

Supplemental Environmental Assessment
Helena Wildfire Mitigation

Lewis and Clark County, Montana

HMGP-DR-1767-MT-2009-11; PDM-PJ-08-MT-2010-010

May, 2011



FEMA

U.S. Department of Homeland Security

HELENA WILDFIRE MITIGATION PROJECT SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT

INTRODUCTION

The City of Helena, Montana has applied for funding under the Federal Emergency Management Agency's (FEMA) Pre-Disaster Mitigation (PDM) program and Hazard Mitigation Grant Program (HMGP) to mitigate wildfire impacts to improved properties and reduce the need for federal disaster assistance in the future. In accordance with the National Environmental Policy Act of 1969, the Council on Environmental Quality (CEQ) regulations implementing NEPA (40 Code of Federal Regulations [CFR] Parts 1500 through 1508), FEMA's regulations (44 CFR Part 10) for environmental considerations, and DHS Management Directive 5100.1, FEMA must fully understand and consider the environmental consequences of actions proposed for federal funding.

In May of 2008, FEMA prepared an Environmental Assessment (EA) and a **Finding of No Significant Impact** (FONSI) was issued May 22, 2008 for the Fuels Reduction Project, Helena Open Lands System. This supplemental EA is to document and transmit FEMA's evaluation of similar actions in the same geographic area. The new project will address the purpose and need as described in the original EA and approved in the original FONSI, both of which are incorporated here by reference. The only adverse impacts identified in the original EA were minor, short-term impacts to aesthetics, air-quality, and traffic associated with smoke from prescribed burning; and a temporary increase in noise levels from use of chainsaws and chippers. Other impacts were described as beneficial in nature (Appendix C). The overall project elements and approach have been refined to result in fewer impacts than described in the original EA, because no materials will be burned as a result of the proposed project. In addition, potential cultural resources will be identified and avoided through implementation of a monitoring plan.

The proposed treatment area of potential effect (APE) consists of 350 acres and has two components: Helena South Hills (150 acres, HMGP-DR-1767-MT-2009-11) and Open Lands (200 acres, PDMC-PJ-08-MT-2010-010). The Proposed mitigation is to reduce fuel loading from city and private lands within or adjacent to the City of Helena (46.3448, -112.218). According to the application there are approximately 3275 structures located within the project area(s) that are expected to be afforded some level of protection by the project(s). Critical facilities to be protected include Emergency Operations Centers, medical centers, water and power providers, fire protection, schools and other essential government facilities.

The project will be implemented by the City of Helena Parks Department and will follow the Tri-County Fire Working Group (TCFWG) model for fuel reduction. A team of trained forestry personnel, including a qualified forester, a surveyor and a project manager will conduct a comprehensive assessment of sites to be cleared. Site-specific methodology for reduction will be determined after this assessment. In general, beetle-killed pine trees in the project areas will be hand-thinned to create a spacing of 10-15 feet between crowns. Remaining trees will be pruned and excessive seedlings and saplings will be cleared. Cut waste material will be chipped on site or hauled to a sorting yard for appropriate disposal. No material will be burned as a result of this project. Existing city-owned roads will be used to the extent possible for staging and moving equipment. No new roads will be built in the project area. Most of the work is planned to be

completed during the winter, when it is the least intrusive for ground disturbance. Routes with the least amount of ground disturbance will be chosen for the use of motorized equipment. Various types of low-impact equipment will be used, including skid-steer mounted bull-hog masticators and newer chippers with rubber tires.

The City of Helena Parks Department has been designing and implementing low-impact forest fuel mitigation within city-owned open space properties since 2002. The methodologies employed to fell trees, clear undergrowth, move equipment and otherwise accomplish the objectives of Helena's forest hazard reduction projects have a proven track record of completing projects with a minimal amount of ground disturbance. The same methods and types of equipment will be used for the proposed FEMA-funded projects. The public has been duly notified of the proposed project(s) through public meetings, newspaper articles and outreach to individuals within the proposed project area. All original findings, stipulations, mitigation measures and project conditions apply, except as noted below.

THREATENED AND ENDANGERED SPECIES AND MIGRATORY BIRDS

A current listing of threatened and endangered (T&E) species in the area of the subject site was obtained from the US Fish and Wildlife Service (FWS) website. Using the FWS-supplied information in conjunction with original data, it was determined that the project is within the range of the Canada Lynx, which is listed as threatened by FWS. An Informal Biological Assessment (IBA) was completed and results indicated the habitat necessary to support the listed species is not present on or in proximity to the site. FEMA determined the proposed project would have 'No Effect' on the Canada Lynx or any other T&E species or designated critical habitat. Further, based on the data available the proposed project is expected to have no significant impact on migratory birds because the project area is no suitable habitat for any listed species. On October 30, 2009, FEMA notified FWS of its determination; on December 5, 2009, FWS concurred and stated that the project as proposed is unlikely to have any significant effects to fish, wildlife or habitat resources under the purview of the US Fish and Wildlife Service.

HISTORIC AND CULTURAL RESOURCES

After a preliminary review of the project, SHPO and the State Archeologist identified the potential for impacts to historic mine shafts, lime kilns and prehistoric sites within the area of potential effect (APE).

The proposed activities as described above would have low potential to affect any intact archaeological resources if they should exist. In addition to the use of the low-impact equipment and removal methods described above, FEMA will require a professional meeting *The Secretary of Interior's Professional Qualification Standards (36 CFR Part 61)* in the discipline of archaeology to monitor activities to ensure avoidance of areas where potential resources are located. Prior to initiation of work the FEMA and the Applicant will provide three sets of maps. The maps will contain the following information:

1. Map identifying all currently Known Historic Properties in the APE
2. Map identifying Proposed Staging Areas and Vehicle Routes in the APE
3. Map identifying areas of High Probability of Intact Archeological Sites in the APE.

If additional known historic properties are identified the sites will be mapped and avoided. A mapping and monitoring plan was provided by the City's archaeological consultant (Integrity Resources Archaeology). SHPO agreed with the plan in their email dated March 31, 2011.

Mapping of known historic properties, staging areas and high-probability sites; combined with on-site archaeological monitoring represent a *reasonable and good faith effort to carry out appropriate identification efforts* as stated in §800.4(b)(1). In accordance with 36 CFR part 800.5 FEMA, based on our review of the scope of work as submitted and with the inclusion of the mapping and monitoring plan noted above, has determined that there would be no historic properties affected by the proposed project because they will be avoided.

