.

*Representation by “tall genera” grasses such as bluebunch wheatgrass and Great Basin wildrye (important as nesting cover) is attainable in the short and long term per 1994 monitoring.

**This objective is attainable with high mid seral rating noted during 1994; however, any increase in cheatgrass above 1994 composition could compromise objectives. See Lower Squaw Creek Field footnote above regarding allowable forbs.

2. New Browse Transect/Key Area [DI-SV-15-(YEAR)] Between Big Butte and Hot Creek Spring – in vicinity of T38N, R48E, section 15, --Deer intermediate range and pronghorn summer range, and sage grouse nesting/early brood-rearing/winter habitat. Big sagebrush-bitterbrush vegetation type; Loamy Slope 12-16” P.Z. Ecological Site. Potential vegetative composition (air dry weight) is about 60% grasses, 15% forbs and 25% shrubs. 1980s ecological status inventory indicates that, at ocular sampling points, the area was in late seral ecological status.

Short Term (by spring 2007) maintain, or make progress towards, and Long-Term (by spring 2015) achieve the following:

- ⌘ Utilization of current year’s growth of bitterbrush will not exceed

50% (25% livestock during 5/1 to 10/14 and 25% big game during 10/15 to 5/1.

- ⌘ Maintain age and form class of bitterbrush in satisfactory condition or improve to satisfactory condition.
- ⌘ Provide sage grouse lateral nesting cover and a minimum of 15% perennial native grass canopy cover and 10% perennial native forb cover.
- ⌘ Provide a minimum of 15% to 18% basal cover of native perennial grasses.
- ⌘ % foliar canopy cover of shrubs not to exceed 30% with no less than 8-10%.
- ⌘ Maintain or achieve at least late seral status (51 numerical rating) of ecological site as indicated by forage production monitoring with at least 5-10% “allowable” perennial forbs.

Soldier Field

New Browse Transect/Key Area [DI-SV-16-(YEAR)] Between Coyote Creek and Little Rock Creek in vicinity of T40N, R48E, section 16 SW or 21NW - Deer intermediate range and pronghorn summer range, sage grouse nesting/brood-rearing habitat. Consider areas higher in elevation, as deemed necessary, to select representative site in vicinity of T40N, R48E, section 8 and 9. Big sagebrush-bitterbrush vegetation type; Loamy Slope 10-12” P.Z. Ecological Site. Potential vegetative composition (air dry weight) is about 65% grasses, 10% forbs and 25% shrubs. (1980s ecological status inventory indicates that, at ocular sampling points, the area was in late seral ecological status. Trend is undetermined at this time in light of present livestock management, severe to extreme drought from 1999-2003, and wild horse issues in various states of resolve.

Short Term (by spring 2007) maintain, or make progress towards, and Long-Term (by spring 2015) achieve the following:

- ⌘ Utilization of current year’s growth of bitterbrush will not exceed 50% (25% livestock during 5/1 to 10/14 and 25% big game during 10/15 to 5/1 on deer intermediate range.
- ⌘ Maintain age and form class of bitterbrush in satisfactory condition or improve to satisfactory condition.
- ⌘ Provide sage grouse lateral nesting cover and a minimum of 15% perennial native grass canopy cover and 10% perennial native forb cover.
- ⌘ Provide a minimum of 15% to 18% basal cover of native perennial grasses with emphasis on representation of “tall genera” species.
- ⌘ % foliar canopy cover of shrubs not to exceed 30% with no less than 8-10%.
- ⌘ Maintain or achieve at least late seral status (51 numerical rating)

of ecological site as indicated by forage production monitoring with at least 5-10% “allowable” perennial forbs.

Frazer Creek Riparian Field

Establish a browse utilization transect/key area on Loamy 10-12” P.Z. Ecological Site characterized by the big sagebrush/bitterbrush vegetation type. Consider area in the vicinity of Scraper Springs Creek in the vicinity of T40N, R47E, section 15. At a minimum, collect bitterbrush utilization data and age and form class condition data within mule deer summer range, pronghorn summer range and sage grouse nesting habitat. Potential vegetative composition (air dry weight) is about 65% grasses, 10% forbs and 25% shrubs. (1980s ecological status inventory indicates that, at ocular sampling points, the area was in mid seral to late seral ecological status. Trend is undetermined at this time in light of livestock management since the 1980s , severe to extreme fifth-year drought from 1999-2003, overall 2001 Buffalo Fire effects and livestock closure, and wild horse issues in various states of resolve.

Short Term (by spring 2007) maintain, or make progress towards, and Long-Term (by spring 2015) achieve the following:

- ⚡ Utilization of current year’s growth of bitterbrush will not exceed 50%.
- ⚡ Maintain age and form class of bitterbrush in satisfactory condition or improve to satisfactory condition.
- ⚡ Provide a minimum of 15% to 18% basal cover of native perennial grasses with emphasis on representation of “tall genera” species.
- ⚡ Provide for lateral sage grouse nesting cover and a minimum of 15% perennial native grass canopy cover and 10% perennial native forb cover.
- ⚡ % foliar canopy cover of shrubs not to exceed 30% with no less than 8-10%.
- ⚡ Maintain or achieve at least late seral status (51 numerical rating) of ecological site as indicated by forage production monitoring with at least 5-10% “allowable” perennial forbs *.

*Ecological site maintenance or improvement should be noted in concert with livestock grazing system proposed to improve riparian habitat, and ongoing resolution of wild horse issues.

Upper Willow Creek Habitat Enhancement Plan (UWCHEP) area¹

1. Key Areas Number 1 and Number 2

Upper Nelson Field²: Deer intermediate range, pronghorn summer range and sage grouse nesting habitat. Low sagebrush vegetation type; Claypan 12-16” P.Z. Ecological Site³. Potential vegetative composition is about 60% grasses, 15%

forbs and 25% shrubs by air dry weight. 1980s ocular/quantified ecological status inventory indicated that the ecological site was in late seral ecological status at specified ocular sampling points adjoining Nelson Field with the potential for same within Nelson Field. Trend in the area is undetermined at this time in light of livestock management within the area since this time coupled with severe to extreme drought from 1999 to 2003.

Short Term (by spring 2007) maintain, or make progress towards, and Long Term -Phase I (by spring 2015) and Long Term - Phase II (summer 2015 to life of Barrick Betze Project dewatering) achieve the following:

- ≠# Maintain satisfactory age and form class of low sagebrush as measured by Cole Browse Method.
- ≠# Provide a minimum of 15% to 18% basal cover of native perennial grasses with emphasis on representation of “tall” genera species with height greater than seven inches⁴.
- ≠# % foliar canopy cover of shrubs not to exceed 20-25% with no less than 8-10%.
- ≠# % foliar canopy cover of shrubs on any shrub manipulation areas: 8-10% or less⁵.
- ≠# Improve to, or maintain, at least late seral status (numerical rating of 51) of ecological site with at least 10% “allowable” native forbs⁶ as indicated by forage production monitoring; or 10% basal cover⁷ as indicated by point intercept monitoring.

¹ Per post-allotment evaluation meetings between BLM and DeLoyd Satterthwaite (at-the-time livestock permittee), Barrick Goldstrike representatives, and Nevada Division of Wildlife personnel; January 2003 Supplemental Environmental Impact Statement (SEIS) – Betze Project Record of Decision; and follow-up meetings with by Cedar Creek (Barrick consultants) for key area establishment: New key areas established in enhancement area to monitor mule deer transitional range and sage grouse nesting habitat. Establish Desired Plant Community objectives.

² January 2003 SEIS – Betze Project, Appendix B, page 9 incorrectly mentions Key Area Number 1 as being located in Lower Nelson Field.

³ Per ocular comparison of ecological status maps, ecological site description, February 2002 Upland Evaluation write-ups for 2001 baseline by Cedar Creek Associates (Barrick’s contractor) and their key area photos.

⁴ Sage Grouse Nesting Cover: Representation by “tall genera” grasses such as bluebunch wheatgrass and Idaho fescue (important as nesting cover) within “allowable” (see below) 25-35% range would help meet this objective in the Long

Term –Phase I. The contractor’s 2001 baseline monitoring indicates that this should be attainable.

⁵ Ecological site dynamics maintenance or improvement should be noted in concert with livestock grazing system proposed to improve riparian habitat. However, potential short, mid and long term management actions coupled with grazing system could improve cover, and forage availability and diversity: 1) Mosaic shrub manipulation by prescribed fire or mechanical methods or other means to allow native release, or low ground impact interseeding of native “tall genera” grasses (e.g. bluebunch wheatgrass, Snake River wheatgrass and Great Basin wildrye) and native forbs, could be completed as deemed necessary. Compare with recent 2002 “small” wildfire burn on Nelson Field for any potential to improve herbaceous cover, and forage diversity and availability on similar ecological site.

⁶The Ecological Status write-up and Ecological Site Description includes present versus allowable percentages of forbs. This helps to provide for forb diversity where percentages are allowable compared to where present percentage might only solely include disturbance-associated forbs such as Hood’s phlox, as an example. Therefore, Hood’s phlox would only be allowed two percentage points versus any larger percentage which would not represent a semblance of the potential diversity on the site.

⁷Measured as basal cover of forbs per BLM-adopted monitoring techniques and scientific research, and mentioned as “10% canopy cover” in *Management Guidelines for Sage Grouse and Sagebrush Ecosystems in Nevada, October 2000* – BLM, Nevada.

2. Key Area Number 3

Lower Nelson Field: Collect bitterbrush, serviceberry and low sagebrush age and form class condition data within mule deer transitional (intermediate) habitat and sage grouse nesting habitat with the following objectives:

Short Term (by spring 2007) maintain, or make progress towards, and Long Term -Phase I (by spring 2015) and Long Term - Phase II (summer 2015 to life of Barrick Betze Project dewatering) achieve the following:

Maintain age and form class of bitterbrush, serviceberry and low sagebrush in satisfactory condition or improve to satisfactory condition*. Complete this action by: Utilization of current year’s growth of bitterbrush will not exceed 50% (25% livestock during 5/1 to 10/14 and 25% big game during 10/15 to 5/1.

*Define Satisfactory Age and Form Class Per BLM Technical Manual 4400-3 and BLM Form 6630-3:

Age Class: When the sum of seedlings (basal stems 1/8" or less in diam.) and young plants (basal stems 1/8" to 1/2" in diam.) in the sample (25 to 50 plants) outnumber decadent plants, the key browse species age class is satisfactory at the monitoring site.

Form Class: When the two-year-old growth (the previous year's leaders) of mature, seedling, young, resprouting, and decadent (>50% of the canopy area dead) plants in the sample (25 to 50 plants) reflect less than 50% utilization (41-60% utilization class interval), and outnumber severely hedged (61% or more utilization of two-year-old growth), unavailable (at least 50% of crown out of reach of cattle and big game), and dead plants, the key browse species form class is satisfactory at the monitoring site.

Further considerations regarding key browse form class per interpretation of BLM Technical Manual 4400-3 - Browse plants are considered to reflect the normal growth form when less than 50 percent of the two-year-old growth (the previous year's leaders) has clipped ends and the majority of the current leaders extend directly from terminal buds off two-year-old wood. Alterations from the normal growth form are reflected when 50 percent or more of the two-year-old wood has clipped ends. Current leaders occur mostly as extensions from lateral buds off two-year-old wood in the moderately hedged condition or as clumped lateral and/or adventitious sprouts in the severely hedged condition.

3. Key Area Number 4

Upper Nelson Field:

Quaking Aspen Objectives for deteriorated stand identified and monitored as a baseline by Cedar Creek Associates (Barrick contractors) per January 2003 SEIS – Betze Project Record of Decision:

Short Term (by spring 2007) and Long Term (by spring 2015)

Improve young aspen age class recruitment by increasing the number of single-stemmed saplings¹ by at least 10% above baseline values per acre in deteriorating² stands.

