Nebraska Forest Service

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FOREST FUELS REDUCTION PROGRAM

Thinning forests to lower fuels loads is the only effective way to reduce extreme wildfire behavior. The Nebraska Forest Service (NFS) Forest Fuels Reduction Program:

- creates strategically located corridors of thinned forests across the landscape;
- reduces fire intensity;
- improves fire suppression effectiveness;
- increases firefighter safety; and
- better protects lives and property.

Thinning forests to lower forest fuel loads involves mechanically removing small- and medium-size trees that are either:

- 1) converted to wood chips for use in biomass energy plants (e.g., at Chadron State College) or
- 2) burned in piles during safe winter periods.

After mechanical thinning, forests will be periodically burned under controlled conditions to maintain low fuel loads.

With state, federal and private funds, NFS:

- is substantially expanding the fuels reduction program in 2008 to treat 3,500 acres of highly flammable forest;
- coordinates fuels reduction efforts on private lands with other public land management agencies for landscape-level impacts; and
- provides homeowners with training in firewise awareness through workshops, the media and on-site technical assistance.



In densely overgrown forests, debris and understory growth serve as the pathway for making ground fires canopy fires. Once fires reach the forest canopy, they burn intensely and are much more dangerous and destructive.





This Chadron-area home was threatened by an approaching crown fire in 2006. Because of fuels reduction work conducted near the house two years earlier, the fire lost intensity as it entered the thinned area and did not ignite the house.

The Nebraska Forest Service: Improving peoples' lives by protecting, utilizing and enhancing Nebraska's tree and forest resources.

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FOREST FUELS REDUCTION SUMMARY 2001-2007







PINE RIDGE: 2001-2007

- \$550,000 USFS dollars awarded to NFS in FY 2007 and 2008 for fuels reduction
- Total treated acres = 5,586
- Total federal and state (grant) funds expended or obligated = \$1,416,000
- Number of cooperating landowners = 104
- Unobligated federal dollars for cost-share in Pine Ridge= \$610,000
 - enough to treat 2,033 acres at \$300/acre

NIOBRARA VALLEY: NEW PROGRAM IN 2007

- \$500,000 federal funds awarded to NFS for fuels reduction in FY 2007 and 2008
- \$237,500 FY 2008 state funds appropriated to NFS for fuels reduction in the Pine Ridge and Niobrara Valley
- \$646,000 unobligated federal/state dollars available for cost-share
 - enough to treat 1,068 acres at \$600/acre

TOTAL FUELS REDUCTION PROGRAM RESULTS

- Total acres treated or under contract for treatment since 2001 = 5,663 acres
- Total funds (federal and state) expended or obligated for fuels treatment since 2001 = \$1,462,750
- Total unobligated funds (federal and state) = \$1,256,000
 - enough to treat 3,101 acres
- Woody biomass potentially generated each year = 24,315 tons
 - the Chadron State College campus is heated and cooled with 9,000 tons/year

FUNDING SOURCES

- USFS Wildland-Urban Interface funds (50 percent cost-share)
- USFS Adjacent Lands Funds (100 percent cost-share)
- USFS Forest Land Enhancement Program (50 percent cost-share)
- Nebraska Environmental Trust grant (50 percent cost-share)
- NRCS Conservation Innovation Grant (50 percent cost-share)
- Nebraska state forest fuels reduction appropriation (25 percent cost-share)
- Nebraska Forest Service operating funds (personnel support/overhead)





Densely overgrown forests (top) contain ladder fuels, which allow ground fires to become highly destructive canopy fires. Fuels treatment projects remove small diameter trees and understory growth (above), thus reducing the risk of catastrophic wildfires.