PUBLIC INVOLVEMENT

The public has been duly notified of the proposed project(s) through public meetings, newspaper articles and outreach to individuals within the proposed project area. Public meetings at which the South Hills 2009 and Open Lands 2010 projects have been presented by City of Helena Parks Department staff include:

1. 01-28-09, Helena Citizens Council Meeting (City County Building)
2. 02-25-09, Helena Citizens Council Fair (Helena Technical College)
3. 03-31-09, Helena Open Lands Open House (Lewis and Clark County Library)
4. 04-06-09, Lewis and Clark County Parks Board Monthly Meeting (City County Building)
5. 05-09-09, Prickly Pear Land Trust Open Space Fair (Pioneer Heritage Park)
6. 07-06-09, Helena City Commission Administrative Meeting (City County Building)
7. 07-23-09, Kiwanis Club Meeting (Montana Club)
8. 07-25-09, Lake Helena Watershed Monthly Meeting (Spring Meadow Lake)
9. 07-16-09, Prickly Pear Land Trust Board of Directors Meeting (DA Davidson)
10. 07-28-09, Carroll College (Carroll Campus)
11. 08-03-09, Helena City Commission Administrative Meeting (City County Building)
12. 10-16-09, Northern Region Wildfire Contractors Association (Missoula, MT)
13. 02-03-10, Helena City Commission Administrative Meeting (City County Building)
14. 02-26-10, Montana Communities Wildfire Presentation (Fairmont Hot Springs)
15. 03-24-10, Helena Citizens Council Fair (Helena Civic Center)

SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT

16. 05-27-10, Helena Citizens Council Wildfire Preparedness Meeting (Lewis and Clark Library)
17. 06-04-10, Prickly Pear Land Trust Open Space Fair (Pioneer Heritage Park)
18. 08-17-10, Lions Club (Montana Club)
19. 09-15-10, Environmental Class (Helena High School)
20. 09-21-10, Lake Helena Watershed Forestry Workshop (Lewis and Clark Fairgrounds)
21. 12-01-10, Helena City Commission Administrative Meeting (City County Building)
22. 12-07-10, Helena Educators Meeting (Adult Community Education Center)

The following notice was published in the Helena Independent Record, February 14, 2011:

HELENA WILDFIRE MITIGATION PROJECTS

Interested parties are hereby notified that the City of Helena, Montana has applied for funding under the Federal Emergency Management Agency's (FEMA) Pre-Disaster Mitigation (PDM) program and Hazard Mitigation Grant Program (HMGP) to mitigate wildfire impacts to improved properties and reduce the need for federal disaster assistance in the future. The proposed mitigation is to reduce fuel loading from city and private lands within or adjacent to the City of Helena (46.3448, -112.218). The treatment area consists of 350 acres and has two components: Helena South Hills (150 acres, HMGP-MT-2009-11) and Open Lands (200 acres, PDM-MT-2010-005).

The project will be implemented by the City of Helena Parks Department and will follow the Tri-County Fire Working Group (TCFWG) model for fuel reduction. In general, beetle-killed pine trees in the project areas will be removed, and live trees will be hand-thinned to create a spacing of 10-15 feet between crowns. Trees selected for retention will be pruned to remove low lying, fire prone branches. Cut waste material will be chipped on site or hauled to a sorting yard for appropriate disposal. No material will be burned as a result of this project. Existing city-owned roads will be used to the extent possible for staging and moving equipment. No new roads will be built in the project area.

The methods employed to fell trees, clear undergrowth, move equipment and otherwise accomplish the objectives of Helena's forest hazard reduction projects, which have a proven track record of completing projects with a minimal amount of disturbance. The same methods and types of equipment will be used for the proposed FEMA-funded projects. This notice is to ensure that the public has been duly notified of the proposed projects and given the opportunity to provide comments.

Interested parties may obtain more detailed information about the Helena South Hills and Open Lands projects from the City of Helena by calling Brad Langsather at 406.447.8454 or by email at blangsather@ci.helena.mt.us. Additionally, comments or questions regarding FEMA's Environmental/Historic Preservation review process can be directed to Richard Myers, FEMA Region VIII Deputy Regional Environmental Officer by calling 303.235.4926 or by email at richard.myers@dhs.gov.

No comments have been received by the City or FEMA as a result of this public notice.

SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT

APPENDICES

Appendix A: Site Maps

Appendix B: Correspondence

Appendix C: Summary Comparison of Impacts

PREPARERS

Steven Hardegen, FEMA Region VIII, Regional Environmental Officer

Joan Huston, FEMA Region VIII, Hazard Mitigation Program Specialist

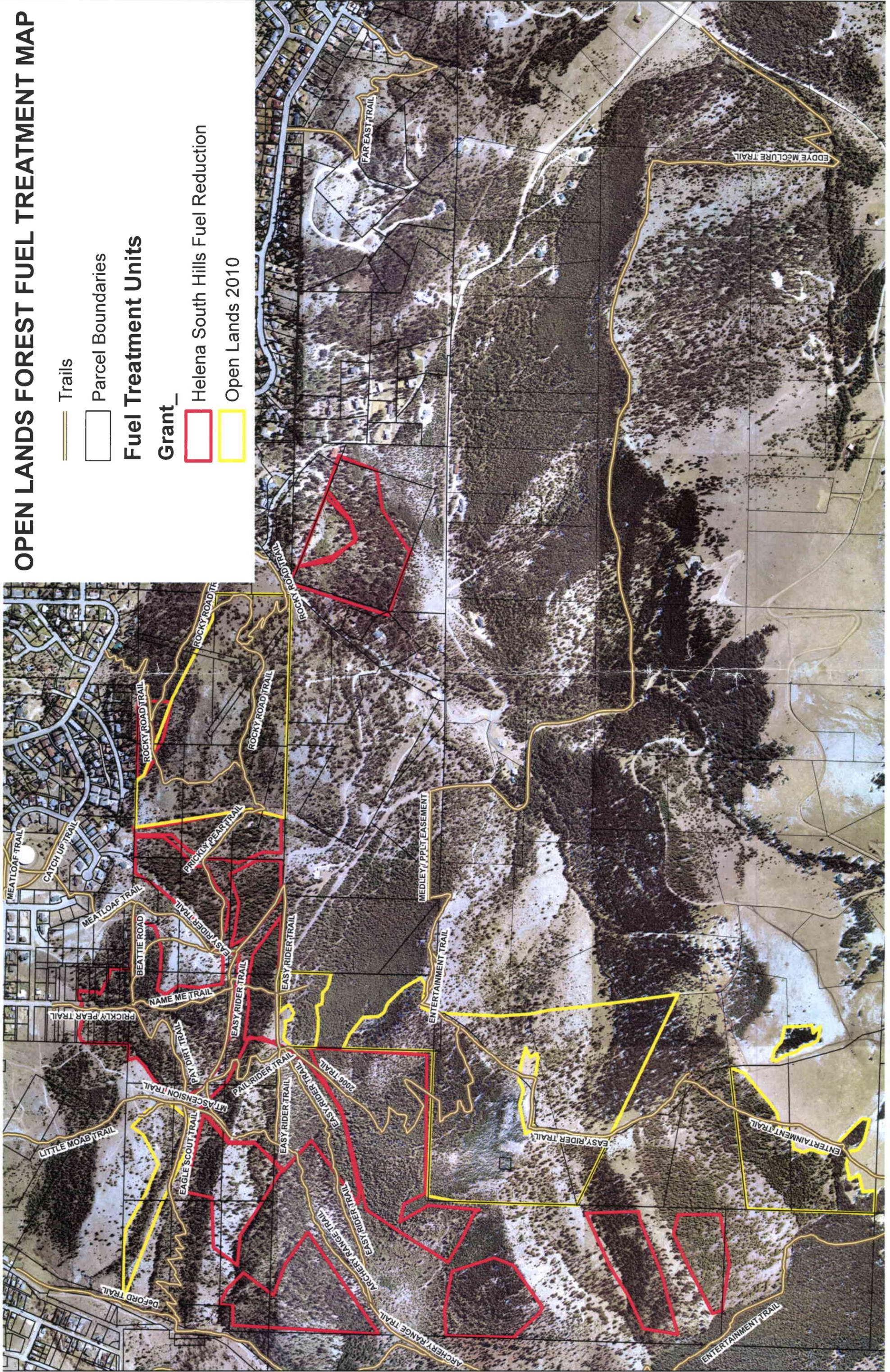
Richard Myers, FEMA Region VII, Deputy Regional Environmental Officer

