Castle Valley Wildfire Mitigation Project

Project	4793	Project	Jason Kirks
Status	Draft	PM	Bureau of Land Management
Fiscal	2020	PM	Moab
Submitted	N/A	Lead	Bureau of Land Management
Total	1,395	WRI	Southeastern

Description:

The project will focus on creating a fuel break for the town of Castle Valley by reducing juniper encroachment on the southwest end of the valley on BLM lands. This project will have a secondary purpose to improve mule deer and elk habitat through juniper reduction.

Location:

This project is located on the southwestern end of Castle Valley extending from the edge of the incorporated town to the land managed by the Forest Service on the southeast end of the project. The project area includes lands owned by multiple private landowners, BLM, USFS, Private and Utah Open Lands.

PROJECT NEED

Need For Project:

There is a need to decrease the potential threat of destructive wildfire adjacent to the community of Castle Valley and a secondary objective to increase and improve crucial Mule Deer winter range habitat. This can be achieved by thinning pinyon/juniper (PJ) expansion within historic sagebrush communities throughout the Castle Valley area. By strategically placing fuel breaks in the high fire risk zone; this hazardous fuels reduction project will help decrease the potential threat of wildfire throughout the area.

Vegetation:
One of the greatest threats to sagebrush habitat is encroachment of pinyon pine (Pinus edulis) and Utah juniper (Juniperus osteosperma) (Bunting et al.1999). Through fire suppression, historic livestock over-grazing, and changes in climatic conditions, PJ have expanded and encroached into areas once dominated by sagebrush (Tausch 1999). PJ encroachment within historic sagebrush communities has led to dramatic changes in the understory species composition throughout the Great Basin (Miller and Rose, 1999). Sagebrush steppe communities historically contained <5% canopy cover of PJ and was dominated by shrubs, forbs, and grasses. When PJ canopy cover and tree density reaches certain levels, the diversity and density of under-story vegetation (shrubs, grasses, and forbs) decline. Historically within the Great Basin, shrubland communities have been the dominant where current PJ encroachment is occurring (Tausch 1999) where pockets of woodlands were imbedded in non-tree communities. The transition to greater coverage of PJ has led to increased risk of more devastating fires on the landscape.

Wildlife:
The Castle Valley project encompasses an expansive PJ ecosystem, which is encroaching into the historic sagebrush steppe community. This valley is critical winter range for Mule Deer and Elk. This project will provide substantially more acres of useable habitat and forage throughout the project area. This will reduce the competition for forage between Mule Deer and Elk. It is important that this project be implemented as soon as possible to mitigate any future habitat degradation through further PJ encroachment and future wildfires.

Water Quality:
Another negative impact on the watershed from PJ encroachment is soil erosion (Farmer 1995). Removing PJ will allow grasses and forbs to expand and decrease the speed of water-flow and the size of soil particles that can be transported. Also, PJ have been shown to intercept about 10-20 percent of precipitation and have greater precipitation runoff (Farmer 1995, Skau 1964). By removing PJ and establishing grasses and forbs, water will more readily infiltrate the soil and remain in the system. Dense tracts of PJ are a big concern for stand replacing wildfire, which tends to sterilize and cause hydrophobic soil. Removing sections of trees will help to slow down fire spread and intensity, and help to prevent invasive species like cheatgrass from establishing post-fire. It has been observed that by cutting PJ, the under-story vegetation will grow back in greater amounts than in those areas that are not cut (Bates et al. 2000). Mechanical PJ removal (e.g. Bull hog or chainsaw crew) projects like this project have proven to be a successful method for replacing the function of fire in the ecosystem and help to maintain watershed health. The town of Castle Valley is supported by an EPA designated sole source aquifer fed by the watershed within the project area. The re-establishment of a sagebrush steppe community supporting native grasses, forbs, and other

shrubs ties to the positive water quality properties of PJ removal for watershed preservation.

