

FY 2016 Landscape Scale Restoration Competitive Program	Filename		
	State:	NV	Keyword:
	Administration Information		
	Funds Requested:		
	Match:		
Score:	Ranking:	Project Funding:	

1	Applicant Information					
	State Forestry Agency:	Nevada Division of Forestry				
	Contact Person:	Cayenne Engel				
	Address:	4747 Vegas Drive				
	City:	Las Vegas	State:	NV	Zipcode:	89107
	Phone:	702-486-5123	Email:	cengel@forestry.nv.gov		

2	Project Information					
	<p style="color: red; font-size: small;">Is this a Multi-state proposal? Check "yes" if want to submit the same proposal with multiple state budget requests. If yes, a co-applicant menu item will appear in the on-line version for you to add other states/islands. This allows you to work on the same proposal with eah applicant requesting funds.</p>					X <input type="checkbox"/> Yes OR <input type="checkbox"/> No
	Descriptive Title of Project:	Managing pinyon and juniper encroachment into sagebrush habitat				
	Partnering Agencies / Organizations:	1 Lincoln County Conservation District (LCCD), 2 Lincoln County Commissioners (LCC), 3 Nevada Division of Forestry (NDF); 4 Nevada Department of Wildlife (NDOW), 5 Nevada Department of Conservation and Natural Resources (NV DCNR), 6 Nevada Sagebrush Ecosystem Technical Team (SETT), 7 Utah Division of Forestry, Fire, and State Lands (UDFFSL); 8 Utah Watershed Restoration Initiative (UWRI); 9 Utah Non-Gov-Sportsman; 10 Pitman/Robertson; 11 BLM (Utah and Nevada), 12 Utah and Nevada private landowners				
Project Duration:	<input type="checkbox"/> One Year		<input type="checkbox"/> Two Years		<input checked="" type="checkbox"/> Three Years	

3	National Themes		
	<input checked="" type="checkbox"/> Conserve Working Forest Landscapes <ul style="list-style-type: none"> <input type="checkbox"/> High priority ecosystem and landscapes are identified and conserved. <input type="checkbox"/> Forests are actively and sustainably managed. 	<input checked="" type="checkbox"/> Protect Forests From Harm <ul style="list-style-type: none"> <input type="checkbox"/> Fire-adapted lands are restored and risk of wildfire impacts is reduced. <input type="checkbox"/> Threats to forest and ecosystem health are identified, managed and reduced. 	<input checked="" type="checkbox"/> Enhance Public Benefits From Trees and Forests <ul style="list-style-type: none"> <input type="checkbox"/> Water quality or quantity are protected or enhanced. <input type="checkbox"/> Air quality is improved or energy is conserved. <input type="checkbox"/> Communities plan for and reduce their risk from wildfire <input type="checkbox"/> The economic benefits and values of trees and forests are maintained or enhanced. <input type="checkbox"/> People are connect to trees and forests and are engaged in stewardship activities. <input type="checkbox"/> Trees and forests are managed and restored to help mitigate or adapt to changing conditions.

4	Project Overview/Purpose Statement
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5 Points. 500 Characters Including Spaces – Provides a succinct and relevant overview; could easily be used to communicate critical elements and value of the project.

Sagebrush ecosystem function and condition are degraded by encroachment from pinyon-juniper woodlands. Encroachment reduces plant community resilience, increases the prevalence and severity of wildfires, reduces water availability, and is one of the greatest threats to greater sage-grouse, a candidate for ESA listing. NV and UT are partnering with landowners, organizations, and Federal agencies to address these issues through the rehabilitation of 820 acres of high priority sagebrush shrubland.

Project Budget							
	Grant	Leverage ¹			Source	TOTAL	
		Match		Non-Match			
	Funds requested	Applicant	Non-federal contributors	Applicant, non-federal, and/or federal	3 rd Party Contributor/s	Total project cost	
5	Personnel / Labor:	\$25,000	\$34,000				
	Fringe Benefits:	\$8,800	\$7,040				
	Travel:	\$5,000					
	Equipment:	\$3,000					
	Supplies:	\$34,003					
	Contractual:	\$200,000	\$73,360	\$155,136	\$243,000		
	Construction:						
	Consolidated ² :						
	Other:						
	Indirect Costs ³ :	\$62,977					
	TOTAL:	\$300,000	\$112,160	\$196,176	\$243,000		\$851,336

¹ Leverage includes all three categories: match, non-match, and source. Funds qualifying as “match” must meet the same program requirements as grant funds (e.g., program authorities, non-federal sources). Other “non-match” leveraged funds do not need to meet the same standards (e.g., may include funds for construction, funds from other federal partners). Partnership with other USFS programs outside of State & Private Forestry, as well as other federal and state programs is encouraged.

