Appendix 1 - Objectives, Strategies, and Classes to be Treated with Approved Maximum Treatable Acreages and Allowable Treatment Methods by Ecological System for the Bodie Hills Upland Vegetation Restoration Project in Mono County, California.

Tables 1.1-1.9 of this appendix summarize the objectives, strategies, and classes to be treated with approved maximum treatable acreages and allowable treatment methods (management tools) by ecological system for the Bodie Hills Upland Vegetation Restoration Project in Mono County, California. The selected alternative (Modified Proposed Action) consists of the Proposed Action (Alternative 2), modified to include the treatment acreages for Montane Sagebrush Steppe and Low Sagebrush ecological systems from the Increased Acreage Alternative (Alternative 3) in Environmental Assessment (EA) DOI-BLM-CAC-070-2011-0032-EA. The approved treatment methods, method selection criteria, and design features remain the same as described in the Proposed Action. Acreage differences from the Proposed Action are highlighted in gray.

Upland Treatments

1.1 Basin Wildrye - Big Sagebrush			
Objective: Work towards the long term (20 year) goals of improving ecological condition of basin wildrye - big sagebrush from 73% departure from NRV to 50% departure or less and reducing depleted classes by 50%. Prevent any increase of exotic forbs.			
Strategy	**Classes to be treated (See Appendix B of EA for class descriptions)**	**Acres over 10 years**	**Management tools to be used**
I. Treat late seral basin wildrye and classes lacking native herbaceous cover to convert them to early development classes (A and B).	Late seral-open (D), Shrub-Annual grass (U ShAG), Annual grass (U Ag)*	230	-Mowing -Hand cutting shrubs with piling and burning or chipping -Broadcast prescribed fire
II. Prevent conversion to pinyon/juniper by treating early establishment stages.	Late-open (D), Tree-encroached (U TrEnc), Tree-Annual grass (U TrAG)*	120	-Hand cutting pinyon/juniper with piling and burning or chipping -Spot burning pinyon/juniper
Maximum acres of vegetation treatment		**350**	

*Classes with large annual grass components will only be treated if trials of methods such as spring burning are shown to be successful at restoring a greater percentage of natives. See adaptive management strategy.

1.2 Low Sagebrush (146% of Proposed Action)			
Objective: Work towards the long term (20 year) goals of maintaining ecological condition of low sagebrush at ~40% departure from NRV or less and limiting increase of high-risk (tree encroached and annual grasses) classes to 10% or less.			
Strategy	**Classes to be treated (See Appendix B of EA for class descriptions)**	**Acres over 10 years**	**Management tools to be used**
I. Remove trees from later successional stages.	Late-open (E), Mid-open (B), Tree encroached (U TrEnc)	2,200	-Hand cutting pinyon/juniper with piling and burning or chipping -Spot burning pinyon/juniper
II. Treat classes with an annual grass component to prevent increase and achieve some conversion to earlier classes.	Annual grass (UAG) , Shrub-Annual grass-Perennial grass (U ShAP)	800	-Seeding native species with mowing, hand cutting or spot burning shrubs where necessary for establishment
Maximum acres of vegetation treatment		**3,000**	

1.3 Montane Sagebrush Steppe (133% of the Proposed Action)			
Objective: Work towards the long term (20 year) goals of improving the ecological condition of montane sagebrush steppe from high departure (72%) from NRV to moderate departure (~55%) and limiting increase in highest risk classes to 20% or less. Establish a fuel break around Bodie State Historic Park that will also provide ecological benefits by increasing early successional classes.			
Strategy	**Classes to be treated (See Appendix B of EA for class descriptions)**	**Acres over 10 years**	**Management tools to be used**
I. Treat late successional, depleted, and annual grass invaded classes to convert them to early development classes with greater native herbaceous cover.	Mid-closed (C) Late-open (D), Depleted (U DPL), Shrub-Annual grass-Perennial grass (U ShAP)*, Shrub-Annual grass (U ShAG)*	12,300	-Broadcast prescribed burning -Mowing -Hand cutting small pinyon/juniper** -Seeding native species in the most depleted/high risk sites if necessary
II. Remove trees from classes with increasing pinyon/juniper to prevent and reduce conversion.	Late-open (D), Late-closed (E), Tree encroached (U TrEnc), Depleted (U DPL), Shrub-Annual grass-Perennial grass (U ShAP)*, Shrub-Annual grass (U ShAG)*	1,400	-Hand cutting pinyon/juniper with piling and burning or chipping -Spot burning pinyon/juniper
III. Reduce fuels around Bodie State Park to protect structures and values at risk by reducing fire risk and increase early development classes. This may include both BLM and State lands.	Several classes – site selection depends on location, not class.	300***	-Mowing -Hand cutting shrubs with piling and burning or chipping -Broadcast prescribed burning -Seeding native species if necessary
Maximum acres of vegetation treatment		**14,000**	

* Classes with large annual grass components will only be treated if trials of methods such as spring burning are shown to be successful at restoring a greater percentage of natives.
** Early stages of pinyon/juniper establishment are difficult to map with aerial imagery. Small trees may occur in class C & D. A minimum of 2000 acres of "shrub" treatment in the montane sagebrush steppe system will be removal of conifer trees.
*** Fuel break acres will be periodically maintained to keep fuel loading low.

