



STAFF REPORT

Report To: Board of Supervisors

Meeting Date: May 19, 2016

Staff Contact: Robert Schreihans, rschreihans@carson.org

Agenda Title: For Possible Action: To authorize Carson City to submit a grant application in the amount of \$1,999,900.00 to the Southern Nevada Public Land Management Act (SNPLMA), through the Bureau of Land Management - Carson City Westside Hazardous Fuels Reduction Project. (Robert Schreihans)

Staff Summary: The Carson City Fire Department will treat 943 acres in the Wildland Urban Interface surrounding Carson City. This treatment will reduce hazardous fuels along the west side of Carson City, which has a rich history of wildfire. By reducing the fuels in these strategic locations, the potential impact of a wildfire will be greatly reduced.

Agenda Action: Formal Action/Motion

Time Requested: 10 minutes

Proposed Motion

To authorize Carson City to submit a grant application in the amount of \$1,999,900.00 to the Southern Nevada Public Land Management Act (SNPLMA), through the Bureau of Land Management, for the Carson City Westside Hazardous Fuels Reduction Project.

Board's Strategic Goal

Safety

Previous Action

N/A

Background/Issues & Analysis

The Carson City Fire Department will treat 943 acres in the Wildland Urban Interface surrounding Carson City. We are proposing to cut, pile and burn 246 acres, and masticate 451 acres. This treatment will reduce hazardous fuels along the west side of Carson City, which has a rich history of wildfire. By reducing the fuels in these strategic locations, the potential impact of a wildfire will be greatly reduced. The majority of the areas within this project are within the threat zone around communities vulnerable to catastrophic loss in the event of a wildfire. As Carson City has grown over the years, residents are occupying land further and further up the hills on the west side of town. This has created some inherent hazards within these communities that include ingress/egress bottlenecks, slope restrictions, and extended response times. All of these factors increase the need and effectiveness of strategic fuels reduction projects. This project will drastically increase the sustainability of the ecosystems by returning the environment back to a more "natural" landscape in terms of density and species composition. This project also has the ability to extremely increase the vitality of critical Mule Deer winter range. As our communities move further into the hills, we are fragmenting these key winter ranges, and we need to become stewards of the land to maintain biodiversity.

Applicable Statute, Code, Policy, Rule or Regulation

N/A

Financial Information

Is there a fiscal impact? Yes No

If yes, account name/number: None

Is it currently budgeted? Yes No

Explanation of Fiscal Impact: None

Alternatives

The alternative, choosing to not authorize application, would remove the opportunity to receive the funding for this project.

Board Action Taken:

Motion: _____

1) _____

2) _____

Aye/Nay

(Vote Recorded By)

**SNPLMA ROUND 16 NOMINATION FOR
HAZARDOUS FUELS REDUCTION AND WILDFIRE PREVENTION**



**Carson City Fire Department
777 S. Stewart Street
Carson City, NV 89506**

Project: Carson City Westside Hazardous Fuels Reduction Project

Project Timeframe: 6 Years

Amount Requested: \$1,999,900

Contact: Fire Chief Robert Schreihans

Phone: 775-887-2210

Fax: 775-887-2209

Email: BSchreihans@carson.org

Location: N 39° 10' 24"
W 120° 47' 59"

PURPOSE STATEMENT

Carson City Fire Dept. will treat 943 acres in the Wildland Urban Interface surrounding Carson City, Nevada. We are proposing to cut and pile 246 acres, then burn the piles on the same 246 acres, and masticate 451 acres. This treatment will reduce hazardous fuels along the west side of Carson City, which has a rich history of wildfire. By reducing the fuels in these strategic locations, the potential impact of a wildfire will be greatly reduced. The majority of the areas within this project are within the threat zone around communities vulnerable to catastrophic loss in the event of a wildfire. As Carson City has grown over the years, residents are occupying land further and further up the hills on the west side of town. This has created some inherent hazards within these communities that include ingress/ egress bottlenecks, slope restrictions, and extended response times. All of these factors increase the need and effectiveness of strategic fuels reduction projects. This project will drastically increase the sustainability of the ecosystems by returning the environment back to a more “natural” landscape in terms of density and species composition. This project also has the ability to extremely increase the vitality of critical Mule Deer winter range. As our communities move further into the hills, we are fragmenting these key winter ranges, and we need to become stewards of the land to maintain biodiversity.

