

Overview

Silver City, located in Grant County, lies in southwestern New Mexico at the base of the Pinos Altos Mountains. The city borders the southern edge of Gila National Forest and is a short distance from the scenic Gila Wilderness Area. Silver City is designated one of the state's top twenty communities most threatened by catastrophic wildfire. At an elevation of just under 6,000 feet, the surrounding forests are composed of pinon-juniper and ponderosa pine with some mountain mahogany and scrub oak.

According to the 2000 census, the average household income is \$25,661 and the average home value is \$87,700. About 10% of the homes are seasonally occupied with over 10,000 people living in Silver City. The area has a staggering unemployment rate of 14% and recently lost another 700 jobs with the shut down of Stream, an international call center. The semi-arid climate with four mild seasons attracts a growing retirement population. In the past, the Silver City area depended on mining and ranching for employment and economic stability. A decline in the mining industry in recent years has seen an economic shift to tourism and retirement.

Addressing the threat

Silver City has not experienced a wildfire in its wildland urban interface, but has taken actions to address its threat. The response to the threat of wildfire has been coordinated through the National Fire Plan Implementation Team (NFPIT). NFPIT is composed of many agencies and organizations that have differing sets of responsibility for wildfire issues in Grant County and Silver City. The NFPIT mission statement says their goal is, "To create a community that is in continuous harmony with the regional environment-by integrating wildfire issues with the broader goals of ecosystem restoration and social and economic development".

NFPIT was founded in the fall of 2000 as a "multi-agency, community-driven effort on developing strategies and projects that address: fire planning, forest restoration, fuels reduction, public outreach and economic development". NFPIT emerged from a previous organization, the Local Emergency Planning Council (LEPC). Frank Kenney had coordinated LEPC beginning in 1999 and also heads NFPIT. Kenney is a retired police officer who is funded for part-time work on NFPIT through New Mexico State Forestry (NMSF).

NFPIT meetings are monthly and allow the multiple participants involved in the wildfire problem to meet and discuss current issues, problems and opportunities. Participants also have continuous situations of one-on-one interaction depending on the given issue or problem. Good coordination stems from the LEPC. Resident and agency workers involved in NFPIT tend to have worked in Silver City for long periods of time giving them a strong attachment and commitment to place. According to Doug Boykin, Socorro District Forester (NMSF), "There are different agendas, but no hidden agendas" in NFPIT.

Why are the forests surrounding Silver City at such high risk of catastrophic wildfire?

"Prior to the late 1800s, frequent low-intensity ground fires maintained the ponderosa pine and gambel oak forests. However, heavy grazing in the late 1800s followed by aggressive fire suppression altered the landscape from an open park-like environment consisting of single-story stands with continuous bunchgrass understory cover, to multistoried stands with dense, downed

woody material and sparse live ground cover. “Grant County Wildland Urban Interface Fire Mitigation Plan

National Fire Plan (NFP) Community Assistance Programs

In New Mexico, NFP Community Assistance Programs incentivize communities to address their wildfire threat through five grant programs; 1) 20 Communities Cost-Share Program, supports thinning on private land, 2) Economic Action Programs, develops economic opportunities related to traditionally underutilized wood products 3) Volunteer/Rural Fire Assistance, improves firefighting capabilities of rural fire departments 4) Four Corners Sustainable Forest Partnerships, promotes community development through forest restoration and 5) Collaborative Forest Restoration Program, supports projects to restore forests on public lands.

Silver City aggressively seeks monies under these programs. In 2001, Silver City was funded for \$618,655 through NFP Community Assistance Programs. In 2002, the town received funding of \$731,000 through these programs.

WGA Goal - Improve Fire Prevention and Suppression

Actions to meet goal

- Improve firefighting capability/readiness to protect communities and the environment
- Reduce incidence of injury to life and property resulting from catastrophic wildland fire
- Expand outreach and education to homeowners
- Develop a consistent preparedness model among partners

Community outreach

Two programs focus on education for the community— Defensible Space Workshops and FIREWISE Communities Workshops. The Gila National Forest has been conducting the Defensible Space Workshops for over five years. These workshops are 2-hour presentations with interagency partners. Local fire departments give the workshops along with the USFS District Fire Management Office. After the presentation, the 20 Communities Cost-share Program is explained to give homeowners an incentive to treat their land. These group and one-on-one meetings are a critical step when dealing with people and their houses.

In 2001, Grant County Local Emergency Planning Committee (LEPC) and National Fire Plan Implementation Team (NFPIT) began co-sponsoring FIREWISE workshops intended to increase homeowner awareness of the wildfire threat and develop skills to protect homes. The workshops are well attended by the community and now are expected to be an annual event.