² If any part of your match requirement is being covered through a consolidated payment grant (i.e. state spending of non-federal funds on activities that meet S&PF program authorities but are not tied to this proposal), please place it here.

³ Indirect costs must be tied to an established rate. Waived indirect costs are an acceptable source of match.

Context, Goals, and Objectives

15 Points. 2,000 Characters Including Spaces – Context clearly identifies priority landscapes and issues that are being addressed. Goals and objectives address the national themes being addressed by the project.

Pinyon-Juniper (PJ) tree encroachment into sagebrush-bunchgrass communities degrades ecological condition and diminishes the quality and suitability of sagebrush habitat required by greater sage-grouse (GSG), a candidate species for listing as a threatened or endangered species. Tree competition reduces sagebrush cover, reduces water availability from springs and groundwater, and out-competes the grass/forb understory lowering wildfire resiliency and creating hazardous fuel conditions. Low-intensity fires formerly maintained species diversity and sagebrush cover in systems that now experience severe fire behavior. Habitat type conversion through PJ encroachment and wildfire are the primary threats to GSG in Nevada and Utah and have impacted thousands of acres of breeding habitat, brood rearing areas, and wintering areas including the region of western Hamlin Valley, Table Mountain, and the Mount Wilson range proposed for restoration work.

Altered fire regimes have led to landscape scale changes with overstocked PJ woodlands, extreme fuel hazard conditions, and loss of sagebrush habitat throughout the Great Basin. These changing habitats now require implementing the Cohesive Strategy of “restore and maintain resilient landscapes” to return to healthy stocking levels, historic fire regimes, and native sagebrush ecosystems.

6 Goals:

- Restore healthy woodlands in sagebrush habitat throughout project areas in eastern Lincoln County, NV, and western Beaver and Iron counties, Utah.
- Reduce the risk of catastrophic wildfire.
- Restore fire adapted landscapes with resilient perennial grasses and forbs in both PJ woodlands and sagebrush ecological sites.
- Provide favorable conditions for the expansion of GSG populations into historic range in healthy and sustainable numbers.

Objectives:

1. Implement fuel reduction activities to control encroaching PJ.
2. Increase plant diversity and useable habitat acreage through PJ removal, seeding, and planting shrub, forb, and grass species.

Proposed Activities

20 Points. 2,500 Characters Including Spaces – Clearly describes with specificity, activities to be completed with grant funds and leveraged resources. Links specific project activities to funding amounts in the Project Budget and to stated project goals and objectives.

The most effective means for improving GSG habitat and restoring the historic wildfire regime is removing encroaching Pinyon and Juniper (PJ) trees and re-establishing native species. We propose to implement PJ reduction treatments across high priority GSG habitat in eastern NV and western UT in a landscape mosaic. This mosaic will increase suitable habitat availability while reducing the fuel hazard and fire risk across the landscape. The proposed sites are mapped as high quality habitat, with most treatment sites within 15 miles of an existing lek (GSG can travel in excess of 50 miles between seasonal habitats).

Grant funded = G, Contractual grant funds = CG, Matching funds = M.

