

**Colorado
State
FOREST
SERVICE**

Colorado State University
Fort Collins, Colorado 80523-5060
(970) 491-6303
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24 July 2014

Chris O'Brien
900 Lefthand Canyon Dr.
Boulder, CO 80302

RE: 2014 CAFA/Stevens Applications – Nugget Hill Fuels Mitigation Project

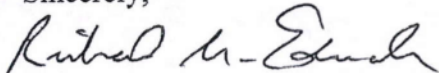
Dear Mr. O'Brien,

This letter is to inform you that you were not successful in the US Forest Service – 2014 CAFA Stevens grant application process. Due to limited funds and competition amongst other states in the Rocky Mountain Region, Colorado only had 1 project approved.

I would be happy to try and answer any questions that you have about your applications or the process. Again, funding limitations played a significant role in the number of projects that received approval.

I can be reached at (970) 491-8036 if you have questions. Thanks for your continued interest in reducing wildfire hazard and improving the health of Colorado's forests.

Sincerely,



Richard M. Edwards, CF
Assistant Staff Forester

✓ cc: Allen Owen, District Forester, CSFS – Boulder District



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24 July 2014

Allen Owen
CSFS – Boulder District
5625 Ute Hwy
Longmont, CO 80503-9130

RE: 2014 CAFA/Stevens Application – Nugget Hill Fuels Mitigation Project

Dear Allen:

Please see the enclosed letters addressed to Chris O'Brien. I will depend on your office to forward these letters to the grant applicants. I am employing this technique to ensure that you are informed about the information that is being distributed to your cooperators.

Please let me know if you have any questions or need additional information.

Thank you.

Sincerely,

A handwritten signature in cursive script, appearing to read "Richard M. Edwards".

Richard M. Edwards, CF
Assistant Staff Forester



**2014 CAFA - Community Wildfire
Protection Program Grant Application**

FOR OFFICIAL USE ONLY	
State Submitting Project:	
State Priority Number:	
Dollar Amount Requested:	
Matching Share:	

PROGRAM INFORMATION

The Wildland/Urban Interface Grant Program provides funding for projects that reduce catastrophic fire effects on Colorado communities. Eligible projects for the *Community Wildfire Protection Program* are for hazardous fuels reduction on non-federal lands adjacent to federal lands with a planned fuels reduction project pending or in progress. Specifically, projects on non-federal land must be:

Adjacent to federal land (i.e. National Forests) where hazardous fuels reduction projects are occurring or are pending that may place the communities at risk; and

*Federal treatment **must include** the application of prescribed fire to treat hazardous fuels but may include hand or mechanical treatment as well as prescribed fire. Prescribed fire includes broadcast, jackpot and pile burning.*

An objective of the *Community Wildfire Protection Program* is to minimize damage to private property in the event a prescribed fire crosses onto private property from adjacent federal property. For this reason, funding is only available for on-the-ground fuels treatment of non-federal acreage. No match required by the applicant; however, because the focus is on treating as many acres as possible with available funding, any match that serves to lower the grant cost-per-acre is highly desirable and may make the proposal more competitive. Applicants are required to work with local Forest Service personnel in determining where federal treatments are planned for the wildland/urban interface and how to best coordinate a project on non-federal lands adjacent to the treatment area.

If a project from this application process is selected for funding and, at a later date is determined unviable or unachievable for any reason, then those remaining funds from the project will be used to fund the next priority unfunded project meeting the criteria within the State. Furthermore, if a project will be completed under budget, its remaining funds will be used to increase/expand the original project or moved to another project for completion or expansion.

PLEASE NOTE: All information for the project must fit into the allotted spaces provided on the four page form. Applications that have been altered in any way will be disqualified. Attachments other than required maps and letters of support will not be reviewed.