Helena Wildfire Mitigation

Appendix A: Site Maps

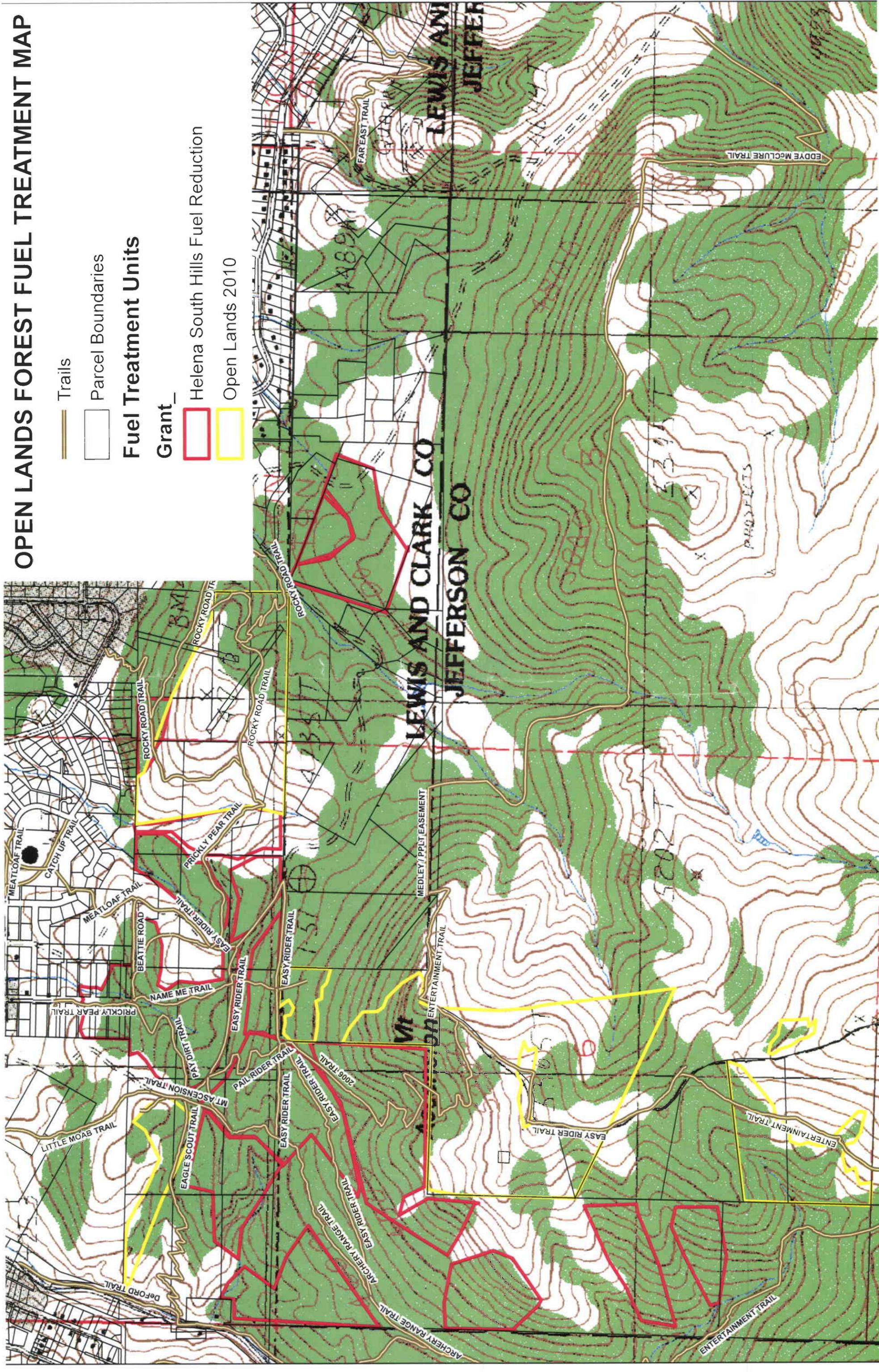
OPEN LANDS FOREST FUEL TREATMENT MAP

- Trails
- Parcel Boundaries
- Fuel Treatment Units**
- Grant_**
 - Helena South Hills Fuel Reduction
 - Open Lands 2010



