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## **The Nevada Wildfire Awareness Campaign: A Collaborative Approach to Wildfire Education Programming**

### **Abstract**

The public is flooded with wildfire preparedness messaging, with different information coming from a variety of sources. The lack of consistency can result in confusion, leaving communities ill-informed and underprepared. It is important for agencies to work amongst each other to agree on a collective wildfire communication strategy. The University of Nevada, Reno Extension annually convenes partners from across many agencies in Nevada to coordinate a collaborative wildfire awareness campaign. The campaign is built through a series of stakeholder engagement workshops where we cultivate ideas and develop event plans. We utilize different communication modalities that have varying success at reaching broad audiences. In the four different campaign years we tracked (2020-2023), we observed an increase in partner participation but an overall decline in public reach due to changes in communication preferences.

**Keywords:** wildfire preparedness, campaign, stakeholder engagement

## Introduction

The public is flooded with disaster preparedness messaging, with different information coming from a variety of sources. The lack of consistency can result in confusion, leaving communities ill-informed and underprepared (Brenkert-Smith et al., 2013). Wildfire is an increasingly complex socioecological issue that requires community engagement and preparedness (McCaffrey et al., 2020). Since wildfires can occur on any property (e.g., federal, local, municipal, private, etc.), there are many people working in the wildfire space and communication is not always consistent. It is important for agencies to collaborate with each other to agree on a collective communication strategy and consistent messaging (Ryan et al., 2020).

Cooperative extension programs work at the interface of science, management, and communication and function as a convener for partner agencies. The Living With Fire (LWF) program at the University of Nevada, Reno serves as the statewide wildfire preparedness program, partnering with a wide range of stakeholders to support and enhance their education and messaging. In Nevada, we have many different agencies working in wildfire including the Nevada Division of Forestry, Bureau of Land Management, U.S. Forest Service, and many local and regional fire departments/districts. The fire chiefs of each agency organize locally into different chief's associations (i.e., Lake Tahoe Regional Fire Chief's Association, Northern Nevada Fire Chiefs, Sierra Front Wildfire Cooperators, Southern Nevada Fire Operations Group, and the Nevada Fire Chiefs Association). These associations facilitate the cohesion of operations and communication strategies. They also provide opportunities for extension professionals to efficiently collaborate with the different agencies.

Every year, LWF convenes partners from across the many agencies in Nevada to coordinate a collaborative wildfire awareness campaign. There are two primary objectives of the campaign:

1. Develop shared wildfire preparedness messaging among land management and fire agencies.

2. Increase public awareness about wildfire preparedness, including evacuation, defensible space, home hardening, and fire adapted communities.

The campaign planning gives us the opportunity to meet as a team to collectively assess the education needs and to execute a plan to increase wildfire awareness.

## **Methods**

We work with stakeholders across Nevada to create a shared messaging campaign that utilizes mass marketing, in-person events, and social media. The campaign is built through a series of five stakeholder engagement workshops (held monthly January – May) where we cultivate ideas and develop event plans. Stakeholder participation is critical to ensure that we create shared messaging and that it is not a top-down effort. The stakeholder group is comprised of mitigation/education specialists and public information officers from each agency. Each year, we work with the stakeholder group to develop a “theme” or slogan that we use for marketing purposes. We use a multi-step process to decide on the theme.

- Step 1: Meet as a group and brainstorm ideas
- Step 2: Prioritize the themes internally based on communication expertise
- Step 3: Vote on the theme ideas using a google form

Once the theme is decided, we work internally with Living With Fire design experts to create a visually appealing banner that communicates that theme. Stakeholders who voted for a different theme join with the rest of the group and still participate in the campaign. We usually take the same banner graphic and re-design it to fit with the Lake Tahoe environment. The banners are then printed and placed at fire stations and other public viewing points across the state of Nevada and Lake Tahoe Basin. The graphics are also used on social media and sometimes billboards in high-traffic areas.

The campaign's duration has varied over the years, spanning from one month to six months. In 2020, the campaign was one month long. From 2021-2022, the campaign spanned six-months because we wanted to emphasize the need for wildfire

preparedness throughout the year. In 2023, we moved the campaign to one month in Nevada because agency partners felt that having the campaign spread over six months diluted the effort. The Lake Tahoe Basin partners opted to keep the six-month campaign. The timing of the campaign varies by region; we work closely with partners in the Lake Tahoe Basin (in California and Nevada) and their fire season starts later than in other parts of Nevada. There are pros and cons to the different length campaigns.

The campaign also engages local government officials through county, local fire boards and statewide proclamations. Proclamations are official government documents that proclaim a governing body's support of the wildfire awareness month/campaign. The utility of these proclamations is bringing awareness about wildfire to elected officials and the media.

Each year we utilize a different communication modality to help spread the message. We have advertised on billboards, created local radio, print and television ads, conducted a community tour, recorded podcasts, delivered presentations, and advertised a photo contest. Each of these modalities has had varying success at reaching broad audiences, which is a challenging part of the campaign format.