1	Applicant Information			
	Applicant:	Lefthand Fire Protection District		
	Contact Person:	Chris O'Brien		
	Address:	900 Lefthand Canyon Dr.		
	City/Zip Code:	Boulder, CO 80302		
	Phone (Work/Cell):	720-214-0560 Work/303-817-6009 Cell		
	Email:	cobrien@lefthandfire.org		
	Fax:	720-214-0559		
2	Community At Risk Information			
	Name of Project:	Nugget Hill Fuels Mitigation Project		
	Community Name:	Nugget Hill		
	County:	Boulder	Congressional District:	2nd District
	Latitude (decimal degrees):	40*5.050 N	Longitude (decimal degrees):	105* 22.344 W

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Total Project Expense (Include leveraged funds if applicable)				
Budget Detail (Provide additional information in Block 7)	Grant Share (\$ Amount Requested)	Leveraged funds		TOTAL
		Dollars	In-Kind	
Personnel / Labor:	\$2000/ac = \$226000	0	0	\$226,000
Fringe Benefits:	0	0	0	0
Travel:	0	0	0	0
Equipment:	\$23,165	0	\$34,465	\$57,630
Supplies:	\$4,260	0	0	\$4,260
Contractual:	0	0	0	0
Construction:	0	0	0	0
Other:	0	\$9,000	0	\$9,000
Indirect Costs:	0	0	\$3,000	\$3,000
TOTAL:	\$253425	\$9,000	\$37,465	\$299890

Project Summary (check all that apply and answer related questions)			
Name of the US Forest Service (USFS) Project adjacent to this treatment and NEPA Decision Date		Gill Fuel Reduction Project 12/2009 Jamestown Fuels Reduction Project 2/2005	
When is the USFS Project scheduled for implementation (year)?		Projects are in progress	
USFS Contact Person:	Kevin Zimlinghaus	Phone:	303-541-2537
What is the duration of this project? (check one)	<input type="checkbox"/> One Year	<input checked="" type="checkbox"/> X	<input type="checkbox"/> Two Years
Hazard Fuels Reduction			
Number of acres to be treated ¹ :	Footprint 113ac/total area 127ac	Estimated cost per acre:	\$2,000
Number of communities directly affected by this project:	6: Nugget Hill, Glendale Gulch, Sunshine, Boulder Heights, Jamestown, Bar-K Ranch		
Number of citizens reached with information/education:	Approximately 2500 per 2009 census		
Planning			
Number of residences affected:	30 directly, 600 indirectly		
Project Timeline			
Provide a working timeline for project which includes milestones, timeframes, and critical steps for project completion.			
<p>We plan on commencing the Nugget Hill Fuels Reduction Project in September 2014. While there is not a significant number of beetle infested trees, there is sign of beetle infestation in the area. By starting in the fall we reduce the possibility of attracting beetles into the healthy tree population. We plan to be completed with the home ignition zones and shaded fuel break around the private properties in the spring of 2015, securing the area for fire from the north, west and south. In the fall of 2015 we plan to complete the work on the fuels reduction zone on the south aspect area which is defined by the Nugget Hill loop and Lefthand Canyon Dr. The goal is to complete the Nugget Hill Fuels Reduction Project in the spring of 2016 by burning hand stacked slash piles, and with a Firewise Community event that showcases the combination of home ignition zone, fuels reduction zone, and shaded fuel-break, as a model for other communities within the Lefthand FPD CWPP.</p>			

¹ Identify both the Treatment unit acres (footprint) and the acreage of the full treatment sequence

Community Wildfire Protection Plan (CWPP)

Community Wildfire Protection Plan (CWPP)				
Does this community have a wildfire protection plan that follows the Healthy Forest Restoration Act CWPP guidelines? (check one)	<input checked="" type="checkbox"/>	yes	<input type="checkbox"/>	no
			<input type="checkbox"/> in development	
Is this project part of the plan? (check one)	<input checked="" type="checkbox"/>	yes	<input type="checkbox"/> no	
If not covered by a CWPP is the community covered by an equivalent collaborative plan?		<input type="checkbox"/> yes	<input type="checkbox"/> no	
Is this project part of the equivalent collaborative plan? (check one)		<input type="checkbox"/> Yes	<input type="checkbox"/> no	
Where would we obtain a copy of the CWPP or equivalent plan? (internet link)	www.lefthandfire.org CWPP tab.			