RELATIONSHIP TO THE SNPLMA STRATEGIC PLAN

The project **promotes sustainability** by restoring the landscape to a more “natural” state. This will be accomplished by reducing the larger woody stemmed vegetation which will be replaced by early successional grasses and forbs. This vegetation type will be more indicative of historic vegetation. If we are going to continue to aggressively suppress fire in the WUI environment the need to create “disturbance” in the vegetation communities will be imperative.

The project **promotes community** by creating healthy and sustainable ecosystems. By managing the landscape in the WUI, it extends the community out into the wildland giving residents more access and opportunity to recreate. Anytime we can provide an example of fuels reduction done right, community members are more likely to mimic the treatments on their own property.

RELATIONSHIP TO PREVIOUS/ANTICIPATED PHASES

Carson City was fortunate enough to receive SNPLMA funding in the past. These funds were administered by the City Parks Dept. in the past and now the Fire Dept. is applying for the funds directly. The previous funds were from Round 8 dating back to 2008, at that time our fuels reduction program was in its infancy, it has come a long way since then. Our intention is to enhance and enlarge most of the projects completed in the past. We have learned over the years that a 30’ fuel break is not always enough, given the environmental conditions present and the weather extremes observed. These larger landscape scale projects are indicative of the move to survivable space and Fire Adapted Communities. This nomination will result in a stand-alone, viable project and Carson City Fire acknowledges that there is neither guarantee nor expectation of funding for future phases.

CONTRIBUTED FUNDS

Carson City Fire Dept. has an ongoing Fuel Reduction Program which includes Homeowner lot inspections, new WUI homeowner contact, education on Fire Adapted Communities, and a seasonal wildland firefighting crew. CCFD will continue to offer these programs and document any homeowner match at the current rate. CCFD will include \$5,000 in crew time each year for a minimum total of contributed in-kind funds to be \$30,000

PROJECT DELIVERABLES

1. Primary Deliverables
 - a. Hand thin, pile and burn, and/or mechanically treat 943 acres of land in the wildland-urban interface in Carson City, Nevada to reduce the threat and impact of a wildfire. Final acres will be determined based on a variety of factors, including terrain accessibility, slope, cost estimates and environmental review.
 - b. A walking tour of the area will be held at the completion of the project. We will invite community members, city leaders, and invested stakeholders.
 - c. An updated Community Wildfire Protection Plan will be finalized after all treatments are completed.
2. Anticipated Deliverables
 - a. Additional fuels reduction on lands adjacent to project areas. CCFD will identify and target lands adjacent to fuels projects, and work with those landowners to extend the treatments on to private property.
 - b. Complete a minimum 200 defensible space inspections adjacent to project areas.
3. Standard Deliverables
 - a. Mitigation Plan, describing the prescription to accomplish the project's goals and objectives, and all necessary measures to mitigate negative impacts to wildlife, water quality, forest health, and cultural resources.
 - b. Stream zone variance from the Nevada Stream Zone Variance committee where applicable.
 - c. Avoidance protocols for cultural resources and concurrence with a finding of no adverse effect from the State Historic Preservation Office (SHPO).
 - d. Prescribed Fire Burn Plan, satisfying National Wildfire Coordinating Group (NWCG) interagency requirements.
 - e. Photo points will be established for post mitigation monitoring.

