



THE WILDFIRE
INITIATIVE

JANUARY 21-22, 2019

THE CAMP FIRE TOUR

Western Fire Chiefs Association
Paradise, CA



UNDERSTANDING PARADISE

**“THE CAMP FIRE
REPRESENTS ‘THE SUM
OF ALL FEARS’ IN THE
WUI ENVIRONMENT.”**

Sources of Risk

The Camp Fire represents (to borrow a Tom Clancy phrase, which is really from Winston Churchill) “the sum of all fears” in the WUI environment. We understand the dangers associated with the alignment of wind, topography, fuels and time of day to predict “major runs” at the tactical level. Tubbs, Thomas, and Camp - all are incidents where the elements mentioned above came into alignment and “urban conflagrations” resulted, leading to the associated large losses of life and property. Each of these began as wildfires. Some accumulating sources of risk promoting “urban conflagration alignment” include but are not limited to:

- Decades of incremental urban expansion into historically wildfire-prone areas
- 100+ years of mostly 100% wildfire suppression policy
- Decades of fund reductions in fuels management
- Decades of aquifer reductions secondary to population increase and water use
- Decades of drier western climate, regardless of the reason, evidenced through longer fire seasons, and declining forest health
- Higher density construction in the WUI, increased use of lightweight construction

THE PURPOSE OF THE CAMP FIRE TOUR IS TO BRING MULTIPLE DISCIPLINES AND ORGANIZATIONS TOGETHER...

The purpose of the Western Fire Chiefs Association (“WFCA”) tour of the Camp Fire is to bring multiple disciplines and organizations together to gain the first-person experience of the post-incident community and develop unified efforts focused on the following areas.



OBJECTIVES

01

Focus on these strategic alignment components of “urban conflagration” and minimize the attention on the tactical level components like more firefighters and fire engines.

02

Initiate cross-disciplinary and cross-organizational interactions based on what is already known, what will be learned from the Tour, and what can be done to mitigate the hazards and risks associated with wildfire.

03

Using the WFCAs Wildfire Policy Summit Report as an outline, identify pre-event, event, post-event, and technology opportunities.

04

Develop a work plan of action items, including timelines, person/organization responsible.

05

Capitalize on this opportunity by keeping an open mind, looking at the situation through each other’s eyes, taking space and giving space, and being engaged.

WILDFIRE POLICY SUMMIT REPORT

THE FOLLOWING IS AN EXCERPT FROM THE WFCFA WILDFIRE POLICY SUMMIT REPORT (A COMPLETE COPY OF THE REPORT IS ATTACHED). THESE ARE THE ITEMS THAT ARE MOST RELEVANT TO THE OBJECTIVES AND SCOPE OF THE CAMP FIRE TOUR

PRE-EVENT

6. Evacuation Education and Planning - standardization nationwide between states (ready, set, go vs. evacuation level 1,2,3)

- Different terminologies from different backgrounds
- Different Jurisdictions for who can declare a mandatory evacuation
- Have to be a multi-association fix (International Sheriffs, Police Chiefs, etc.)
- Consistent application of NIMS/ICS across all federal agencies, state and local

7. Fuels Treatment

- Local governments need one set of speaking points, model guidance on how to talk to your forest ranger and what to ask for.
- If there are local government recommendations for direction and policy, they should come through the committee process and go to the board of directors to be adopted
- Ask the IAFC Wildfire Committee for model verbiage on what local fire chiefs should be asking for from our federal land management plans.

8. Policy on WUI Code Adoption

- Should WUI be applied in Urban Areas?
- Should a Policy on Enforcing Defensible Space be developed?

EVENT

2. Community Alerting

- Opt-out (Everybody gets it, like an amber alert)
- Where you go/map pins (After the alert, need to know where to go)
- Social Media (Other forms of Notification)
- Hardening of cell sites
- Share multiple cell towers in an emergency

3. Fuels Management

- Defensive Space
- Federal Land Management dictate what you can and can't do
- Fuel Management in correlation to Historical Fires
- Funding for fuel management
- Elimination of Fuels (Biofuels? What do you do to get rid of them all?)

POST EVENT

3. Community Education

- Consistent Messaging – Layman Terminology, talking in a language people understand
- Partnership – Consistent messaging across Federal State and Local government

5. Building Codes

- How do the codes we had in place work?
- What is it going to look like when that community comes to rebuild?



