

CSFS 2014 Western Wildland Urban Interface State Fire Assistance Grant
Colorado State Forest Service: Boulder District

General Project Information

The intended project areas will be located on private lands throughout Boulder, Gilpin, and Larimer counties, or within the CSFS Boulder District. Approximately 400 acres of hazardous fuels reduction will be conducted to protect structures and property from wildfire, as well as to improve upon forest health conditions.

Budget Items

Any grant money received for this project will be matched with private landowner funds along with in-kind labor match. Grant funds will be used to reimburse CSFS approved completed acreage at a 50/50 cost-share ratio, not to exceed \$750.00 per an acre. CSFS Boulder District will charge \$48/hour for project layout, which will be an expense the landowner can use to show expenditure toward the grant.

Project Description

The CSFS Boulder District ranges in elevation from approximately 5,000 feet all the way up to tree line near the continental divide. Forest composition is generally ponderosa pine at lower elevations, which transitions into lodgepole pine at higher elevations, and finally transitioning into spruce-fir before tree line at the highest elevations. North facing slopes commonly have a strong douglas fir component. Drainages and low laying areas where moisture is more prevalent are commonly where groves of aspen can be found.

Throughout the last century, fire as a healthy ecosystem disturbance has been suppressed and, therefore, creating forested stand densities that are higher than what these ecosystems can support. Fuel loadings have increased, as well as the likelihood of catastrophic stand replacing fires. In the absence of healthy fires, other insect and disease agents have been able to gain strongholds in several areas throughout the district. These agents range from Mountain Pine Beetle, Spruce Beetle, Dwarf Mistletoe, etc.

The CSFS Boulder District also has a growing Wildland Urban Interface (WUI). These are areas where homes have been built in close proximity to forested lands, and are at high risk from wildfire. WUI homes exist throughout the entire district, ranging from one home per a square mile, up to several per a quarter square mile. Many homes within the WUI have values that exceed \$500,000.00.

Planning Linkages

Program funding will be used to link homeowner's associations (LOA) and fire protection districts (FPD) in efforts to reduce the hazardous fuel loadings in their jurisdictional areas. FPD's and LOA's will follow existing Community Wildfire Protection Plans (CWPP) in their efforts to prioritize needs for mitigation and forest health restoration. Another useful tool to help aid these stakeholder groups in identifying high risk areas will be the Colorado Wildfire Risk Assessment Portal (CO-WRAP).

Proposed Project Activities

Project areas will be predetermined by CSFS Boulder District Foresters prior to awarding funding to any given entity. Landowners will first contact CSFS Boulder District to convey interest in conducting hazardous fuels reduction thinning. Projects will either be defensible space thinning (individual or linking several), or shaded fuel break thinning. CSFS Boulder District will utilize CO WRAP to determine wildfire hazard ratings for each parcel of land. CSFS Boulder District will visit with each prospective landowner on site to determine if their intended project area is worthy of thinning, as well as the landowners intent to follow CSFS guidelines of approvable stewardship per CSFS FIRE-2012. If criteria have been met, CSFS Boulder District will continue by awarding funding and marking the project area as necessary. LOA's will follow the same procedures as individual landowners, although CSFS Boulder District will need to have direct communication with interested landowners the LOA will be supporting for project work.

Project work will consist of removing suppressed, unhealthy trees, along with any insect and disease trees. Trees with poor health will also be targeted for removal in an effort to achieve adequate crown spacing in the residual stand. Additional trees will be targeted for removal that are of the co-dominant/dominant classes to achieve desired crown spacing.

Pure lodgepole pine stands will be thinned to reduce the densities by no more than 30%, so that windthrown trees may be reduced. This will be considered a "phase one" thinning, as an additional thinning (phase two) to achieve desired crown spacing will be necessary approximately five years down the line.

Where it is possible, smaller diameter trees will be left so that diversity may exist within the stand. Obtaining diversity in the species present on site will also be of a higher objective. All trees within the residual stand will be limbed up to a minimum of six feet, or up to 25% (whichever is of the lesser) in an effort to reduce fuel ladders to the forest canopy.

Landscape Attributes

Proposed project areas that aim to treat larger acreages will be prioritized for funding. Also, proposed projects that benefit several landowners (i.e. community shaded fuel breaks) will be prioritized highly. Landscape level treatments are the best way to reducing the hazards associated with wildfire, and therefore, projects that have the greatest impact to improving the larger landscape will be given priority.

Project Cooperator/Interagency Collaboration

Projects will incorporate collaboration primarily with CSFS Boulder District and private landowners. Collaboration for projects may also include FPD's, LOA's, non-for-profit groups, etc. CSFS Boulder may distribute a list of local contractors, but in no way will promote one over the other. Therefore, collaboration between stakeholder groups and contractors will be done without the intervention of CSFS Boulder District.

Project Timeline

Project planning and funding allocations will begin as soon as program funding becomes available. Proposed project funding will be awarded on a first-come first-serve basis, as CSFS Boulder District deems appropriate. Funding will continue to be allocated until depleted. All project work will be targeted for completion no later than Fall, 2015.

Project Sustainability

All funded project work will be required to be maintained for a minimum of ten years following completion. CSFS may determine, if necessary, the need for a second entry at a sooner time to expand upon intended hazardous fuels reduction (i.e. lodgepole pine forests).



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MEMORANDUM

Date: 16 May 2014
To: District Foresters; Area Foresters
From: Rich Edwards; Assistant Staff Forester
Subject: 2015 WUI SFA Competitive Grant Process

We are currently preparing for the 2015 Western Wildland Urban Interface (WUI) State Fire Assistance (SFA) round of competitive grants. As you all know, last year we introduced a new concept paper format. This new methodology is designed to cut down on both District and State Office Forest Management Division (FMD) work load, while generating highly competitive, effective, focused, and successful grant proposals with your cooperators.

Rather than generating 60-100 individual applications; sorting, bundling, and prioritizing; we would like to ask initially for concise, specific, and well defined concept papers from district's interested in applying for funds (both pass through and non-pass through funding). I have attached some format guidelines for the concept papers along with this memo that will help you put together these documents. Please address each category in the concept paper format answering the questions to the best of your ability in a succinct manner (i.e. more is not necessarily better). Each prospective project should be submitted on a separate concept paper.

Note also that concept paper categories loosely follow the most current WUI/SFA grant application format. For your reference, I will include an electronic copy of the 2014 WUI/SFA grant application. The general idea is that concept papers, if selected as a viable project, could be used in the final application as standard framework for a fully developed grant application.

We will need to have these concept papers back to the State Office by close of business on Monday 16 June 2014. Once we receive all of the concept papers, FMD staff will review the papers, and rank each one. If chosen, FMD will notify the district for assistance in filling out a fully detailed SFA grant application. Successful applications will then be prioritized and reviewed by the CSFS Leadership Team for the final application submission package to the Western Forestry Leadership Coalition.