SNPLMA PERFORMANCE MEASURES

Outcome: Minimize the loss of life, property, and the environment from catastrophic wildfire within the wildland-urban interface of Carson City, Nevada. Achieving the following output will accomplish this outcome:

Output (Primary Deliverable): Reduce hazardous fuels manually and mechanically on 943 acres in the wildland-urban interface. The SNPLMA Performance Measure is:

- Performance Measure F2 – Acres of hazardous fuels treated, enhanced, or restored to reduce wildland fuels hazards and to restore or maintain ecosystem resiliency within the WUI.

Outcome: Increase public awareness about hazardous fuels reduction and wildfire preparedness. Achieving the following output(s) will accomplish this outcome:

Output (Primary Deliverable): Hosted walking tours of the project area will be held at the completion of the project. We will invite community members, city leaders, and invested stakeholders. The SNPLMA Performance Measures include:

- Performance Measure O5 – Number of Outreach Contact Made (each individual is reported as one unit).
- Performance Measure O7 – Number of Interpretive or Educational Presentations Given and/or Community Events Participated In or Hosted (each presentation is reported as one unit).

PROJECT READINESS

Carson City Fire has procedures in place to handle this project. The status of the Wildland Fuels Management Officer will be upgraded to full time to ensure all work for this project is completed to the specifications set forth in the Mitigation Plans. We have a seasonal crew in place that will be tasked with the hand cut/ pile and burn portions of the project. If additional resources are required, we can reach out to neighboring jurisdictions or hire a contractor for the work. All of the mechanical treatments will be performed by qualified contractors under the supervision of the Wildland Fuels Management Officer.

HAZARDOUS FUELS REDUCTION AND WILDFIRE PREVENTION RANKING CRITERIA

1. Improves the community within and/or adjacent to the project area.

A. Addresses immediate public health and safety and community infrastructure.

This project is designed to reduce hazardous fuels in strategic areas located within the Defense Zone of the Wildland Urban Interface. 91% of the 943 acres are located within the Defense Zone, and the acres that fall into the Threat Zone are included in this project because they are protecting critical water infrastructure to the City of Carson City.

B. Promotes protection of source water (rivers and lakes) or municipal watersheds.

Included in this project is fuels reduction around critical infrastructure in the form of water tanks and a water treatment facility. If damage were to occur to these facilities, the water supply to Carson City could be reduced or interrupted. If these facilities were lost or damaged during a wildfire event, the interruption of water could minimize the effectiveness of fire suppression efforts, putting life and property in danger.

C. Project includes education and outreach to the community on Living with Fire or Fire Adapted Communities and/or the importance of fuels reduction on federal, state, and local government land.

A key element in any fuels reduction project in the Defense Zone is the education of the residents around that project. During this project we will be informing and interacting with these residents. This will include project narratives and timetables being distributed before implementations starts, along with pertinent educational materials from the *Living With Fire* program. If there is enough interest from the community, a public meeting will be held to address any concerns and questions.

2. Improves the connection of fuels reduction activities and wildlife habitat.

A. Project connects previously treated areas to create or increase contiguous blocks of treated land.

This project will increase or enhance several project areas treated using Round 8 funding. Carson City has learned a lot since this first projects were implemented. This project will extend and connect some of these old project areas creating large landscape scale fuel breaks. By creating connectivity between projects were greatly increasing the overall effectiveness. Even as the west side of Carson City if highly fragmented, we are trying to create expansive fuel breaks that link communities together. These links from one community to another creates recreation opportunities for our citizens.

B. Project protects or enhances wildlife habitat and/or resilient vegetative communities.

The West side of Carson City is currently a degraded winter range for mule deer. Implementing these projects will decrease the age class of the vegetation as well as increase the amount of forbs within the interspaces in the brush. As sage brush and bitterbrush age, their stem production is reduced and chemical changes within the plants make them almost inedible to mule deer. Since disturbance from fire and grazing has been limited, these types of projects are critical in restoring degraded ecosystems around Carson City.