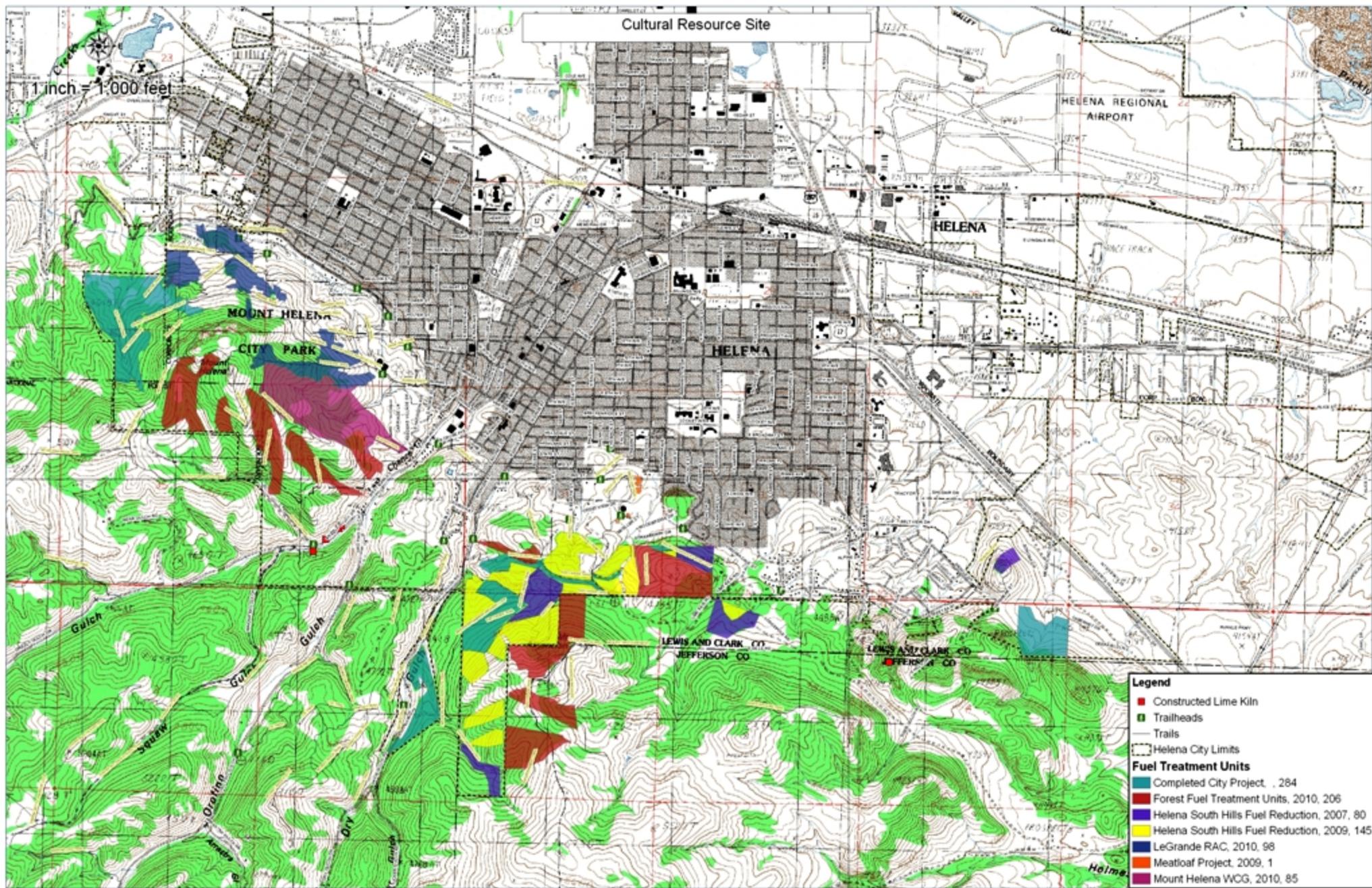
OPEN LANDS FOREST FUEL TREATMENT MAP

- Trails
- Parcel Boundaries
- Fuel Treatment Units**
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Cultural Resource Site

1 inch = 1,000 feet



Helena Wildfire Mitigation

Appendix B: Correspondence

**U.S. DEPARTMENT OF HOMELAND SECURITY
FEDERAL EMERGENCY MANAGEMENT AGENCY**

**FINDING OF NO SIGNIFICANT IMPACT
Fuels Reduction Project
Helena Open Lands System, Helena, Montana
May 22, 2008**

BACKGROUND

Forest conditions in the western United States (US) are currently much different than conditions prior to European settlement in the 19th century. Due to past fire management practices, ground and ladder fuels have increased to the point that surface fires can easily move into the tree canopy, which can lead to destructive crown fires. The presence of high density continuous fuels in many forests allows fires to spread large distances in a relatively short amount of time, making control of wildfires difficult and dangerous. Fire suppression in the Helena Open Lands system has resulted in dangerous fire potential conditions; exclusion of fire has resulted in dangerous accumulations of these volatile fuels.

In recent years, there has been a sharp increase in the number of homes that have been constructed within forested areas that abut state and federal forestlands; these homes located in the urban wildfire interface area need to be protected during a wildfire. The overall goal of this project is to reduce ladder fuels in heavily vegetated areas in order to discourage crown fires that spread quickly and may lead to spotting and reduce the threat to residents of Helena from a near wildland fire.

DESCRIPTION

The City of Helena Open Lands system is approximately 2,140 acres of open parkland south of Helena, including Mount Helena City Park. Seven project areas within the Helena Open Lands system have been identified for vegetation management treatments. Treating these seven areas would benefit the entire Helena Open Lands system due to the strategic location of the project areas close to or within the city limits of Helena, and their value to the community as recreational use and open space. The seven project areas total 158.73 acres and are listed below:

- Prairie/1906 Trail Area 62.79 acres
- McKelvey Trail Area 15.66 acres
- Entertainment Trail Area 10.82 acres
- Easy Rider Trail Area 36 acres
- Water Tank Area 12.48 acres
- Lime Kiln/Windflower Area 15.42 acres
- Nob Hill Area 5.56 acres

FONSI –Helena Open Lands System

Vegetation types targeted for treatment include Ponderosa pine, Douglas fir, and mixed conifer. After evaluating the forests that have been targeted for vegetation management under the Federal Emergency Management Agency (FEMA) grant, Lewis & Clark County determined that thinning, chipping, creation of fuelbreaks, and prescribed burning treatments will be used in combination for this project. Of the 158.73 acres total among the seven project areas, Lewis & Clark County will thin and chip 77.9 acres; thin and burn 132.25 acres; and create fuelbreaks in all project areas. Treatments will be performed in the summer months. Prescribed burning will only be conducted during winter months when soils are frozen or covered with snow. Existing access roads will be utilized to haul in equipment, including chipping machines. No new temporary or permanent roads will be created as part of this project.

MITIGATION AND STIPULATIONS

The resulting mitigation and stipulations upon which this finding is conditioned are:

1. Before any burning would begin, Lewis & Clark County will obtain a temporary burn permit from the Montana Department of Environmental Quality (DEQ); notify the local news, sheriff, fire departments, Tri-County Fire Working Group; and post a public notice in the local newspaper.
2. Prescribed burning will occur only during winter months when soils are frozen or covered with a minimum of 2 inches of snow, and when there is no weather inversion pattern.
3. Notify USFS of proposed vegetation management prior to implementing treatment.
4. Snags (standing dead trees), which are an important component of a forest ecosystem by providing valuable habitat to numerous wildlife species, will be retained except where they would represent a fuel ladder.
5. Old growth stands of Ponderosa pine and Douglas fir will only be treated in a manner that maintains or restores pre-fire suppression old growth characteristics. Trees with old growth characteristics will be protected during the thinning operation except when severely infected with insects or diseases, or when retention will compromise the effectiveness of the treatment.
6. In order to minimize visual impacts in stands of Douglas fir, individual trees will not be pruned, as this is not visually appealing. Instead, vegetation will be thinned around the large fir trees, and fuelbreaks will be built around large homogenous stands.
7. To minimize impacts to soils, any tire ruts that occur will be filled, graded, and seeded with native vegetation.
8. Workers will conduct the treatments in a safe manner and comply with all laws, rules, and regulations relating to the safety of persons and property.
9. Operation of Wood Chippers and Chainsaws will only occur during normal working hours.
10. A vegetative screen will be left in treatment areas to maintain the high scenic quality for

FONSI –Helena Open Lands System

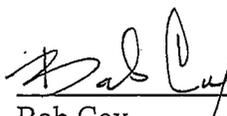
recreationists.