Thank you.

rme

cc: File
Joe Duda
Katherine Schaubert
Mike Lester
Pete Blume
Rich Homann
Scott Woods

**2015 Colorado State Forest Service District
Wildland Urban Interface (WUI) State Fire Assistance (SFA)
Competitive Grant Concept Papers Format Guidelines
(Who, What, Where, When, & Why)**

16 May 2014

General Project Information:

This should include a project and/or community name, which county(ies) the project lies in, and a general physical latitude and longitude.

Budget Items:

What are you going to use the money for and how will it be matched? Should include rough budget numbers including grant \$ required; soft and/or hard \$ that could be contributed.

The Project Description:

What problem are you solving and what issue(s) are you addressing (community, resource, watersheds, etc.)?

Planning Linkages:

What is the relationship of the project to the State Forest Action Plan (SFAP), Community Wildfire Protection Plan(s) (CWPP(s)), and other overall strategies and plans (including the amount of collaboration)?

Proposed Project Activities:

What is the proposed scope of work? How will you get the project done (how, what, and why)? This should include an estimate on number of acres treated and types of treatments.

Landscape Attributes:

What does the landscape look like? Describe the landscape that the project covers. Also, what is the current condition of the landscape and how does it tie into the scope of the project?

Project Cooperator/Interagency Collaboration:

Who are the partners that are going to make this project work and what will each of them bring to the table? Are there multiple partners? Is it going to connect/enhance prior and future planned projects? Are there cross-boundary supporters?

Project Timeline:

Describe the time related to project activities. How and when will the project be completed?

Project Sustainability:

What difference will the project make and how will you maintain it successfully (depending on fuel type)? Sustainability should be related to the SFAP, CWPPs, and vegetative type. How is project going to maintain viability over time?

rme

**2015 Western Wildland Urban Interface State Fire Assistance Grant
Colorado State Forest Service: Boulder District**

General Project Information

The intended project areas will be located on private properties throughout the Boulder District within Boulder and Gilpin Counties. Approximately 200 acres of hazardous fuels reduction will be conducted to protect properties and watersheds from wildfire, as well as to improve upon forest health conditions. The approximate coordinates of this project are 40.2120° N and 105.2891° W.

Budget Items

Grant money received for this project will be matched with private landowner funds along with in-kind labor. Grant funds will be used to reimburse CSFS approved acreage at a 50/50 cost-share ratio, not to exceed \$750.00 per an acre. CSFS Boulder District will charge \$50/hour for project layout, which will be an expense the landowner can use to show expenditure toward the grant.

Project Description

The CSFS Boulder District ranges in elevation from approximately 5,000 feet all the way up to tree line near the continental divide. Forest composition is generally ponderosa pine at lower elevations, which transitions into lodgepole pine at higher elevations, and finally transitioning into spruce-fir before tree line at the highest elevations. Both the ponderosa pine and lodgepole pine forest types have mixed conifer components. Douglas-fir is a major component of these forests and adds to the diversity in both of these forest types but also has helped increase ladder fuels and crown closure. Stand densities in all of these forest types have increased since fire has been excluded from their ecosystems.

The CSFS Boulder District also has a growing Wildland Urban Interface (WUI). WUI homes exist throughout the entire district, ranging from less than one home per a square mile, up to one per acre. Many homes within the WUI have values that exceed \$500,000.00.

These forests include critical watersheds that are home to reservoirs that provide drinking water and irrigation to many Front Range communities and farmers.

It is the goal of this project to implement projects that improve forest health and watershed function and that decrease fire danger in these WUI communities.

Planning Linkages

All Boulder and Gilpin County communities are covered by either their county CWPP or their local community or fire protection district CWPP. Proposed project areas will all follow recommendations in any given CWPP.

All proposed project areas have been identified in the State Forest Action Plan as either medium-high (Conserve and Protect) to high (Enhance). The majority of these communities and forests have been rated as medium/high on CO-WRAP

It is goal of this project to sustain and enhance the ongoing cooperation amongst the many partners engaged in fuels reduction and fire safety in these communities. While grant money will go directly to private property owners, the advertising, education, and outreach associated with this project will use the existing relationships that the CSFS Boulder District has with local communities/HOA's, Boulder County Land Use, Boulder and Gilpin County Extension offices, Fire Protection Districts, and volunteer groups. All of these partners are committed to cooperation and this funding will help attain common goals.

Proposed Project Activities

Project areas will be determined by CSFS Boulder District foresters prior to awarding funding to any given entity. Projects will either be defensible space thinning (individual or linking several), or shaded fuel break thinning. CSFS Boulder District will visit with each prospective landowner on site to determine if their intended project area is worthy of thinning, as well as the landowners intent to follow CSFS guidelines per CSFS FIRE-2012. If criteria have been met, CSFS Boulder District will continue by awarding funding and marking the project area as necessary.

Landscape Attributes

Proposed project areas that aim to treat larger acreages will be prioritized for funding. Also, proposed projects that benefit several landowners (i.e. community shaded fuel breaks) will be prioritized. Landscape level treatments are the best way to reducing the hazards associated with wildfire, and therefore, projects that have the greatest impact to improving the larger landscape will be given priority. The goal will be to treat at least 200 acres through these practices.

Project Cooperator/Interagency Collaboration

Projects will incorporate collaboration primarily with CSFS Boulder District and private landowners. Collaboration for projects may also include county and municipal government staff, FPD's, HOA's, non-for-profit groups, etc.

Project Timeline

Project planning and funding allocations will begin as soon as program funding becomes available. Proposed project funding will be awarded on a first-come first-serve basis, as CSFS Boulder District deems appropriate. Funding will continue to be allocated until depleted. All project work will be targeted for completion no later than fall of 2016.

Project Sustainability

This project will build upon past projects with and without similar funding. The Boulder District and the associated cooperators have been and are committed to keeping this process moving forward and

improving safety and ecosystem function. All funded project work will be required to be maintained for a minimum of ten years following completion. CSFS may determine, if necessary, the need for a second entry at a sooner time to expand upon intended hazardous fuels reduction (i.e. lodgepole pine forests).

2015 CSFS WUI SFA Grant Concept Paper

City of Longmont – Button Rock Dam Watershed Area

General Project Information:

Button Rock Dam Watershed area is located in Boulder County along the North Saint Vrain Creek. The Preserve encompassed two reservoirs, 2.5 miles of stream and approximately 2500 acres of forested land, owned by the City of Longmont. Lon/ Lat 40 12 70/105 22 26

Budget Items:

The funds will be used to reduce the timber canopy, improve forest health and reduce catastrophic wildfire potential in unmitigated and previously mitigated forest areas. Project costs are anticipated at \$60,000. The grant request would be \$40,000 with the City of Longmont providing matching funds of \$20,000 from its' Water Utility budget.