Short Term (by spring 2007 or three years after implementation of baseline transects):

Improve* young age class recruitment by making significant progress toward an equivalent of at least 850 single-stemmed saplings¹ per acre in deteriorating² stands identified in 2001 with overstory canopy cover class³ of 20% or less.

Long Term –Phase I (by spring 2015) and Long Term – Phase II (summer 2015 to

Maintain* young age class recruitment by allowing an equivalent of at least 850 single-stemmed saplings¹ per acre in deteriorating stands identified in 2001 with a post-2002 overstory canopy cover class³ of 20% or less.

* Short term improvement of identified deteriorating stands and long-term maintenance of young age class recruitment in identified deteriorating stands would take in consideration site potential, disease and natural mortality factors, and potential need for disturbance

treatments (to stimulate recruitment) and/or fencing.

¹ Saplings, as mentioned for these objectives, are defined as single-stemmed aspen that are at least 4.9 feet in height and less than 3.9 inches in diameter at breast height (4.5 feet). The sapling definition for these objectives take in consideration a minimum height needed to help allow terminal growth out of reach of browsing animals which is 0.5-foot higher than saplings defined by Natural Resource Conservation Service (NRCS) ecological site descriptions for aspen woodland sites on the allotment. The maximum diameter (less than 3.9 inches) at breast height for saplings is considered because stems less than 3.9 inches in diameter usually constitute reproduction while larger stems usually contribute to the overstory.

² Deteriorating stands, as mentioned for these objectives, include those existing stands in immature, mature, and overmature woodland successional stages as defined by NRCS range site descriptions, with (1) an open canopy (10% or less canopy cover class), (2) abnormally large amounts of aspen residue (standing or fallen), and (3) sagebrush invasion. A deteriorating stand was identified in the 2001 field season by Cedar Creek Associates.

³ Canopy cover class of 20% or less, as mentioned for this objective, is expressed as the percent cover class where young age class recruitment is less likely to be influenced by competition by older age class aspen in immature, mature, and overmature stands.

Aspen recruitment studies: Density of single-stemmed saplings sampled in fixed 1/100-acre circular plots (5-10 plots per stand) 2X30-meter belt transects, or other standardized forestry methodology.

3. Spanish Ranch Allotment existing/proposed key areas and key area objectives:

Spanish Ranch Allotment
Existing Key Areas:

Key Area Location	Utilization Objective
All key areas on native range	Average of 50% of current year's growth on native grass key species, not to exceed 55% in any one year

Burner Hills Field

Key Area RC-13 (AS-T-88-37) – Mint Mine area, established in 1988. Pronghorn summer range and sage grouse nesting/early brood rearing habitat. Loamy 8-10" P.Z. ecological site. Potential vegetative composition is about 60% grasses, 5% forbs and 35% shrubs by air dry weight. 1994 (latest) composition was rated at mid seral status ("fair" condition with numerical rating at 37) with 51% grasses (including 33% cheatgrass), 3% forbs and 46% shrubs. 1994 followed the banner 1992-1993 winter precipitation year.

Short Term (by spring 2007) maintain, or make progress towards, and Long Term (by spring 2015) achieve the following:

- ⚡ Maintain satisfactory age and form class of Wyoming big sagebrush as measured by Cole Browse Method.
- ⚡ % foliar canopy cover of shrubs not to exceed 15% with no less than 8-10%*.
- ⚡ Provide a minimum of 15% basal cover of native perennial grasses.
- ⚡ Provide lateral sage grouse nesting cover and a minimum of 15% perennial native grass canopy cover and 10% perennial native forb cover **.
- ⚡ Maintain or achieve at least "upper" mid seral status of ecological site as indicated by forage production monitoring with at least 5-10% "allowable" native forbs***.
- ⚡ Management that does not result in cheatgrass over 1% composition by cover with efforts to reduce it to less than 1% (0.94% in 1988)*****.

*Shrub foliar cover was 11.8% in 1988 (latest).

**Basal cover of perennial grasses was 4.1% in 1988. An increase in "tall genera" grasses such as bluebunch wheatgrass and Thurber's needlegrass (important as nesting cover) is not likely in the long term although they are part of the potential species on site. These species were not sampled during 1994 forage production and might only exist in scattered areas/tucked under brush in the Burner Hills Field. However, squirreltail (7% of composition), Sandberg's bluegrass (11% of composition) and Great Basin wildrye [Less than 1% (Trace) of composition] were sampled.

*** The allowable forb percentages sampled in 1994 was 3%. The Ecological Status write-up and Ecological Site Description includes present versus allowable percentages of forbs. This helps to provide for forb diversity where percentages are allowable compared to where present percentage might only solely include disturbance-associated forbs such as Hood's phlox, as an example. Therefore, Hood's phlox would only be allowed two percentage points versus any larger percentage which would not represent a semblance of the potential diversity on the site. The 5-10% allowable forbs should be

attainable in “upper” mid seral to late seral ecological status.

****The 33% composition by air dry weight sampled in 1994, as part of forage production monitoring, is a concern. Restoration work to reduce cheatgrass composition and increase composition of native perennial species through seeding efforts could be completed as this type of work is prioritized on the allotment in concert with a grazing system that would help maintain or improve the composition and diversity of native grasses.

New Wildlife/Range Transect/Key Area [SR-BH-#-YEAR] West of Soldier Cap between Scrapper Springs Road and headwaters of Chimney Creek in vicinity of public lands in T40N, R47E, sections 1 and 2. Deer and pronghorn summer range and sage grouse nesting/early brood-rearing habitat. Loamy Slope10-12” P.Z. Ecological Site - Big sagebrush-montane shrub (including bitterbrush) vegetation type. Potential vegetative composition (air dry weight) is about 65% grasses, 10% forbs and 25% shrubs. 1980s ecological status inventory indicates that the area was in mid seral ecological status as monitored at ocular sampling points. Trend is undetermined at this time in light of present livestock management*, the 1994 Mahogany Fire, severe to extreme drought from 1999-2003, and major wild horse issues in various states of resolve.

Short Term (by spring 2007) maintain, or make progress towards, and Long-Term (by spring 2015) achieve the following:

- ⚡ Utilization of current year’s growth of bitterbrush/serviceberry will not exceed 50% on pronghorn summer range.
- ⚡ Maintain age and form class of bitterbrush/serviceberry in satisfactory condition or improve to satisfactory condition.
- ⚡ Provide sage grouse lateral nesting cover and a minimum of 15% perennial native grass canopy cover and 10% perennial native forb cover.
- ⚡ Provide a minimum of 15% to 18% basal cover of native perennial grasses with emphasis on representation of “tall genera” species.
- ⚡ % foliar canopy cover of shrubs not to exceed 30% with no less than 8-10%.
- ⚡ Maintain or achieve at least late seral status (51 numerical rating) of ecological site as indicated by forage production monitoring with at least 5-10% “allowable” perennial forbs.

*Livestock permittee has stated that cattle have not been intentionally moved to the area due to excessive wild horse numbers during the past five years (1999-2003) although cattle have “drifted” into the area from surrounding areas during this time.

Winters Creek Field

New Wildlife/Range Transect/Key Area [SR-WC-#-YEAR] Between Threemile Creek and Winters Creek in vicinity of T41N, R48E, section 10 S1/2 or 15N1/2. Pronghorn summer range and sage grouse nesting/early brood-rearing habitat. Consider areas higher in elevation, as deemed necessary, to select representative site. Loamy Slope10-12” P.Z. Ecological Site - Big sagebrush-montane shrub (including bitterbrush) vegetation type. Potential vegetative composition (air dry weight) is about 65% grasses, 10% forbs and 25% shrubs. 1980s ecological status inventory indicates that the area was in late seral ecological status, as monitored at ocular sampling points. Trend is undetermined at this time in light of present livestock management, 1994 Mahogany Fire, severe to extreme drought from 1999-2003, and major wild horse issues in various states of resolve.

Short Term (by spring 2007) maintain, or make progress towards, and Long-Term (by spring 2015) achieve the following:

- ⌘ Utilization of current year’s growth of bitterbrush/serviceberry will not exceed 50% on pronghorn summer range.
- ⌘ Maintain age and form class of bitterbrush/serviceberry in satisfactory condition or improve to satisfactory condition.
- ⌘ Provide sage grouse lateral nesting cover and a minimum of 15% perennial native grass canopy cover and 10% perennial native forb cover.
- ⌘ Provide a minimum of 15% to 18% basal cover of native perennial grasses with emphasis on representation of “tall genera” species.
- ⌘ % foliar canopy cover of shrubs not to exceed 30% with no less than 8-10%.
- ⌘ Maintain or achieve at least late seral status (51 numerical rating) of ecological site as indicated by forage production monitoring with at least 5-10% “allowable” perennial forbs*.

Red Cow Field

New Wildlife/Range Transect/Key Area [SR-RC-#-YEAR] Between Fourmile Creek and Amazon Creek in vicinity of T41N, R49E, section 2SW or 3SE. Pronghorn summer range, deer summer range, and sage grouse nesting/early brood-rearing habitat. Consider areas higher in elevation, as deemed necessary, to select representative site. Loamy Slope10-12” P.Z. Ecological Site; Big sagebrush-montane shrub (including bitterbrush) vegetation type. Potential vegetative composition (air dry weight) is about 65% grasses, 10% forbs and 25% shrubs. 1980s ecological status inventory indicates that the area was in late seral ecological status as monitored at ocular sampling points. Trend is undetermined at this time in light of present season-long livestock use, severe to extreme drought from 1999-2003, and wild horse issues in various states of resolve.

Short Term (by spring 2007) maintain, or make progress towards, and Long-Term (by spring 2015) achieve the following:

- ⊘ Utilization of current year's growth of bitterbrush/serviceberry will not exceed 50% on pronghorn summer range.
- ⊘ Maintain age and form class of bitterbrush/serviceberry in satisfactory condition or improve to satisfactory condition.
- ⊘ Provide sage grouse lateral nesting cover and a minimum of 15% perennial native grass canopy cover and 10% perennial native forb cover.
- ⊘ Provide a minimum of 15% to 18% basal cover of native perennial grasses with emphasis on representation of "tall genera" species.
- ⊘ % foliar canopy cover of shrubs not to exceed 30% with no less than 8-10%.
- ⊘ Maintain or achieve at least late seral status (51 numerical rating) of ecological site as indicated by forage production monitoring with at least 5-10% "allowable" perennial forbs*.

Big Cottonwood Uplands Field

1. **Key Area RC-04 (CDS-T-88-31) Six Mile** – Crucial deer summer range and sage grouse nesting/early brood-rearing habitat. Big sagebrush-bitterbrush vegetation type; Loamy Slope 12-14" P.Z. Ecological Site. Potential vegetative composition (air dry weight) is about 70% grasses, 10% forbs and 20% shrubs. 1994 (latest) composition was rated at mid seral status (numerical rating at 39) with 20% grasses (including 2% cheatgrass), 5% forbs and 74% shrubs (under 100% due to rounding). 1994 followed the banner 1992-1993 winter precipitation year. Trend is undetermined at this time in light of present season-long livestock use and severe to extreme drought from 1999-2003.

Short Term (by spring 2007) maintain, or make progress towards, and Long-Term (by spring 2015) achieve the following:

- ⊘ Utilization of current year's growth of bitterbrush will not exceed 50%.
- ⊘ Maintain age and form class of bitterbrush in satisfactory condition or improve to satisfactory condition.
- ⊘ Provide sage grouse lateral nesting cover and a minimum of 15% perennial native grass canopy cover and 10% perennial native forb cover.
- ⊘ Provide a minimum of 15% to 18% basal cover of native perennial grasses with emphasis on representation of "tall genera" species.
- ⊘ % foliar canopy cover of shrubs not to exceed 30% with no less than 8-10%.
- ⊘ Maintain or achieve at least late seral status (51 numerical rating)

of ecological site as indicated by forage production monitoring with at least 5-10% “allowable” perennial forbs*.

