

# Lawrence County Hazardous Fuels Reduction Landowners Packet

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## HAZARDOUS FUELS REDUCTION COST SHARE PROGRAM

The following hazardous fuels reduction cost share program is designed to provide a private landowner the tools needed to perform hazardous fuels reduction on property that is at risk from uncontrolled wildland fire. The liaison for this program will be the Wildland Urban interface Specialist and the Lawrence County Emergency Manager. The main focus of this fuels reduction program will be in the 30 to 300 foot survivable space around inhabited structures and associated outbuildings. This area may be modified if a larger treatment area would be beneficial to other structures or values in the area. The WUI Specialist administrating the program will determine the area to be treated. A fire adapted community is one that will survive a wildland fire without substantial loss because of active fuels management. This will not only promote a healthier forest but it will maintain the value and aesthetics of the property after a wildfire.

The following prescription has been developed for the Lawrence County Hazardous Fuels Reduction Program.

1. Overstory conifer canopy spacing shall be maintained at an average of 20 feet between crowns. Hazardous topography, which is land with south or west aspect on a slope greater than 8%, will require more aggressive treatments. Conifer spacing will need to be increased up to an average of 30 feet under these conditions.
2. Ladder fuels must be trimmed a minimum of 6 feet off the ground. This will interrupt vertical fuels and keep surface fire from spreading into the forest canopy. Ladder fuels under conifer vegetation shall be maintained to reduce the risk of torching and crowning fire behavior. Isolated patches of volatile shrubs and regeneration can exist if they are well separated from surrounding overstory.
3. Surface fuels must be removed or significantly reduced to decrease surface fire intensity. Existing surface fuels and any additional fuel created by the project must be treated and maintained.

When selecting trees for removal, large dominant trees that are straight, with good form and vigor should be left providing they meet the minimum spacing requirements. Remove all storm bent or damaged trees. Also dead or split top trees or trees with stem cankers should be removed. Remove unhealthy or defective trees first, and then remove remaining trees until desired spacing is achieved.

Remove, chip or pile and burn all resulting vegetation residue. If chips are to be scattered they should not be more than 4 inches deep. Chips or other residue should not be placed under vegetation that could cause a ladder affect, or generate enough intensity to cause mortality to the vegetation above it. Utilize wood as commercial logs, firewood, mulch or other forest products where practical.

To diminish the threat from wildfire action needs to be taken to reduce fire intensity in proximity to structures, associated outbuildings and other values at risk. This will provide fire suppression crews a better opportunity to perform suppression activities in a safer working environment.

The landowner will be required to submit 2 bids from contractors to do the work. The landowner will be responsible for all work being preformed on the property and for the project being completed to the prescription. The landowner will track all costs and provide documentation of such at the completion of the project. Any profit or revenue received by the landowner as a result of the fuels reduction project will be subtracted from the total cost of a project before determining the total of all qualifying costs. Documentation of any and all revenue the landowner receives as a result of the fuels reduction must also be provided at the completion of the project. The program will reimburse the landowner 50% of all qualifying costs from approved fuels reduction activities with a maximum of \$500.00 per acre. The commitment to maintain this prescription for 10 years by the landowner will increase the cost share of the program to 60% with a maximum of \$600.00 per acre. There would be no reimbursement for this maintenance after the initial completion of the project. Qualification of a property for the program will be at the discretion of the WUI Specialist.

This program will only reimburse a maximum of 60% of a \$1000 per acre of treatment costs. All costs above \$1,000 per acre will be the responsibility of the landowner. Projects that will be eligible for the cost share program include; thinning dense stands of trees, thinning dense under story, using prescribed fire to reduce hazardous fuels, slash or biomass disposal, eliminating ladder fuels and removal of volatile fuels in close proximity to structures. This program is not intended to provide selective tree removal if the entire survivable space of the structure and associated outbuildings are not treated.

When the project is complete a certificate of completion form, a copy of all invoices, a copy of the canceled check or payment, a completed W-9 form and a claim against Lawrence County form must all be submitted to Lawrence County. The project will be inspected to insure all requirements have been met and then the landowner would be reimbursed for the amount of the approved project.

Lawrence County will not be held liable for work that is conducted under this program on a landowner's property. All issues that arise with the contractor will be the responsibility of the landowner to settle. There is no guarantee that the property treated will survive a wildfire event. This program is only intended to **reduce the risk** from wildfire.