The campaign is funded through a combination of grants that the LWF director acquires every three to five years. Two primary grants have funded the campaign through paying for LWF staff time and material printing: 1) a grant from the Bureau of Land Management Nevada, and 2) a grant from the Southern Nevada Public Lands Management Act (SNPLMA) that comes through the Tahoe Resource Conservation District. Stakeholder participation is considered an in-kind contribution to the campaign.

## **Results and Discussion**

In this article, we report on the last four years of campaigns (2020-2023) and note observed changes and successes. Each year, we used different communication strategies and the contacts reached reflect the difference. The length of the campaign also influences how many contacts are reached over time. One of the greatest

challenges with doing broad messaging campaigns is measuring impacts. For this reason, we are only able to report on the direct metrics of contacts reached and involvement rather than changes in behavior.

The county and partner agency involvement varies annually, and the contacts reached also vary accordingly (Table 1). We have seen an increase in the number of partner agencies engaged, increasing from 22 to 43. Partner agency involvement has likely increased due to our continual relationship building and work to actively solicit participation. The number of proclamations and counties involved has also increased every year, showing more local government engagement with wildfire issues in Nevada.

Table 1. Nevada Wildfire Awareness Campaign metrics.

<b>Year</b>	<b>Banners</b>	<b>Procla- mations</b>	<b>Counties</b>	<b>Partner Agencies</b>	<b>Direct Contacts</b>	<b>Indirect Contacts</b>
2020	50	3	10	22	376	2,745,862
2021	73	13	12	43	7,179	6,159
2022	60	16	14	43	1,862	63,506
2023	70	17	15	43	392	507

The contacts depend on the communication modality used that year and the number of events (Table 1). In 2020, we placed billboards in high-traffic areas and estimated traffic through that area to reach our indirect contact numbers. Direct contacts are those reached through one-on-one engagement through our events and those of partner agencies. Because it was a one-month campaign in 2020, our direct contacts are relatively low. There is a notable increase in direct contact reach in 2021 and 2022 due to the six-month campaign period. Any event that occurred during that timeframe was recorded as a campaign event. In 2023, we returned to a one-month campaign and saw the lower numbers in contact reach. It is important to note that events occurred in the

years with the one-month campaign in the summer months that followed but were not counted towards the final campaign tally.

The chosen annual themes reflect the prevailing ideas each year. In 2020, we emphasized defensible space by using the term “boundaries” (Figure 1). In 2021, we focused on home hardening through talking about ignition resistance (Figure 2). In 2022 and 2023, we emphasized the relationship to place because local pride is strong in Nevada (Figure 3 and 4).



Figure 1. The 2020 campaign focused on defensible space through delineating the landscaping around the home. The flames are kept separate from the home and property to show that fire will be separate from the home with adequate defensible space.



Figure 2. The 2021 campaign focused on home hardening through depicting embers and flames moving towards the house.

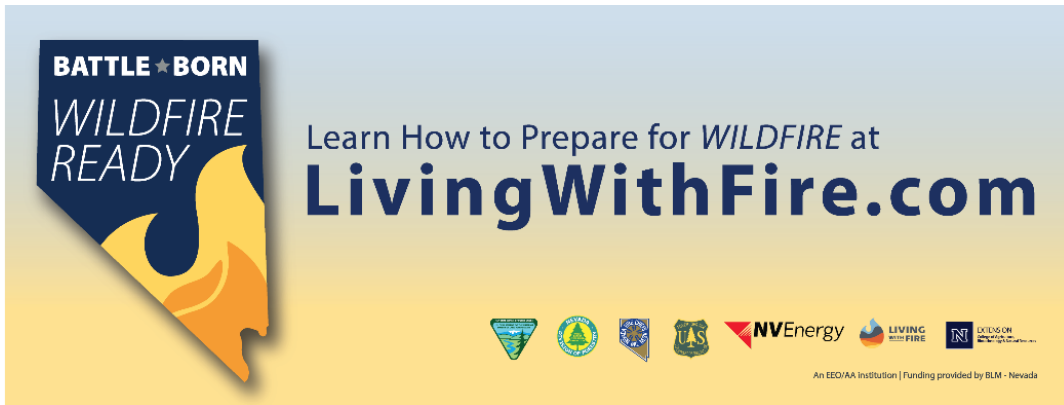


Figure 3. The 2022 campaign emphasized pride in local place by using the Nevada state slogan “Battle Born.” This theme was very popular across Nevada.



Figure 4. The 2023 campaign also emphasized the sense of home and place, utilizing the Nevada state outline with homes and vegetation.

Since 2021, we have curated a “social media toolkit” for partner agencies to use for their social media accounts during the campaign. The reason to create the toolkit is to emphasize the shared wildfire preparedness messaging. Each year the toolkit contained 65 unique posts for all three main social media platforms (Twitter, Facebook, and Instagram). The posts included content about defensible space, wildfire preparedness, smoke, home hardening, post-fire management, and prescribed fire. The toolkit included graphics, wording, recommended hash tags and a calendar of recommended times to share these posts. The posts were available on the LWF website for all partner agencies to access and use.