WUI consideration:
The town of Castle Valley has started to create a shaded fuel break on private property that borders the BLM lands for this project. The town has expressed desire to improve the shaded fuel break, for both fire hazard and habitat, along the boundary of public and private land within the project area.

Objectives:

1- Reduce the risk of destructive fires to Castle Valley by creating fuel breaks of mosaic open patches and thinning.
2- Utilize and reduce biomass by providing firewood and fence post collection areas to the public.
3- Increase available forage and habitat for mule deer and elk.
4- Increase under-story plant diversity of forbs, grasses and shrubs.
6- Increase available water quantity and quality.
7- Decrease potential soil loss and erosion by increasing under-story vegetation.

Threats / Risks:

The focus of the Castle Valley project is to reduce the threat of devastating wildfire to the community of Castle Valley through the removal of high-density PJ. Present high-density PJ poses risk of stand replacing fire with potential impacts to the community and surrounding lands, which would also alter/decrease critical winter range for Mule Deer in the valley. Devastating wildfire in present high-density PJ poses risk to the community's watershed and aquifer through vegetation loss, soil erosion and increased sedimentation.

The Utah Wildlife Action Plan (UWAP) outlines five specific threats relevant to this project:
2.3.1 Improper Grazing (current): refers to grazing systems currently in practice and subject to improvement. The timing, duration and intensity of livestock grazing are able to alter plant structure and composition, water quantity and quality, and soil structure and stability. Improper grazing may thereby reduce habitat suitability in numerous and diverse ways. Over the longer term, improper grazing accelerates desertification by reducing litter, increasing soil bulk density and bare ground, reducing water infiltration, and increasing water runoff and soil erosion.
7.1.1 Inappropriate Fire Frequency and Intensity: Concerns about lack of fire note the closing of forest, woodland, and certain shrubland canopies is impacting composition and structure of understory and early-seral vegetation, mainly through degradation and loss of herbaceous stratum and deciduous trees. Another concern is extreme fire intensity due to fuel loading.
8.1.2 Invasive Plant Species- Non-native: Cheatgrass expansion into the area would have negative impacts which includes: indirect effects on species, alteration of fire cycles, reduction of prey base, and reduction of cover.
8.2.3 Problematic Plant Species- Native Upland: PJ encroachment and expansion pose a very high threat impact to mountain shrub species. Every year without treatment allows for greater PJ expansion with loss of under-story plant diversity and reduction of sage habitat. The continued loss of habitat also increases the pressure on remaining plants by herbivores (e.g. deer and elk) thus decreasing the health of remaining plants. The risk of not treating this area can ultimately result in lower quality browse for ungulates like mule deer and elk.
11.4 Storms and Flooding: Monsoonal moisture patterns for the area pose threat for extreme flooding and erosion due to current lack of adequate understory vegetation with the current dense PJ.

Relation To Management Plan:

State and County Resource Management Plans:

State of Utah Resource Management Plan
Fire Management
*The State supports the efforts of the Utah Watershed Restoration Initiative and other rehabilitative efforts throughout the state.
*The State will advocate for forest management practices that promote species diversity and overall ecosystem health.
*The State supports the Watershed Restoration Initiative to encourage reduced wildfire acreage and suppression costs, reduced soil loss from erosion, reduced sedimentation and storage loss in reservoirs, improved water quality and yield, improved wildlife populations, increased forage, reduced risk of additional federal listing of species under the Endangered Species Act, improved agricultural production, and resistance to invasive plant species.
Livestock and Grazing
*Improve vegetative health on public and private lands through range improvements, prescribed fire, vegetation treatments, and active management of invasive plants and noxious weeds.
*Actively remove pinyon-juniper encroachment in other ecological sites due to its substantial consumption of water and its detrimental effect on sagebrush, other vegetation, and wildlife
*The state supports the active removal of pinyon juniper encroachment on other ecosystem, such as sagebrush, due to its consumption of water, detrimental effects on vegetation and available forage, and its negative effects on wildlife habitat.
Noxious Weeds