Proposed Key Area/Browse Transect between Red Cow Creek and Big Cottonwood Creek Headwater area: Establish a key area in the vicinity of T41N, R50E, sections 33 and 34. Mountain brush vegetation type; Loamy Slope 16+ P.Z. Ecological Site. Potential vegetative composition is about 50% grasses, 15% forbs and 35% shrubs and trees by air dry weight. 1980s ecological status inventory indicates that the area was in Potential Native Community (PNC) at specified ocular sampling points. Trend is undetermined at this time in light of season-long livestock use, severe to extreme drought from 1999 to 2003 and wild horse issues in various stages of resolve.

Short Term (by spring 2007) maintain, or make progress towards, and Long-Term (by spring 2015) achieve the following*:

- ⚡ Utilization of current year’s growth of serviceberry/chokecherry will not exceed 50%.
- ⚡ Maintain age and form class of serviceberry/chokecherry/bitterbrush in satisfactory condition or improve to satisfactory condition.
- ⚡ % foliar canopy cover of shrubs not to exceed 30% with no less than 8-10%.
- ⚡ Provide a minimum of 15% to 18% basal cover of native perennial grasses.
- ⚡ Maintain or achieve Potential Native Community status (75 numerical rating) of ecological site as indicated by forage production monitoring with at least 5-10% “allowable” native forbs.

Cornucopia Field

Key Area RC-12 (CDW-2-T-04) Cornucopia Ridge – Deer intermediate range and sage grouse nesting/early brood-rearing habitat. Big sagebrush-bitterbrush vegetation type; Loamy Slope 12-16” P.Z. Ecological Site. Potential vegetative composition (air dry weight) is about 60% grasses, 15% forbs and 25% shrubs. July 1994 forage production monitoring indicates that the area was in mid seral ecological status. 1994 followed the banner 1992-93 winter precipitation year.

Short Term (by spring 2007) maintain, or make progress towards, and Long-Term (by spring 2015) achieve the following:

- ⚡ Utilization of current year’s growth of bitterbrush will not exceed 50% (25% livestock during 5/1 to 10/14 period and 25% big game during 10/15 to 5/1 period).
- ⚡ Maintain age and form class of bitterbrush in satisfactory condition

- or improve to satisfactory condition.
- ⊘ Provide sage grouse lateral nesting cover and a minimum of 15% perennial native grass canopy cover and 10% perennial native forb cover.
- ⊘ Provide a minimum of 15% to 18% basal cover of native perennial grasses.
- ⊘ % foliar canopy cover of shrubs not to exceed 30% with no less than 8-10%.
- ⊘ Maintain or achieve at least late seral status (51 numerical rating) of ecological site as indicated by forage production monitoring with at least 5-10% “allowable” perennial forbs*

All Fields on Squaw Valley and Spanish Ranch Allotments where Quaking Aspen Occurs (except Upper Willow Creek Habitat Enhancement Plan area as described above), as deemed necessary:

Quaking Aspen Objectives for deteriorated stand identified and monitored on the Squaw Valley and Spanish Ranch Allotments, as deemed necessary:

Short Term (by three years after implementation of baseline transects) and Long Term (by 12 years after implementation of baseline transects):
 Improve young aspen age class recruitment by increasing the number of single-stemmed saplings¹ by at least 10% above baseline values per acre in deteriorating² stands.

Short Term (three years after implementation of baseline transects):
 Improve* young age class recruitment by making significant progress toward an equivalent of at least 1,500 single-stemmed saplings¹ per acre in deteriorating² stands identified in 2001 with overstory canopy cover class³ of 20% or less.

Long Term –Phase I (by 12 years after implementation of baseline transects) and LongTerm – Phase II (12 years or later after implementation of baseline transects)
 Maintain* young age class recruitment by allowing an equivalent of at least 1,500 single-stemmed saplings¹ per acre in deteriorating stands identified in baseline transects with a post-baseline overstory canopy cover class³ of 20% or less.

* Short term improvement of identified deteriorating stands and long-term maintenance of young age class recruitment in identified deteriorating stands would take in consideration site potential, disease and natural mortality factors, and potential need for disturbance treatments (to stimulate recruitment) and/or fencing.

¹ Saplings, as mentioned for these objectives, are defined as single-stemmed aspen that are at least seven feet in height and less than 3.9 inches in diameter at breast height (4.5 feet). The sapling definition for these objectives take in consideration a minimum height

needed to help allow terminal growth out of reach of browsing animals which is 2.5-feet higher than saplings defined by Natural Resource Conservation Service (NRCS) ecological site descriptions for aspen woodland sites on the allotment. The maximum diameter (less than 3.9 inches) at breast height for saplings is considered because stems less than 3.9 inches in diameter usually constitute reproduction while larger stems usually contribute to the overstory. Sapling height and density recommendations per Dr. Charles Kay's December 2002 report to BLM Battle Mountain and Elko Field Office entitled *Aspen Management Guidelines for BLM Lands in North-Central Nevada*.

² Deteriorating stands, as mentioned for these objectives, include those existing stands in immature, mature, and overmature woodland successional stages as defined by NRCS range site descriptions, with (1) an open canopy (10% or less canopy cover class), (2) abnormally large amounts of aspen residue (standing or fallen), and (3) sagebrush invasion.

³ Canopy cover class of 20% or less, as mentioned for this objective, is expressed as the percent cover class where young age class recruitment is less likely to be influenced by competition by older age class aspen in immature, mature, and overmature stands.

Aspen recruitment studies: Density of single-stemmed saplings sampled in fixed 1/100-acre circular plots (5-10 plots per stand), 2X30-meter belt transects*, or other standardized forestry methodology. The samplings should be evenly distributed throughout an entire aspen stand or clone*.

* Per methods described by Dr. Charles Kay in his December 2002 report to BLM Battle Mountain and Elko Field Office entitled *Aspen Management Guidelines For BLM Lands in North-Central Nevada* available from BLM Elko Field Office.

Wildlife:

4. Improve to and/or maintain all seasonal big game habitat to good or excellent condition at existing key area monitoring locations (or additional key area monitoring locations selected in consultation with affected interests), except where Desired Plant Community objectives have been developed to achieve multiple use objectives, to provide forage and habitat capable of supporting the following reasonable numbers:

4,181	Mule deer (5,015 AUMs)
56	Pronghorn antelope (101 AUMs)

Riparian:

5. Manage grazing on the following streams to achieve short and long-term stream/riparian habitat objectives as outlined below:

LOTIC (FLOWING WATER) RIPARIAN HABITATS

Squaw Valley Allotment

Manage grazing to achieve short and long-term stream/riparian habitat objectives as defined in Tables 6, 7, and 8. Note that objectives may be revised at the conclusion of the short and/or long-term evaluation periods.

Streams Not Included in the Upper Willow Creek Habitat Enhancement Plan (UWCHEP)

Table 6. Short and long-term objectives for selected habitat parameters for streams in the Squaw Valley Allotment based on date of implementation of the grazing plan. Data are from stream survey stations (shown in parentheses) located on both public and private land (refer to map 3).

STREAM HABITAT PARAMETER	MOST CURRENT BASELINE DATA	SHORT-TERM OBJECTIVE (4 yrs)¹	LONG-TERM OBJECTIVE (8 yrs)²
Middle Rock Creek - Dominant Rosgen Channel Type: B (S-1 through S-6)			
Riparian Condition Class (% optimum) ³	57 (2003)	≥60	67 ∂ 7
Stream width/depth Ratio ⁴	22 (2003)	Maintain or decrease	18 ∂ 5
Shorewater Depth (in.) ⁴	1.9 (2003)	Maintain or increase	1.0 ∂ 0.4
Streambank Angle (∇) ⁴	131 (2003)	Maintain or decrease	132 ∂ 11
Ave. Width Type A Riparian Vegetation ⁵ (ft.)	4.3 (2003)	5.6 ⁶	Increase in Type A and/or Type B
Functioning Condition	Functional at Risk, trend upward (2003)	Proper Functioning Condition (PFC)	Proper Functioning Condition (PFC)
Upper Rock Creek (upper reach) - Dominant Rosgen Channel Type: B (S-1 through S-4, SA-1)			
Riparian Condition Class (% optimum) ³	66 (2003)	Maintain or increase	67 ∂ 7
Stream width/depth Ratio ⁴	15 (2003)	Maintain	18 ∂ 5
Shorewater Depth (in.) ⁴	1.3 (2003)	Maintain or increase	1.0 ∂ 0.4
Streambank Angle (∇) ⁴	136 (2003)	Maintain or decrease	132 ∂ 11
Ave. Width Type A Riparian Vegetation ⁵ (ft.)	7.5 (2003)	9.8 ⁶	Increase or maintain Type B
Functioning Condition	Proper Functioning Condition (PFC) (2003)	Maintain	Maintain
Upper Rock Creek (lower reach) - Dominant Rosgen Channel Type: C (S-5 through S-9)			
Riparian Condition Class (% optimum) ³	48 (2003)	62	68 ∂ 4
Stream width/depth Ratio ⁴	27 (2003)	≤ 23	18 ∂ 5
Shorewater Depth (in.) ⁴	0 (2003)	Increase	0.7 ∂ 0.3
Streambank Angle (∇) ⁴	150 (2003)	≤ 147	139 ∂ 8
Ave. Width Type A Riparian Vegetation ⁵ (ft.)	3.8 (2003)	4.9 ⁶	Increase in Type A and/or Type B
Functioning Condition	Functional at Risk-trend not apparent/ Non-functional (2003)	Functional at risk-upward trend	Proper Functioning Condition (PFC)
Toe Jam Creek (upper reach) - Dominant Rosgen Channel Type: B (S-11 through S-14)			
Riparian Condition Class (% optimum) ³	75 (2003)	Maintain or increase	67 ∂ 7
Stream width/depth Ratio ⁴	23 (2003)	Maintain or decrease	18 ∂ 5
Shorewater Depth (in.) ⁴	0.8 (2003)	Maintain or increase	1.0 ∂ 0.4

STREAM HABITAT PARAMETER	MOST CURRENT BASELINE DATA	SHORT-TERM OBJECTIVE (4 yrs)¹	LONG-TERM OBJECTIVE (8 yrs)²
Streambank Angle (∇) ⁴	140 (2003)	Maintain or decrease	132 ∂ 11
Ave. Width Type A Riparian Vegetation ⁵ (ft.)	4.7 (2003)	6.1 ⁶	Increase in Type A and/or Type B
Functioning Condition	Functional at risk, trend not apparent (2003)	Functional at Risk, upward trend	Proper Functioning Condition (PFC)
Toe Jam Creek (lower reach) - Dominant Rosgen Channel Type: B (S-1 through S-10)			
Riparian Condition Class (% optimum) ³	52 (2003)	≥ 60	67 ∂ 7
Stream width/depth Ratio ⁴	28 (2003)	≤ 23	18 ∂ 5
Shorewater Depth (in) ⁴	0.2 (2003)	0.3	1.0 ∂ 0.4
Streambank Angle (∇) ⁴	151 (2003)	≤ 143	132 ∂ 11
Ave. Width Type A Riparian Vegetation ⁵	2.6 (2003)	3.4 ⁶	Increase in Type A and/or Type B
Functioning Condition	Functional at Risk, trend not apparent to downward (2003)	Functional at Risk, upward trend	Proper Functioning Condition (PFC)
Frazer Creek - Dominant Rosgen Channel Type: B (S-1 through S-7)			
Riparian Condition Class (% optimum) ³	73 (2003)	Maintain or increase	67 ∂ 7
Stream width/depth Ratio ⁴	15 (2003)	Maintain or decrease	18 ∂ 5
Shorewater Depth (in) ⁴	0.7 (2003)	Maintain or increase	1.0 ∂ 0.4
Streambank Angle (∇) ⁴	138 (2003)	Maintain or decrease	132 ∂ 11
Ave. Width Type A Riparian Vegetation ⁵ (ft.)	7.5 (2003)	9.8 ⁶	Increase in Type A and/or Type B
Functioning Condition	Functional at Risk, upward trend (2003)	Proper Functioning Condition (PFC)	Proper Functioning Condition (PFC)
Trout Creek - Dominant Rosgen Channel Type: B (S1 through S-6; S-1A through S-3A)			
Riparian Condition Class (% optimum) ³	56 (2003)	≥ 60	67 ∂ 7
Stream width/depth Ratio ⁴	14 (2003)	Maintain or decrease	18 ∂ 5
Ave. Width Type A Riparian Vegetation ⁵ (ft.)	4.7 (2003)	6.1 ⁶	Increase in Type A and/or Type B
Functioning Condition	Variable (2003)	Functional at Risk, upward trend	Proper Functioning Condition (PFC)
Coyote Creek			
Functioning Condition	Nonfunctional (1999)	Functional at Risk, upward trend	Proper Functioning Condition (PFC)
Soldier Creek			
Functioning Condition	Nonfunctional (1999)	Functional at Risk, upward trend	Proper Functioning Condition (PFC)

¹Based on 30% improvement over baseline values where applicable.