Loretta Ray is a USFS Interagency Coordinator and Fire Information Officer and works closely with NFPIT and their community education efforts. Loretta has seen a "domino effect" with defensible space. When one property is thinned, other property owners like the appearance and soon follow suit. Still, there are those that move to remote areas in Silver City to avoid people and regulations and to live with nature. Many like the privacy associated with thick dense forests and can be difficult to communicate with or reach through these means

The All Hazards Emergency Operations Plan

In 1999, LEPC established the Grant County Unified Fire Command Protocols. These protocols established procedures including evacuation plans. A variety of fire and emergency agencies met to develop an interagency plan. Exercises were designed and conducted to test the plan. In 2002, the Unified Fire Command Protocols were adopted and incorporated in the County's All Hazards Emergency Operations Plan.

Silver City Fire Department

Silver City Fire Department has 21 full-time firefighters that support the community of over 10,000 people. The Department began 130-190, Basic Wildland training in the late 1990's and requires all firefighters to remain current in the training. This means that all firefighters are cross-trained in both structure and wildland firefighting techniques.

Wildfires in Silver City

There have not been many wildland fires in the USFS Silver City District. In 2002, the Middle fire and the Cub fire burned in the District. The Middle fire was mostly grass and burned 35,000 acres. The Cub fire hit a previous fire and was reduced to a ground fire. 7,500 acres were burned.

Prescribed fire has been used more on Gila National Forest in comparison to others. According to Gerry Engel, SC District Ranger this is due to the foresight of the current and past Fire Management Officers who wanted to use and continue to use fire as a tool to mitigate the wildfire threat.

WGA Goal - Reduce Hazardous Fuels

Actions to meet goal Reduce acres at risk

- Ensure communities most at risk receive priority
- Expand and improve integration of hazardous fuels management program
- Incorporate public health and environmental quality considerations in fire management activities
- Develop smoke management plans in conjunction with prescribed fire planning
- Address fire-prone ecosystem problems
- Maintain areas improved by fuels treatment
- Conduct and utilize research to support the reduction of hazardous fuels in WUI communities
- Factor in local environmental conditions during fuels treatment planning

20 Communities Cost-share Program

The 20 Communities Cost-share Program allows landowners to create defensible space around homes and thin private property at a reduced cost. The state covers 70% of the cost while the homeowner is responsible for 30%, which is paid in cash or through in-kind work or donation. Silver City received \$164,000 during the 2001 round of grants. 55 properties totaling 100 acres were thinned at a cost of \$144,000. Interest from local residents remained high and Silver City was funded for \$276,000 for the 2002 round of the 20 Communities Cost-share Program.

USFS projects in the Silver City (SC) District

SC District has two prioritized areas for treatment. Little Walnut, a 300 acre site adjacent to homes and BLM land, has been thinned and was in the process of being burned 2002. Pinos Altos (PA) is a 4,000 acre area north of Silver City adjacent to BLM lands. 50 acres of USFS property adjacent to BLM lands were treated in 2002. The USFS has funding for thinning 25 acres to connect with BLM work on the PA project in 2003. Additional funding for hazardous fuels treatment projects has been difficult to find and is the main impediment towards more progress.

The Mill Site is another USFS thinning project. This site is 1,400 acres treated to a specific restoration prescription. Developed in conjunction with environmentalist in the region, the Mill Site Project began thinning in 2003. USFS Silver City District works with the Center for Biological Diversity, Gila WoodNet, Silver City Grant County Economic Development Corporation, the Village of Santa Clara and The Nature Conservancy in developing and implementing forest restoration prescriptions. To date, 15 acres have been treated. The Mill Site Project allows greater "buy in" from environmental groups and builds trust between the various agencies and organizations involved. Funding for this project is in the form of a \$356,000 Collaborative Forest Restoration Program Grant.

BLM Project

The Bureau of Land Management (BLM), Las Cruces Field Office, is thinning a 700-800 acre site in Pinos Altos to create a fuel break. The BLM had to adapt its prescription once it started. The initial prescription was to cut 8" ponderosa pine. However, the prescription left too many trees and they are now cutting 10" and below. This area cost about \$435-450/acre to treat and the BLM has hired three contractors for the work. The contractors chip when they can not burn and the contractor can take the bigger wood. BLM had a \$400,000 budget for the Pinos Altos project and have requested another \$350,000 for contracting additional acreage.

In December 2001, the BLM Las Cruces Field Office was presented the National Wildland-Urban Interface award, including a monetary award of \$10,000, for their collaboration with the USFS on the Pinos Altos project.

WGA Goal - Restore Fire Adapted Ecosystems

Actions to meet goal

- Perform burned area stabilization and rehabilitation work in emergency areas
- Restore burned areas and repair and improve lands unlikely to recover
- Place priority on at risk watersheds that have been damaged by wildland fire
- Establish native seeds and other plant material
- Publicize and train in the use of minimum impact suppression activities
- Promote research of effective restoration practices
- Research interactions between fire, land management and other disturbances

Mill Site Project

In 2000, a restoration project was established in the Gila National Forest by Gila WoodNet, the Center for Biological Diversity and the USFS. The Mill Project Forest Restoration/Economic Development Partnership is a 1,400-acre site that Gila WoodNet and the Center for Biological Diversity developed as a demonstration area. It is designed to allow Forest Service personnel and the environmental community to work together to find the best approaches to restore unhealthy forests. The project is funded by a Collaborative Forest Restoration Program (CFRP) grant of \$356,400 awarded in 2001. The grant will complete an environmental analysis, develop prescriptions and fund restoration work on site. Wood debris removed from the project area will be used by local industries, such as Santa Clara Woodworks, to make furniture and small log cabins.