*Establish immediate revegetation or rehabilitation after treatment. The state of Utah supports prevention as one of the best methods of managing noxious weeds.
Wildlife
*Conserve, improve, and restore 500,000 acres of mule deer habitat throughout the state with emphasis on crucial ranges.
*Protect existing wildlife habitat and improve 500,000 acres of critical habitats and watersheds throughout the state by 2025.
*Produce and maintain the desired vegetation for wildlife and domestic livestock forage on public and private lands.
T&E Species
*Work with stakeholders and partners to continue to implement recommendations from the Utah Wildlife.
Water Quality and Hydrology
*Cooperate in the protection, restoration, enhancement and management of water resources in the State of Utah to the extent of each agency's authority, expertise, and resources.

Grand County Resource Management Plan
Land Use
*Land Restoration (Public Lands Policy 7.) Encourages public land-management agencies to restore damaged areas.
Wildlife
*The County supports wildlife management that seeks an optimal balance between wildlife populations and human needs.

CANYON COUNTRY FIRE MANAGEMENT PLAN - September 2004- Maintenance Update 2013: Fuels Treatment Objectives: Fuels management strategies such as prescribed fire, mechanical, chemical, etc. will be used to reduce hazardous fuel conditions. Fuels in condition class two and three will be treated to change them to condition class one.

NATIONAL COHESIVE WILDLAND FIRE MANAGEMENT STRATEGY- This project will align with the goals of the national strategy for (1) Managing vegetation and fuels, and (2) Protecting homes, communities, and other values at risk.

NORTH AMERICAN MULE DEER CONSERVATION PLAN (2004):
Manage mule deer habitat if a fashion to control type conversions (i.e. conversion of shrublands to monotypic pinyon-juniper stands).

GRAND COUNTY GENERAL PLAN (2012):
Chapter 3 (3.2 Vision: Ecology, Water, and Air) Goal 1- Strategy G: Municipalities, water districts and public water suppliers are encouraged to work in partnership with the agencies that govern land use in their drinking watersheds to enact agreements for long-term watershed management.
Public Lands Policy 2 (Watershed Management)- Public lands agencies are encouraged to adopt policies that enhance or restore watersheds for Moab, Spanish Valley, Castle Valley and Thompson Springs. The county supports classification of these aquifers to the highest quality standard. Grand County will follow all state and federal water protection laws and actively engage local, regional, and federal land management agencies in discussing risks to aquifers and aquifer recharge areas in Grand County.
Public Lands Policy 19 (Wildfire Management)- Continue to work with the State of Utah Division of Forestry Fire and State Lands to implement the Wildland Fire Plan and to reduce wildfire hazard of fire in the wildland-urban interface.

TOWN OF CASTLE VALLEY GENERAL PLAN (March 19, 2014):
Water Policy 8- The Town will actively participate in County, State and Federal land use planning processes to insure that any proposed developments/activities in our watershed are thoroughly reviewed by the Town to meet our watershed protection goals. This may include researching and seeking a Municipal Watershed designation for the Castle Valley Watershed with the appropriate County, State and Federal entities.
Fire Policy 4- The Town will consider adopting the updated Community Wildfire Protection Plan (CWPP), and ensure that residents and property owners implement firewise practices on their properties, developed or otherwise. This will be accomplished through programs, incentives, and/or regulations that reflect the ongoing need to properly manage fuels to complement the efforts of the Castle Valley Fire District and to protect life and property.

STATEWIDE MULE DEER MANAGEMENT PLAN
Habitat Objective 2: Improve the quality and quantity of vegetation for mule deer on a minimum of 500,000 acres of crucial range by 2019. d. Initiate broad scale vegetative treatment projects to improve mule deer habitat with emphasis on drought or fire damaged sagebrush winter ranges, ranges that have been taken over by invasive annual grass species, and ranges being diminished by encroachment of conifers into sagebrush or aspen habitats, ensuring that seed mixes contain sufficient forbs and browse species.