### **PUBLIC EDUCATION INFORMATION**

The public shall be provided with important information pertaining to maintaining a Firewise property or otherwise known as a fire adapted community. Building construction, fuel modification and continued maintenance are the key factors in preventing initial ignition of structures. Fire resistive building materials need to be used to keep a wildfire from igniting a structure from direct flame impingement or from radiant or convective heat transfer. Fire resistive vegetation should be used in the home ignition zone of a structure to help reduce fire intensity. Interrupting fuel sources can reduce the spread of fire which threaten values in Lawrence County.

Firewood, combustible materials and other fuel sources should not be stored in unenclosed spaces beneath structures, on decks, under eaves, canopies or overhangs. These materials should be a

minimum of 30 feet from the structure. These items should be within the survivable space of the structure so they can be protected but not presenting a hazard during a fire event. *See fire resistive building construction requirements at the back of this packet.*

All structures should be marked with the appropriate address signage. If the structure is not visible from the primary road the structures address should be posted at the primary road. Signage should be clearly visible and constructed with fire resistant material.

Residents should be encouraged to develop a fire protection plan that addresses specific details to be more prepared from wildfire. These may include: topography, slope/aspect, flammable vegetation, climatic conditions, fire history, water sources, access, building ignition, fire resistant factors, equipment, survivable space and vegetation management.

Survivable space is very important to reduce wildfire intensity near values in the Wildland Urban Interface. Building materials, types of vegetation and fuel loads are key considerations when determining how much survivable space is required. Effective survivable space may be anywhere from 30-300 feet. Structures that are built on steeper slopes require more survivable space on the down slope side. There is documented scientific research that indicates structures that are 100 feet or farther from high intensity crown fire normally do not ignite from radiant or convective heat. Usually, it is the small things that people overlook that cause initial ignition of the structure. Privately owned parcels shall be maintained so that they will not support high intensity crown fire. Ladder fuels need to be removed to lower the possibility of the fire spreading up into the canopy from the ground. Not only is there a danger of a fire approaching from outside an area but there is also the danger of a fire starting within the survivable space and spreading outward. Surface fuels need to be significantly reduced or eliminated to reduce surface fire intensity. Fire resistive vegetation is an efficient way to reduce fire intensities. Hardwoods and deciduous types of vegetation are good ways to provide safety, while providing pleasing aesthetic value. *See Fire Resistive Plant Species for the Great Plains in the back of this packet for a complete list of fire resistive vegetation.*

Structures situated in the open areas also need to give consideration to the hazards associated with fuels such as cured grasses. Mitigation efforts could include graveled driveways, disking fuel brakes, cultivated flowerbeds, and well-managed shelterbelts. This will interrupt the continuity of the natural fuels that threaten values in Lawrence County.

A fire resistive roof covering is needed to protect a structure from initial ignition from firebrands. Windows and skylights should be double pained or tempered glass. No vinyl or plastic windows, door assemblies or siding. All structure openings need 1/8-inch metal screen to keep out embers and wind-blown fuels. Eaves should be enclosed and not vented. All external walls and decks should have a minimum of a 20-minute fire rating. Debris needs to be kept off roofs and out of gutters. These areas should be rechecked throughout the fire season. Heavy timber or log construction is acceptable; these materials have a lot of thermal mass and possess high heat absorbency characteristics.

The Lawrence County Hazardous Fuels Reduction Cost Share Program will be available to help landowners achieve desired fuel treatments. This cost share program will be offered for as long as the funding is available. FireWise property will help to protect values against uncontrolled wildfire.

Encouraging people to live Firewise lives is crucial to protecting life and property. This cannot be achieved easily but will require the shared responsibility of everyone that has a stake in its success.

## Fire Resistive Plant Species for the Great Plains

All Plant material will burn if dry but the following is a list of plants that are more fire resistive.