1.4 Mountain Shrub			
Objective: Improve the ecological condition of mountain shrub from moderate departure (39%) from NRV to low departure (~25%).*			
Strategy	**Classes to be treated (See Appendix B of EA for class descriptions)**	**Acres over 10 years**	**Management tools to be used**
I. Treat late developmental classes to return them to early developmental classes.	C (late-closed) and D (Late-open).	1,000	-Broadcast prescribed burning
Maximum acres of vegetation treatment		**1,000**	

*The mountain shrub ecological system was not identified in the report as one of the highest priorities for treatment so the objectives for managing this system were not explored in detail. The Bishop Field Office chose to add this system and create management objectives for it because it has a high probability of success and can be included with adjacent ecosystems in prescribed burns.

1.5 Wyoming Big Sagebrush - Loamy			
Objective: Work towards the long term (20 year) goals of improving ecological condition of Wyoming big sagebrush - loamy from highly departed (~74%) to moderately departed (<66%) and reducing the risk of wildfire spreading to adjoining ecosystems and properties or structures.			
Strategy	**Classes to be treated (See Appendix B of EA for class descriptions)**	**Acres over 10 years**	**Management tools to be used**
I. Treat late development classes in fuel breaks mostly arranged along roads to return them to early development classes and reduce the fuel load and continuity.	Late-closed (C), Late2-open (D), Late2-closed (E), Depleted (U DPL), other classes as necessary to complete fuel break.	250**	-Mowing -Seeding native species
II. Remove trees from classes with increasing pinyon/juniper.*	Late-closed (C), Late2-open (D), Late2-closed (E), Tree encroached 9U TrEnc)	600*	-Hand cutting pinyon/juniper with piling and burning or chipping -Spot burning pinyon/juniper
Maximum acres of vegetation treatment		**850**	

*Tree removal was not included in the management scenario for this ecological system in the Provencher, Low et al. 2009 report, but it was included in the Proposed Action because pinyon/juniper establishment into this system was under represented in the mapping based on field review. In addition, the analysis also predicts that there would be 600 acres of pinyon/juniper establishment by the end of the scenario without active management. No true juniper or pinyon woodlands will be treated.
** Fuel break acres will be periodically maintained to keep fuel loading low.

1.6 Wyoming Big Sagebrush - Sandy			
Objective: Work towards the long term (20 year) goal of improving ecological condition of Wyoming big sagebrush - sandy by a small percentage (5%) while reducing risk of wildfire spreading into adjoining ecosystems and properties or structures.			
Strategy	**Classes to be treated (See Appendix B of EA for class descriptions)**	**Acres over 10 years**	**Management tools to be used**
I. Create fuel breaks mostly arranged along roads to convert to early developmental classes and reduce fuel load and continuity.	Many; site selection depends on location rather than class but majority of area will be in Depleted (U DPL), Late-closed (C), Late2-open (D), Late2-closed (E).	500**	-Mowing -Hand cutting shrubs with piling and burning or chipping -Seeding native species if necessary
II. Remove trees from classes with increasing pinyon/juniper.*	Late-closed (C), Late2-open (D), Late2-closed (E), Tree encroached 9U TrEnc)	1,000*	-Hand cutting pinyon/juniper with piling and burning or chipping -Spot burning pinyon/juniper
Maximum acres of vegetation treatment		**1,500**	

*Tree removal was not included in the management scenario for this ecological system in the Provencher, Low et al. 2009 report, but it was included in the Proposed Action because pinyon/juniper establishment into this system was under represented in the mapping based on field review. In addition, the analysis also predicts that there would be 5,670 acres of pinyon/juniper establishment by the end of the scenario without active management. No true juniper or pinyon woodlands will be treated.
** Fuel break acres will be periodically maintained to keep fuel loading low.

Associated Riparian Treatments

1.7 Montane Riparian			
Objective: Contribute to the long term (20 year) goal of maintaining montane riparian habitat at less than ~33% departure from the natural range of variability.			
Strategy	**Classes to be treated (See Appendix B of EA for class descriptions)**	**Acres over 10 years**	**Management tools to be used**
I. Treat late successional classes to move them to early successional stages and reverse or prevent conversion to upland woody species.	Late-closed (E), Shrub-Forb-Encroached (U SFEnc)	30	-Broadcast prescribed burning
Maximum acres of vegetation treatment		**30**	

1.8 Stable Aspen			
Objective: Contribute to the long term (20 year) goal of improving the ecological condition of stable aspen from 41% departure from the natural range of variability to ~33% departure and reduce "no aspen" classes by ~50%.			
Strategy	**Classes to be treated (See Appendix B of EA for class descriptions)**	**Acres over 10 years**	**Management tools to be used**
I. Treat late successional classes to move them to early successional stages, reverse or prevent conversion to upland species, and promote healthy aspen regeneration.	Late1-closed (E), Late1-open (D), Depleted-open (U DPL), No aspen (U NAS)	500	-Broadcast prescribed burning -Hand cutting pinyon/juniper
Maximum acres of vegetation treatment		**500**	

1.9 Wet Meadows			
Objective: Contribute to the long term (20 year) goal of maintaining the ecological condition of wet meadow at less than 33% departure from the natural range of variability and preventing any increase in exotic forbs.			
Strategy	**Classes to be treated (See Appendix B of EA for class descriptions)**	**Acres over 10 years**	**Management tools to be used**
I. Treat areas of iris or sagebrush to convert them to early seral classes.	Shrub-Forb encroached (U SFEnc), Desertification (U DES), Tree encroached (U TrEnc)	100	-Broadcast prescribed burning*
Maximum acres of vegetation treatment		**100**	

* Other methods were recommended in the report in addition to broadcast burning. Those methods are outside the scope of this analysis because they are not among the tools also being used in the uplands.

Sum of All Ecological Systems:

Total maximum acres of vegetation treatment across all ecological systems*	**21,330** (126% of the Proposed Action)

* Does not include maintenance of established fuel breaks or weed treatments.