C. Project enhances the effectiveness of other treatments in progress or complete.

Our fuels treatments have been limited to a 30 foot fuel breaks in the past, and this project will significantly increase those fuel breaks as we move to more Fire Adapted Communities. As defensible space evolves to survivable space and with the introduction of Fire Adapted Communities, a simple 30 foot fuel break is not always acceptable anymore due to slope and historical wind patterns. By increasing the size of fuels treatments, we are reducing the risk to our communities and also creating a viable and sustainable ecosystem that can thrive for years to come.

3. Improves sustainability of the multijurisdictional 10-year plans, environment, and financial resources.

A. The Project will:

1. Improve the sustainability of the forest health and ecosystem function (e.g. stand density, desired species mix and age, tree health, etc.)

The project goal is to reduce hazardous fuels in the Threat Zone by targeting dead and dying decadent vegetation that has accumulated over the years. This treatment will act as a natural disturbance within the ecosystem and the resulting growth will increase the forage opportunities, increase the overall number of forb species occupying the site and increase the resiliency of the remaining vegetation.

2. Improve the habitat for sensitive species and Threatened and Endangered species. Includes mitigation and/or minimization measures when treatment in sensitive habitat is unavoidable.

There are several species that are of concern that could benefit from this project. None are known to inhabit the project area now, but ongoing monitoring pre and post treatment will identify any of these species. By opening up dense dead and decadent vegetation and exposing the soil to sunlight, we never fully know what could sprout given the right conditions. If any of these species are identified before, during or after implementation, mitigation measures will be put in place to minimize the impact.

The result of no project could be catastrophic wildfire, which would result in bare mineral soil and possible cheat grass infestations. This would not be an environment that could sustain any of the species of concern.

3. Includes broadcast prescribed fire for resource management objectives for sustainable landscapes.

Although prescribed burning is not a primary objective of this project, we will evaluate the opportunities available and determine if prescribed fire would be an effective tool for ongoing management. Carson City Fire has used prescribed fire in the past to reduce fuels and would like explore all opportunities in the future

B. The method of treatment is fiscally responsible for the project area by balancing resource objectives, values at risk, and cost per acre factors or cost-benefit analysis.

There are tremendous values at risk along the west side of Carson City. Two of our higher end communities, key winter range for mule deer and critical water infrastructure are just some of the vulnerable assets.

The aftermath of the 2004 Waterfall fire that swept along the west side of Carson City is still our worst case scenario for a wildfire. This single event destroyed 18 homes, 51 vehicles, including two fire apparatus, and caused an estimated \$23,500,000 in damages. These fuel breaks will significantly decrease the impacts of a wildfire in the future.

4. Demonstrates sound project management and quality control measures.

A. Project goals and implementation processes are clear, measurable, achievable, and demonstrable.

Carson City Westside Hazardous Fuels Reduction Project has clear and achievable project goals that include the reduction of hazardous fuels on 943 acres. These treatments will result in a more sustainable ecosystem better equipped to withstand wildfire and increased vigor in the remaining vegetation. All mitigation plans will take into account several factors including wildlife, erosion, air quality and residual fuel loading.

B. Project proponent has the capacity to implement this project in a timely manner (contractor and staff availability, no backlog of current project, etc.) and within budget.

Carson City Fire Dept. has an excellent track record of completing fuels reduction projects on time and within budget. The Wildland Fuels Management Officer for CCFD has experience in implementing fuels projects on over 1500 acres in Northern Nevada and over 100 acres in Carson City over the past two years. The infrastructure to all billing and contracts is in place and functioning efficiently.