Project Description:

This project will reduce timber fuel loads within 40 acres of forested area adjacent to the reservoir and creek.

Planning Linkages:

The proposed thinning area is listed as a high value forest within the SFAP. This area is also delineated within the Button Rock Forest Stewardship Plan, developed in 2003(CWPP), to improve forest health within the watershed. The Button Rock Preserve area is also identified within the regional Boulder County wildfire assessment as a high priority location for forest improvement.

Proposed Project Activities:

The City of Longmont will hire contractors to perform the thinning activities. Small ladder trees, poor quality and diseased trees will be removed. Dense pockets of trees will be thinned. The timber will be cut, with limbs lopped and scattered or chipped. Wood products will be removed from the site after drying or stacked in open areas for decay.

Landscape Attributes:

The project areas are portions of the shoreline of the reservoirs and stream which have accessible terrain, leading to rocky outcrops and steep unmanageable slopes. The area to be thinned is overgrown with ladder fuel timber.

Project Cooperator/Interagency Collaboration:

This project will compliment the proposed USFS St. Vrain Fuels Project on adjacent national forest and coincides with fuels mitigation on adjacent Boulder County Hall Ranch and Riverside Ranch Open Space areas. This project will address mitigation concerns within the landscape wide Saint Vrain Wildfire/Watershed Stakeholders Assessment process, and will meet standards of CSFS CWP2.

Project Timeline:

- March 2016: Identify project area boundary and trees for removal.
- June - December 2016: Complete thinning mitigation efforts on 40 acre area.

Project Sustainability:

This project will provide a transition zone between the reservoir, private lands, USFS lands and Boulder County Open Space. This mitigation will help to slow down a wildland fire creeping towards the reservoir and creek. It will also create a healthier forest environment directly adjacent to the reservoir.

General Project Information:

All work on this project will be performed by BMFPD's Emergency Response/Mitigation Team. All funds will be used to mitigate emergency evacuation routes and isolate unmitigated areas in BMFPD's district. If BMFPD receives the funding from this grant it will be used to offset the costs of mitigating acres to the property owners, thus allowing BMFPD to increase the total amount of acres mitigated in the district. All of the proposed mitigation work will be performed on private land. Average acreage sizes in Pine Brook Hills and Boulder Heights is approximately 2 acres. The average acreage size in Carriage Hills is 35 acres. The proposed project will help protect Pine Brook, Left Hand Canyon, and Olde Stage Water Districts, which serve approximately 638 homes and over 1200 customers.

Budget Items:

Boulder Mountain Fire's mitigation rates are charged on an hourly basis. BMFPD's 2014 rates are: \$63 per hour per sawyer, \$95 per hour for a brush chipper/haul truck, and \$35 per hour for each chip crew member, and \$35 per hour for each slash pile burning crew member. BMFPD supplement's the mitigation program from the general operations budget annually at a rate of \$60,000 per year, to decrease the hourly rates and increase the amount of mitigated areas in the district every year. The BMFPD mitigation coordinator will obtain the matching funds from property owners and home owner associations, set up the mitigation project areas, mark the project boundaries, mark the trees for removal, provide a written estimate for property owners, invoice the property owners and grant, and collect and deposit the invoiced funds. The mitigation coordinators contribution is paid for by BMFPD and provided at no cost to the property owners and grant funds.

The Project Description:

BMFPD completed many informal scientific analyses of our district prior to contracting a nationally-known fire management consultant to perform a rigorous scientific study and publish the results (August 2004) in a report titled "Wildland Urban Interface (WUI) Community Vulnerability Analysis and Landscape Fuels Modifications". The methodology for this analysis used a Wildfire Hazard Rating (WHR) to rank areas of BMFPD's district based on the results of modeled environmental factors such as fuels and topography, along with the field experience and knowledge of wildland fire experts. The WHR survey and fuel model ground truthing were accomplished by field surveyors with WUI experience. Based on these rankings key egress and ingress routes for resident evacuation and fire equipment emergency access were identified and a list of 12 recommendations for fuel treatments were identified. In April of 2006 BMFPD completed a CWPP which expanded on the results of the 2004 report.

Planning Linkages:

Participants include the BMFPD, CSFS, private landowners, Home Owners Associations (HOAs), and the Boulder County Land Use Department. The CSFS and BMFPD will hold public meetings with the affected landowners to provide information on project plans and educate landowners on the rationale behind

specific details of the project. The majority of the project setup with landowner coordination will be done by BMFPD's full time Emergency Response/Mitigation Coordinator. The BMFPD crew will be paid through landowner/HOA funds and reimbursed through a CSFS sub award. BMFPD subsidizes one third of the Mitigation Service's annual budget through money collected by property taxes. BMFPD's Emergency Response/Mitigation Services has worked, and will work with, with mitigation crews from neighboring districts and private contractors on projects of opportunity that fall along district boundary lines with the grant funds provided.

Proposed Project Activities:

The requested funds for this project will be sufficient to create 51.4 or more acres of shaded fuel breaks with an approximate width of 300 feet. The priority mitigation acreage outlined in this grant will cover the highest fuels treatment risks for the communities mentioned. Fuels treatment will need to occur within the communities for multiple years to mitigate all potential fire hazards. The most cost effective techniques will be utilized and includes lopping and scattering of slash and contouring the logs greater than 6 inch diameter when outside the range of winches and BMFPD's trailer mounted chipper. Where feasible the wood will be cut into fire wood for utilization by the property owners in the winter. The firewood also be made available to community residents for pick up, thus removing the fuel from the forest at no cost and reusing the fuel to heat homes.

Landscape Attributes:

The mitigation projects listed above encompasses three water drainages; The Left Hand Creek, Four Mile Canyon Creek, and Two Mile Canyon Creek. These drainages supply water to The Left Hand Water District, Pine Brook Hills Water District, City of Boulder, as well as Boulder County in general. The landscape along BMFPD district roads is heavily wooded with evergreens and is in the wildland urban interface. The majority of defensible spaces in the district have been mitigated successfully but this has left areas along property lines and outside the Zone 1 Defensible Space areas mostly untreated and require extensive mitigation to reduce the threat of uncontrollable fire along evacuation routes and driveways. BMFPD's plan is to utilize the funds provided by this grant to take advantage of areas already cleared for defensible space and connect them together, to create continuous mitigated acreage along major evacuation routes. By tying together, existing mitigated acreage the effective area of the fuel breaks installed is increased substantially. The central location of the fuel breaks proposed in this year's application will help connect past mitigation efforts and make the existing and proposed fuel breaks more continuous and comprehensive across the district and beyond district boundaries.