Work began on the Mill Site Project in July 2002. The prescriptions call for low impact equipment purchased through a 1999 grant from the Ford Foundation.

WGA Goal - Promote Community Assistance

Actions to meet goal

- Reduce losses to communities from wildland fire
- Promote markets for traditionally underutilized wood
- Promote opportunities to continue and enhance sustainable livestock grazing as part of restoration strategies
- Increase incentives for private landowners to address defensible space and fuels management needs on private property
- Promote local government incentives through fire-sensitive land use planning

20 Communities Cost-share Program

To date, 55 properties have been treated for a total of 100 acres. Landowners wanting to apply for the 20 Communities Cost-share Program must contact the local fire department or New Mexico State Forestry (NMSF) office to schedule an assessment of the property. An Assessment Team inspects the property and sits down with the homeowner to review the findings. If major thinning is required the landowner has an option to apply for the 20 Communities Cost-share Program. The Grant Soil and Water Conservation District (SWCD) is the administrator for the program. The 20 Communities Cost-share Program will reimburse 70% of the cost of creating defensible space (within 30-100 feet from the home), thinning (within 100 feet to 2 acres surrounding the house), and create a fuelbreak along property boundaries or roads. The assessment team will complete a Practice Plan that identifies what degree of thinning needs to take place. The landowner can hire a contractor or complete the work him or herself. The homeowner is paid \$15.39 an hour in-kind that is calculated into the 30% cost-share. The work must pass an inspection before a request for reimbursement can be submitted to the SWCD.

The reimbursement rates for the 20 Communities Cost-share Program depend on whether the defensible space/thinning is categorized as light, medium or heavy. For defensible space a homeowner can be reimbursed for 70% of \$600/acre for light, \$1150/acre for medium and \$1700/acre for heavy thinning. Defensible space creates a zone that is heavily thinned adjacent to the home. The reimbursement rate for thinning/fuelbreaks is \$550/acre for light, \$950/acre for medium and \$1150/acre for heavy thinning. Thinning blends more with the surrounding forest than defensible space. Basal area is used to determine the category of the property. Most properties in the Silver City area have been in the heavy category.

Gila WoodNet and Santa Clara Woodworks

Gila WoodNet was established by Gordon West, a local resident and woodworker, to research options for forest restoration by-products. Gila WoodNet is dedicated to developing new logging and processing equipment and creating value added wood products derived from small diameter timber. West wants to manufacture products out of forest restoration byproducts that currently have little market value. One product that Gila WoodNet is experimenting with is ceramicrete—a chemically bonded phosphate ceramic mixed with residual wood waste. Ceramicrete is a solid brick that can work like wood and be drilled, nailed or easily sawed. The product is made from clean or dirty woody residue and also has carbon sequestration potential.

West also owns and operates Santa Clara Woodworks, which builds furniture and log buildings. Santa Clara Woodworks utilizes locally harvested small diameter timber and byproducts from forest restoration projects. From small diameter ponderosa pine, Santa Clara Woodworks built over 250 mission-style pieces of furniture for the Nature Conservancy's Bear Mountain Lodge.

The Pinos Altos Wildland Urban Interface Project

Grant County received a 2002 Collaborative Forest Restoration Program grant in the amount of \$360,000 to thin small diameter trees on BLM land around Pinos Altos. The project will provide job training and employment opportunities to the local community. Local businesses that utilize small diameter timber and forest byproducts will be given the opportunity to market and use the timber from the project.

Summary

Silver City is notable because it has not faced a wildfire in the wildland urban interface but has taken action to deal with the threat of wildfire. The National Fire Plan Implementation Team is a multi-agency group that addresses the wildfire threat in Silver City. They focus on developing strategies and projects that address fire planning, forest restoration, fuels reduction, public outreach and economic development. Silver City stands out due to its forest restoration efforts. The Mill Site Project is a 1,400 acre demonstration site that allows environmentalists and the US Forest Service to work together and develop different prescriptions for forest restoration projects. Silver City also has been especially active in addressing utilization issues. Gila WoodNet is a nonprofit research organization dedicated to finding new and innovative uses for forest restoration by-products.

Utilization and funding issues are the principal challenges for Silver City. Gila WoodNet and Santa Clara Woodworks are the primary utilizers for forest byproducts. However, small diameter timber from USFS projects is subsidized with a Collaborative Forest Restoration Program grant. Lack of a larger fuels treatment budget on the USFS Silver City District prohibits the treatment of a greater number of acres.