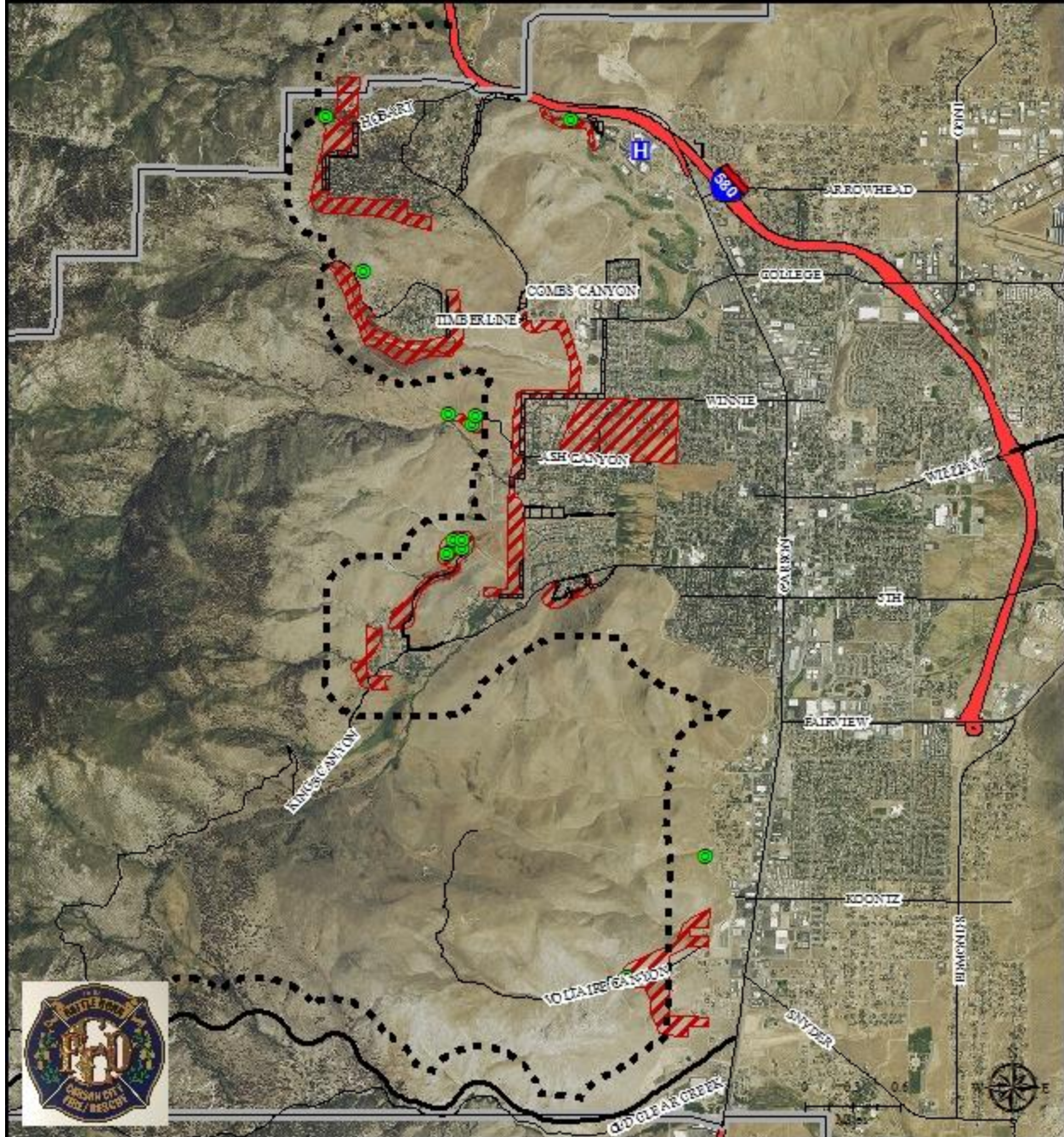
C. Is a phase or related component to a previously funded project.

This project enhances and extends 100 acres of treatment funded in SNPLMA Rd. 8. Those projects were good by themselves, but don't take a landscape scale approach at fuels treatments. By enhancing these treatments we are creating survivable space for both suppression personnel and residents alike. We are moving towards Fire Adapted Communities that will be able to withstand wildfire with little to no outside help.

D. Has identified committed non-SNPLMA sources of funding or in-kind contribution in the development and/or implementation of the project.

The Carson City Fire Department will provide a minimum of \$5,000 of work from our seasonal crew in support of the Carson City Westside Hazardous Fuels Reduction Project as explained above. Over the life of the grant this equals \$30,000.