Project Cooperator/Interagency Collaboration:

Participants include the BMFPD, CSFS, private landowners, Home Owners Associations (HOAs), and the Boulder County Land Use Department. BMFPD will hold public meetings with the affected landowners to provide information on project plans and educate landowners on the rationale behind specific details of the project. The majority of the project setup with landowner coordination will be done by BMFPD's full time Emergency Response/Mitigation Coordinator. BMFPD's Emergency Response/Mitigation Services

has worked with mitigation crews from neighboring districts and private contractors on projects of opportunity that fall along district boundary lines.

Project Timeline:

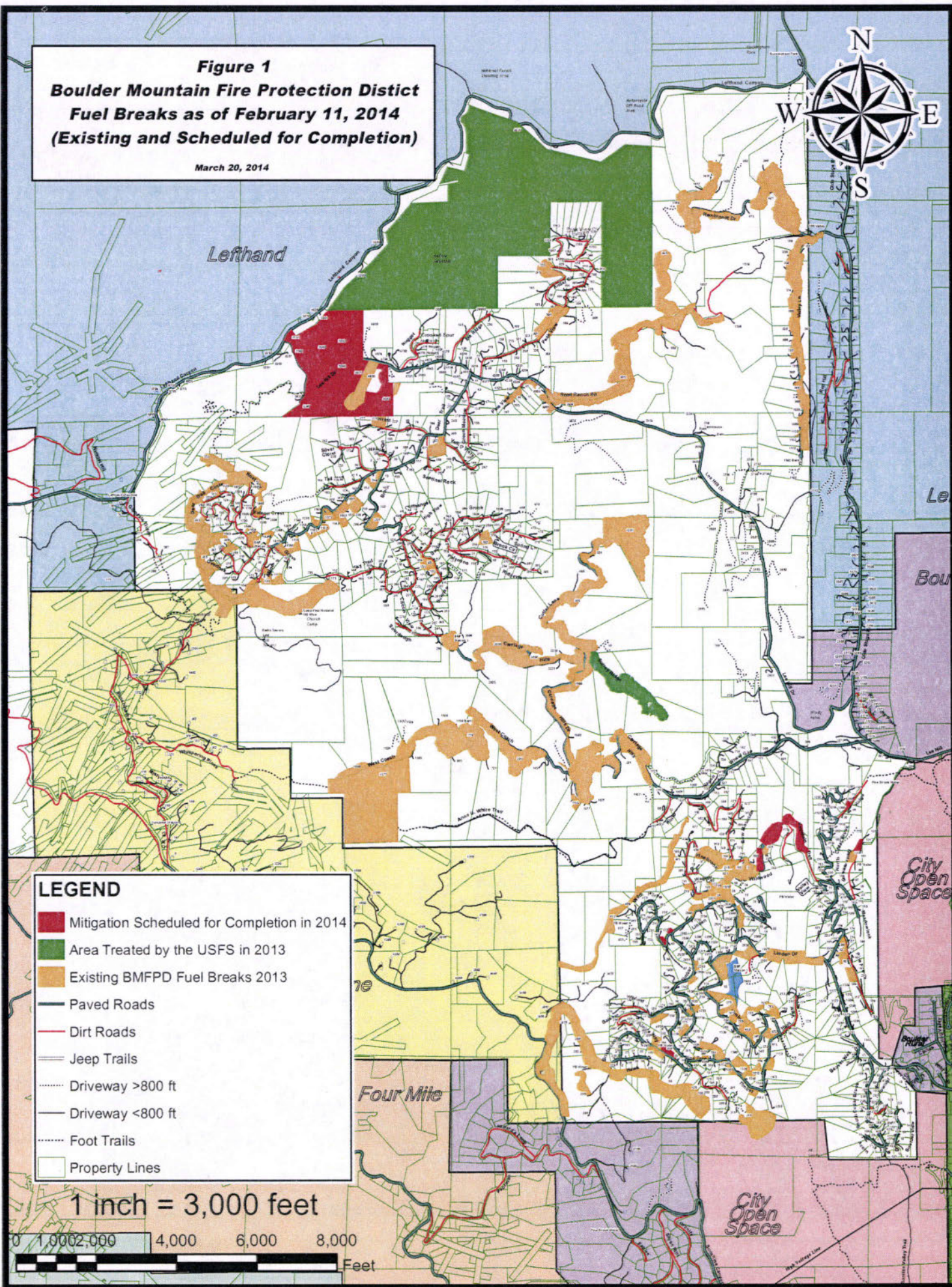
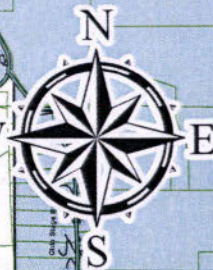
Upon grant award, the BMFPD Mitigation Coordinator will work with a CSFS representative to organize community meetings, mark project areas, and finalize permissions. Tree cutting will commence in the fall of 2015 following the finalization of project setup, matching fund collection, contract negotiation, and obtaining of landowner permissions. Project cutting will continue for two years from the date of award. BMFPD will assign 4 seasonal staff to complete work on the proposed mitigation projects for two 6 month periods during the spring summer and fall of 2015 and 2016. BMFPD will take advantage of breaks in the winter weather and dedicate 2 of it's full time employees to mitigate fuel breaks when possible in the off winter months.

Project Sustainability:

BMFPD has a mitigation crew of 8 with 2 full time, 3 seasonal and 4 part time employees as well as a full time mitigation coordinator that are dedicated to maintaining the fuel breaks in the community and monitoring for insects and disease. BMFPD relies on funding from the local home owners associations grant funding, tax revenue, and individual resident payments. BMFPD Mitigation Services has successfully maintained hundreds of acres of fuel breaks installed over the the last 15 years.

Figure 1
Boulder Mountain Fire Protection District
Fuel Breaks as of February 11, 2014
(Existing and Scheduled for Completion)

March 20, 2014



LEGEND

- Mitigation Scheduled for Completion in 2014
- Area Treated by the USFS in 2013
- Existing BMFPD Fuel Breaks 2013
- Paved Roads
- Dirt Roads
- Jeep Trails
- Driveway >800 ft
- Driveway <800 ft
- Foot Trails
- Property Lines

1 inch = 3,000 feet

0 1,000 2,000 4,000 6,000 8,000 Feet

City of Boulder OSMP- Shanahan 8

General Project Information

The Shanahan 8 project area is located on City of Boulder Open Space and Mountain Parks (OSMP) lands approximately one mile west of the City of Boulder and Lehigh Street. The project covers a total of 47 acres in low elevation ponderosa pine forest in close proximity to the Shanahan Ridge and Cragmoor neighborhoods. The treatment is also half a mile southwest of the National Center for Atmospheric Research (NCAR). Lat/Long= 105.2824, 39.9666

Budget Items

Any grant money received for this project will be matched with OSMP funds earmarked for seasonal forest crew staffing. OSMP does all of its forest management work with "in-house" crews that are funded with OSMP operating budget dollars. These crews are managed by OSMP permanent staff and utilize city equipment that has been purchased specifically for forest management projects. Grant funds will be used to partially fund crew staffing for the duration of this project. Matching funds will come from a combination of hard match funds, in-kind match from work done related to project layout and oversight, and OSMP equipment usage. Over the past five years OSMP's average treatment cost is approximately \$1000/acre. The estimated grant portion for the Shanahan 8 project would be \$23,500 at a 50/50 match.