Project Area Description

Provide a brief overview of the project and the project area. (Identify vegetation types, fuel types or hazard rating and the relative risk to the communities or structures in the vicinity of the project.)

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Nugget Hill is located approximately 7.5 miles west of HWY 36 along Lefthand Canyon Drive, near the townsite of Glendale and Glendale Gulch Road. Residences in the vicinity along Lefthand Creek and lower Glendale Gulch Road have been included in the assessment. Approximately 25 structures are located on Nugget Hill Road. An additional; 18 structures are located in the area along Lefthand Canyon Drive and Glendale Gulch Road. Nugget Hill Road has two access points along Lefthand Canyon Drive approximately 750 feet apart. The road loops up the steep south facing slope of Nugget Hill which forms the divide between Lefthand Canyon and James Canyon to the north. The road is 1 to 1 ½ lanes, with several restrictive switchbacks, and no established turnarounds. 4WD is recommended. The upper portion of the loop is unimproved, single lane, constructed across an open steep south facing slope, but passable in good weather. The majority of structures are located on the east loop. The area borders USFS managed lands to the north and Boulder County Open Space and BLM managed lands to the west, south, and east. Glendale Gulch Road is a steep single lane 4WD road that deadends into driveways and a 4WD trail that leads to subdivisions in Boulder Heights and Sunshine Canyon to the south. This area has been identified as a high risk area for wildland fire in Boulder County. **Topography:** Nugget Hill rises over 2,000 feet in less than linear mile to form the divide between Lefthand Canyon and James Canyon to the north. Elevation ranges from 6,500 at Glendale Gulch to over 8,500 at the summit. Nugget Hill Road is constructed across the south face of a ridge that runs up the slope of Nugget Hill from Lefthand Canyon. This ridge forms the divide between two distinct topographic chimneys that further dissect the slope of Nugget Hill. Structures are located low to mid-slope. By contrast, Glendale Gulch is a steep north facing chimney that gains 1,000 vertical feet in ¼ of a mile. The side slopes of the gulch are steep and inaccessible. Most structures are clustered at the base of the gulch but several are located midway to the saddle. **Vegetation/Fuels:** Vegetation and corresponding fuel models contrast sharply between the north aspect of Glendale Gulch and the dryer south aspect of Nugget Hill. Nugget Hill Road is characterized by isolated stands (FBFM 8) or individual ponderosa pine and juniper and a grassy understory that will support rapid uphill spread of a down slope ignition (FBFM 1 & 2). The stand density on the south aspect is currently overpopulated and should be reduced to a basal area between 40 and 60 square feet. The north aspect of the Glendale Gulch area supports much denser conifer growth, primarily ponderosa pine and spruce and riparian deciduous species varieties along Lefthand Creek. These slopes are characterized by a continuous canopy, dense ladder fuels, and thick needle understory (FBFM 8). The stand density on the north aspect is overpopulated and should be reduced to a basal area between 40-60 square feet. **Hazard and Risk Factors:** Primary risk factors Nugget Hill Road residents involve access, slope, and potential rate of spread upslope in FBFM 1 & 2. Access hazards include steep grade, restricted 2-way traffic flow, and restricted turning on two switchbacks. The combination of steep south aspect, fuels with a high rate of spread, and a roadside ignition source downhill from residences possess a significant threat. Fortunately such fuel models are easily mitigated and if maintained create a dependable defensible zone around any treated structure. The upper connecting loop of Nugget Hill Road provides a 4WD escape route if either loop is not passable. The close proximity of both entrances to Lefthand Canyon Drive may pose an ingress/egress hazard in certain incident scenarios. Timber and vegetation encroach upon primary evacuation routes on both Nugget Hill Road and Glendale Gulch Road. Residences in Glendale Gulch lack adequate defensible for steep forested terrain. Emergency water supply and emergency apparatus are located and positioned within the assessment area in the canyon. There is not an active wildland fire history in this section of Lefthand Canyon, making it more susceptible to wildland fire effects and devastation. This area has been classified as a high wildland fire risk. **Watershed:** This project will also help to improve the watershed of Lefthand and James Creek area, which are feeder watersheds for the South Platte watershed district. Per the COWRAP mapping software