Carson City Westside Hazardous Fuels Treatments SNPLMA Round 16 Nomination



Legend

City Boundary

WUI Defense Zone

Nominated Project Units

Past Fuels Projects (2008-2015)

Critical Infrastructure

Map 1 of 3
Carson City Overview
Hazardous Fuels Reduction

Carson City Westside Hazardous Fuels Treatments SNPLMA Round 16 Nomination

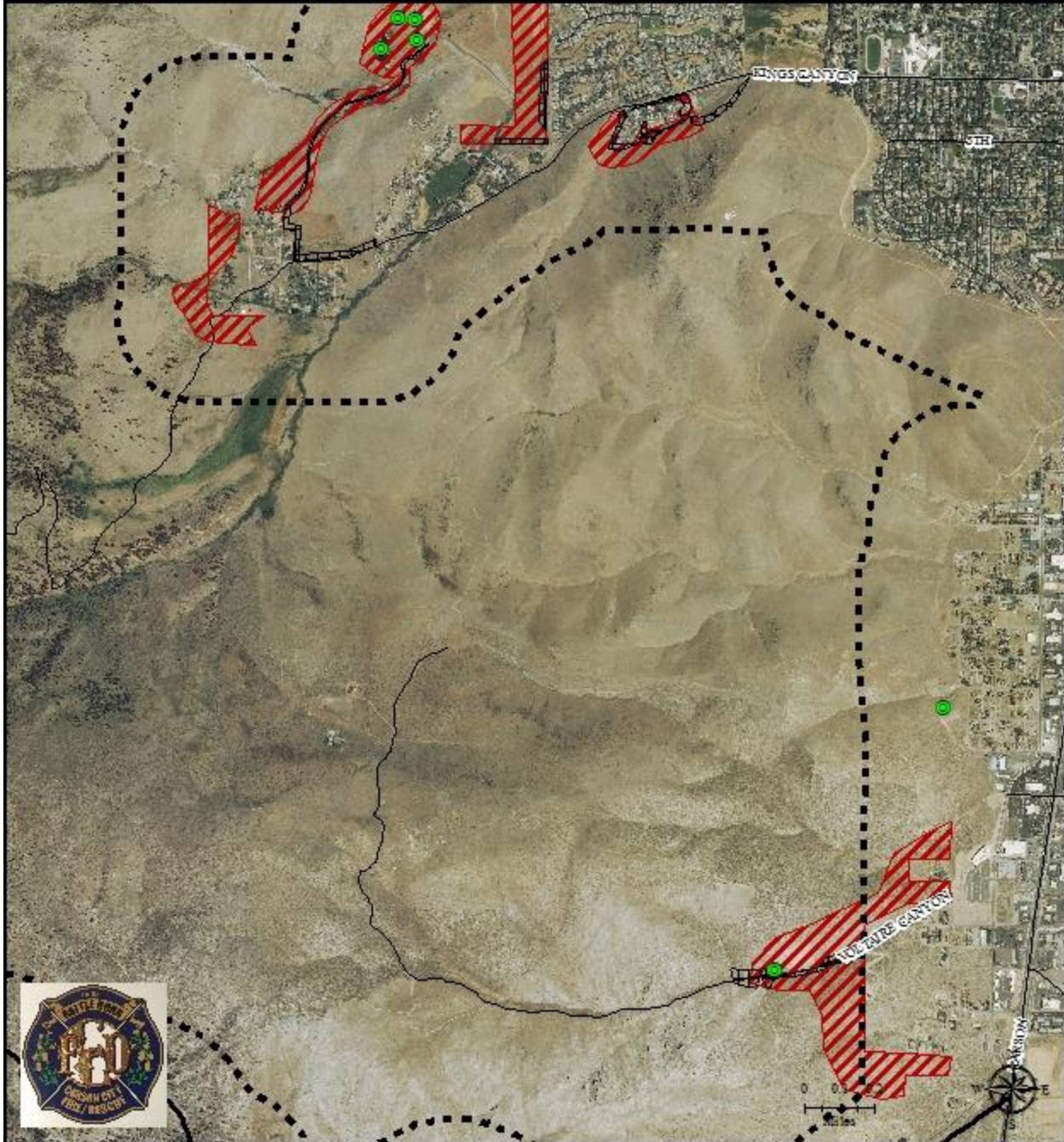


Legend

- City Boundary
- WUI Defense Zone
- Nominated Project Units
- Past Fuels Projects (2008-2015)
- Critical Infrastructure