Activities:

1. Reduce the abundance of encroaching PJ into sagebrush communities on 820 acres of private land composed of priority habitat including springs and wet meadows (500 ac in UT, 320 ac in NV; 9 parcels; 14 landowners).
 - Thin PJ to healthy densities for sagebrush ecosystem function using hand-crews and mechanical techniques - ~\$600/acre (CG: \$207K-(3); \$190K-(7); M: \$250K-(8); \$73K-(3); \$5K-(5); \$150K-(4) for work on adjacent parcels).
 - Biomass reduction or removal including chipping, pile burning, or off-site hauling (CG: \$18K; M: \$10K-(12); \$50K-(12)
 - The BLM is currently conducting thinning activities on publically owned lands adjacent to proposed parcels and within the landscape including the Wilson Range Foothills and the connected Hamlin Valley, the region of all proposed work. Leveraged funds for ongoing and future projects within this region include: \$243K-(11) (additional \$723K proposed); \$50K-(9); \$180K (10); \$20K-(8); \$1.16M-(11).
 - Project planning, monitoring, implementing, report writing, and arch clearance (G: \$50K-UFFSL; M: \$20K-NDF, \$20K-(5)
 - Travel (field sites are considerable distances from offices) (G: \$7K-(7); M: \$5K-(3)
 - Supplies and equipment (G: \$6K-(3); \$3K-(7)
2. Increase plant diversity and restore resiliency of treated sites. Dominance of PJ overstory and loss of understory seed banks makes vegetation enhancement necessary to re-establish the diversity of grasses and forbs historically present.
 - Seed acquisition and application (G: \$18K-(3); \$7K-(7))
 - Plant material for outplanting (G: \$12K-(3), M: \$4K volunteer planting).
3. Treatment effectiveness monitoring of plant diversity and GSG habitat use (M: \$5K-(3); \$10K-(4)

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Deliverables, Outputs, and Outcomes

15 Points. 2,000 Characters Including Spaces – Defines deliverables, outputs, and outcomes which will achieve the national themes addressed by the project. Provides clear, quantitative measures of success.

Deliverables

1. Thin PJ woodland on approximately 820 acres of phase 1, 2, and 3 PJ encroached communities.
2. Resulting biomass will be chipped and scattered, masticated, piled and burned, or hauled offsite, depending on specific site needs to reduce onsite slash accumulation.
3. 2,000 native plant seedlings planted to increase the shrub, forb, and grass diversity.
4. Broadcast seed around springs and highest priority habitats with native forbs and grasses (40 acres).

Outputs

1. Immediate reduction in hazardous fuels and severity of fire behavior.
2. A more diverse, appropriately age-stratified ecosystem.
3. Enhanced GSG habitats will include upland sites and riparian meadows for brood rearing, and healthy sagebrush habitats for nesting and winter range.

Outcomes

- Healthy and functional ecosystems with tree densities and distribution consistent with historic levels
- Biologically diverse shrub communities composed of diverse age structure with a productive understory consisting of grasses and forbs that help insure that the site will be resilient to future disturbances.
- Increased site suitability and utilization by GSG, for the first time in decades in some areas.
- Reestablishment of GSG populations into historic range in sustainable numbers.
- A landscape mosaic of privately and publically owned land parcels actively managed collaboratively to support diverse, healthy, sagebrush plant communities.
- Significant contribution to the regional goal of 10,000 acres per year treated for PJ encroachment.
- Healthier and more productive spring systems in eastern NV and southwestern UT with greater water availability and increased diversity of vegetation types sufficient to support a greater abundance and diversity of wildlife.

8

Collaboration

15 Points. 2,000 Characters Including Spaces –

Project uses coordination and partnerships with complementary state and federal programs to improve outcomes. Clearly describes how partners are committed and will add value during project development and implementation. Collaboration will clearly result in a successful cross-boundary project.

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State foresters from Nevada and Utah will work collaboratively with the (5)(NV DCNR), (12), and independent teams from local conservation districts (LCCD), wildlife agencies (4)and (8) (UWRI, a collaboration among state, federal, academic and citizen representatives) to plan and implement this project. (3), (7), (5), the Nevada Sagebrush Ecosystem Technical Team (SETT), and (8) will work with landowners upon project initiation (0-6 months) to ensure that all parties are fully informed about expectations for project implementation and results. (3) and (7) will collaborate with conservation camps (NDF) and contractors (UDFFSL) to make project awards and implement and manage projects (years 1-3). (4) will perform basic monitoring of Nevada sites for habitat characteristics and utilization (years 2-3). (3) will work with landowners, and (1) to facilitate volunteer planting events (year 3). (3), (7), and (11) from respective states will coordinate to disseminate information of project progress, challenges, results and outcomes as the respective projects on adjacent and nearby parcels are implemented (years 1-3). (3) staff will also meet annually with Lincoln County Commissioners who have actively supported adjacent (11) treatments and give activity updates. SETT team members will work with (3) throughout to advise activities, techniques, and project effectiveness evaluation. (3) will work with landowners to write stewardship plans for all properties treated to define strategies meeting landowner goals of habitat improvement, wildfire resilience, and forest health. Communication and information exchange among this mix of staff from multiple states, federal partners working on adjacent lands, landowners, and regional citizen and management groups will set a precedent for future work addressing landscape scale, multijurisdictional land management issues.