provided by the CSFS, this watershed area is defined as a level 7 in terms of drinking water importance on a scale of 10, 1 is least important. By reducing the fuel load, we reduce the severity of the fire, and the post-fire effects such as hydrophobic soils and ash deposit/runoff which will have largely negative impacts on the watershed such as choking waterways and destroying water quality with ash, particulates and sediment. Likewise, post-fire water pollution is damaging to aquatic species, and it negatively impacts the watershed.

Scope of Work

Provide a brief scope of work which clearly describes how grant funds will be spent. (This should be more specific than the project description. Include how many treatments will be applied to the area and what kind will be used (i.e. removing vegetation (bull hogging, hand treatment, etc), burning slash, piling slash, chipping, reseeding, etc and the acreage for each of the treatments in the treatment sequence. Include any additional information regarding budget details in this section. Also explain how this project aligns with the active or proposed Forest Service Project named above.)

The goal of this project is to use good forestry management practices to remove hazardous fuel loads in the Nugget Hill and Glendale Gulch communities to reduce the risk of catastrophic wildland fire and minimize the threat of loss to homes and private property in that area. We propose to do so by identifying key zones and treating accordingly. We have identified 5 zones: home ignition zone, fuels reduction zone, shaded fuel break zone, western boundary zone, and the defensible space zone. The funds will be used as an incentive to the property owners to promote mitigation on their properties and to pay for the cost of the labor, equipment maintenance and operation for the project. The scope of work proposed includes identifying and providing defensible space in the home ignition zone through the removal of hazardous fuels and education of the homeowners to Firewise landscaping and maintenance procedures. These fuels will be completely removed by saw teams and chipped. We are exploring opportunities with alternative fuels manufacturers for removal of chipped material for processing for animal bedding and fuel manufacturing. We are also working with Boulder County to identify fuels that could be used in the biomass program. All bole wood up to 12" diameter for all zones will be removed and chipped. Boles up to 12" can be chipped into roll-offs to be transported to the biomass collection site where they could be used and a fuel source for the County jail. Bole wood greater than 12" diameter from all zones will be extracted and donated to a local middle school fundraising program that uses proceeds from fire wood sales to provide scholarships to students in need. The combined home ignition zones of the project total approximately 15 acres.

As we extend beyond the home ignition zone on the south aspect, the project focuses on hand removal and machine skidding of beetle trees, unhealthy/overpopulated Ponderosa Pine, removal of Doug Fir, removal of Juniper, Cedar, Mountain Mahogany and Sumac to reduce the stand to a more natural state. Invasive shrub species will be identified and removed. These treatments will include chipping either broadcast or removal depending on fine fuel ground cover, some lop and scatter for regenerative growth propagation, and hand piling slash for future burning for fuels removal in spring 2015. Brush will be flush cut and removed, either stacked with slash for burning or broadcast chipped. Some wildlife trees in the fuels reduction zone will be identified and left standing to encourage wildlife habitat. Fuels reduction projects have been shown to encourage wildlife population of a treated area. The fuels reduction zone comprises approximately 80 acres.

Where the project meets the USFS boundary on the north side, we will be constructing a shaded fuel break with hand piles built for slash burning in spring 2015, which can be performed cooperatively with the USFS working in that zone. This fuel break will complement both the USFS James Creek Watershed project to the northwest approximately 2 miles away in the north aspect drainage behind the ridge that defines Nugget Hill and the USFS Nugget Hill Ridgeline Fuels Reduction project adjacent to this area which forms the north boundary. The shaded fuel break zone is approximately 20 acres.