11. Invasive species management will include biological control and selective herbicide use, where feasible.
12. Selective spraying of herbicides will occur around burned bunny piles to prevent invasive species from gaining a foothold in the post-fire treatment area.
13. All guidelines and recommendations for managing noxious weeds in the Helena Open Lands Plan will be followed.
14. If any historic or cultural materials are discovered during vegetation management activities, FEMA and the SHPO must be notified immediately. Work cannot resume until concurrence from FEMA and the State Historic Preservation Office is obtained.
15. Best management practices would be used to maintain all equipment in accordance with proper specifications.

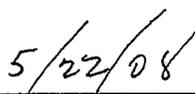
FINDINGS

Based upon the information contained in the attached Final Environmental Assessment completed in accordance with the National Environmental Policy Act and FEMA's regulations (44 CFR Part 10) for environmental considerations, which implements the regulations of the Council on Environmental Quality (40 CFR 1500-1508); Executive Orders (EO) addressing Floodplains (EO 11988), Wetlands (EO 11990), and Environmental Justice (EO 12898); it is found that the Proposed Action with the prescribed mitigation measures and stipulations will have no significant adverse impact on the human environment. As a result of this Finding of No Significant Impact, an Environmental Impact Statement will not be prepared, and the Proposed Action with the associated mitigation measures and stipulations as described in the attached Environmental Assessment may proceed.

APPROVAL



Bob Cox
Regional Environmental Officer



Date



FEMA

MT-R8

October 30, 2009

Mark Wilson, Project Leader
U.S. Fish and Wildlife Service
Montana Field Office
585 Shepard Way
Helena, Montana 59601

Re: Yellowstone County & Helena South Hills Fuel Reduction Project 2009

Dear Mr. Wilson:

The City of Helena and Yellowstone County, Montana have submitted applications for funding under FEMA's Hazard Mitigation grant program. This program allows communities and counties to apply to FEMA for financial assistance to implement identified pre-disaster mitigation projects that are designed to reduce the impacts of future disasters and render the community more disaster resistant.

FEMA is required under the National Environmental Policy Act (NEPA) to consider the potential environmental impacts of proposed federal actions. The FEMA regulations which establish the agency-specific process for implementing NEPA are set forth in 44 CFR Section 10. FEMA is currently in the process of conducting the NEPA compliance process and preparing an environmental assessment (EA) for this project in accordance with both FEMA and NEPA regulations, as well as other environmental laws and Executive Orders (EOs).

In addition to review under NEPA, consideration of impacts to threatened and endangered species is mandated under Section 7 of the Endangered Species Act (16 U.S.C. § 1531 – 1534). Requirements include the need to identify threatened and endangered plant and animal species that may be impacted by the proposed action. FEMA recognizes its responsibility for compliance with the Endangered Species Act and will enter into formal Section 7 consultation with the Service if applicable.

Threatened and Endangered Species

We are aware the areas for the proposed project are within the range and has potential habitat for the Canada Lynx, which is listed as threatened by the Service. Enclosed is a map outlining the

boundaries for the proposed project areas. The boreal forests of Canada and Alaska are the primary habitat of the Canada lynx in North America. Populations occurring in the western mountains of the conterminous United States occupy peninsular extensions of this distribution. In Montana, Canada lynx have been documented, historically and currently, throughout the Rocky Mountains, from the Canadian border through the Yellowstone area. Canada lynx presence has also been verified in the majority of the mountain ranges in Montana, including isolated ranges such as the Big Belt, Little Belt, and Crazy Mountains, and trapping records indicate past occupancy in the Big Snowy, Little Snowy, and Highwood Mountains. USFWS has concluded that a resident population of Canada lynx is distributed throughout its historic range in Montana. The Montana Fish, Wildlife and Parks (FWP) indicate that Montana supports the healthiest Canada lynx population in the lower 48 states.

Canada lynx lead solitary lives except when rearing young and during a short breeding period from February to March. Lynx seem to prefer to travel through coniferous forests, also using ridges, saddles, and riparian areas. Canada lynx are most active from shortly before dark to shortly after dawn but are sometimes active during daylight hours. They usually bed for the day in, or on the edge of, dense to moderate cover. The home range size of the Canada lynx is varies considerably with reported home ranges between 5 and 147 square miles. Location and abundance of prey species heavily influence home range size of the Canada lynx.

Canada lynx feed primarily upon snowshoe hares, especially during the winter. Canada lynx also eat other small to medium-sized animals and occasionally larger animals and carrion. The distribution and abundance of lynx are associated with those of their primary prey species, the snowshoe hare. However, the red squirrel is an important alternative prey. In Montana, snowshoe hares are most abundant in young, dense stands of lodgepole pine.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA), 16 U.S. Code (U.S.C.) 703 was enacted in 1918. The MBTA prohibits the taking of any migratory birds, their parts, nests, or eggs, except as permitted by regulations. The U.S. Fish and Wildlife Service (USFWS) consults on issues related to migratory birds.

The Proposed Action would not be expected to have any significant impacts on migratory birds. The proposed work would occur in areas that are not suitable habitat for listed bird species.

The proposed projects are located in suburban areas adjacent to densely forested land. The areas chose for the proposed project are considered “high-risk for potential wildfires due to their proximity to forested land. Site location maps have been included for your review and reflect the following legal descriptions:

Yellowstone County – is a total of 3,680 acres located near three housing developments, Rehberg Ranch subdivision (270 acres), Emerald Hills (1910 acres), and Pine Hills (1500 acres). The legal description is Township 1 North, Range 25 East, Section 15 and 22; Township 1 North, Range 27 East, Sections 8, 21, 22, 23, 26, 27, 28, 29 and 34; Township 1 North, Range 27

East, Sections 17 and 20. The actual project area will take place only up to 150 from the dots indicated on the enclosed map, not the entire area highlighted.

City of Helena – is a total of 145 acres located in open space land adjacent to homes at Township 10 North, Range 3 West, Section 31 and 32.

The goal of the proposed project is to reduce the wildfire threat on the property and create a safer working environment for firefighters involved in the suppression of a potential wildfire. Once completed, the treated acreage would potentially serve as a fire break in the event a wildfire is started on nearby lands.

The primary objective of this treatment is to reduce the fuel loading within the project areas. A secondary benefit of tree thinning and slash disposal would reduce the risk of pine beetle-caused mortality within project areas by creating environmental conditions less favorable to beetles.