Forest Action Plan Integration

10 points. 1,250 Characters Including Spaces – Clearly describes the need for the proposed project and relates it to one or more priority landscapes, issues, areas, or strategies identified in the Forest Action Plan.

This project addresses the following topics addressed in Nevada and Utah Forest Action Plans.

The NV FAP is comprised of two documents, Assessment (A) and Strategies (S). www.forestationplans.org

- Threat 1 - Serious forest health related issues (S:p.24). The replacement of native shrub and grass communities by PJ corresponds to a loss in diversity of wildlife, habitat, and healthy watersheds. Selective thinning of Nevada's forests is imperative to develop resiliency (A:p.66).
- Threat 3 - Increasing size and frequency of wildfires (S:p.24).
- Re-introduce historic fire regimes, and reduce fire severity (S:p.25).
- PJ encroachment increases the risk of catastrophic fire in closed canopy conditions (A:p.22).
- Nevada's sagebrush communities are classified as "in need of active restoration activities" due to the lack of low-severity wildfires changing the community structure (A:p.14-16).
- Riparian system degradation, reduced quality of wildlife habitat within (A:p.68).
- Direction from the Governor of NV to evaluate projects for impact on GSG (A:p.72)

Utah's FAP was modified by governor's executive #11 directing state agencies to prioritize fuels-mitigation activities within or near GSG management areas.

Meaningful Scale

10 Points. 1,250 Characters Including Spaces

Scale of the project is clearly based on and is appropriate for the stated goals, objectives, and outcomes including cross boundary goals. The scale is sufficient to address the national theme and priority landscape and issues.

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This project incorporates the critical private land component needed to create a mosaic of landscapes (820 acres in total) that will establish healthy, usable sagebrush communities across a region of eastern Nevada and southwestern Utah nearly 30 miles across. The patchwork of state facilitated projects will be adjacent to and nested within planned and ongoing projects implemented by Federal partners, to strengthen the cross-jurisdictional collaboration among all agencies, landowners, and stakeholders. The proposed projects build on existing and ongoing plans by Federal partners to implement landscape scale treatments. Providing habitat refuges across multiple drainages, throughout an extensive valley system, and connecting existing highly fragmented habitat is necessary and effective. Timing of the proposed project is crucial to maintain the momentum of landowners actively managing their land in a way that supports both their personal goals and national priorities such as sage-grouse conservation, wildfire risk reduction, and the major tenants of the National Cohesive Strategy. The success of this project will confirm the effectiveness of collaboration to accomplish multiple land management goals at landscape scales.

Sustainability of Outcomes

10 Points. 1,250 Characters Including Spaces – Project clearly results in skills and enhanced capability that extend beyond the life of the project. Project displays how this investment will lead to a specific, quantifiable, cost effective, replicable benefit that addresses national themes.

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This project will immediately improve the quality of the habitat within the landscape, reduce fire risk, and improve the effectiveness of projects on adjacent public land. Sagebrush-bunchgrass communities will be more resilient with increased growth of understory perennial grass and forb species, and measurable trophic level benefits for GSG and many other sagebrush obligate birds, plants, and insects that are declining across the Great Basin.

The National Cohesive Strategy will be implemented through stakeholder participation to manage and protect at-risk values at the landscape scale and by addressing the long-term goals of ecosystem resiliency. Participating landowners will be incentivized by the experience with the collaborative process and will be provided with stewardship plans to maintain the project benefits into the future. Partners will develop lasting relationships from the experience and from seeing work done that achieves their mutual goals. This project will serve as a model of effective multi-state, multi-agency, and landowner partnerships, allowing all participants to share encouragement with others and to advocate for the local, collaborative, landscape scale management approach.