MANTI-LA SAL NATIONAL FOREST LAND AND RESOURCE MANAGEMENT PLAN:

Proposed activities meet the goals and management direction provided by the Forest Plan. The proposed project will meet specific direction in the Forest Plan [WILDLIFE AND FISH RESOURCE MANAGEMENT (C01)] to maintain optimum cover:forage ratios for big game (LRMP III-19) and maintain/improve wildlife habitat and habitat diversity through direct treatment of vegetation (LRMP III-23). Vegetation treatment, particularly the removal of encroaching pinyon-juniper trees in this area is specified in the Forest Plan (pg A-6, A-10, A-20). The Forest Plan also provides direction to minimize hazards from wildfire - Reduce fuel loading, stand and crown/canopy density, and resultant fire hazard to vegetation, the public, private property, and firefighters (LRMP III-5).

Fire / Fuels:

Pinyon and juniper trees have moved into areas once dominated by shrubs, forbs, and grasses. Dense PJ fuel conditions are to the point that if a wildfire occurred it would be difficult to contain, leading to an increased risk to firefighter and public safety, suppression effectiveness and natural resource degradation. Treatments identified within this proposal, will help reduce hazardous fuel loads, create fuel breaks, and reduce the overall threat of a destructive wildfire. Delayed treatment of the encroaching PJ and present high-density PJ would lead to increased treatment costs in the future.

Conditions following treatment of the area will strengthen efforts to protect the community in the event of a devastating wildfire. The shaded fuel break in conjunction with the thinning and post-treatment discontinuity of fuels will greatly decrease the devastating fire risk presented with the currently dense PJ. The NEPA anaylsis area encompasses 7,551 acres. Of the project area, 5,711 acres are classified under Vegetation Condition Class (VCC) I (low departure: 0-33%), and 1,823 acres are classified under VCC II (moderate departure: 34-66%). Of the 5,711 VCC I acres, 4,149 acres are 20% departure from historic vegetation, which is an illustration of the PJ encroachment in the project area. Treatments for the project will work to move acres currently VCC II towards VCCI, and maintain current VCC I acres by removing PJ encroachment.

Water Quality/Quantity:

Removal of pinyon and juniper could increase available moisture for more than 3 weeks in the spring (Roundy et al., 2014). In addition, removing pinyon and juniper from stands can increase water from 6-20 days respectively. Due to pinyon and juniper being prolific water users, they readily out-compete understory species, which eventually die off. Mechanical PJ removal (e.g. Bull hog or chainsaw crew) projects like this project have proven to be a successful method for replacing the function of fire in the ecosystem and help to maintain watershed quality. Results of the Great Basin Landscape Conservation Cooperative study in Nevada (Desatoya Mt.) found that by removing (lop and scatter) PJ (130 trees/acre) there is the potential to increase water recharge yields 4% on wet years. On wet years, this will increase recharge, but does not increase stream flow. Wet meadows and upland plants benefit by utilizing the increased soil moisture, providing for better resiliency during drought years. This provides for an increase in water quantity for herbaceous plants on sites where PJ is removed. It is expected that soils will improve by allowing soils to exhibit permeability and infiltration rates that will sustain/improve site productivity throughout the area. This will be accomplished by making improvements to the biotic integrity of the community by converting areas that are dominated by PJ to a diverse component of perennial grasses, forbs and shrubs. Indicators will include sufficient cover and litter to protect the soil surface from excessive water and wind erosion, limiting surface flow and limiting soil moisture loss through evaporation, which will promote proper infiltration.

The Castle Valley Aquifer has been declared as a Sole Source Aquifer by the Federal Environmental Protection Agency in 20012 and classified by the Utah Division of Water Quality as "pristine" in certain areas. It is an unconsolidated valley-fill type and exposed at the surface with no overlying confining geologic formation. This allows contaminates to move more quickly downward to the water supply.

Compliance:

The NEPA document will be in draft form and slated for completion by May 2019. This project falls within the scope of the BLM Moab Field Office RMP and DOI Secretarial Order 3336.