Project Description

The Shanahan 8 thinning project is designed to address a number of forest health and fire mitigation goals. The majority of the treatment area is in a ponderosa pine forest that had historically open stand structures but has become dominated by sapling and pole size regeneration due to historic fire suppression and previous forest management efforts to control mountain pine beetles in the late 70's. Restoring more natural and historic forest conditions will be a major part of this project. Creating healthier forest conditions with a lower risk of high intensity crown fires will also improve habitat conditions for the local wildlife and vegetation and could decrease the potential impacts of a large scale wildfire to the City of Boulder.

In addition to restoration related targets, fire management and public safety is also a key focus of the Shanahan 8 project. This project will build on a series of previous thinning efforts in the Shanahan Ridge area. The project will add to the broader landscape scale efforts to decrease fuel loads and fire risk adjacent to the southwest portion of the City of Boulder.

Planning Linkages

The Shanahan 8 treatment area falls into the high or very high category for all the value criteria outlined in the Colorado Statewide Forest Resource Assessment and in the highest category on the aggregate map. The project is also identified in the City of Boulder's CWPP as a high priority project. In the CSFS Wildfire Risk Assessment Portal the treatment area is within the "high" category on the Fire Intensity Scale.

Proposed Project Activities

The work proposed for this grant will include thinning (using chainsaws), chipping of slash and the skidding and removal of logs. All three phases will be completed as part of this project and will cover roughly 47 acres. All of the work planned will be completed "in-house" by City of Boulder seasonal and permanent staff. The OSMP forest crew has extensive experience with this type of work and has thinned over 1200 acres on City lands. This crew will be responsible for cutting, chipping, skidding and hauling all the trees cut as part of this project. Crews will use existing equipment that OSMP has in its fleet. OSMP has two dedicated tractors, two chippers, and crew trucks and trailers that are currently used for forest management work. The work will also include project layout, tree marking, and regular progress checks which will be completed by the OSMP forest ecologist.

Landscape Attributes

The Shanahan 8 treatment area is located in the foothills directly west of the City of Boulder. This project is a small piece of a much larger, diverse mosaic of ponderosa pine and mixed conifer forest. Currently these low elevation forests have diverged dramatically from historic conditions and are dominated by small diameter, young trees that are competing with mature trees that are over 150 years old. In addition to the natural values in the area this is an extremely popular and important recreation area utilized by both the residents of Boulder and by visitors from around the world. Addressing forest health and fuel loads in this area would benefit both the natural systems as well as protect human values.

Project Cooperator/Interagency Collaboration

All of the work for this project will be completed by OSMP staff with some collaboration with the City fire department. OSMP works closely with City Fire on many forest projects and the Fire department provides staff for project implementation. Fire staff is not fully dedicated to this project but they will provide a number of work days. City employees and equipment will be used for all cutting, skidding, chipping, and hauling.

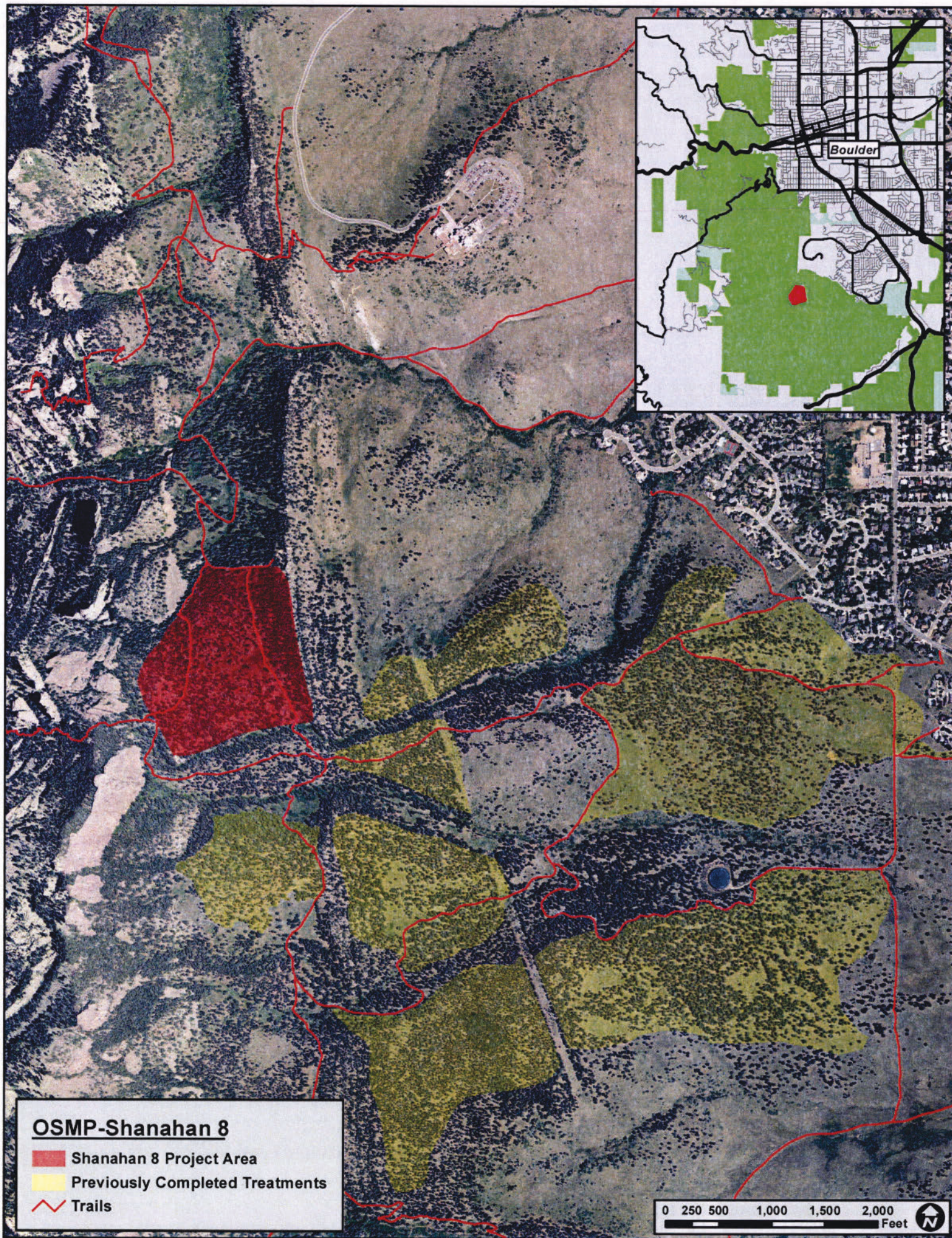
Project Timeline

This project would be planned for the 2015 or 2016 field seasons. Depending on when grant funds were made available project planning and layout would likely start in the summer of 2015. This phase would include all boundary layout and marking. Cutting, chipping and hauling would likely follow in Late July and would be completed by the end of 2015 or in early 2016.