<b>Trees:</b>	<b>Common Name:</b>	<b>Perennials:</b>	<b>Common Name:</b>
Betula	Birch	Achillea spp.	Yarrow
Acer spp.	Maple amur and silver	Allium schoenoprasum	Chives
Alnus spp.	Alder	Bergenia spp.	Bergenia
Catalpa speciosa	Northern Catapla	Brodiaea spp.	Lily
Cornus florida	Flowing Dogwood	Coroepsis spp.	Coreopsis
Fraxinus spp.	Ash green	Erysimum linifolium	Wall flower
Gleditsia tricanthos	Honeylocust	Eschscholzia spp.	California poppy
Malus spp.	Apple siberian crab	Fragaria sp.	Wild Strawberries
Populus spp.	Aspen, Cottonwood, Poplar	Geranium spp.	Geranium
Prunus spp.	Cherry common chokecherry	Hemerocallis hybrids	Daylillies
Quercus spp.	Oak (bur)	Heuchera spp.	Coral bells
Robinia pseudoacacia	Black locust	Iris spp.	Iris
Salix spp.	Willow golden and white	Kniphofia uvaria	Red hot poker
Ulmus pumila	Siberian elm	Lupinus spp.	Lupine
Pyrus ussuriensis	Harbin pear	Oenothera spp.	Evening primrose
		Penstemon spp.	Beard tongue
		Solidago spp.	Goldenrod
		Strachys bysantina	Lamb's ear
<b>Shrubs:</b>	<b>Common Name:</b>	<b>Groundcovers:</b>	<b>Common Name:</b>
Amelanchier spp.	Serviceberry	<b>Succulents:</b>	
Atriplex canescens	Four Wing Saltbush	Delospema nubigenum	Hardest ice plant
Buddilia davidi	Butterfly Bush	Echeveria spp.	Hens & Chicks
Caryopteris x clandonensis	Blue-Mist Spirea	Sudem spp.	Stone crops
Cornus serica	Red Osier Dogwood		
Cotoneaster spp.	Cotoneaster	<b>Non-succulents:</b>	
Liqustrum spp.	Privet	Schillea tomentosa	Wolly yarrow
Mahonia spp.	Creeping Grape Holly	Ajuga reptans	Carpet bugle
Pachistima canbyi Dqarf	Mountain Lover	Arctostaphylois uva-ursi	Kinnikinnick
Philadelphus spp.	Mock Orange; Syringa	Armeria meritima	Sea pink; thrift
Rhamnus fragula	Buckthorn	Cerastium tomentosa	Snow in summer
Rhododendron spp.	Azalaes, Rhododendrons	Cotoneaster dammeri	Bearberry cotoneaster
Ribes spp.	Currant	Euonymus fortunei	Winter creeper
Sheperdia argentea	Silver buffaloberry	Potentilla tabernaemontanii	Spring cinquefoil
Symphoricarpos albus	Snowberry	Senecio cineraria	Dusty miller
Viburnum trilobum	Cranberry bush	Thymus praecox articus	Mother of thyme
Yucca spp.	Yucca	Verbenia bipinnatifida	Verbenia
Syringa vulgaris	Common lilac		

The highlighted species have a higher chance of survival; the other types may grow as a landscape species with proper care. For more site-specific information please contact your state forester.

**LAWRENCE COUNTY HAZARDOUS FUELS REDUCTION  
REQUEST FOR COST-SHARE ASSISTANCE**

**Applicant Information**

First Name: \_\_\_\_\_ M: \_\_\_\_ Last Name: \_\_\_\_\_  
Address \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_  
Telephone \_\_\_\_\_

**Project Information**

Community/Subdivision \_\_\_\_\_  
Parcel # \_\_\_\_\_ Latitude \_\_\_\_\_ Longitude \_\_\_\_\_

Project Description: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(Complete 1 Only)                      Number of Trees \_\_\_\_\_      Number of Acres \_\_\_\_\_

**Applicant Request**

I request cost-share assistance to complete the project described above. I agree to complete the entire project by the expiration date or all cost-share funds shall be forfeited. I understand that by completing the application, I am not guaranteed cost-share. Upon completion of the project I agree to provide Lawrence County with proof of my expenses by submitting a copy of receipts, invoices or other written document itemizing costs incurred. I understand that I will not receive payment until such proof, along with a signed "Certificate of Project Completion" has been received by the County. I authorize a representative of the County to have access to the project site area. I have not yet started the project and I understand that if I begin the project before receiving written approval, I may be denied funding.

I \_\_\_\_\_ agree to maintain the prescribed treatment for 10 years.

Signature of Participant \_\_\_\_\_ Date \_\_\_\_\_

**Office Use Only -----**

Approved by \_\_\_\_\_ Date Approved \_\_\_\_\_  
Estimated Total Project Cost \_\_\_\_\_ Estimated Cost-Share Amount \_\_\_\_\_  
Estimated Completion Date \_\_\_\_\_

Participation in Lawrence County Firewise program is open to all eligible applicants without regard to race, color, religion, national origin, age, sex, marital status, or disability.