National Environmental Policy Act of 1969

Public Rangelands Improvement Act of 1978

Utah Administrative Code R68-9 (Utah's Noxious Weed Act)

UDWR Rule and Regulations, Rule 657 series; UAC Title 23, Wildlife Resources of Utah. Utah Division of Wildlife Resources

Executive Order 13112, Invasive Species- Section 2: This project is consistent with the duties required of

the agency regarding identification of actions that may affect the status of invasive species.

Federal Land Policy and Management Act of 1976 (FLPMA, 43 U.S.C. 1701 Sec 103 (C): The BLM is directed to manage public lands in a manner that will best meet present and future needs of the nation.

TOWN OF CASTLE VALLEY GENERAL PLAN (March 19, 2014): The Town is committed to working with private landowners, agencies and authorities that own property in the Town's watershed to protect water quality and availability per the town's Watershed Protection Ordinance.

Executive Order 13855 of December 21, 2018, specifically: Section 1. Policy, (b) Coordinating Federal, State, Tribal, and Local Assets. Wildfire prevention and suppression and post-wildfire restoration require a variety of assets and skills across landscapes. Federal, State, tribal, and local governments should coordinate the deployment of appropriate assets and skills to restore our landscapes and communities after damage caused by fires and to help reduce hazardous fuels through active forest management in order to protect communities, critical infrastructure, and natural and cultural resources. (c) Removing Hazardous Fuels, Increasing Active Management, and Supporting Rural Economies. Post-fire assessments show that reducing vegetation through hazardous fuel management and strategic forest health treatments is effective in reducing wildfire severity and loss. Actions must be taken across landscapes to prioritize treatments in order to enhance fuel reduction and forest-restoration projects that protect life and property, and to benefit rural economies through encouraging utilization of the by-products of forest restoration. Sec. 6. Collaborative Partnerships. To reduce fuel loads, restore watersheds, and improve forest, rangeland, and other Federal land conditions, and to utilize available expertise and efficiently deploy resources, the Secretaries shall expand collaboration with States, tribes, communities, non-profit organizations, and the private sector.

Secretarial Order 3372: (2)(b) Coordinate and Collaborate with Land-Managing Partners and Stakeholders. Managing wildfire is not unique to the Department. The Department shares this responsibility with other Federal land-managing Agencies, States, Territories, Tribes, localities and stakeholder groups. (c) Utilize active Land, Vegetation, and Wildfire Management Techniques that are supported by Best Practices and Best Available Science.

Methods:

Phase 1 is proposed for 1433 acres of thinning, clearing and buffering roads to create a large shaded fuel-break for wildfire mitigation to the community of Castle Valley. 1061 acres will be lopped and scattered of Juniper 1-8 inches in diameter and pinyon 1-4 inches in diameter. created by thinning PJ with contracted hand crews. 339 acres of buffered roads that are thinned within the project area will have firewood piled for utilization by the community of Castle Valley. This will help reduce the biomass and fuel loading of the area. 334 acres divided into 6 patched will be cleared of PJ up to 85% to create mosaic patches resembling breaks created naturally by wildfires. The BLM will refine boundary and treatment areas (e.g., drainage buffering, thinning areas, etc.). The shaded fuel break along the private/BLM boundary will involve thinning of the PJ with firewood pullback, which will be utilized to reduce the fuel left from the thinning. The shaded fuel break along the border will be 150-200 feet on the BLM side. Remaining PJ will be limbed where appropriate to reduce ladder fuels while also opening up corridors for wildlife travel. Work on the shaded fuel break will be done with handcrew(s) utilizing chainsaws to thin PJ and reduce slash left to acceptable specifications (no more than 2 feet in height).

Through the other areas of the project, lop and scatter will be used to create buffered pockets around currently present sagebrush openings and remove PJ that has encroached. The patchwork of non-uniform openings will reduce the fuel continuity and hazardous fuels conditions across the landscape while also creating wildlife corridors throughout the project area. Where there are more continuous areas of high-density PJ, not conducive to effective lop and scatter for hazardous fuels conditions reduction, bullhog mastication will be utilized to thin and create openings to promote understory growth. Buffers will be left along drainages by leaving in place standing PJ. This will shelter the drainages and aid in soil stabilization in those areas.