In 2021, we also created 10 unique radio ads for KUNR public radio for 224 radio spots from April-October. The radio ads included messaging about the campaign and our

upcoming events and podcast episodes, and included specific wildfire preparedness tips. The messages are as follows:

- In wildfire events, 60-90 % of home loss is due to embers. Reducing the home's vulnerability to ember ignition will increase the chance of wildfire survivability. Learn more at [livingwithfire.com](http://livingwithfire.com).
- Reminding Nevadans to prepare for wildfire now. Learn more about preparing for evacuation at [livingwithfire.com](http://livingwithfire.com).
- Reminding Nevadans to prepare for wildfire now. Learn more about how to make homes ignition resistant at [livingwithfire.com](http://livingwithfire.com).
- Spring is a great time to create and maintain defensible space. Learn more about how to prepare one's home and property from wildfire at [livingwithfire.com](http://livingwithfire.com).
- Reminding Nevadans that wildfire knows no season. Now is the time to remove any leaf litter and dead vegetation from around your home and property. Learn more at [livingwithfire.com](http://livingwithfire.com).

As a part of the campaign, we sponsor the Silver State Stampede in Elko, Nevada. We create digital media, public service announcements (PSAs) and printed material to engage with a large captive audience. In 2022, a LWF team member spoke directly to the audience of 4,500 contacts. Each year, LWF, BLM, NDF and the Elko County Fire Protection District spoke to attendees as they entered the ticketing gate. The rodeo is broadcast on the Cowboy Channel to a national audience. The event includes 10, 30-second PSAs about wildfire awareness, 100 digital displays of the LWF logo, 25 static fire prevention messages, the display of three large banners, and announcer messages about fire prevention and preparedness.

In 2022, we conducted an in-person community tour to high-fire hazard communities across Nevada. The presentations included:

- Las Vegas – Included three presentations with one from LWF titled "How to Reduce the Health Impacts of Wildfire Smoke." Other presentations were from the American Lung Association and the Clark County Dept. of Environment and Sustainability. (6 contacts)
- Mount Charleston – Included seven presentations with one from LWF titled "Defensible Space and Home Hardening." Other presentations were from local



fire and emergency response agencies, NV Energy, NDF, and the US Forest Service (USFS). (42 contacts)

- Topaz Ranch Estates – Included eight presentations, including one from LWF titled “Defensible Space and Home Hardening.” Other presentations were from local fire and emergency response agencies, NDF and BLM. (60 contacts)
- Spring Creek – Included seven presentations, including one from LWF titled “Defensible Space, Home Hardening, and Evacuation Tips.” Other presentations were from local fire and emergency response agencies, NV Energy, NDF, USFS, and BLM. (37 contacts)
- Tahoe Basin – Included two presentations in Spanish by UNR Extension staff Jeanette Diles and Monica Peterson. The LWF team created the presentations and worked with Jeanette and Monica to translate. Attendees were given LWF publications in Spanish. (6 contacts)

The community tour worked well in regions that had experienced wildfires (Topaz Ranch Estates and Mount Charleston) and less in more urban areas (Las Vegas).

## **Conclusions**

The Nevada Wildfire Awareness Campaign is one method that the LWF program uses to increase wildfire preparedness in Nevada. The process of creating the campaign convenes stakeholders and catalyzes conversations with local government officials, which helps spread consistent messaging throughout the state.

The stakeholder engagement is a critical part of the process that should not be undervalued. Convening representatives from across different agencies helps to create a unified vision for communication and wildfire preparedness (Fischer et al., 2016). It also creates a sense of community so that all players know one another and can help in community events. Three community volunteers attend the planning meetings and obtain banners for their communities.

The campaign format limits our ability to evaluate successes and measure changes in knowledge and behavior. As Extension faculty, we need to balance the need to measure outcomes, fulfill grant deliverables, and respond to stakeholder needs. The shared messaging that we create out of the campaign is highly valued by our agency

partners and is not common in other neighboring states. For this reason, we continue to put effort into the campaign but have modified it so that it is less investment in programming that does not completely fulfill the mission of Extension.

The duration of the campaign (one-month vs. six-months) changes the overall reach but decreases the time investment. When the campaign was six months long, all events that occurred within that time period were binned with the campaign programming and this made reporting confusing. We found that it is preferable to have a shorter campaign in May and to move other programming outside of the confines of the theme for that year.

We have learned lessons about public communication during and after the coronavirus pandemic. During the core pandemic years everything moved online and attendance at our virtual events and use of social media increased dramatically. As we have emerged from the pandemic, it has been difficult to pinpoint how audiences want to learn. We observed decreases in online participation but that has not correlated with an increase in in-person participation. It appears that the public has online fatigue but has also grown accustomed to less in-person functions (Newman and Toretta, 2022). We continue to refine our programming to meet the changing needs of our audience.

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