Project Sustainability

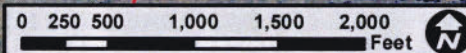
The target for this project will be a 35% decrease in basal area from approximately 103 sq. ft/acre to about 70 sq. ft/acre. Long-term maintenance of this project will include monitoring and overstory inventories conducted by the OSMP forest ecologist. An inventory following the thinning project will measure the success of the treatment and, in some cases, additional thinning may be added to maintain desired conditions. Forested areas will be monitored on a ten year cycle to track changes in forest

conditions and the effectiveness of previous treatments. All on-going forest work will be included in long-term OSMP workplans.



OSMP-Shanahan 8

- Shanahan 8 Project Area
- Previously Completed Treatments
- Trails



City of Boulder OSMP- Eldorado

General Project Information

The Eldorado project area is located on City of Boulder Open Space and Mountain Parks (OSMP) lands less than one mile south of the Eldorado Springs community. The project covers a total of 93 acres in low elevation ponderosa pine forest in close proximity to the homes in and around Eldorado Springs. The project is also located in close proximity to South Boulder Creek and Denver Water Board infrastructure that diverts water to north Denver. All of the proposed work would occur in Boulder County but is close to the Jefferson County line.

Lat/Long= 105.2704, 39.9182

Budget Items

Any grant money received for this project will be matched with OSMP funds earmarked for seasonal forest crew staffing. OSMP does all of its forest management work with "in-house" crews that are funded with OSMP operating budget dollars. These crews are managed by OSMP permanent staff and utilize city equipment that has been purchased specifically for forest management projects. Grant funds will be used to partially fund crew staffing for the duration of this project. Matching funds will come from a combination of hard match funds, in-kind match from work done related to project layout and oversight, and OSMP equipment usage. Over the past five years OSMP's average treatment cost is approximately \$1000/acre. The estimated grant portion for the Eldorado project would be \$46,500 at a 50/50 match.

Project Description

The Eldorado thinning project is designed to address a number of forest health and fire mitigation goals. The majority of the treatment area is in a ponderosa pine forest that had historically open stand structures but has become dominated by sapling and pole size regeneration due to historic fire suppression. Restoring more natural and historic forest conditions will be a major part of this project. Creating healthier forest conditions with a lower risk of high intensity crown fires will also improve habitat conditions for the local wildlife and vegetation and could decrease the potential impacts of a large scale wildfire to the town of Eldorado Springs and to the South Boulder Creek watershed and Denver Water Board infrastructure. This project will build on a series of previous thinning efforts in the Eldorado area. The project will add to the broader landscape scale efforts to decrease fuel loads and fire risk adjacent to the homes in and around Eldorado Springs.

Planning Linkages

The Eldorado treatment area falls into the high or very high category for all the value criteria outlined in the Colorado Statewide Forest Resource Assessment and in the highest category on the aggregate map. The area is also identified in the City of Boulder CWPP and the Rocky Mountain Fire CWPP as a priority treatment area. In the CSFS Wildfire Risk Assessment Portal the treatment area is within the "high" category on the Fire Intensity Scale.

Proposed Project Activities

The work proposed for this grant will include thinning (using chainsaws), chipping of slash and the skidding and removal of logs. All three phases will be completed as part of this project and will cover roughly 93 acres. All of the work planned will be completed "in-house" by City of Boulder seasonal and permanent staff. The OSMP forest crew has extensive experience with this type of work and has thinned over 1200 acres on City lands. This crew will be responsible for cutting, chipping, skidding and hauling all the trees cut as part of this project. Crews will use existing equipment that OSMP has in its fleet. OSMP has two dedicated tractors, two chippers, and crew trucks and trailers that are currently used for forest management work. The work will also include project layout, tree marking, and regular progress checks which will be completed by the OSMP forest ecologist.

Landscape Attributes

The Eldorado treatment area is located in the foothills directly south of the City of Boulder and the Town of Eldorado Springs. This project is a small piece of a much larger, diverse mosaic of ponderosa pine and mixed conifer forest. Currently these low elevation forests have diverged dramatically from historic conditions and are dominated by small diameter, young trees that are competing with mature trees that are over 200 years old. In addition to the natural values, both OSMP and Eldorado State Park are extremely popular and important recreation areas utilized by both the residents of Boulder and by visitors from around the world. Addressing forest health and fuel loads in this area would benefit both the natural systems as well as protect human values.

Project Cooperator/Interagency Collaboration

All of the work for this project will be completed by OSMP staff with some collaboration with the City fire department. OSMP works closely with City Fire on many forest projects and the Fire department provides staff for project implementation. Fire staff is not fully dedicated to this project but they will provide a number of work days. City employees and equipment will be used for all cutting, skidding, chipping, and hauling.