TECHNOLOGY

The top priority identified by the Technology Workgroup is to develop an All Hazards (All Risk, All Disciplines) over-arching policy to govern the development of all other solutions and tools. An information/data sharing policy would be included in the over-arching policy. They also identified the following elements as technological priorities:

- Real-time statusing
- Geo-coded locating
- Commits resource to a user in real-time
- Has Unique Identifiers – person and hard assets
- Nearly fully automated
- National/State/Local views (scalable)
- Provides Situational Awareness/Common Operation Picture
- Replaces IQS, ROSS & EMAC
- Attaches cost notes
- Integrates PSAPs with the Mutual Aid System
- FirstNet needs an articulated portal and protocol for requesting FirstNet resources

INSURANCE

1. Appropriate Risk Classification
2. Incentive (FD) / Disincentive Policies (Insurance)
3. Establish State Policy Alignment

Workgroups to include:

- Insurance Commissioner
- State Fire Marshall
- State Forester
- State Fire Chief

INCIDENT SYNOPSIS

2018 CAMP FIRE

The Camp Fire started in a very remote area, mid slope in a steep canyon with a lot of fire history. The fire was under extreme gradient, north winds steady around 25-30, gusting to 52, actually more of a east, northeast wind. As you know California was under extreme, record setting fuel conditions that developed after a long hot summer and a period of over 200 days without appreciable rainfall. Those conditions set the stage for a rapidly developing fire that included an ember storm which precipitated thousands of spot fires.

Some firefighting & evacuation considerations both before and during the fire that played a role:

- Early detection, although it would of had no impact on this fire as the conditions were too extreme. We have camera's, but the fire originated in a canyon out of sight from the camera.
- Access was difficult, fire started mid slope above narrow, one way dirt road under extreme conditions. Rapid fire development.
- Ember ignition, ember ignition, ember ignition. The Camp Fire was all about ember ignition. Paradise and surrounding area are in a Pine forest, the ground was littered with pine needles. Ponderosa Pines drop about 1/3 of their needles each year it was mid fall and needles where being blown out of the trees creating a fine fuel bed receptive to embers. Even those who had "raked" their yards had a new fuel bed due to the wind.
- D Space, it is very important but what we call the "Home Ignition Zone" home and first 5 feet where resistance ember ignition was more often the difference in this fire between surviving and burning down. Naturally, building construction is a key factor in the Home Ignition Zone.
- We did have some areas where we had an urban conflagration, building to building ignition.
- The fire immediately impacted approximately 30,000 residents within the first few hours and by the end of the operational period about 45,000. The necessitated a focus on life safety, rescue.
- We are working in a different wildland fire environment in Ca even over the past 10 years. Adapting our fire control resources, engines, dozers, crews, aircraft and line supervision is a priority.
- The Paradise community was known as a retirement area with the mean age 52 yo., many elderly residents with limited mobility.
- Paradise had been threatened by fire many times, but had never been directly impacted by a large fire other than the 2008 Humboldt where 85 homes were destroyed, 5 within the Town of Paradise on the south end.
- Access for firefighting resources (and other responders) was severely hampered by citizen evacuating on area roads.

INCIDENT SYNOPSIS

2018 CAMP FIRE



- The Town had a very detailed evacuation plan premised on Ready, Set, Go! which included a map where the community was divided in to zones for evacuation. The plan was on version 5, original in 1998. This plan and the corresponding evacuation traffic plan and “one-way traffic plan” were critical in the success of the Town’s evacuation. While 86 people lost their lives I’m fully convinced it would have been worse if we did not have these plans. We had practiced the plans based on fire scenarios and routinely met to review, update and discuss the plans and evacuation process.
- Code Red is used to notify residents along with conventional means. Code Red includes all ATT land lines, but not cellular nor VOIP phones. Residents must sign up. Cellular connectivity in Town was maintained until around 0945 to 1000 hrs limiting notification.
- Utility infrastructure hampered travel on area roads as power poles burned, lines came down. An in some cases trees came down in roadways.
- In some areas, where fire closely impacted evacuation routes, citizens abandoned their vehicles leaving them along and in area roads hampering travel.
- Citizens in groups were cut off by fire and were refuged in several Temporary Refuge Areas (TRA) around Town.
- Mobilization of firefighting resources, 250 fire engines were on order by 1000 hrs (0630 start).
- The Town of Paradise is served by a local water purveyor. There are hydrants throughout Town, the pressure in the system is maintained by 3 pumping stations and head pressure. By early afternoon the water system, hydrants lost pressure making firefighting operations difficult. Water was supplemented by water tenders.
- There were some seemingly small, but very successful firefighting efforts that protected key infrastructure, hospital, schools, police & fire stations, Town Hall, that will help with recovery and continuity of government.
- Early detection, although it would of had no impact on this fire as the conditions were too extreme. We have camera’s, but the fire originated in a canyon out of sight from the camera.

RECOVERY CONSIDERATIONS

www.buttecountyrecovers.org

- Economic base has been destroyed, a few business have started back up but relatively few survived. About 87% of residential structures destroyed, property taxes reassessed.
- The people, many have moved elsewhere.
- Temporary housing, housing/rental crunch, FEMA, trailers, homeless.
- FEMA, CalOES clean up process
- Community planning to rebuild an entire town with modern infrastructure
- Building standards, single family stick home vs manufactured
- Utility infrastructure.
- Timber & Biomass utilization, what do we do with the trees and vegetation.
- Reconstruction



NOTES



www.wildfireinitiative.org