- Stands of Ponderosa Pine and Douglas Fir would be targeted for fuels reduction. All pine bark beetle killed trees would be removed with the exception of those retained for wildlife habitat at a rate of two per acre if possible.
- Trees of varying ages would be selectively removed based on species, stem form, genetic, traits, and location within the forest canopy to encourage a diverse forest structure.
- In dense forest areas, thickets of seedling, sapling, and pole-sized trees would be hand-thinned with a chainsaw to provide 10 – 15 feet of space between tree crowns.
- Sawtimber-sized-trees would be pruned to a height of 6 – 10 feet to further reduce potential for ground fires to reach crowns of mature trees.
- Trees less than 20 feet tall would be pruned to 1/3rd of their total height.
- In range encroachment areas, thickets of sapling and pole-sized trees would be thinned to provide 15 – 20 feet or greater space between tree crowns. Some trees with dead tops, sweep, forks, and crooks would be left to add structural diversity to the forest and to provide wildlife habitat.

Removal methods would include a combination of hand thinning by chainsaw and mechanical using rubber tracked equipment such as a bullhog, masticator with various attachments including a root grapple, bucket, tree shear, rotation log grapple and winch, chipper and mulching head. In **Yellowstone County** the majority of the activity will be hand thinning with chainsaws, weed eaters, forestry cutters in developed housing areas within 150 feet of structures. Waste would be chipped on site and spread as ground cover to a depth no greater than three inches. Waste larger than six inches in diameter will be transported to be used for fuel, landscape material, or pulp.

The goal is to perform fuel reduction activities within 24 months once funding has been awarded. If possible, the work will take place during the winter months to minimize fire danger, and the pine bark beetles are less active during the winter.

Selective spraying of herbicide would occur to manage the proliferation of noxious weeds such as Dalmation toadflax, spotted knapweed and Houndstongue. Safety precautions will be taken to

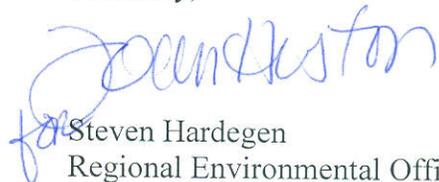
manage noxious weed including power washing any vehicles or equipment prior to arrival on the property. A biological approach will be used if possible including the selective use of purchased insects on Dalmation toadflax and leafy spurge.

Determination of Effects

Based on the information provided above, researching the project area and the USFWS website, FEMA has determined that the Proposed Action would have **NO EFFECT** on the Canada lynx.

Please review the project information provided with this letter and make your assessment as to whether you agree with the determination findings. Please provide me with a letter that states your findings, to be included in the environmental review of the proposed project. If you have questions regarding the project, please contact Joan Huston either by telephone at 303.235.4798 or via email at joan.huston@dhs.gov

Sincerely,

A handwritten signature in blue ink that reads "Joan Huston". The signature is written in a cursive style and is positioned above the typed name and title.

for Steven Hardegen
Regional Environmental Officer

Enclosure-Map



United States Department of the Interior Fish and Wildlife Service



Ecological Services
Montana Field Office
585 Shepard Way
Helena, Montana 59601-6287
Phone: (406) 449-5225 Fax: (406) 449-5339

December 5, 2009

Mr. Steve Hardegen
Regional Environmental Officer
FEMA Region 8
U.S. Dept. of Homeland Security
Denver Federal Center, Bldg. 710
P.O. Box 25267
Denver, CO 80225-0267

Re: Yellowstone County and Helena South Hills Fuels Reduction Project 2009

Dear Mr. Hardegen:

We have reviewed the Yellowstone County and Helena South Hills Fuels Reduction Project description in your letter dated October 30, 2009, along with the attached maps, and site photographs. We concur with your determination that the project would have no effect on Canada lynx, and that the project as proposed is unlikely to cause significant adverse effects to fish, wildlife, or habitat resources under the purview of the U.S. Fish and Wildlife Service.

Please telephone me at 406/449-5225, ext. 205, if you have any questions regarding this matter.

Sincerely,

R. Mark Wilson
Field Supervisor



FEMA

R8-EHP

November 3, 2010

Mark Baumler, Ph.D.
State Historic Preservation Office
1410 8th Avenue
PO Box 201202
Helena, MT 59620-1202

**2009 Helena Wildfire Mitigation Grant
City of Helena, Montana**

Dr. Baumler:

Pursuant to Section 106 of the National Historic Preservation Act I am writing this letter to initiate consultation regarding a Hazard Mitigation Grant Program (HMGP) grant application submitted by City of Helena. The grant has been awarded to mitigate wildfire impacts to improved properties and reduce the need for federal disaster assistance in the future.

The proposed treatment area of potential effect (APE) has two components: Helena South Hills (150 acres, HMGP-MT-2009-11) and Open Lands (200 acres, PDM-MT-2010-005). The Proposed mitigation is to reduce fuel loading from city and private lands within or adjacent to the City of Helena (46.3448, -112.218). According to the application there are approximately 3275 structures located within the project area(s) that are expected to be afforded some level of protection by the project(s). Critical facilities to be protected include Emergency Operations Centers, medical centers, water and power providers, fire protection, schools and other essential government facilities. The project will be implemented by the City of Helena Parks Department and will follow the Tri-County Fire Working Group (TCFWG) model for fuel reduction. A team of trained forestry personnel, including a qualified forester, a surveyor and a project manager will conduct a comprehensive assessment of sites to be cleared. Site-specific methodology for reduction will be determined after this assessment.

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types of low-impact equipment will be used including skid-steer mounted, bullhog masticators and newer chippers with rubber tires.

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1. Map identifying all currently Know Historic Properties in the APE
2. Map identifying Proposed Staging Areas and Vehicle Routes in the APE
3. Map identifying areas of High Probability of intact Archeological Sites in the APE.

FEMA has determined that the use of low impact equipment, avoidance of Known Historic Properties, and on-site archaeological monitoring represent a *reasonable and good faith effort to carry out appropriate identification efforts* as stated in §800.4(b)(1). The proposed activities would have low potential to affect intact archaeological resources if they should exist, provided that these conditions are followed. If additional Known Historic Properties are identified the sites will be avoided and mapped.

FEMA over the last year has been working your office and the Office of the State Archaeologist to develop a work plan for this project. FEMA intended to originally utilize in-house staff to complete the identification process, however due to a high level of disaster activity in the region and dramatic changes to the level of effort to complete this project FEMA has determined that the above level of action is the only fiscally available option at this time.

In accordance with 36 CFR part 800.5, and based on our review of the scope of work as submitted with the inclusion of conditions noted above, FEMA has determined that the project as proposed would have "No Effect" to known historic properties or newly identified historic properties within the project area, because they will be avoided.

We respectfully ask for your concurrence regarding FEMA's work plan to identify known historic properties and FEMA's finding that all known historic properties will be avoided. FEMA intends to move forward in approving this mitigation project unless the State Historic Preservation Office objects within thirty days of receiving this information. Should you require additional information for your review, please feel free to contact me by phone at (303) 235-4714 or by email at

Dr. Baumler, MT SHPO
Helena Wildfire Mitigation Grant
November 3, 2010
Page 3 of 3

steven.hardegen@dhs.gov; or you may contact the Deputy Regional Environmental Officer, Richard Myers at (303) 235-4926 or by email at richard.myers@dhs.gov.