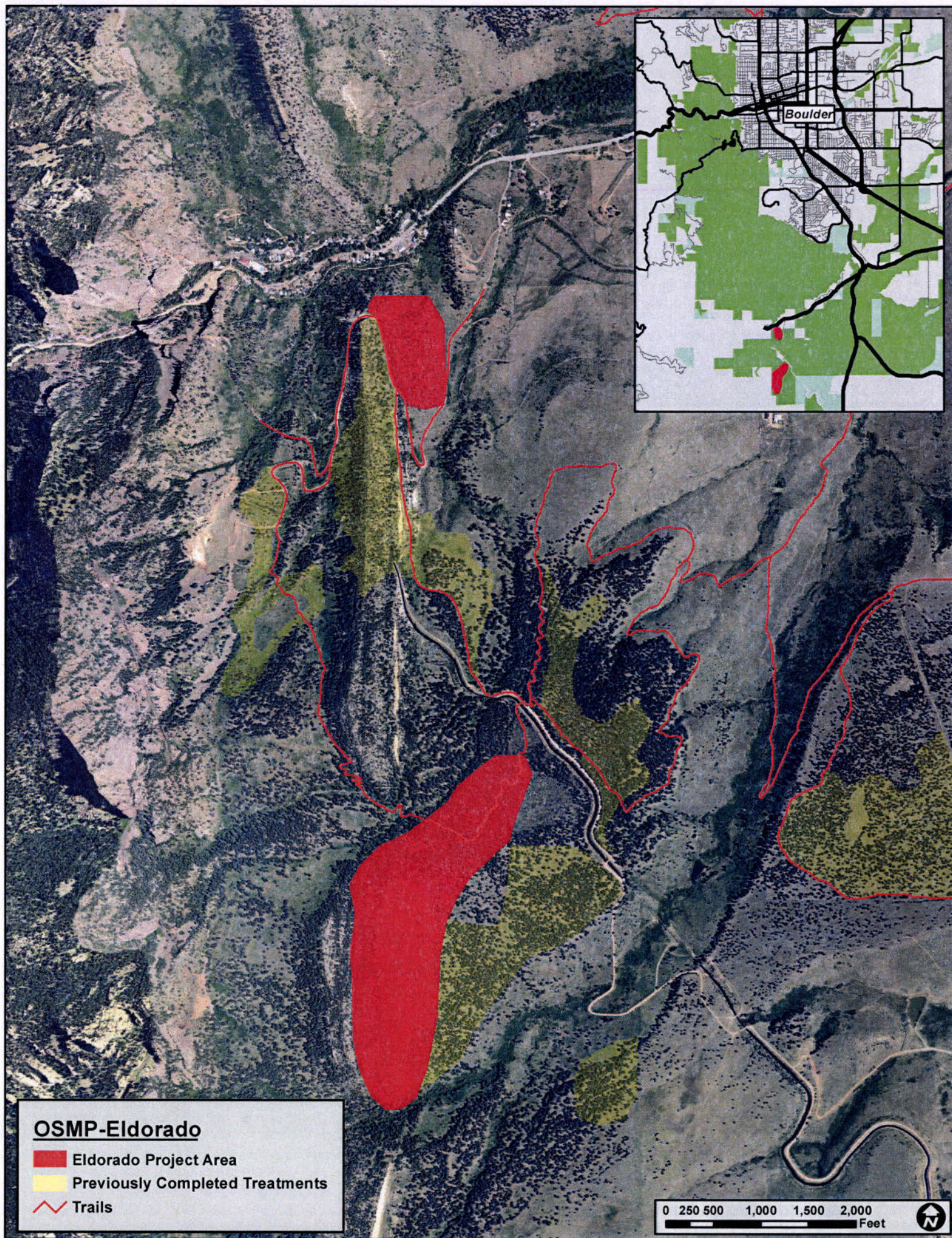
There may also be opportunity to work closely with Rocky Mountain Fire (RMF) on this project. RMF has completed some fire mitigation projects in this area and has plans for others in the future. This project would be an opportunity to look at cross boundary thinning efforts that would benefit the Eldorado Springs community.

Project Timeline

This project would be planned for the 2016 field season. Depending on when grant funds were made available project planning and layout would likely start in the spring of 2016. This phase would include all boundary layout and marking. Cutting, chipping and hauling would likely follow in Late July and would be completed by the end of 2016 or early 2017.

Project Sustainability

The majority of this project area is extremely dense with average basal areas between 120 and 150 sq. ft./acre. The target for treatment will be to focus on removing trees in the 4-10" diameter classes and decrease the basal area to 70-80 sq. ft./acre. Long-term maintenance of this project will include monitoring and overstory inventories conducted by the OSMP forest ecologist. An inventory following the thinning project will measure the success of the treatment and, in some cases, additional thinning may be added to maintain desired conditions. Forested areas will be monitored on a ten year cycle to track changes in forest conditions and the effectiveness of previous treatments. All on-going forest work will be included in long-term OSMP workplans.



2015 SFA grant proposal items, Lefthand FPD

General Project Information:

we are proposing to use the 2015 SFA grant funding to increase our home defensible space protection and to expand our resource management and watershed improvement in the Lefthand FPD communities. The areas in question will range from Highway 36 on the east to the Peak to Peak highway in the west, focusing on the Lefthand Canyon and James Canyon/Overland Rd corridors. The center point of the described project is 40° 06' 51.34" N by -105° 23' 04.71 W. The goal is to treat 100 acres in a combination of defensible space at individual properties, and to manage resources to promote both forest and watershed health at the upper portions of the district including the Crestview, Sky Ranch, Mattoon's Highlands, Glendale Gulch and Nugget Hill areas.

Budget Items:

We will be using the money to pay for hand crew mitigation work employees and to offset equipment use costs. We would use a 50% match with property owners to promote defensible space on smaller properties and develop forest/watershed health protections on larger parcels. We estimate an average cost of \$1800 per acre, total project cost of \$180,000, with a \$90,000 hard match from the property owners.

Project Description:

Our goal is to help homeowners solve the problem of appropriate defensible space on their properties by applying Firewise practices to create a proper defensible space based on their property landscape attributes. The other part of the project is to work in common areas within the communities of Crestview, Glendale, Nugget Hill, Sky Ranch and Mattoon's Highlands to create shaded fuel breaks that will focus on improving forest health and promoting watershed health in the areas in question. This will help solve the problems of fire spread, forest health and watershed health.

Project Linkages:

The areas in question address the SFAP in terms of improving defensible space, and promoting forest and watershed health. These areas have been identified a high risk both by the state and within the Lefthand FPD CWPP. Lefthand has had a proven track record of partnering with the District Forester, including partnering with the CSFS and the Lake of the Pines community to develop the first Firewise recognized community in Boulder County. Since then, we have had one more community recognized, the North Foothills Ranch community, and we have two that will be seeking recognition this year. We also have been partnering with the USFS as there is a substantial portion of the Arapahoe-Roosevelt NF in our district, and we have partnered with Boulder County's Wildfire Partner program, working with their assessors to develop mitigation plans for our residents and then executing those plans.

Proposed Project Activities:

We will use hand crews with chain saws to treat 100 acres of defensible space and open forest in community settings. The majority of the slash produced will be chipped, with some lop and scatter and stack for burning depending on access and owner's wishes. Bole wood is typically cut to fireplace length and stacked for the homeowner. In cases where the homeowner or community does not need the bole

wood, we have a donation program with a local middle school where we donate the wood for a firewood campaign that provides scholarships for needy students. The scope of work is to reduce the basal area foot count by identifying weak or diseased trees, beetle infested trees, and other problem trees, selecting trees of different ages to promote a density appropriate multi-generational stand.