Maintenance work/expansion of the thinned sagebrush pockets will be done as monitoring suggests. This will allow for maintaining future PJ encroachment into the treatment areas.

Seeding does not seem necessary at this time with amount of brush and grass cover.

In order to include USFS administered lands in a later phase of the project, 212 acres will be surveyed for cultural resources in preparation for clearance.

Monitoring:

Monitoring will consist of randomly located vegetation transects with the purpose of measuring both over-story and under-story vegetation change. Measurements will include line-point intercept cover, tree density, species richness, and seeded species frequency using BLM's Assessment, Inventory, and Monitoring (AIM) protocols. Repeat photographs will also be taken.

Partners:

Utah Watershed Restoration Initiative; will help with funding and contracting.
State of Utah DNR; consulting for wildlife benefits.
USFS - additional adjacent PJ treatment areas.

Future Management:

Subsequent phases following the completion of the shaded fuel break, sagebrush pocket and PJ thinning will include removal of Russian Olive, maintenance of sagebrush pockets, and assessment of cheatgrass and other invasive species found in the area to determine what, if any, management action needs to be done.

The site may be rested from grazing (if permitee is agreeable) for two years post project implementation to allow for re-growth of vegetation. The site will be monitored and if maintenance needs to be done in the future, we will do what is necessary to maintain the health of the range.

Domestic Livestock Benefit:

Where pinyon and juniper dominate, they out-compete under-story vegetation for water and nutrients. Over time these under-story species become less productive and vigorous and eventually die out. Removing P/J releases under-story grasses and forbs from competition, which increases plant vigor and rangeland productivity. P/J removal treatments alone help increase forage quantity and quality for livestock (Clary and Jameson, 1981).

BUDGET

WRI/DWR	Other	Budget Total	In-Kind Total	Grand Total
$355,512.00	$0.00	$355,512.00	$4,200.00	$359,712.00

Item	Description	WRI	Other	In-Kind	Year
Archaeological Clearance	survey 212 acres of sagebrush/PJ on USFS land on Harpole Mesa	$5,512.00	$0.00	$4,200.00	2020
Contractual Services	Lop & Scatter 1061 Acres	$100,000.	$0.00	$0.00	2020
Contractual Services	Thin & Pile 334 Acres	$150,000.	$0.00	$0.00	2020
Contractual Services	Fire Wood Pull Back 329 Acres	$50,000.0	$0.00	$0.00	2020
Archaeological Clearance	Survey 1500 acres	$50,000.0	$0.00	$0.00	2020

FUNDING

WRI/DWR	Other	Funding Total	In-Kind Total	Grand Total
$355,512.00	$0.00	$355,512.00	$4,200.00	$359,712.00

Source	Phase	Description	Amount	Other	In-Kind	Year
BLM Fuels (Canyon Country)		Arch Clearance 1500 acres	$50,000.0	$0.00	$0.00	2020
BLM Fuels (Canyon Country)		Contract Services	$250,000.	$0.00	$0.00	2020
UWRI		Arch Survey on Manti LaSal USFS	$5,512.00	$0.00	$0.00	2020
UWRI		Contract Services	$50,000.0	$0.00	$0.00	2020
USFS		USFS, SHPO consultation, sensitive plant survey	$0.00	$0.00	$4,200.00	2020

EXPENSE

WRI/DWR	Other	Expense Total	In-Kind Total	Grand Total
$0.00	$0.00	$0.00	$0.00	$0.00

Source	Phase	Description	Amount	Other	In-Kind	Year
BLM Fuels (Canyon Country)		N/A	$0.00	$0.00	$0.00	
BLM Fuels (Canyon Country)		N/A	$0.00	$0.00	$0.00	
UWRI		N/A	$0.00	$0.00	$0.00	
UWRI		N/A	$0.00	$0.00	$0.00	
USFS		N/A	$0.00	$0.00	$0.00	