LAWRENCE COUNTY HAZARDOUS FUELS REDUCTION  
**CERTIFICATATION OF PROJECT COMPLETION**

**Applicant Information**

First Name: \_\_\_\_\_ M: \_\_\_\_\_ Last Name: \_\_\_\_\_  
Address \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_  
Telephone \_\_\_\_\_

**Project Information**

Community/ Subdivision \_\_\_\_\_  
Parcel # \_\_\_\_\_ Latitude \_\_\_\_\_ Longitude \_\_\_\_\_

Project Description: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(Complete 1 Only)                  Number of Trees \_\_\_\_\_ Number of Acres \_\_\_\_\_

**Participation Certification and Request for Payment**

I certify that I have completed the above project in accordance with the project specification program requirements. I hereby apply to Lawrence County for cost-share payment for completed project work. I have included documentation of costs incurred, and a completed form W-9. Any profit or revenue received as a result of this fuels reduction project has also been disclosed and documented.

I \_\_\_\_\_ agree to maintain the prescribed treatment for 10 years.

I understand this treatment only **reduces the risk**, and **does not guarantee** my property will not sustain damage during a wildfire event.

Signature of Participant \_\_\_\_\_ Date \_\_\_\_\_

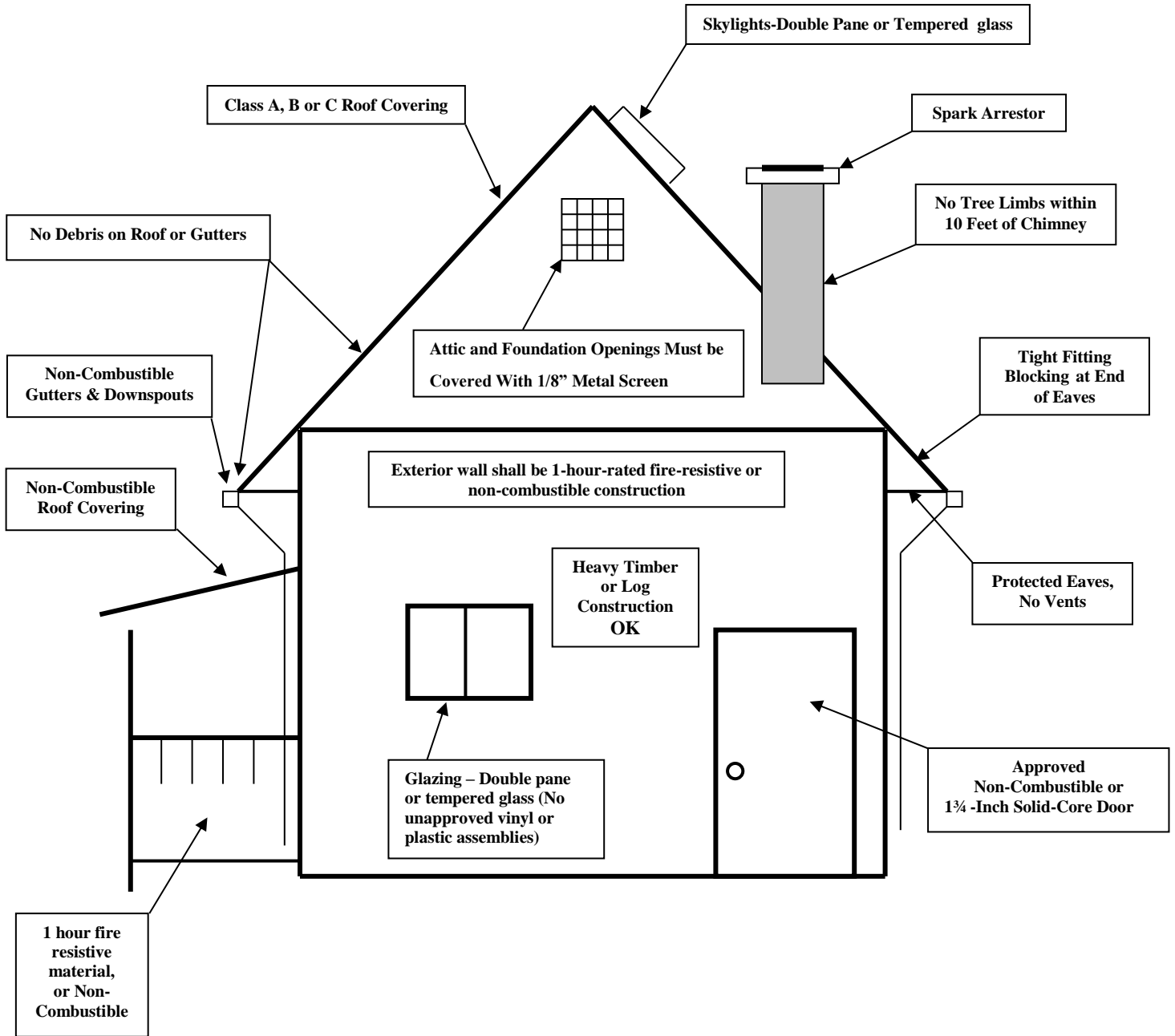
**Office Use Only** -----

Approved By \_\_\_\_\_ Date Approved \_\_\_\_\_ Cost-Share Earned \_\_\_\_\_  
Date Completed \_\_\_\_\_ Date Cancelled \_\_\_\_\_  
Number of Trees Treated \_\_\_\_\_ Number of Acres Treated \_\_\_\_\_  
Payment Approved By \_\_\_\_\_ Date Payment Approved \_\_\_\_\_

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# IGNITION RESISTIVE CONSTRUCTION



No vinyl or plastic handrails on decks unless approved & fire rated



## Fire Resistive Building Requirements

Requirements addressing building design, location and construction are set forth as below:

- A. Shingles shall be Class A, B, or C fire resistant material.
- B. No wooden shake shingles are allowed.
- C. Vents shall be screened with a corrosion resistant, noncombustible wire mesh with the mesh opening not to exceed nominal 1/8" in size.
- D. Eaves shall be boxed in with 5/8" nominal sheathing or noncombustible materials.
- E. Where the roof profile allows space between the roof covering and the roof decking, the spaces shall be constructed to prevent the intrusion of flames and embers, be fire stopped with approved materials, or have additional assembly components of noncombustible materials to prevent ignition.
- F. Attic or foundation ventilation louvers or ventilation openings in vertical walls shall be covered with nominal 1/8" mesh corrosion-resistant metal screen or other noncombustible and approved material that offers equivalent protection.