²Based on mean values (∂ 95% confidence limits) for applicable Rosgen channel types in desired condition (Newman 2001 and Rosgen 1996).

³Average of bank cover and bank stability. Optimum is considered to represent stable streambanks well vegetated with tall trees or shrubs (BLM 2002).

⁴Objectives for stream width/depth ratio may not be applicable if the survey area is included within a

beaver dam complex. Note also depth measurements are based on average of three measurements.

⁵Canopy cover of riparian shrubs, trees and basal cover of riparian herbaceous vegetation is less than 50% (BLM 2002).

⁶30% increase over baseline may be in Type B riparian vegetation (defined as canopy cover of shrubs, trees and basal cover of herbaceous vegetation greater than 50%) (BLM 2002).

Note: Stream survey stations are shown for Lower Willow Creek below the reservoir on map 3. Additional objectives may be established for this area at a future date.

Techniques for measuring stream habitats are described in Aquatic Habitat Inventory and Monitoring Level III Survey Procedures, Level III Survey Procedures, Elko Revised Handbook 6720-1 (BLM 2002). Techniques for determining proper functioning condition of lotic riparian habitats are described in BLM Technical Reference 1737-15 (Prichard et al. 1998). Data are currently averaged by stream but may be averaged by stream segments within pastures if and when additional pasture fences are constructed. For the grazing treatment to be considered successful for a particular stream, the majority (} 50%) of the objectives identified for that stream must be met. Locations of stream survey stations are shown in Map 3.

Additional information including pool characteristics, substrate composition, streambank and riparian zone characteristics, ungulate impacts, and water temperatures collected as part of BLM's stream survey protocol will also be used to evaluate the overall effectiveness of the grazing system. Riparian herbaceous stubble heights, woody riparian plant utilization, and streambank trampling will be monitored to document and evaluate grazing impacts. Stubble height and plant utilization will be measured using techniques described in BLM (1996) and in Nevada Rangeland Studies Task Group (1984). Streambank trampling will be determined by measuring the percent of streambank trampled or compacted by livestock along transects established at study sites.

Streams included in the Upper Willow Creek Habitat Enhancement Plan (UWCHEP)

Table 7. Stream habitat improvement criteria for streams included within the Upper Willow Creek Habitat Enhancement Plan (UWCHEP) area (BLM 2003). Stream survey stations are shown in parentheses.

STREAM HABITAT PARAMETERS	2002 BASELINE¹	CRITERIA²
Lewis Creek (S-1:S-4)		
Riparian Condition Class (% optimum) ³	63	70
Stream width/depth Ratio	15	15:1 or a 30% reduction from baseline, whichever is achieved first
Functioning Condition	TBD* (2003)	Proper Functioning Condition (PFC)
Nelson Creek (S-1:S-4; S-5 excluding T-2)		
Riparian Condition Class	73	70

STREAM HABITAT PARAMETERS	2002 BASELINE¹	CRITERIA²
(% optimum) ³		
Stream width/depth Ratio	23	15:1 or a 30% reduction from baseline, whichever is achieved first
Functioning Condition	TBD (2003)	Proper Functioning Condition (PFC)
Upper Willow Creek (S-1:S-5)		
Riparian Condition Class (% optimum) ³	46	65
Stream width/depth Ratio	29	15:1 or a 30% reduction from baseline, whichever is achieved first
Functioning Condition	TBD (2003)	Proper Functioning Condition

¹Refer also to Viert (2002) for additional information on baseline values for stream width to depth ratios.

²Under the UWCHEP, criteria shown must be attained prior to reauthorization of grazing following exclusion of livestock in 2004.

³Average of bank cover and bank stability. Optimum is considered to represent stable streambanks well vegetated with tall trees or shrubs (BLM 2002).

*TBD=To be determined

Monitoring techniques for streams within the UWCHEP are the same as those described for streams in Table 6.

Under provisions of the UWCHEP, additional habitat parameters will be monitored on Lewis, Nelson, and Upper Willow Creeks to evaluate the overall effectiveness of the grazing system. These parameters along with monitoring methods are shown in Table 6.

Table 8. Additional stream and riparian habitat monitoring parameters and methods for streams included within the UWCHEP area (BLM 2003).

MONITORING PARAMETER	METHODOLOGY
Riparian Zone Width	Elko Revised Handbook 6720-1 (BLM 2002)
Vegetation cross-section composition, greenline composition, woody riparian species regeneration	U. S. Forest Service Gen. Tech. Report RMS-GTR-47 (Winward 2000)
Temperature	Thermographs
Photography	Elko Revised Handbook 6720-1 (BLM 2002)
Vegetative Overhang	Elko Revised Handbook 6720-1 (BLM 2002)
Pool Quality	Elko Revised Handbook 6720-1 (BLM 2002)

Spanish Ranch Allotment

Manage grazing to achieve short and long-term stream/riparian habitat objectives as defined in Tables 9. Note that objectives may be revised at the conclusion of the short and/or long-term evaluation periods.

Table 9. Short and long-term objectives for selected habitat parameters for streams in the Spanish Ranch Allotment based on date of implementation of the grazing plan. Data are from stream survey stations (shown in parentheses) located on public land (refer to map 3).

STREAM HABITAT PARAMETER	MOST CURRENT BASELINE DATA	SHORT-TERM OBJECTIVE (4 yrs)¹	LONG-TERM OBJECTIVE (8 yrs)²
Red Cow Creek - Dominant Rosgen Channel Type: B (S-1, S-2, S-5, S-6, S-7, S-8, S-10, S-11)			
Riparian Condition Class (% optimum) ³	49	≥64	68 ∂ 4
Stream width/depth Ratio ⁴	32	≤23	18 ∂ 5
Shorewater Depth (in) ⁴	0.10	Maintain or increase	0.7 ∂ .3
Streambank Angle (∇) ⁴	157	≤ 147	139 ∂ 8
Ave. Width Type A Riparian Vegetation ⁵ (ft.)	3.3	4.3 ⁶	Increase in Type A and/or Type B
Functioning Condition	Non-functional (2000)	Functional at Risk, upward trend	Proper Functioning Condition (PFC)
Chino (Fourmile) – Rosgen B Channel Type (S-7, S-9)			
Riparian Condition Class (% optimum) ³	52 (1992)	≥ 60	67 ∂ 7
Stream width/depth Ratio ⁴	30 (1992)	≤ 23	18 ∂ 5
Functioning Condition	Functional at Risk, downward trend (2002)	Functional at Risk, upward trend	Proper Functioning Condition (PFC)
Big Cottonwood Canyon - Dominant Rosgen Channel Type: B (S-2, S-3, S-8)			
Riparian Condition Class (% optimum) ³	41	53	67 ∂ 7
Stream width/depth Ratio ⁴	28	≤ 23	18 ∂ 5
Shorewater Depth (in) ⁴	0	Increase	1.0 ∂ 0.4
Streambank Angle (∇) ⁴	156	≤143	132 ∂ 11
Ave. Width Type A Riparian Vegetation ⁵	5.0	6.5 ⁶	Increase in Type A and/or Type B
Functioning Condition	Non-functional (1999)	Functional at Risk, upward trend	Proper Functioning Condition (PFC)
Winters Creek - (establish stream survey stations on public land)			
Riparian Condition Class (% optimum) ³	TBD*	TBD	TBD
Stream width/depth Ratio ⁴	TBD	TBD	TBD
Ave. Width Type A Riparian Vegetation ⁵	TBD	TBD ⁶	Increase in Type A and/or Type B
Functioning Condition	TBD	TBD	Proper Functioning Condition (PFC)
Sixmile Canyon Creek - Dominant Rosgen Channel Type: B (S-2, S-3, S-4, S-5)			
Riparian Condition Class (% optimum) ³	60 (2002)	Maintain or increase	67 ∂ 7
Functioning Condition	Functional at risk, trend not apparent (83%) PFC (17%) (1999)	Functional at Risk, upward trend/Proper Functioning Condition (PFC)	Proper Functioning Condition (PFC)
Hot Creek	Nonfunctional (1999)	Functional at Risk, upward trend	Proper Functioning Condition (PFC)

¹Based on 30% improvement over baseline values where applicable.

²Based on mean values (\pm 95% confidence limits) for applicable Rosgen channel types in desired condition (Newman 2001 and Rosgen 1996).

³Average of bank cover and bank stability. Optimum is considered to represent stable streambanks well vegetated with tall trees or shrubs (BLM 2002).

⁴Objectives may not be applicable if the survey area is included within a beaver dam complex. Note also width to depth measurements are based on average of three measurements.

⁵Canopy cover of riparian shrubs, trees and basal cover of riparian herbaceous vegetation is less than 50% (BLM 2002).

⁶30% increase over baseline may be in Type B riparian vegetation (defined as canopy cover of shrubs, trees and basal cover of herbaceous vegetation greater than 50%) (BLM 2002).

Techniques for measuring stream habitats are described in Aquatic Habitat Inventory and Monitoring Level III Survey Procedures, Level III Survey Procedures, Elko Revised Handbook 6720-1 (BLM 2002). Techniques for determining proper functioning condition of lotic riparian habitats are described in BLM Technical Reference 1737-15 (Prichard et al. 1998). Data are currently averaged by stream but may be averaged by stream segments within pastures if and when additional pasture fences are constructed. For the grazing treatment to be considered successful for a particular stream, functioning condition objectives as well as majority (\geq 50%) of the stream and riparian habitat objectives identified for that stream must be met. For example, if objectives for functioning condition, riparian condition class, stream width to depth ratio, and shorewater depth are met, but objectives for width of type A riparian vegetation and streambank angle are not met, the grazing treatment will still be considered successful for that stream. Locations of stream survey stations are shown in map 3.

Additional information including pool characteristics, substrate composition, streambank and riparian zone characteristics, ungulate impacts, and water temperatures collected as part of BLM's stream survey protocol will also be used to evaluate the overall effectiveness of the grazing system. Riparian herbaceous stubble heights, woody riparian plant utilization, and streambank trampling will be monitored to document and evaluate grazing impacts. Stubble height and plant utilization will be measured using techniques described in BLM (1996) and in Nevada Rangeland Studies Task Group (1984). Streambank trampling will be determined by measuring the percent of streambank trampled or compacted by livestock along transects established at study sites.

LENTIC (STANDING WATER) RIPARIAN HABITATS

Squaw Valley and Spanish Ranch Allotments

Within four years from the date of implementation of the grazing system, show progress towards meeting Proper Functioning Condition (PFC) on selected lentic (standing water) riparian habitats within applicable pastures or grazing treatment areas. Over the long-term (within eight years of the date of implementation of the grazing system) achieve PFC on selected riparian habitats. Techniques for determining proper functioning condition of lentic riparian habitats are described in BLM Technical Reference 1737-16 (Prichard, et al. 1999).