SPECIES

Species	"N" Rank	HIG/F Rank
Domestic Livestock		N/A
Threat		Impact
No Threat		NA
Elk		2
Threat		Impact
Inappropriate Fire Frequency and Intensity		High
Mule Deer		1
Threat		Impact
Improper Grazing – Livestock (current)		Low
Inappropriate Fire Frequency and Intensity		High
Wild Turkey		1
Threat		Impact
Inappropriate Fire Frequency and Intensity		Medium
Black Rosy-finch	N4	N/A
Threat		Impact
Habitat Shifting and Alteration		Medium
Golden Eagle	N5	N/A
Threat		Impact
Inappropriate Fire Frequency and Intensity		Medium
Invasive Plant Species – Non-native		Medium

HABITATS

Habitat	
Lowland Sagebrush	
Threat	Impact
Droughts	High
Inappropriate Fire Frequency and Intensity	Very High
Invasive Plant Species – Non-native	Very High
Problematic Plant Species – Native Upland	Medium
Mountain Shrub	
Threat	Impact
Improper Grazing – Livestock (current)	Low
Inappropriate Fire Frequency and Intensity	Low
Invasive Plant Species – Non-native	Medium
Problematic Plant Species – Native Upland	Low

PROJECT COMMENTS

Comment 11/15/2018 Type: Project Commenter Jason Kirks

Hello everyone, I'm inviting you all to participate in this new project for the community of Castle Valley. The project will have a dual focus to reduce wildfire risk and improve wildlife habitat. I'm hoping to create a project that is creative and beneficial for the community of Castle Valley and holistic for the environment. Some of the project ideas are;
*Fuel breaks on roads with biomass utilization (firewood and fence posts)
*Shaded Fuel breaks closer to homes
*Open large areas through mastication adjacent to Round Mountain
*Cheatgrass and other invasive plant reduction
*Habitat improvement and resiliency for deer, raptors and pollinators
*A project design that incorporates wildlife travel corridors, thermal refugia and increased forage

All ideas for project design are welcome and diverse methods of implementation are encouraged.

Send me your thoughts and ideas, Thanks!

Comment 12/19/2018 Type: Project Commenter Barb Smith

I added on 212 acres of USFS lands in upper Castle Valley where I have always wanted to do a project to reduce the pinyon encroachment into a natural sagebrush opening on the top of Harpole Mesa. If we hadn't dropped retardant across this area during the 2008 Porcupine Ranch wildfire, we would have removed the pinyon, but also all the sagebrush and had other severe and undesirable effects. A mechanical treatment in this area will have the positive ecological/wildlife habitat effects without the adverse ones. For this first phase on USFS land I am requesting funding for the archaeological surveys.

Comment 02/12/2019 Type: Project Commenter Scott Gibson

You could probably add black rosy-finch to the species list. Should be good wintering spot for them - especially since we've documenting them during the breeding season at the top of the La Sals.

Comment 02/12/2019 Type: Project Commenter Jason Kirks

Thanks Scott, black rosy-finch added.

Comment 02/11/2019 Type: Admin Commenter Tyler Thompson

Barb, Jason, Please add the 212 acres of USFS land to the map as "affected area" so we know where the CRI will take place for the next phase.

Comment 02/12/2019 Type: Admin Commenter Jason Kirks

USFS feature added.

Comment 02/21/2019 Type: Financial Commenter Alison Whittaker

Where is the in-kind coming from? It should be listed as a separate funding source from UWRI. Thanks.

COMPLETION

Start Date:

End Date:

FY Implemented:
2020

FY Completed:

Final Methods:
N/A

Project Narrative:
N/A

Future Management:
N/A

Map Features

ID	Feature Category	Action	Treatment/Type
8000	Terrestrial Treatment Area	Vegetation removal / hand crew	Lop-pile-burn
8001	Terrestrial Treatment Area	Vegetation removal / hand crew	Lop and scatter
8058	Affected Area	N/A	N/A