The western boundary of the project is defined by a chimney-like drainage that is overpopulated with Ponderosa Pine and mixed conifers. This area will be hand treated with saw teams using good forestry management techniques. Identified trees will be removed. Much of this drainage runs parallel to the western access road and is overgrown, impinging the road. Slash will be either broadcast chipped where accessible or hand piled for slash burning in spring 2015. The western boundary is approximately 6 acres. Given the stand densities on the north aspect and the high density and complex nature of the interface in the lower section of Glendale Gulch, the focus will be on the home ignition zone and defensible space around the homes. The riparian area will support fire but of a lower intensity than the south aspect/Nugget Hill loop. Here the treatment will consist primarily of saw teams removing identified Douglas Fir, Spruce, and any beetle infested trees or trees that are an immediate hazard to a residence. Crews will concentrate on the creation of quality defensible space around the residences and follow good forestry management

techniques to reduce the fuels overload in those areas. Fuels removed will be either broadcast chipped, chipped and removed, or the slash will be hand piled for slash burning in spring 2015. The defensible space zone comprises approximately 11 acres. The total size of the project is 127 acres, with about 13 acres in 5 different polygons on the south aspect that do not require treatment. The treatment specific footprint is approximately 113 acres.

Interagency Collaboration

Specify the private, local, tribal, county, state, federal and/or non-governmental (501c3) organizations that will contribute to or participate in the completion of this project. Describe briefly the contributions each partner will make (i.e. – donating time/equipment, funding, etc.).

This fuels reduction project is a collaborative effort between the USFS, CSFS, Boulder County, Lefthand FPD, NFPA/Firewise and the Nugget Hill/Glendale Gulch communities. The project utilizes expertise from the USFS and CSFS along with Lefthand FPD for fuels identification/marketing. The project will be funded through the Stevens Grant from the USFS and administered by Lefthand FPD and CSFS. Lefthand FPD and the Nugget Hill/Glendale Gulch community will provide matching funds through cash donation by the homeowners of \$9000, and soft match through equipment time donation from Lefthand FPD and in personnel time for administering the grant and marking fuels for removal estimated value \$3,000 at a rate of \$50/h for 60h. We expect labor costs to be \$2000 per acre for the crew, totaling \$226,000. We do not have any fringe benefit or travel costs as the project is within 7 miles of our primary station. We propose a 50/50 cost share with our chipper, \$11,300 paying for chipper time from the grant and LHFPD matching \$11,300 at a rate of \$100/h for machine time, 2h per acre. Likewise LHFPD proposes a 50/50 cost share for the saw time, determined at a rate of \$35/saw/day, with the grant funding \$11,865, and LHFPD covering \$11,865. LHFPD will absorb the cost of the mitigation vehicle for a total of \$11,300, \$50/d, reducing the funded equipment total to \$23,165. We expect the supplies for the project including saw chain, files, wedges, other related felling equipment and fuel to cost \$4,260 and will be funded by the grant. The total contribution which includes hard and in-kind match from LHFPD and the Nugget Hill/Glendale communities will be \$45,465; the grant funding will be \$253,425, which is approximately a 20% match. We anticipate 226 days of work.

Maintenance / Sustainability

Clearly demonstrate how this project will remain effective over time by clearly outlining commitments, monitoring measures, future funding, environmental factors and outreach.

We plan to engage residents through outreach and continuing education concerning wildfire hazards and risks, structure ignitability factors, defensible space, landscape mitigation, pine beetle options, emergency planning, evacuation, and involvement with the fire department. The continued viability of this project will be addressed through the Firewise Community designation and program.