Wild Horses:

6. Manage for a wild horse herd size which will maintain a thriving ecological balance consistent with other multiple uses while remaining within the newly designated wild horse herd management area.

2. **Continue to conduct necessary monitoring studies and periodically evaluate the effects of grazing to determine if progress is being made in meeting the multiple use objectives and standards for rangeland health. The Spanish Ranch and Squaw Valley Allotments will be analyzed after one complete cycle of the proposed grazing systems to determine progress toward attainment of objectives and to make any necessary adjustments in grazing use. Subsequently, these allotments will be reevaluated in accordance with priorities established in the Elko District Monitoring and Evaluation Schedule. If monitoring studies indicate a need to modify grazing use based on carrying capacity, necessary adjustments will be made. In addition to specific monitoring techniques described for lotic and lentic riparian habitats, the following studies will include, but are not limited to, the following:**

Uplands:

- forage production
- ecological production
- trend frequency
- utilization
- actual use
- Upland Proper Functioning Condition Assessment
- Ecological Site Inventory
- Precipitation studies

Wildlife Habitat:

- habitat condition studies (BLM Manual 6630)
- wildlife population census
- Cole Browse

Wild Horses:

- wild horse population census

Rationale: The Spanish Ranch and Squaw Valley AE summarized current grazing management, determined where or not progress was being made toward attainment of the multiple use objectives, and provided recommendations for future management. The allotment specific objectives which were analyzed in the AE, were formulated based on management issues which existed in 1987 when the RPS was published. Based on monitoring data and conclusions presented in the AE, it is necessary to modify and/or requantify the allotment specific objectives to address the following resource issues:

- ⚡ Upland range conditions
- ⚡ Lotic and lentic riparian conditions
- ⚡ Wildlife habitat conditions

€# Wild horse management

Monitoring studies will continue to be conducted and the effects of grazing will be evaluated periodically to determine if progress is being made in meeting the multiple use objectives and significant progress is being made toward attainment of the standards for rangeland health.

A supplement to the 1998 Biological Assessment for the Squaw Valley Proposed Multiple Use Decision (BLM 1998) has been transmitted to the U.S. Fish and Wildlife Service for formal consultation. The supplement addresses the grazing systems proposed for the Squaw Valley Allotment. An Environmental Assessment (EA) has also been prepared to analyze the affects of the proposed actions. All three documents (1998 Biological Assessment, 2003 Biological Assessment Supplement, and the 2004 Final Multiple Use Decision Environmental Analysis) are available by request from the Elko BLM Field Office.

Sincerely,

CLINTON R. OKE
Assistant Field Manager
Renewable Resources

Enclosures: As stated above

cc:

Nevada Department of Wildlife
National Mustang Association
Bureau of Land Management (Winnemucca FO)
Nevada Woolgrower's Association
American Bashkir Curley Register
U.S. Fish and Wildlife Service
Commission for the Preservation of Wild Horses
Western Watersheds Project
Committee for Idaho's High Desert
Bill Houston

Gregg Simonds
Sierra Club
WHOA
Nevada State Division of Ag.
Agri Beef
Nevada Cattlemen's Assoc.
Resource Concepts Inc.
Elko County Commissioners
Fund for Animals
Duane Erickson

Supporting Documents

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TABLE 4. SQUAW VALLEY GRAZING SYSTEM

FIELD	ACRES	AUM's¹	KEY ISSUES	MANAGEMENT STRATEGY SHORT-TERM (2004-2006)^{2,3}	MANAGEMENT STRATEGY LONG-TERM (2007-2014)^{2,3}
Horseshoe	27,101	1,956	Poor ecological condition Crucial deer winter range Cheatgrass domination Protection of seeded species Wildfire Severe-extreme drought (1999-03; <i>applies to all pastures</i>) ⁴	Grazing: March-April Fall use would be limited to alternate year trailing ³ with Indian Springs with utilization restrictions of 50% of the current year's growth on crested wheatgrass and forage kochia ⁵ See sheep grazing footnote	Grazing: Flexible with following restrictions: If grazing during active growing season when apical meristem can be harvested (est. May 1 st – June 30 th), then no grazing during active growing season the following year; fall use would be limited to alternate year trailing with Indian Springs with utilization restrictions of 50% of the current year's growth on crested wheatgrass and forage kochia ⁵ Follow-up monitoring will be completed to ensure that seeded species and soils/soil hydrology on seedings are not impacted. If seeded species are being impacted, carrying capacities and stocking rates may be adjusted accordingly or the pasture will receive one of two years rest or a rotation with Indian Springs Pasture. See sheep grazing footnote. Improvements: Evaluate potential for water developments and additional seedings for fuelbreaks, wintering big game, and improvement of ecological sites. Grazing: Same as above and if fall grazing (after September 15 th), then utilization restrictions of 50% of the current year's growth on crested wheatgrass and forage kochia ⁵ See sheep grazing footnote Improvements: Same as above
Indian Springs	15,973	1,312	Same as above	Same as above	Grazing: Flexible Improvements: Evaluate the need for mosaic-pattern vegetative manipulation of shrub species and seeding of forb species ⁶
Horseshoe Seeding	4,447	1,943	Low biodiversity	Grazing: Flexible	Grazing: Flexible
Midas Seeding	1,189	733	Low plant species diversity	Grazing: Flexible	Grazing: Flexible
Rock Creek Seeding	1,358	690	Same as above	Grazing: Flexible	Grazing: Flexible
Upper Clover Seeding	668	92	Same as above	Grazing: Flexible	Grazing: Flexible
Rock Creek Riparian (existing fire fence)	35,964	2,233	Riparian values-Rock Creek Protection of seeded species	Cattle Grazing: Rest Sheep Grazing: See sheep restrictions footnote	Grazing: Early off (by June 15 th) annually or alternate with fall use (after Sept. 30 th) with the following restriction: If grazing during active growing season when apical meristem can be harvested (est. May 1 st – June 15 th), then no grazing during active growing season the following year. See sheep grazing footnote Improvements: Evaluate the potential for water developments and fencing selected areas along Rock Creek.
Lower Rock Creek Gorge Pathway	1,300	391	Manage area, including that portion affected by 2001 Hot Lake Fire burn area, to help restore site dynamics and to prevent cheatgrass domination	Grazing: Flexible although AUMs justify consideration primarily as trailing route. See sheep grazing footnote	Grazing: Flexible although AUMs justify consideration primarily as trailing route. In concert with management of above pasture, restrict use during native perennial grass critical growth period. See sheep grazing footnote

FIELD	ACRES	AUM's ¹	KEY ISSUES	MANAGEMENT STRATEGY SHORT-TERM (2004-2006) ^{2,3}	MANAGEMENT STRATEGY LONG-TERM (2007-2014) ^{2,3}
Willow Creek Reservoir	62,554	6,972		<p>Grazing: Flexible with progress to consider restriction of active growing season use and other criteria as shown for the long term. See sheep grazing footnote</p>	<p>Pending any final NEPA approval to construct fences to create pastures: Grazing: Flexible. If grazing during active growing season when apical meristem can be harvested (est. May 1st – June 30th), then no grazing during active growing season the following year. Utilization of current year's growth of bitterbrush will not exceed 50% (25% livestock during 5/1 to 10/14 and 25% big game during 10/15 to 5/1). See sheep grazing footnote Improvements: Fence selected key riparian habitats as necessary.</p>
Willow Creek South (Proposed long-term field)	TBD ⁶	TBD	Riparian values-Willow Creek and springs Mule deer intermediate range High sage grouse values	NA	<p>Grazing: Alternate active growing season use with other Willow Creek fields with the following restrictions: -Utilization of the current year's growth of bitterbrush will not exceed 50% (25% by livestock during 5/1 to 10/14 and 25% big game during 10/15 to 5/1) See sheep grazing footnote Improvements: Evaluate the following potential actions: Fencing to divide Willow Creek Reservoir Field into two units to create this field; prescribed burning; mechanical vegetation treatments; water developments; fence selected riparian habitats as necessary Grazing: Same as above per evaluation Improvements: Evaluate the need to split the North Field into two separate pastures</p>
Willow Creek NW (long-term field)	TBD	TBD		NA	
Willow Creek NE (long-term field)	TBD	TBD		NA	
Lower Squaw Creek	15,846	1,128	Poor ecological conditions 1999 Squaw Valley Fire area imperiled as a result of potential cheatgrass domination	<p>Grazing: June-July Improvements: Construct pasture fence segment</p>	<p>Grazing: Flexible with caveat that if grazed during active growing season when apical meristem can be harvested (est. May 1st – June 30th), then no grazing during active growing season the following year. See sheep grazing footnote Improvements: Evaluate the potential following actions: water developments; fence selected non-stream riparian habitats as necessary. Once Stream and Riparian Habitat Criteria defined in UWCHP are met: Grazing: No grazing after July 1st and before September 16th with the following restrictions: -The UWCHEA shall be rested following any year of livestock use -The following conditions would be met following removal of livestock: 4 inch herbaceous stubble height Utilization would not exceed 20% on willows and 10% on aspen Streambank trampling would not exceed 10% -If above conditions are not met, the UWCHEA would be rested from livestock grazing for two consecutive years and future grazing use</p>
Upper Willow Creek Habitat Enhancement Area ⁷	13,500	736	Lahontan cutthroat trout Riparian-streams, springs Sage grouse nesting and brood rearing Mule deer summer range	<p>Rest until criteria defined in the Upper Willow Creek Habitat Enhancement Plan (UWCHEP) are met See sheep grazing footnote Improvements: Fence west side of Upper Willow Creek with mitigation for sage grouse concerns.</p>	

FIELD	ACRES	AUM's ¹	KEY ISSUES	MANAGEMENT STRATEGY SHORT-TERM (2004-2006) ^{2,3}	MANAGEMENT STRATEGY LONG-TERM (2007-2014) ^{2,3}
					<p>would be adjusted to ensure criteria for stubble height, utilization, and trampling conditions are not exceeded. -No flexibility in July 1st off date allowed. See sheep grazing footnote Improvements: Prescribed burning</p>
Frazier Creek Riparian	20,443	1,633	<p>Lahontan cutthroat trout Riparian-streams, springs Sage grouse nesting and brood rearing Mule deer summer range</p>	<p>Cattle Grazing: Rest Sheep Grazing: See sheep restrictions footnote</p>	<p>Cattle Grazing: Hot season use [(use between June 16th and October 20th (depending on climatic conditions))] cannot occur more than one time each in a four year grazing cycle. A minimum of one year of rest is required in a four year cycle⁸. Two consecutive years of hot season use will not be allowed. Sheep Grazing: See sheep restrictions footnote</p>
Trout Creek	TBD	5,085 before split with Toe Jam	<p>Lahontan cutthroat trout recovery habitat Riparian-streams, springs Sage grouse nesting and brood rearing Mule deer summer range</p>	<p>Cattle Grazing: Rest Sheep Grazing: See sheep restrictions footnote</p>	<p>Cattle Grazing: Hot season use [(use between June 16th and October 20th (depending on climatic conditions))] cannot occur more than one time each in a four year grazing cycle. A minimum of one year of rest is required in a four year cycle⁸. Two consecutive years of hot season use will not be allowed. Sheep Grazing: See sheep restrictions footnote Improvements: Construct Trout Creek/Soldier Field pasture fence; evaluate the potential for prescribed burning and water developments</p>
Soldier Field	19,965	1,472	<p>Riparian values-streams, springs Sage grouse nesting and brood rearing Mule deer summer range</p>	<p>NA</p>	<p>Cattle Grazing: Hot season use [(use between June 16th and October 20th (depending on climatic conditions))] cannot occur more than one time each in a four year grazing cycle. A minimum of one year of rest is required in a four year cycle⁸. Two consecutive years of hot season use will not be allowed. Sheep Grazing: See sheep restrictions footnote</p>
Trout Creek Field	TBD	TBD	<p>Lahontan cutthroat trout recovery habitat Riparian-streams, springs Sage grouse nesting and brood rearing Mule deer summer range</p>	<p>NA</p>	<p>Cattle Grazing: Hot season use [(use between June 16th and October 20th (depending on climatic conditions))] cannot occur more than one time each in a four year grazing cycle. A minimum of one year of rest is required in a four year cycle⁸. Two consecutive years of hot season use will not be allowed. Sheep Grazing: See sheep restrictions footnote Improvements: Construct Trout Creek/Soldier Field pasture fence; evaluate the potential for prescribed burning and water developments</p>
Toe Jam Field	TBD	TBD	<p>Lahontan cutthroat trout Riparian-streams, springs Sage grouse nesting and brood rearing Mule deer summer range</p>	<p>NA</p>	<p>Cattle Grazing: Hot season use [(use between June 16th and October 15th (depending on climatic conditions))] cannot occur more than one time each in a four year grazing cycle. A minimum of one year of rest is required in a four year cycle⁸. Two consecutive years of hot season use will not be allowed. Sheep Grazing: See sheep restrictions footnote Improvements: Construct Trout Creek/Toe Jam pasture fence, not shown on map 2; evaluate the potential for prescribed burning and water developments</p>

¹Based on the percentage of total AUMs in the native pastures derived from adjudication maps, multiplied by the proposed permitted use for the Native Pasture of the allotment. AUM calculations for the Seeding Pastures can be found in Appendix 4 within this report.