Landscape Attributes:

The predominant species is Ponderosa Pine with Douglas Fir, Spruce, Lodgepole and Limber Pine, and Aspen intermixed. We are seeing densities of 100-150 basal feet per acre, and the goal is to reduce that to 40-50 basal feet per acre.

Project Cooperator/Interagency Collaboration:

Lefthand FPD will be working closely with the communities of Crestview, Glendale Gulch, Nugget Hill, Sky Ranch and Mattoon's highlands to create more defensible space around homes and to improve forest/watershed health in common areas. We have been working with the Boulder County Wildfire Partners to execute the identified defensible spaces for homeowners in our district, and many of the homeowners in these communities have either taken advantage of this program or are eligible for it. We have also successfully partnered with the CSFS District Ranger who has provided project guidance and suggestions and has worked with us on project design. We also have collaborated with the USFS on projects that adjoin USFS land. We plan on utilizing these projects to continue to tie together existing fuel breaks and continue to expand defensible space projects looking to improve on reducing the mosaic pattern in the various communities.

Project Timeline:

We anticipate starting the projects in May of 2015 with a completion date in September of 2017.

Project Sustainability:

We are addressing fuels that will require re-treatment in a 5-8 year timeframe. Likewise, defensible space can be maintained both by the homeowner and through re-entry later. This project meets the Lefthand FPD CWPP by creating fuel breaks and expanding defensible space, and meets the SFAP through the creation and maintenance of fuelbreaks and forest health through the identification of and reduction of unhealthy trees as well as restoring the overall forest health through reducing the stand density, creating a multi-generational stand and promoting understory growth.

District	Project Name	Dist Priority	Lat	Long	Grant Requested	Hard Match Provided	Soft Match Provided	Focused Proposal	6th-level Watershed Name	6th-level Watershed Code	Conserve Rating	Protect Rating	Enhance Rating
AL	Conejos Canyon Urban Interface	1	37.1328	-106.35270	\$80,000	\$40,000	\$40,000	1	Sheep Creek-Conejos River	130100050405	Low	Medium High	Medium Low
AL	P-J Urban Wildland Interface Education	2	37.4719	-105.86910	\$80,000	\$40,000	\$40,000	0	Hansen Bluff-Rio Grande	130100020710	Medium Low	Low	Low
AL	Private Reservoirs Erosion Protection	3	37.6011	-106.71010	\$100,000	\$80,000	\$20,000	1	Outlet South Fork Rio Grande	130100011106	Low	Medium High	Medium Low
BO	City of Boulder OSMP - Shanahan 8	1	40.0830	-105.32680	\$23,500	\$23,500	\$0	1	Middle Left Hand Creek	101900050504	Medium High	Medium High	High
BO	City of Boulder OSMP - Eldorado	2	39.9666	-105.28240	\$46,500	\$46,500	\$0	1	City of Boulder-Boulder Creek	101900050406	High	High	High
BO	City of Longmont - Button Rock Dam	3	39.9182	-105.27040	\$20,000	\$20,000	\$0	1	Lower South Boulder Creek	101900050303	Medium High	High	High
BO	Boulder District Hazardous Fuel Reduction	4	40.2194	-105.37390	\$150,000	\$300,000	\$100,000	0	Outlet North Saint Vrain Creek	101900050301	Medium High	Medium High	High
BO	BMFPD Fuels Treatments	5	40.1143	-105.38460	\$51,400	\$128,500		0	Little James Creek	101900050103	Medium Low	Medium Low	High
BO	Lefthand FPD Fuels Treatment	6	40.2120	-105.28910	\$90,000	\$90,000	\$0	0	Outlet South Saint Vrain Creek	101900050204	Medium Low	Medium High	High
BR	FRFTP South Zone	1			\$300,000	\$300,000	\$0	0					
BR	FRFTP North Zone	2			\$300,000	\$300,000	\$0	0					
DU	Firewise of SW Colorado	1	37.2739	-107.87910	\$240,000	\$15,000	\$225,000	0	Dry Fork-Animas River	140801040604	Medium High	High	Medium High
DU	Montezuma County Collaborative	2	37.5369	-108.50810	\$60,000	\$30,000	\$30,000	0	House Creek	140300020307	Low	Medium High	Medium High
FC/GR	Colorado Big Thompson		40.3300	-105.58000	\$200,000	\$100,000	\$100,000	1	Wind River	101900070704	Medium Low	Medium Low	High
FC	North Fork of the Poudre Watershed		40.7900	-105.25000	\$100,000	\$50,000	\$50,000	1	Miton Seaman Reservoir-North Fork Cache La Poudre River	101900060203	Medium Low	Medium High	High
FR	Keene Ranch Community Fuels Mitigation	1	39.3672	-104.69100	\$150,000	\$150,000	\$0	1	Russellville Gulch-Cherry Creek	101900020606	High	Medium High	Low
FR	Black Forest Communities Mitigation	2	39.3242	-104.93250	\$150,000	\$150,000	\$0	1	West Plum Creek	101900030106	High	Low	High
GJ	District WUI Incentives		39.3637	-107.52520	\$30,000	\$15,000	\$15,000	0	Middle West Divide Creek	140300010303	Low	Low	Medium High
GJ	Glade Park Roadside Thinning Project		38.9938	-108.74070	\$20,000	\$20,000	\$0	1	Trail Canyon Wash	140100040602	Medium Low	Medium Low	Low
GJ	Snowmass Village HOA Fuels Reduction		39.2130	-106.93790	\$25,000	\$25,000	\$0	1	Brush Creek-Roaring Fork River	140100050304	Medium Low	Medium Low	High
GO	Aspen Park Protection		39.5500	-105.30000	\$300,000	\$0	\$300,000	1	Turkey Creek	101900020807	Medium High	Medium High	High
GO	South Evergreen Protection		39.6167	-105.31670	\$300,000	\$300,000	\$0	1	Cub Creek	101900020804	Medium High	Medium High	High
GO	Green Mule Project		39.8309	-105.41080	\$300,000	\$300,000	\$0	1	Upper Ralston Creek	101900040301	Medium High	Medium High	High
LV	Blackhawk Ranch CWPP Implementation IV		37.4450	-104.70800				1	Saliba Lake-Santa Clara Creek	110200100101	Low	Low	Low
LV	Cuchara/Panadero Fuels Reduction		37.3550	-105.11500				1	Headwaters Cucharas River	110200060401	Low	High	High
LV	Cuchara Pass Ranch Fuels Reduction		37.3100	-105.04900				1	Guajatoya Creek	110200060504	Low	Medium High	High
SO	CO-WRAP Calibration & Enhancement	1			\$150,000	\$0	\$150,000	1					

Sum

27 Papers

10 Districts

\$3,266,400.00

\$2,523,500.00

\$1,070,000.00