The LHFPD CWPP has identified the Nugget Hill and Glendale Gulch communities as priority communities for mitigation. This CWPP has been vetted and approved by our partners, the USFS, CSFS, and Boulder County. The residents of the communities approached LHFPD during the spring of 2013 with interest in having mitigation performed. By partnering with CSFS and Boulder County we will work on securing Firewise Community recognition. This will allow us to continuously monitor and work with the communities, helping them identify and mitigate risks annually through the recertification process required by Firewise. The Firewise program identifies issues beyond landscape mitigation and includes guidelines for reducing the threat of home ignition through the use of recommended building materials and proper maintenance of the home ignition zone. By participating in annual renewals, LHFPD, Boulder County and CSFS have the opportunity to make presentations to continue the program of wildland fire safety for homeowners.

Through improving the roadside vegetation component, the roads will be more accessible and more viable as appropriate escape routes in the event of wildland fire in the Nugget Hill area. Given that the roads are narrow, removing roadside vegetative growth effectively opens the sight lines making the roads appear wider. The Nugget Hill community maintains the eastern half of the road loop, currently there is no maintenance of the western side of the Nugget loop past the house on the northwest corner.

This project will also tie in with a USFS planned ridgeline fuel break project for the Nugget Hill area, takes advantage of fuels reduction efforts from the USFS in the James Creek Watershed. We will also be partnering with Boulder County on their inholdings in the project area. This area is centralized among the communities of Boulder Heights, Sunshine, Gold Hill, Jamestown and Bar-K Ranch subdivision. In protecting this community, it will reduce the fire impact on the surrounding communities.

We plan to continue to partner with the USFS, CSFS, Boulder County and the landowners to secure private and grant funding for re-entry in 5 year increments from the completion of the project to ensure that the mitigation and fuel reduction efforts remain viable. Firewise designation for communities tends to yield preference in grant funding.



United States
Department of
Agriculture

Forest
Service

Boulder
Ranger District

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File Code: 5150

Date: March 31, 2014

Forest Management Division
Colorado State Forest Service
CSU Campus Delivery 5060
Fort Collins, CO 80523-5060

To Whom It May Concern,

I am writing this letter to support the Lefthand Fire District's Steven's Grant application to treat the fuels within the Nugget Hill Fuels Mitigation Project on private lands south of Jamestown. Over the last decade, the South Zone (Clear Creek and Boulder Ranger Districts) of the Arapaho-Roosevelt National Forests and Pawnee National Grassland have actively pursued both mechanical and prescribed fire fuel treatments on National Forest System lands adjacent to communities within the boundaries of the two districts.


The purpose of these treatments is to reduce risks of large-scale wildfire, reduce risks to human life and property, and create sustainable forest conditions. We have completed and plan to continue to treat the fuels within both the Jamestown Fuel Reduction Project (decision signed in February, 2005), and the Gill Fuel Reduction Project (decision signed in December, 2009).

The Forest Service has completed approximately two-thirds of the units within the two projects that surround the proposed mitigation area by Lefthand Fire District. We have treated the vegetation and reduced the fuels utilizing both mechanical and manual methods. The Forest Service is currently treating and plans to continue treating units identified in the two decisions for the next several years. Fuel treatment options for this project may include the removal of biomass material, piling and burning, or chipping based on funding levels and priorities, smoke concerns, or other constraints.

This past fall, the area surrounding the proposed project area was heavily impacted by a flood event. The flood destroyed the roads and infrastructure in the majority of the Lefthand Fire District's jurisdiction. Anticipated response time to wildfire incidents within their jurisdiction will be hampered to existing road conditions. Through the completion of the proposed treatment by the Lefthand Fire District, fire risk would be reduced in an area susceptible to wildfire ignition.

I strongly support efforts for the Nugget Hill Mitigation Project south of Jamestown to address hazardous fuel accumulations and wildfire risk through the Front Range Fuel Treatment Partnership Steven's Grant. Completion of hazardous fuel reduction on private lands will complement both completed and planned work on adjacent National Forest System lands, leading to increased community protection and reduced fire hazard across the landscape.

Sincerely,


SYLVIA G. CLARK
District Ranger