Sincerely,

A handwritten signature in black ink, consisting of a sharp upward-pointing triangle followed by a long horizontal line that tapers to the right.

Steven E. Hardegen
Regional Environmental Officer

Attachments: (available electronically on request):

Topographic maps of project areas

Aerial maps of project areas

Map of known CR sites

Agreement letter from applicant

cc: Kent Atwood, MT SHMO
Brad Langsather, City of Helena

Big Sky. Big Land. Big History.
Montana
Historical Society

*Historic Preservation
Museum
Outreach & Interpretation
Publications
Research Center*

November 29, 2010

Steven E. Hardegen, Regional Environmental Officer
Federal Emergency Management Agency
Region VIII
Denver Federal Center, Building 710
P.O. Box 25267
Denver, CO 80225-0267

Re: 2009 Helena Wildfire Mitigation Grant, City of Helena, Montana

Dear Mr. Hardegen:

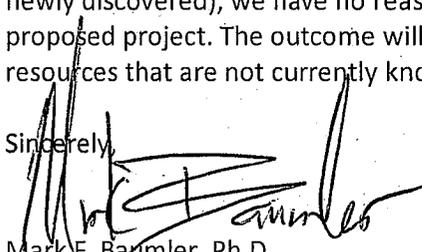
Thank you for your letter of November 3 regarding the above cited undertaking, pursuant to 36CFR800, implementing regulations for the National Historic Preservation Act.

The Montana State Historic Preservation Office concurs that this undertaking has the potential to impact historic and pre-contact heritage properties, if they exist within the project areas. It is regrettable that FEMA did not conduct surveys to identify such properties, as very little information currently exists for the project impact areas and given the history of mining and use of the area, there is a probability that such properties occur within the area of effect.

We understand that FEMA proposes to avoid all cultural resource properties through a program of archaeological monitoring by a professional meeting the Secretary of Interior's Professional Qualification Standards during the project activities. Insufficient information is provided as to when and where this monitoring will occur.

If, as described, FEMA plans to avoid impacts to all cultural resource properties (known, unknown, or newly discovered), we have no reason to not agree that these resources will not be affected by the proposed project. The outcome will depend upon the success of FEMA in avoiding those cultural resources that are not currently known or identified.

Sincerely,

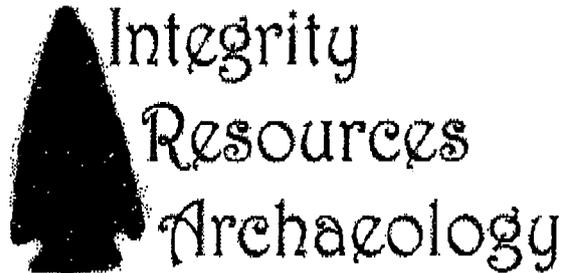

Mark F. Baumler, Ph.D.
State Historic Preservation Officer

File: US/FEMA/2010

2010110406

DEC 03 2010

225 North Roberts Street
P.O. Box 201201
Helena, MT 59620-1201
(406) 444-2694
(406) 444-2696 FAX
montanahistoricalsociety.org



2225 S. Hole in the Wall Road Potomac, Montana 59823 Phone (406)244-5865 Cell (406)531-3045

January 31, 2011

Bob O'Boyle

Principal Investigator

2225 S. Hole in the Wall Rd

Potomac, Montana

59823

To: Brad Langsather

Natural Resource Coordinator Opens Lands Division

316 North Park Avenue

Helena, Montana

59623

Brad,

This letter is a response to the request for archaeological mapping and monitoring proposal for the Helena South Hills Fuel Reduction 2009 and Helena Open Lands Fuel Reduction 2010 Project. Integrity Resources is prepared to provide the necessary work to comply with the City of Helena's National Historic Preservation Act Requirements as outlined in the request for proposal. The below proposal is not a full Class III inventory. Site forms will be prepared as necessary and National Register recommendations will be made as part of the study. Current federal rates are used for lodging and per diem.

All 23 of the treatment units would be investigated prior to the tree removal and chipping. Eleven days would be spent in the field looking at the parcels for historic properties. This would allow for nine day of looking at the parcels (averaging 40 acres a day) and two additional days for flagging out sites and mapping site parameters. One week (five days) would then be spent preparing a preliminary report of findings including maps of the sites located, areas inspected, and high probability intact cultural deposits. In addition there would be two days for meetings, background research, and field preparation.

Follow up monitoring could then be planned based on findings. For each treatment unit with a cultural property located, prior to culling of trees a meeting could be held with the city Parks and Recreation and the contractor (in charge of cutting in the unit) to go over findings and insure the sites are still marked out. Often when there is a time lag between marking sites and

when the work is completed the markings can disappear, be weathered, or simply fade and become difficult to locate. These meetings could be consolidated into a handful of meetings based on the desires of the SHPO for monitoring and the ability to consolidate the opening of the treatment units. This is why a cost per meeting is given. The follow up monitoring meeting would ensure the contractor, city, and cultural resource expert were all on the same page. In addition, it would ensure the sites were clearly marked prior to work being done in the area. If no sites were located within a treatment unit, there would be no need for a monitoring meeting for that unit.

A final report would be completed summarizing all findings, putting the area into a historic context, maps locating known cultural resources, photographs, and making recommendations for future work. This would take five days and would be completed following the last treatment unit being completed. Copies of this report would be provided to the City of Helena.

If you have any question please feel free to contact me anytime.



Bob O'Boyle

2225 S. Hole in the Wall Rd
Potomac, Montana
59823

(406)244-5865 or cell (406)531-3045

Budget

Initial meetings with city officials

Project PI	\$200
Meals and Incidental 1 day.	\$56
Mileage 200 miles X \$.51 a mile	<u>\$102</u>
	\$358

Preliminary Inspection

Project Archaeologist \$200 a day X 15 Days.	\$3000
Meals and Incidentals \$56 X15	\$840
Lodging \$81 a day X 15	\$1215
Mileage 245 miles X \$.51	<u>\$124.95</u>
	\$5179.95

Preliminary Repot

Project Archaeologist \$200 a day X 17	\$3400
--	--------

Follow up Monitoring Meetings

Project Archaeologist \$200 a Day	\$200
Meals and Incidental	\$56
Lodging	\$81
Mileage 200 miles X \$.51 a mile	<u>\$102</u>

Total per monitoring meeting: \$439

*Up to 23 (per treatment unit sites were identified in): \$10,097

Final Report

Project Archaeologist \$200 a day X 8	\$1600
---------------------------------------	--------

Printing costs \$150

Field Supplies (batteries, fagging, paint) \$50

Subtotal: \$20834.95

Overhead 12%: \$2500.19

Up to Total: \$23,335.14

*Only as many monitoring meetings as deemed necessary following the preliminary inspection would be conducted. The cost for each meeting would be \$439. A 12% overhead would be added to the total project cost.