Map 2 of 3
NW Carson City
Hazardous Fuels Reduction

Carson City Westside Hazardous Fuels Treatments SNPLMA Round 16 Nomination



Legend



City Boundary



WUI Defense Zone



Nominated Project Units



Past Fuels Projects (2008-2015)



Critical Infrastructure

Map 3 of 3
SW Carson City
Hazardous Fuels Reduction



Photo #1 – Good representation of the fuel loading along the west side of Carson City. Large decadent bitterbrush, dense sagebrush with little to no interspaces.



Photo #2 – Represents a dense continuous fuel bed that threatens the communities along the Carson Range in Carson City.

**Schedule B
HAZARDOUS FUELS REDUCTION AND FIRE PREVENTION
ESTIMATED NECESSARY EXPENSES**

Project Name:	Carson City Westside Hazardous Fuels Reduction Project		
Project #:	Priority #:	Agencies:	
Prepared by:	Rodd Rummel		
Phone:	775-283-7161	Initial	<input type="checkbox"/>
Date:	4/26/2016	Updated	<input type="checkbox"/>

1. Planning & Environmental Documentation (Surveys/ reports for cultural, natural, biological, archaeological resources, NEPA documentation, etc)	\$ 5,000.00	0%
2. FWS Consultation - Endangered Species Act (direct expenses for FWS if consultation is required)	\$ -	0%
3. Direct Federal Labor to Implement Project (Payroll) (Federal labor costs for completing the project)		0%
4. Project Equipment and/or Supplies/ Materials (include specialized equipment, supplies and materials not included in contracts/ agreements)	\$ 11,000.00	1%
5. Travel & Per Diem for Implementation		0%
6. Official Vehicle Use (Based on agencies procedures for use, fuel, equipment, and mileage charges)	\$ -	0%
7. Contracts/Grants/Agreements to complete the project	\$ 541,200.00	27%
8. Other Direct and Contracted Labor CCFD Seasonal Fire Crew, Wildland Fuels Management Officer	\$ 1,442,700.00	72%
9. Other Necessary Expenses - See Expanded Budget	\$ -	0%
TOTAL	\$ 1,999,900.00	100%

COMMENTS		

Project Title: Carson City Westside Hazardous Fuels Reduction Project		
DETAILED COST ESTIMATE		
1. Planning and Environmental Assessment Costs		
Specialist Surveys/Reports	\$	5,000.00
NEPA	\$	-
Subtotal	\$	5,000.00
2. FWS Consultation - Endangered Species Act		
Subtotal	\$	-
3. Direct Labor/Payroll to Perform the Project (use fully loaded labor rate)		
CCFD Fire Crew	\$	885,600.00
Wildland Fuels Management Officer	\$	557,100.00
Subtotal	\$	1,442,700.00
4. Project Equipment		
Item 1 (list equipment)	\$	-
Subtotal	\$	-
5. Project Materials and Supplies		
Office Supplies	\$	1,000.00
Field Supplies	\$	10,000.00
Vehicle Equipment	\$	-
Subtotal	\$	11,000.00
6. Travel (airfare, car rental, per diem, etc)		
Travel 1 (include purpose)	\$	-
Subtotal	\$	-
7. Official Vehicle Use		
Vehicle Use 1	\$	-
Subtotal	\$	-
8. Required Training for Project Implementation (list purpose)		
Training 1	\$	-
Subtotal	\$	-
9. Cost of Contracts and/or Agreements to Perform Project		
Mechanical Treatment Contractor	\$	541,200.00
CESU Cooperative Agreement:	\$	-
Detailed Cost Estimate Subtotal	\$	1,999,900.00
OTHER NECESSARY EXPENSES (APPENDIX B-11)		
10. Examples of Other Necessary Expenses (providing a breakdown of these costs is optional, however a total estimate is required.)		
ADMINISTRATION COSTS		
Budget Tracking/Accounting and Execution	\$	-
Allocation of Transferred Funds to the Region and to the Field*	\$	-
Preparation of OMB Reports Required in Association with Transferred Funds*	\$	-
Project Procurements and Contract Oversight (If any in addition to Direct Labor for the CO, COR, and PI already included on the Estimated Expense sheet)	\$	-
Preparing Transfer Requests*	\$	-

