



# NEVADA'S LIVING WITH FIRE PROGRAM

## An Organized Effort to Teach and Promote Pre-Wildfire Threat Reduction Practices

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Is it possible for a community of people to live in a high-hazard environment and co-exist with the threat of wildfire? The answer is “yes” if the community accepts the reality of the threat, engrains fire as a facet of the community’s culture, takes action to address the threat, and adopts an attitude of partnership with the fire protection agencies. Living With Fire (LWF) is an interagency program coordinated and implemented by University of Nevada Cooperative Extension that teaches vulnerable residents how to live more safely in wildfire prone areas. From a regionally focused fledgling program in 1998, LWF has expanded its reach and achieved national prominence. This article provides the historical context, operational methodology, and accomplishments of the LWF program.

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### Issue

The increasing occurrence of wildfire in Nevada threatens life, property, and valuable natural resources. High-fire-hazard environments throughout the State are prone to support intense and uncontrollable wildfires. During the decade of the 1990’s, more acres burned in Nevada than in the previous forty years combined and this trend has continued. Within this high-hazard environment are individual homes, subdivisions, and communities. Unfortunately, many Nevada homeowners have

not prepared themselves or their dwelling to survive a wildfire. Research results clearly show that implementing pre-fire wildfire threat reduction practices significantly improve a dwelling’s survivability. Prior to initiation of the LWF program, there was no organized effort to teach and promote these practices to Nevadans. Consequently, it was unlikely that homeowners would prepare themselves or their homes for wildfire.

## The Beginning

In 1998, the Nevada Agricultural Experiment Station launched an innovative program to link public education through Cooperative Extension with research addressing pressing issues confronting Nevadans. To add practicality and relevance to the effort, community participation was also required. To take advantage of this opportunity, Ed Smith, Cooperative Extension's natural resource specialist and Paul Tueller, PhD, an Experiment Station remote sensing scientist, initiated a project entitled, "Wildfire Threat Reduction along the Eastern Sierra Front." To compliment this team, Fire Chief Loren Enstaad of the North Lake Tahoe Fire Protection District and Chairman of a unique coalition of Nevada firefighting agencies joined the project. Using remote sensing technology, the objective was to identify those inhabited areas in western Nevada and eastern California that faced the greatest wildfire threat. Once identified, a wildfire mitigation education program was to be developed and delivered to the residents. That outreach program eventually evolved into Living With Fire.

## Approach

Faced with an array of recommendations emanating from multiple sources, Cooperative Extension first had to develop a standardized set of threat mitigation measures that could be uniformly promoted by responsible organizations. To this end, Extension requested that an interagency committee comprised of local wildland-urban interface (WUI) wildfire mitigation experts be formed to take up this challenge. Cooperative Extension's role was to facilitate the deliberations and ensure a science-based discussion as well as document the final recommendations. After eight hours of intense, consensus-building conversation and several drafts, "Wildfire Threat Reduction Recommendations for Nevadans," was approved by the committee. The recommendations addressed the topics of defensible space, built environment, and access, and became the core around which the LWF program was built.

The primary objective of the LWF program was to package and deliver these recommendations using a variety of methods and formats that would stimulate interest and result in effective learning by Nevada's WUI homeowners. The advantage of this approach was twofold: 1) a homeowner was exposed to consistent recommendations from multiple sources (e.g., Cooperative Extension, U.S. Forest Service,

local fire marshal, etc.) thereby increasing the credibility and perceived importance of the message; and 2) it allowed an economy of scale in producing program publications and materials (i.e., instead of multiple agencies producing their own materials, there would only be one set of interagency program materials).

Currently, LWF is co-managed by Cooperative Extension's natural resource specialist and a marketing specialist. The natural resource specialist is responsible for technical aspects of the program, including authoring peer-reviewed products, teaching at workshops, and pursuing financial support through grant funds. The marketing specialist implements strategies to effectively deliver LWF program materials to the target audience. This combination of both technical and delivery expertise has paid enormous dividends in terms of program success.

## Delivery

During the 17 years that LWF has been in operation, more than one hundred workshops have been taught and over 60 peer reviewed publications, curricula materials, and audio-visual products have been developed. In 2014, LWF disseminated 13,850 copies of publications, had 24,255 online visits to specific publications, and 15,570 visits to Nevada and Lake Tahoe Basin websites. A wide variety of delivery methods have been utilized including social media, video productions, television programs, public service announcements, and conferences.