Helena Wildfire Mitigation

Appendix C: Summary Comparison of Impacts

Appendix C: Summary Comparison of Impacts: Reference Table 4-1 of the original EA.

Affected Environment/ Resource Area	Original Impacts	Supplemental Impacts
Geology and Soils	Minor short-term impacts due to equipment use.	No Change
Land Use and Planning	No impact	No Change
Traffic & Circulation	Minor short-term impacts due to smoke from prescribed burning.	No impacts – no burning will occur during treatment.
Public Health & Safety	Beneficial impacts due to lowered risk of fire.	No Change
Socioeconomic	Beneficial impacts due to reduced fire-fighting and recovery costs.	No Change
Aesthetics/ Visual Resources	Minor short-term impacts due to smoke from prescribed burning.	No impacts – no burning will occur during treatment.
Air Quality	Minor short-term impacts due to smoke from prescribed burning.	No impacts – no burning will occur during treatment.
Public Services	Beneficial due to increased protection of utilities.	No Change
Noise	Minor, temporary adverse impacts due to use of chainsaws and chippers	No Change
Hydrology/Water Quality	Beneficial impacts due to avoidance of increased run-off after uncontrolled fires.	No Change
Floodplains	No impact	No Change
Wetlands	No impact	No Change
Vegetation	Beneficial impacts due to thinning of canopy.	No Change
Invasive Species	Minor impacts around burn piles managed by use of herbicide.	No impacts – no burning will occur during treatment.
Wildlife	Beneficial impacts due to thinning of canopy.	No Change
T & E Species	No impact.	No Change – per updated consultation with USFWS
Cultural Resources	No impact.	No Change – per updated consultation with SHPO
Recognized Environmental Conditions	Minor short-term impacts due to equipment use.	No Change

**FEDERAL EMERGENCY MANAGEMENT AGENCY
FINDING OF NO SIGNIFICANT IMPACT (FONSI)**

**Helena Wildfire Mitigation Project(s)
Lewis and Clark County, Montana
May 2, 2011**

The City of Helena, Montana has applied for funding under the Federal Emergency Management Agency's (FEMA) Pre-Disaster Mitigation (PDM) program and Hazard Mitigation Grant Program (HMGP) to mitigate wildfire impacts to improved properties and reduce the need for federal disaster assistance in the future.

In May of 2008, FEMA prepared an Environmental Assessment (EA) and a **Finding of No Significant Impact (FONSI)** was issued May 22, 2008 for the Fuels Reduction Project, Helena Open Lands System. This supplemental EA is to document and transmit FEMA's evaluation of similar actions in the same geographic area. The new project will address the purpose and need as described in the original EA and approved in the original FONSI, both of which are incorporated here by reference. The only adverse impacts identified in the original EA were minor, short-term impacts to aesthetics, air-quality, and traffic associated with smoke from prescribed burning; and a temporary increase in noise levels from use of chainsaws and chippers. Other impacts were described as beneficial in nature. The overall project elements and approach have been refined to result in fewer impacts than described in the original EA, because no materials will be burned as a result of the proposed project. In addition, potential cultural resources will be identified and avoided through implementation of a monitoring plan.

The proposed treatment area of potential effect (APE) consists of 350 acres and has two components: Helena South Hills (150 acres, HMGP-DR-1767-MT-2009-11) and Open Lands (200 acres, PDMC-PJ-08-MT-2010-010). The Proposed mitigation is to reduce fuel loading from city and private lands within or adjacent to the City of Helena (46.3448, -112.218). According to the application there are approximately 3275 structures located within the project area(s) that are expected to be afforded some level of protection by the project(s). Critical facilities to be protected include Emergency Operations Centers, medical centers, water and power providers, fire protection, schools and other essential government facilities.

The project will be implemented by the City of Helena Parks Department and will follow the Tri-County Fire Working Group (TCFWG) model for fuel reduction. A team of trained forestry personnel, including a qualified forester, a surveyor and a project manager will conduct a comprehensive assessment of sites to be cleared. Site-specific methodology for reduction will be determined after this assessment. In general, beetle-killed pine trees in the project areas will be hand-thinned to create a spacing of 10-15 feet between crowns. Remaining trees will be pruned and excessive seedlings and saplings will be cleared. Cut waste material will be chipped on site or hauled to a sorting yard for appropriate disposal. No material will be burned as a result of this project. Existing city-owned roads will be used to the extent possible for staging and moving equipment. No new roads will be built in the project area. Most of the work is planned to be completed during the winter, when it is the least intrusive for ground disturbance. Routes with

DRAFT FEMA FINDING OF NO SIGNIFICANT IMPACT (FONSI)

the least amount of ground disturbance will be chosen for the use of motorized equipment. Various types of low-impact equipment will be used, including skid-steer mounted bull-hog masticators and newer chippers with rubber tires.

The City of Helena Parks Department has been designing and implementing low-impact forest fuel mitigation within city-owned open space properties since 2002. The methodologies employed to fell trees, clear undergrowth, move equipment and otherwise accomplish the objectives of Helena's forest hazard reduction projects have a proven track record of completing projects with a minimal amount of ground disturbance. The same methods and types of equipment will be used for the proposed FEMA-funded projects. The public has been duly notified of these changes through project specific meetings, newspaper articles and outreach to individuals within the proposed project area. All original findings, stipulations, mitigation measures and project conditions apply, except as noted below.

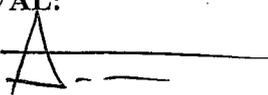
In addition to the use of the low-impact equipment and removal methods described above, FEMA will require a professional meeting *The Secretary of Interior's Professional Qualification Standards (36 CFR Part 61)* in the discipline of archaeology to monitor activities to ensure avoidance of areas where potential resources are located. Prior to initiation of work the FEMA and the Applicant will provide three sets of maps containing the following information:

1. Map identifying all currently Known Historic Properties in the APE
2. Map identifying Proposed Staging Areas and Vehicle Routes in the APE
3. Map identifying areas of High Probability of Intact Archeological Sites in the APE.

If additional known historic properties are identified the sites will be mapped and avoided in accordance with a mapping and monitoring plan provided by the City's archaeological consultant, and approved by the State Historic Preservation Officer (SHPO).

Based on the information contained in the supplemental EA, completed in accordance with the National Environmental Policy Act, FEMA's regulations (44 CFR Part 10) for environmental considerations, and Executive Orders (EO) addressing Floodplains (EO 11988), Wetlands (EO 11990), the Endangered Species Act, and Environmental Justice (EO 12898), it is found that the Proposed Action with the prescribed mitigation measures and stipulations (as amended) will have no significant adverse impact on the human environment. As a result of this **Finding of No Significant Impact (FONSI)**, an Environmental Impact Statement will not be prepared, and the Proposed Action with the associated mitigation measures and stipulations as described in the amended Environmental Assessment may proceed.

APPROVAL:


Signed _____
Steven E. Hardegen
Regional Environmental Officer

05/06/2011
Date