Transfer of Station cost (PCS) for Hiring Project Personnel	\$	-
Managing Allocation of Transferred Funds*	\$	-
Financial Audit Support	\$	-
Supervision and Oversight of SNPLMA-Funded Staff and/or Contractors	\$	-
Travel Administration for Required Project Travel	\$	-
Human Resource/Relations Tasks for SNPLMA-funded Personnel	\$	-
Preparing Quarterly Status Reports	\$	-
Tracking Project Activities, Expenses, IGOs, Task Orders (e.g., project database management)	\$	-
IT Services to Install Hardware/Wiring, Project-Required Software, and Maintain/Trouble Shoot Computers Used for SNPLMA Projects. Hours and costs must be tracked by project and based on percentage of time the computer(s) are used for those projects.	\$	-
A percent of Project-Related Indirect Costs for Support Based on Staff Time Spent on the Project(s), provided these expenses meet the three criteria of necessary expenses and are not covered elsewhere in the cost estimate (Examples of such indirect costs would be secretarial support, printing, copying, cost-center expenses, etc.)	\$	-
PROJECT CONSTRUCTION, CONSULTATION AND MANAGEMENT		
Duties of Project Manager/Supervisor (If not already included on the Estimated Expense Sheet)	\$	-
Construction Trailers and Utilities	\$	-
Required Project Consultations (e.g., safety and fire; cultural and historic, ADA, etc.)	\$	-
Public Scoping and/or Meetings for Environmental Review, Project Design, etc. (Does not include ribbon cutting or opening ceremonies for projects at or near completion.)	\$	-
Review of Contracted Surveys, Assessments, Designs/Drawings, Reports (If not already included on the Estimated Necessary Expense Sheet)	\$	-
Construction Site Security	\$	-
Cell Phones, Cell Service, Radios for Project Personnel Primarily in the Field	\$	-
Required Cultural, Wildlife, Biological, and other Similar Surveys (If not already included on the Estimated Necessary Expense Sheet)	\$	-
Interest Required to be Paid on Construction Contract Retention Amounts	\$	-
Other Necessary Expenses Subtotal	\$	-
GRAND TOTAL	\$	1,999,900.00
CASH/ IN-KIND CONTRIBUTIONS		
Carson Fire Dept. In-Kind	\$	30,000.00
	\$	-
Total	\$	30,000.00



CARSON CITY FIRE DEPARTMENT

"Service with Pride, Commitment, Compassion"

4/25/2016

Robert Wandel, Program Manager
Bureau of Land Management
SNPLMA Division
4701 N. Torrey Pines Dr.
Las Vegas, NV 89130

RE: Carson City Westside Hazardous Fuels Reduction

Mr. Wandel:

The Carson City Fire Department will provide a minimum of \$5,000 of work from our seasonal crew in support of the Carson City Westside Hazardous Fuels Reduction Project as explained in the SNPLMA, Round 16 Nomination.

We look forward to working with the Bureau of Land Management on this project,

Respectfully,

A handwritten signature in black ink, appearing to read 'Robert Schreihans', followed by a long horizontal line.

Robert Schreihans
Fire Chief
Carson City Fire Dept.