²Unless noted, grazing will be limited to dates shown.

³Definitions: Flexible – no season of use constraints; Rest- no grazing between January and December of the same calendar year. Trailing: All livestock being trailed through the Indian Springs or Horseshoe Pastures during the fall, will enter and leave the pasture in no more than 5 days.

⁴Area represents some of the driest portions of the Elko BLM District (refer to AZ1136 for considerations for drought in general, April 28th, 2003 newspaper article, March 14, 2003 BLM Drought Letter and 2003 Drought Monitor attachments).

⁴Utilization restrictions may apply to other seeded plant species as applicable.

⁵Seeding will likely require at least two years growing season rest. Some costs will be borne by livestock permittee.

⁶To be determined once pasture fences are constructed.

⁷Conditions for livestock use of the Willow Creek Habitat Enhancement Area are defined in the Upper Willow Creek Habitat Enhancement Plan (UWCHEP) developed as part of the Final Supplemental Environmental Impact Statement Betze Project, Barrick Goldstrike Mines, Inc. (BLM 2003).

⁸A request to waive the one year rest requirement for cattle in a four year grazing cycle will be considered by the BLM in the absence of hot season grazing during that grazing cycle.

Sheep Grazing Restrictions Footnote: Sheep will not be allowed to bed on the same bedding grounds more than two nights in a row. Sheep will not graze or trail along streams, springs, or aspen stands. Each band will use alternate trailing routes and different bedding areas. Sheep, *when trailing*, will be trailed at least five miles per day. Movement to and from bedding sites will be random to avoid the creation of trails. Sheep bands would not occupy the same bedding sites used in the summer during the fall.

The grazing system will be performance driven: if criteria, standards, objectives are not met, then additional rest or adjustments in livestock numbers will be required in subsequent years. This may also include a 40% utilization restriction in the native pastures during the active growing season. If objectives and standards for rangeland health are being met, potential does exist for consideration of an increase in livestock use. 2,000 of the sheep AUMs may be converted to cattle AUMs and put into active use after the first four year cycle, if progress towards meeting short-term objectives for upland and riparian habitat can be demonstrated. The Authorized Officer, accompanied with proper NEPA documentation, will determine if sheep AUMs may be converted and activated at that time. Complete conversion and activation of sheep AUMs may occur after the second four year cycle, once significant progress or achievement of short and long-term objectives have been made.

Additional range improvements will be implemented as they make sense and as funds are available.

ATTACHMENT 1

2001 Migratory Bird Executive Order This executive order outlines the responsibilities of Federal agencies to protect migratory birds. The United States has recognized their ecological and economic value to this country and other countries by ratifying international, bilateral conventions for the conservation of migratory birds. These migratory bird conventions impose substantive obligations on the United States for conservation of migratory birds and their habitats. The United States has implemented these migratory bird conventions through the Migratory Bird Treaty Act. President Clinton’s Migratory Bird Executive Order directs executive departments and agencies to take certain actions to further implement the Migratory Bird Treaty Act. As defined in the executive order, “action” means a program, activity, project, official policy (such as a rule or regulation), or formal plan directly carried out by a Federal agency. The executive order further states that each Federal agency taking actions that have, or are likely to have, a measurable negative effect on migratory bird populations is directed to develop and implement, within 2 years, a Memorandum of Understanding (MOU) with the Fish and Wildlife Service that shall promote conservation of migratory bird populations. The term “action” will be further defined in this MOU as it pertains to each Federal agency’s own authorities and programs.

A list of the migratory birds affected by the President’s executive order is contained in 43 CFR 10.13. References to “species of concern” pertain to those species listed in the periodic report “Migratory Nongame Birds of Management Concern in the United States”, priority migratory bird species as documented by established plans (such as Bird Conservation Regions in the North American Bird Conservation Initiative or Partners in Flight physiographic areas), and those species listed in 50 CFR 17.11.

A list pertaining to subject Squaw Valley and Spanish Ranch Allotments is shown below.

The Nevada Partners in Flight Bird Conservation Plan identifies the following bird species for prioritization for management action associated with each of the habitat types listed below:

Aspen	Montane Riparian	Montane Shrub	Sagebrush
<u>Obligates*</u> : None <u>Other**</u> : Northern Goshawk Calliope Hummingbird Flammulated Owl Lewis’s Woodpecker Red-naped Sapsucker Mountain Bluebird Orange-crowned Warbler	<u>Obligates</u> : Wilson’s Warbler MacGillivray’s Warbler <u>Other</u> : Cooper’s Hawk Northern Goshawk Calliope Hummingbird Lewis’s Woodpecker Red-Naped Sapsucker Orange-crowned	<u>Obligates</u> : None <u>Other</u> : Black Rosy Finch Black-throated Gray Warbler Calliope Hummingbird Cooper’s Hawk Loggerhead Shrike Blue Grosbeak Vesper Sparrow	<u>Obligates</u> : Sage Grouse <u>Other</u> : Black Rosy Finch Ferruginous Hawk Gray Flycatcher Loggerhead Shrike Vesper Sparrow Prairie Falcon Sage Sparrow Sage Thrasher Swainson’s Hawk

Aspen	Montane Riparian	Montane Shrub	Sagebrush
MacGillivray's Warbler Wilson's Warbler <u>Other Associated Species</u> Cooper's Hawk Northern Flicker Hermit Thrush Yellow-rumped Warbler Long-eared Owl	Warbler Virginia's Warbler Yellow-breasted Chat <u>Other Associated Species</u> Warbling Vireo Broad-tailed Hummingbird Fox Sparrow Blue Grouse	MacGillivray's Warbler Orange-crowned Warbler Swainson's Hawk Western Bluebird	Burrowing Owl Calliope Hummingbird <u>Other associated species:</u> Brewer's Sparrow Western Meadowlark Black-throated Sparrow Lark Sparrow Green-tailed Towhee Brewer's Blackbird Horned Lark Lark Sparrow

Cliffs and Talus	Lakes (Playas)***
<u>Obligates:</u> Prairie Falcon Black Rosy Finch <u>Other:</u> Ferruginous Hawk <u>Other Associated Species</u> Golden Eagle White-throated Swift Say's Phoebe Common Raven Cliff Swallow Violet-green Swallow Canyon Wren Rock Wren	<u>Obligates (PIF-listed as Wetlands/Lakes):</u> White-faced Ibis Snowy Plover American Avocet Black Tern <u>Other (PIF-listed as Wetlands/Lakes):</u> Sandhill Crane Long-billed Curlew Short-eared Owl <u>Other Associated (Wetlands/Lakes) Species</u> American bittern Great Egret Snowy Egret Cattle Egret Black-crowned Night Heron Marsh Wren Common Yellowthroat Yellow-headed Blackbird

**"Obligates" are species that are found only in the habitat type described in the section. [Habitat needed during life cycle even though a significant portion of their life cycle is supported by other habitat types]

***"Others" are species that can be found in the habitat type described in the Nevada Partners in Flight Bird Conservation Plan.

*** Other Associated Wetlands/Lakes Species predominately associated with wetlands where emergent aquatic vegetation provides cover and foraging areas. Otherwise, relative to Spanish Ranch and Squaw Valley Allotments, anywhere where standing water collects or slow moving water flows occur including, but not limited to, snow ponds, playas, beaver dams and other pools associated with riparian areas, and manmade reservoirs could provide some seasonal habitat for some of these species shown.

Attachment 2 – Special Status Species

Definitions of Special Status Species

Federally Threatened or Endangered Species: Any species that the U.S. Fish and Wildlife Service has listed as an endangered or threatened species under the Endangered Species Act throughout all or a significant portion of its range.

Proposed Threatened or Endangered Species: Any species that the Fish and Wildlife Service has proposed for listing as a Federally endangered or threatened species under the Endangered Species Act.

Candidate Species: Plant and animal taxa that are under consideration for possible listing as threatened or endangered under the Endangered Species Act.

BLM Sensitive Species: Species 1) that are currently under status review by the U.S. Fish and Wildlife Service; 2) whose numbers are declining so rapidly that Federal listing may become necessary; 3) with typically small and widely dispersed populations; or 4) that inhabit ecological refugia or other specialized or unique habitats.

State of Nevada Listed Species: State-protected animals that have been determined to meet BLM's Manual 6840 policy definition.

The listing of Nevada BLM Special Status Species is based on input provided by BLM, Nevada Division of Wildlife, and U.S. Fish and Wildlife Service in BLM Instruction Memorandum No. NV-98-013 (February 27, 1998). BLM Elko Field Office provided input for BLM Instruction Memorandum No. NV-98-013, entitled "Former Candidate Category 2 Species On Or Suspected On Elko District -BLM Lands Recommended As BLM Sensitive Species As Of 5/96". As of July 29, 2003 BLM Information Bulletin No. NV-2003-097 includes an attachment for Nevada BLM's newly approved BLM Sensitive Species List. This list was completed through review and suggestions from BLM, Nevada Department of Wildlife, Nevada Natural Heritage Program, Nevada Division of Forestry; and review and comments from the U. S. Fish and Wildlife Service.

The effects of a proposed action on species that are listed or are proposed for listing as threatened or endangered are subject to consultation under section 7 of the ESA.

Nevada BLM policy is to provide State of Nevada Listed Species and Nevada BLM Sensitive Species with the same level of protection as is provided for candidate species in BLM Manual 6840.06C. Per wording in BLM Information Bulletin No. NV-2003-097, Nevada BLM Sensitive are taxa that are not already included as BLM Special Status Species under (1) Federally listed, proposed, or candidate species; or (2) State of Nevada listed species. BLM policy is to provide these species with the same level of protection as is provided for candidate species in BLM Manual 6840.06 C, that is to "ensure that actions authorized, funded, or carried out do not contribute to the need for the species to become listed". The Sensitive Species designation is normally used for species that occur on Bureau administered lands for which BLM has the capability to significantly affect the conservation status of the species through management. The BLM Manual 6840.06 E provides factors by which a native species may be listed as "sensitive" if it:

1. Could become endangered or extirpated from a state, or within a significant portion of its range in the foreseeable future;
2. Is under status review by the FWS and/or National Marine Fisheries Service;
3. Is undergoing significant current or predicted downward trends in: (1) habitat capability that would reduce a species' existing distribution; and/or (2) population or density such that federally listed, proposed, candidate, or State listed status may become necessary.
4. Typically consists of small and widely dispersed populations;
5. Inhabits ecological refugia, or specialized or unique habitats;
6. Is State-listed, but which may be better conserved through application of BLM sensitive species status.