**IMPROVE YOUR ODDS**  
*Prepare For Wildfire!*

10 PAKE  
THAT'S THE WAY TO  
SAFETY

3 CUT AND REMOVE  
THAT'S THE WAY TO  
SAFETY

Q MOVE FIREWOOD  
THAT'S THE WAY TO  
SAFETY

K REMOVE  
THAT'S THE WAY TO  
SAFETY

**Learn how at [LivingWithFire.info](http://LivingWithFire.info)**

Funding for this poster provided by a WUI Community Assistance Grant from the Bureau of Land Management Nevada State Office in cooperation with University of Nevada Cooperative Extension, an EEO/AA Institution.

PICTURED: The theme for 2015 Nevada Wildfire Awareness Month is "Improve Your Odds – Prepare For Wildfire." This graphic is being used as a poster, on billboards, and in televised public service announcements.

Three examples are described below:

Living With Fire Tabloid: The first LWF product was a 16-page newsprint tabloid entitled “Living With Fire – A Guide for the Homeowner.” This publication, originally published in 1998, incorporated the standardized LWF recommendations in a “lay audience format” emphasizing the use of illustrations and photographs. A local newspaper pointed out that using a newsprint tabloid format allowed many rural Nevada newspapers to economically create their own version and deliver it as a newspaper insert. The demand for this publication was overwhelming with requests coming from across the country. In 2003, a survey regarding the number of versions and copies of the tabloid in circulation was conducted. The results showed that 16 states had produced at least 45 versions and that over two million copies were in circulation. University of Nevada, Reno Creative Services reported that it was the most widely circulated publication in the history of the University. Since 1998 the publication has been revised several times and later replaced with “Fire Adapted Communities: The Next Step in Wildfire Preparedness.”

Nevada Wildfire Awareness Month (NWAM): The month of May is given official recognition as a time to promote awareness and action concerning Nevada wildfire issues. A statewide interagency planning committee is established at the beginning of the year to create a theme for NWAM and solicit the involvement of numerous organizations to plan and hold activities across the State. In 2014, 165 activities were conducted by 153 collaborating entities for more than 4,400 participants.

Nevada Landscape Industry Training: Nevada’s landscape industry plays an important role in assisting homeowners to successfully reduce their wildfire threat. Unfortunately, both owners and landscape workers often lack the knowledge or skills in wildfire threat reduction methods to provide the necessary assistance. This program provides eight hours of training, followed by an exam and a certification opportunity. In 2014, the training sold out in the first three weeks of advertising with 65 landscape professionals in attendance. Eighty-nine percent of post-training evaluation respondents indicated they definitely had a better understanding of the wildfire threat to Nevada communities and 93 percent planned on using the information learned in the next 12 months.

## Funding

LWF depends on Cooperative Extension’s funding of a full-time specialist position and extramural funds from the Bureau of Land Management’s Community Assistance Grants program and the Nevada Division of Forestry/US Forest Service’s State Fire Assistance Grants program. To a lesser extent and more intermittent basis, funding has also been provided by the Nevada State Fire Marshal, a regional firefighting coalition, the Nevada Insurance Council, and the Nevada Division of Emergency Management.

## Program Evaluation

In January of 2010, 59 fire prevention specialists and 89 representatives from Nevada’s at-risk communities participated in a statewide evaluation of the LWF program. Fifty (85 percent) of the fire prevention specialists and 39 (44 percent) of the community representatives responded. Key outcomes for fire prevention specialists included: LWF materials were the most utilized wildfire threat reduction educational materials by 70 percent of respondents; 94 percent rated LWF materials and programs “good” or “excellent” and 61 percent indicated that LWF materials/programs played an important or very important role in homeowner compliance with wildfire threat reduction recommendations. Important results for community representatives included: 84 percent of respondents identified LWF materials and programs as the most often used in their community to reduce the wildfire threat; 74 percent rated the LWF materials as “excellent”; 91 percent indicated that they had implemented at least some of the LWF recommendations in the past year; and 84 percent indicated LWF materials and programs played an important or very important role in implementing pre-fire activities in their community.

## The Future

The wildfire threat to Nevada communities will increase well into the future as will the need for the Living With Fire program. Like all programs that rely heavily on grant funding, the future existence of LWF extends no further than the next round of proposals and grant awards. Compounding this dilemma is the reality that the natural resource specialist position committed to the LWF program will retire at some point and currently there is no assurance that the position would be filled or the program continued.●