- G. No attic ventilation openings or ventilation louvers shall be permitted in soffits, in eave overhangs, between rafters at eaves, or in other overhanging areas on those exposures facing hazardous vegetation.
- H. Attic spaces shall be ventilated as approved for the building configuration, the climatological conditions of the site, and the moisture and temperature conditions associated with the occupancy and use of the building.
- I. All overhanging projections and overhanging buildings shall be of heavy timber construction; be constructed of noncombustible material, fire retardant treated wood, or other ignition resistant material; or be 1-hour fire-rated assembly.
- J. Exterior vertical walls shall meet the requirements for heavy timber construction, ignition-resistive material, fire-retardants-treated wood, or a minimum 20-minute fire-rated assembly where walls are potentially exposed to a wildland fire.
- K. All exterior walls shall be protected with 2 inch nominal solid blocking between exposed rafters at all roof overhangs, under the exterior wall covering on all sides exposed to native vegetation.
- L. When appendages and projections are attached to exterior fire resistive walls, they shall be constructed to maintain the fire resistive integrity of the wall.
- M. Structural elements that result in or could result in the collection of combustible materials proximal to the structure shall be protected.
- N. Exterior windows, windows within exterior doors, and skylights shall be tempered glass, multi-layered glazed panels, glass block, or have a fire-resistance rating of no less than 20 minutes.
- O. Window screening shall be noncombustible mesh and installed to prevent the collection of firebrands and embers or their entry into open windows.
- P. Exterior doors shall be solid core wood no less than 1¾-inch thick, approved noncombustible construction, or have a fire protection rating of no less than 20 minutes.
- Q. Vents for attic and sub-floor ventilation shall be screened with a corrosion-resistant wire mesh, with the mesh opening not exceeding nominal 1/8" in size.

- R. No vents shall be installed in a location that faces heavy vegetative fuels.
- S. Every fireplace and wood stove chimney and flue shall be provided with an approved spark arrester constructed of a minimum 12-gauge welded wire or woven wire mesh, with openings not exceeding  $\frac{1}{2}$ ".
- T. Vegetation shall not be allowed within 10 ft. of a chimney outlet.
- U. Accessory structures shall meet all of the requirements of this section or shall be separated from the main structure by a minimum of 30 feet.
- V. Permanently located mobile and manufactured homes with an open space beneath shall have a skirt of noncombustible material or material that has a minimum fire-resistive rating of 20 minutes.
- W. Any enclosed space beneath the mobile or manufactured home shall be vented according to C above.