The following table lists the species according to their status that either documented as shown in bold print or are potentially found on the Squaw Valley and Spanish Ranch Allotments on a seasonal or yearlong basis.

BLM Special Status Species

COMMON NAME	SCIENTIFIC NAME
Federally Endangered Species	
(None)	(None)
Federally Threatened Species	
Lahontan cutthroat trout ¹	<i>Oncorhynchus clarki henshawi</i>
Bald Eagle	<i>Haliaeetus leucocephalus</i>
Federally Proposed Threatened or Endangered Species	
(none)	(none)
Federal Candidate Species	
Spotted frog ¹	<i>Rana pretiosa</i>
State of Nevada Listed Species	
White pelican	<i>Pelecanus erythrorhynchos</i>
White-faced ibis	<i>Plegadis chihi</i>
Spotted bat	<i>Euderma maculatum</i>

COMMON NAME	SCIENTIFIC NAME
Nevada BLM Sensitive Species	
Mammals	
Small-footed myotis	<i>Myotis ciliolabrum</i>
Long-eared myotis	<i>Myotis evotis</i>
Fringed myotis	<i>Myotis thysanodes</i>
Long-legged myotis	<i>Myotis volans</i>
Yuma myotis	<i>Myotis yumanensis</i>
Pale Townsend's big-eared bat	<i>Plecotis townsendii pallescens</i>
Pacific Townsend's big-eared bat	<i>Plecotis townsendii townsendii</i>
Preble's shrew	<i>Sorex preblei</i>
Pygmy rabbit ¹	<i>Brachylagus idahoensis</i>
River otter	<i>Lontra canadensis</i>
Birds	
Northern Goshawk	<i>Accipiter gentiles</i>
Golden Eagle	<i>Aquila chrysaetos</i>
Burrowing Owl	<i>Athene cunicularia</i>
Ferruginous Hawk	<i>Buteo regalis</i>
Swainson's Hawk	<i>Buteo swainsoni</i>
Greater Sage Grouse	<i>Centrocercus urophasianus</i>
Mountain quail	<i>Oreoryx pictus</i>
Short-eared owl	<i>Asio flammeus</i>
Long-eared owl	<i>Asio otus</i>
Vesper sparrow	<i>Pooecetes gramineus</i>
Black rosy finch	<i>Leucosticte atrata</i>
Long-billed curlew	<i>Numenius americanus</i>
Loggerhead shrike	<i>Lanius ludovicianus</i>

COMMON NAME	SCIENTIFIC NAME
Prairie falcon	<i>Falco mexicanus</i>
Peregrine falcon	<i>Falco peregrinus</i>
Black tern	<i>Chilidonias niger</i>
Sandhill Crane	<i>Grus canadensis</i>
Yellow-breasted chat	<i>Icteria virens</i>
Lewis's woodpecker	<i>Melanerpes lewis</i>
Fish	
Interior redband trout ²	<i>Onchorhynchus mykiss gibbsi</i>

¹ Squaw Valley Allotment

² Spanish Ranch Allotment

Attachment 3 - Wildlife Species List

Lower Sagebrush/Grassland Steppe, Northeastern Nevada

Birds

Turkey Vulture
 Bald Eagle
 Northern Harrier
 Swainson's Hawk
 Red-tailed Hawk
 Ferruginous Hawk
 Rough-legged Hawk
 Golden Eagle
 American Kestrel
 Merlin
 Prairie Falcon
 Cray Partridge
 Chukar
 Sage Grouse
 Mourning Dove
 Great Horned Owl
 Burrowing Owl
 Short-eared Owl
 Common Nighthawk
 Broad-tailed Hummingbird
 Northern Flicker
 Gray Flycatcher
 Ash-throated Flycatcher
 Say's Phoebe
 Western Kingbird
 Horned Lark
 Barn Swallow
 Black-billed Magpie
 American Crow
 Common Raven
 Rock Wren
 Mountain Bluebird
 American Robin
 Sage Thrasher
 Loggerhead Shrike
 Northern Shrike
 European Starling
 Brewer's Sparrow
 Vesper Sparrow
 Lark Sparrow
 White-crowned Sparrow
 Lapland Longspur
 Red-winged Blackbird
 Western Meadowlark
 Brewer's Blackbird
 Brown-headed Cowbird
 Black Rosy Finch
 Gray-crowned Rosy Finch
 House Sparrow

Cathartes aura
Haliaeetus leucocephalus
Circus cyaneus
Buteo swainsoni
Buteo jamaicensis
Buteo regalis
Buteo lagopus
Aquila chrysaetos
Falco sparverius
Falco columbarius
Falco mexicanus
Perdix perdix
Alectoris chukar
Centrocercus urophasianus
Zenaidura macroura
Bubo virginianus
Athene cunicularia
Asio flammeus
Chordeiles minor
Selasphorus platycercus
Colaptes auratus
Epidonax wrightii
Myiarchus cinerascens
Sayornis saya
Tyrannus verticalis
Eremophila alpestris
Hirundo rustica
Pica pica
Corvus brachyrhynchos
Corvus corax
Salpinctes obsoletus
Sialia currucoides
Turdus migratorius
Oreoscoptes montanus
Lanius ludovicianus
Lanius excubitor
Sturnus vulgaris
Poocetes gramineus
Chondestes grammacus
Amphispiza belli
Zonotrichia leucophrys
Calcarius lapponicus
Agelaius phoeniceus
Sturnella neglecta
Euphagus cyanocephalus
Molothrus ater
Leucosticte atrata
Leucosticte tephrocotis
Passer domesticus

Townsend's Ground Squirrel
 Belding Ground Squirrel
 Least Chipmunk
 Botta's Pocket Gopher
 Northern Pocket Gopher
 Little Pocket Mouse
 Great Basin Pocket Mouse
 Dark Kangaroo Mouse
 Ord Kangaroo Rat
 Chisel-toothed Kangaroo Rat
 Deer Mouse
 Northern Grasshopper Mouse
 Desert Woodrat
 Sagebrush Vole
 House Mouse
 Kit Fox
 Coyote
 Long-tailed Weasel
 Badger
 Striped Skunk
 Mountain Lion
 Bobcat
 Mule Deer
 Pronghorn

Spermophilus townsendii
Spermophilus beldingi
Tamias minimus
Thomomys bottae
Thomomys talpoides
Perognathus longimembris
Perognathus parvus
Microdipodops megacephalus
Dipodomys ordii
Dipodomys microps
Peromyscus maniculatus
Onychomys leucogaster
Neotoma lepida
Lemmiscus curtatus
Mus musculus
Vulpes macrotis
Canis latrans
Mustela frenata
Taxidea taxus
Mephitis mephitis
Felis concolor
Lynx rufus
Odocoileus hemionus
Antilocapra americana

Reptiles

Western Skink
 Western Whiptail
 Desert Collared Lizard
 Long-nosed Leopard Lizard
 Desert Spiny Lizard
 Sagebrush Lizard
 Western Fence Lizard
 Side-blotched Lizard
 Desert Horned Lizard
 Short-horned Lizard
 Long-nosed Snake
 Ground Snake
 Night Snake
 Gopher Snake
 Racer
 Striped Whipsnake
 Western Rattlesnake

Eumeces skiltonianus
Cnemidophorus tigris
Crotaphytus insularis
Gambelia wislizenii
Sceloporus magister
Sceloporus graciosus
Sceloporus occidentalis
Uta stansburiana
Phrynosoma platyrhinos
Phrynosoma douglassii
Rhinocheilus lecontei
Sonora semiannulata
Hypsiglena torquata
Pituophis melanoleucus
Coluber constrictor
Masticophis taeniatus
Crotalus viridis

Mammals

Little Brown Bat
 Long-eared Myotis
 Long-legged Myotis
 Small-footed Myotis
 Silver-haired Bat
 Western Pipistrelle
 Big Brown Bat
 Townsend's Big-eared Bat
 Brazilian Free-tailed Bat
 Black-tailed Jackrabbit
 Mountain Cottontail
 Pygmy Rabbit

Myotis lucifugus
Myotis evotis
Myotis volans
Myotis ciliolabrum
Lasiurus noctivaganus
Pipistrellus hesperus
Eptesicus fuscus
Plecotus townsendii
Tadarida brasiliensis
Lepus californicus
Sylvilagus nuttallii
Sylvilagus idahoensis

Attachment 4

Nevada Department of Wildlife
60 Youth Center Rd.
Elko, NV 89801

Ellison Ranching Co.
c/o Bill Hall
HC 32, Box240
Tuscarora, NV 89834

Sierra Club – Toiyabe Chapter
Attn: Marjorie Sill
720 Brookfield Drive
Reno, NV 89503

Bureau of Land Management
5100 E. Winnemucca Blvd.
Winnemucca, NV 89445

Barrick Goldstrike Mines
Attn: Ron Espell
PO Box 29
Elko, NV 89803

Wild Horse Organized Assistance
PO Box 555
Reno, NV 89504

Nevada Woolgrower's Association
339 W. Rockwood Drive
Elko, NV 89801

Comm. for the Preservation of Wild Horses
885 E. Lake Blvd
Carson City, NV 89704

Nevada State Division of Ag.
350 Capitol Hill Ave.
Reno, NV 89502

Nevada Cattlemen's Association
P.O. Box 310
Elko, NV 89803

American Bashkir Curley Register
Mrs. Sunny Martin
PO Box 4
Ely, NV 898301

Agri Beef
c/o Jim Andrea
HC 32, Box 370
Tuscarora, NV 89834

USFS
Mountain City Ranger District
Attn: District Ranger
2035 Last Chance Road
Elko, NV 89801

Gregg Simonds
6315 N. Snow View Drive
Park City, UT 84098

Committee for Idaho's High Desert
Attn: Katie Fite
PO Box 2863
Boise, ID 83701

National Mustang Association
Richard Sewing
PO Box 1367
Cedar City, UT 84721

U.S. Fish and Wildlife Service
Attn: Robert D. Williams
1340 Financial Blvd., Suite 234
Reno, NV 89701-4298

Elko County Commissioners
569 Court Street
Elko, NV 89801

Resource Concepts, Inc.
Attn: John L. McLain
340 N. Minnesota St.
Carson City, NV 89703

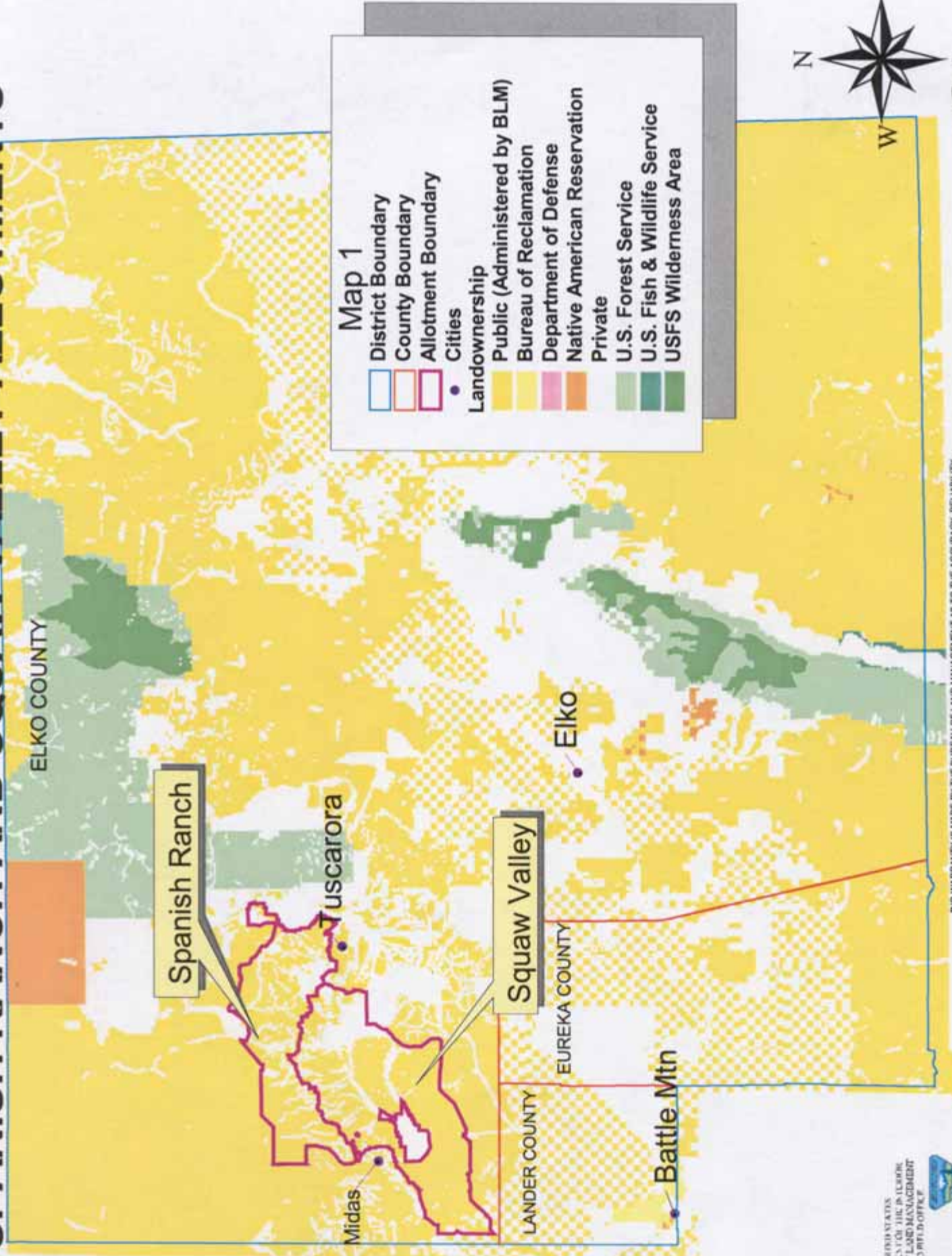
Western Watersheds Project
Attn: Jon Marvel
P.O. Box 1770
Hailey, ID 83333

Fund for Animals
Attn: Andrea Lococo
P.O. Box 11294
Jackson, WY 83002

Bill Houston
Barrick Gold Corp.
PO Box 112410
Salt Lake City, UT 84147

Duane Erickson
213 S. Ashford Dr.
Elko, NV 89801

SPANISH RANCH AND SQUAW VALLEY ALLOTMENTS



Map 1

	District Boundary
	County Boundary
	Allotment Boundary
	Cities
Landownership	
	Public (Administered by BLM)
	Bureau of Reclamation
	Department of Defense
	Native American Reservation
	Private
	U.S. Forest Service
	U.S. Fish & Wildlife Service
	USFS Wilderness Area



ELKO COUNTY

Spanish Ranch

Tuscarora

Squaw Valley

Elko

EUREKA COUNTY

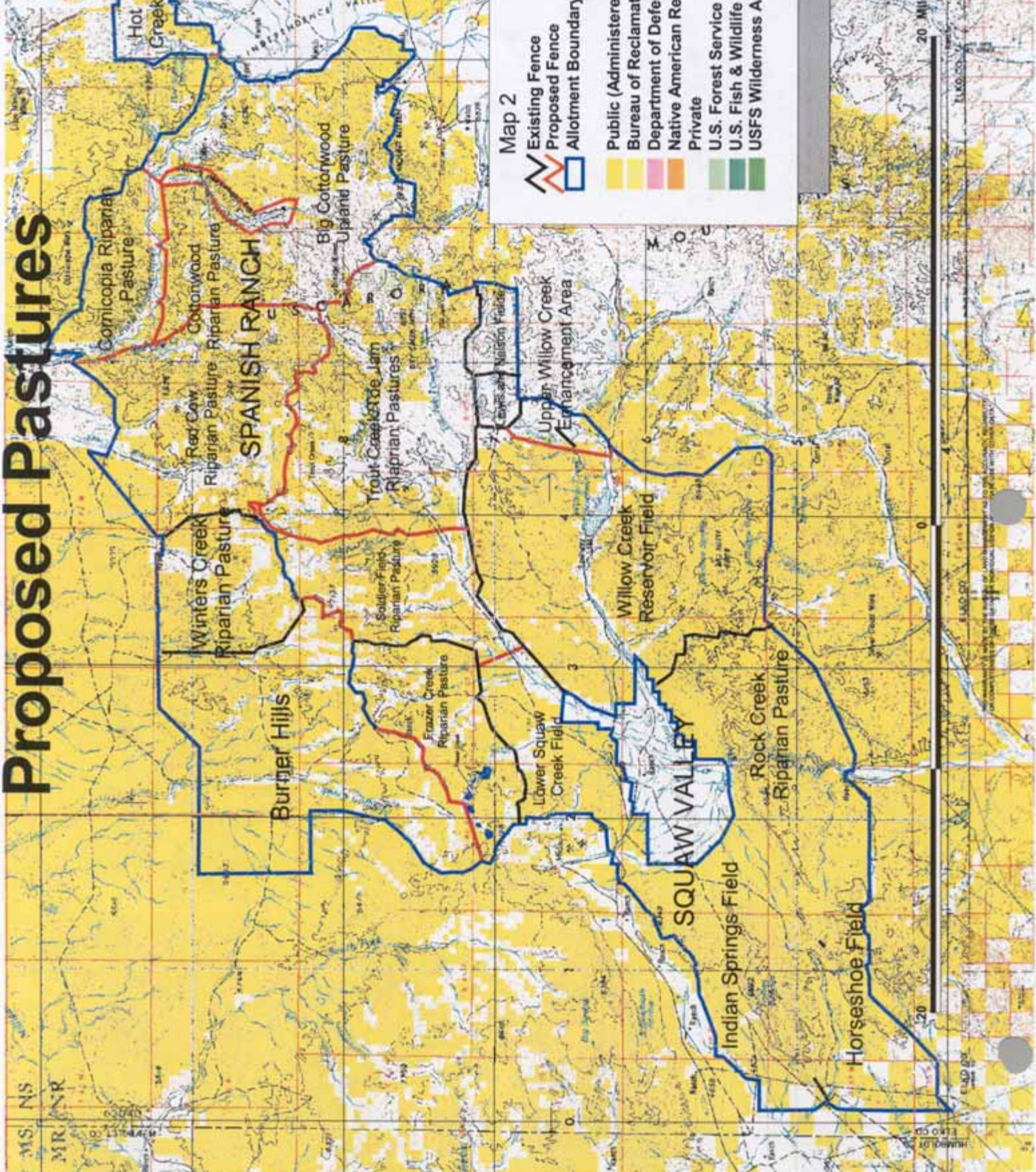
LANDER COUNTY

Battle Mtn

Midas

"NO WARRANTY IS MADE BY THE BUREAU OF LAND MANAGEMENT AS TO THE ACCURACY, RELIABILITY, OR COMPLETENESS OF THESE DATA FOR INDIVIDUAL USE. AGGREGATE USE WITH OTHER DATA."

Proposed Pastures



Map 2

- Existing Fence
- Proposed Fence
- Allotment Boundary Fence
- Public (Administered by BLM)
- Bureau of Reclamation
- Department of Defense
- Native American Reservation
- Private
- U.S. Forest Service
- U.S. Fish & Wildlife Service
- USFS Wilderness Area



20 Miles

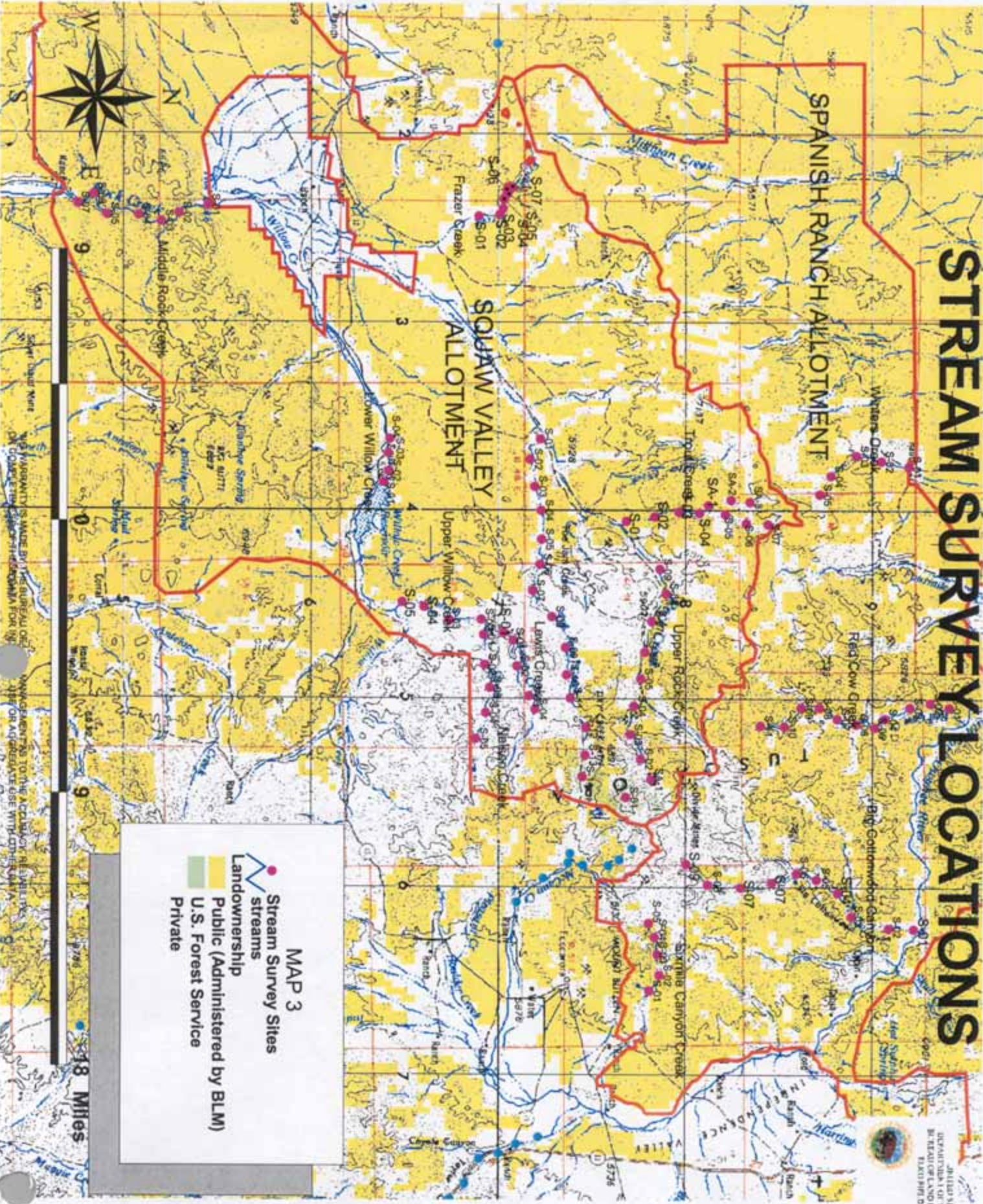


Map 2 shows the proposed riparian pastures in the Squaw Valley area. The map is a topographic map with a grid overlay. The proposed pastures are outlined in red and blue. The legend in the top right corner provides a key for the symbols used on the map. The scale bar at the bottom indicates a distance of 20 miles. The compass rose at the top right shows the cardinal directions.

STREAM SURVEY LOCATIONS

SPANISH RANCH ALLOTMENT

SQUAW VALLEY ALLOTMENT



MAP 3
Stream Survey Sites

-  Stream Survey Sites
-  streams
-  Landownership
-  Public (Administered by BLM)
-  U.S. Forest Service
-  Private



W
N
S
E

9 0 9

18 Miles

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