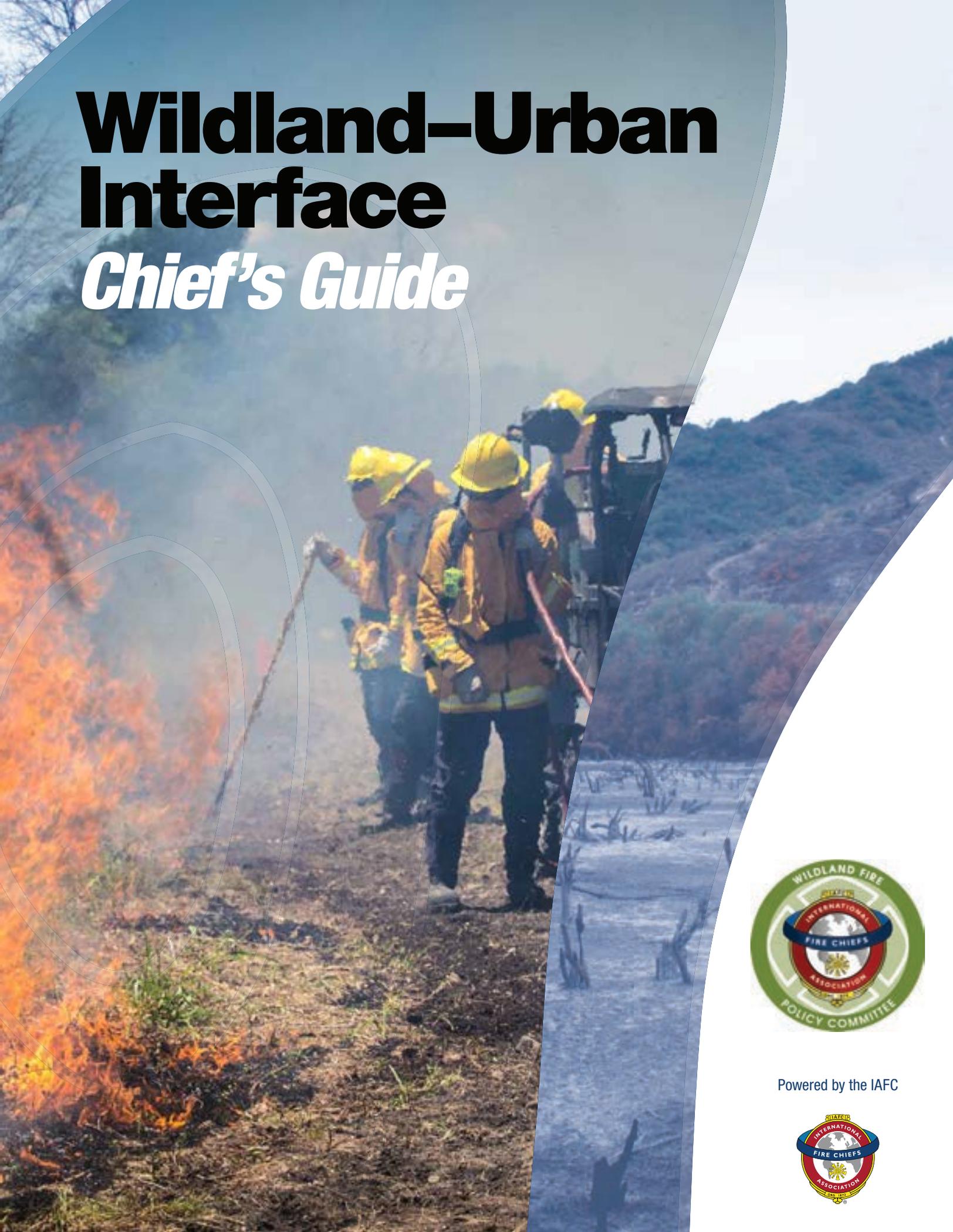


Wildland-Urban Interface *Chief's Guide*



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Playbook Introduction



Whether you call it a wildland fire, forest fire, brush fire, or outdoor fire, these types of fires – characterized by burning vegetation – happen in every jurisdiction and threaten communities. Such fires can become large, disruptive, costly, and dangerous. Where this type of fire meets infrastructure, civilization, and communities, the fires are called Wildland-Urban Interface fires, or WUI fires.

For many jurisdictions, WUI fires may be a low-frequency event, but they have the potential to have a significant impact on the community and response organization.

What once might have been a community with a low-risk of wildfire may not be that way today. With the increased drought, climate change, and expansion into the WUI areas, these communities are now vulnerable and may be at high-risk of wildfire.

All organizations need to clearly identify the risks, whether they come from inside or outside the jurisdiction, and then adequately prepare for those types of fires. This preparation must start once the risk has been identified. All WUI fires start small and with proper preparation can be managed. Without such preparation, these fires can destroy entire communities and put people at risk. In addition to proper preparation and mitigation, communities should work to develop suitable response capabilities. Additionally, communities also need to be prepared to properly manage recovery from a WUI fire.



THIS PLAYBOOK HAS BEEN DESIGNED BY FIRE CHIEFS FOR FIRE CHIEFS

to help provide a better understanding of the wildland-urban interface and the necessary information to help prepare, mitigate, respond, and recover from these events.

The intent of this guide is to help individuals gain an understanding of how a Fire Chief or other official can help a community adequately manage the emerging risk of fires in the wildland-urban interface. Each section will contain information and advice, case studies, and where possible, access to referenced resources.

Case Study

Oklahoma City, OK

DEPARTMENTS OF ALL SIZES BENEFIT FROM WILDLAND PREPARATION

The importance of peer networking, partnership building, and sharing lessons learned – successes and failures – throughout the fire service cannot be stressed enough. We tend to assume that bigger-budget, large fire departments have all the capacity, knowledge, and tools they need to serve their communities in terms of preparedness, mitigation, response, and recovery. This isn't always the case. In the study below, you'll see that no matter the size, every department can take on initiatives to improve its operations and community preparedness.

In October 2016, representatives of Oklahoma City Fire Department (OKCFD) attended a Fire Department Exchange (FDX) hosted by the City of Santa Fe Fire Department and facilitated by the International Association of Fire Chiefs through funding from the United States Forest Service.

The goal of FDX is to bring together all types of fire departments with varying levels of experience who face wildland fire and wildland-urban interface (WUI) challenges in order to broaden their knowledge base, consider alternative measures, create new solutions and improve overall practices within their departments.

When the Exchange began, and the group made it through the overview and introductions, OKCFD representatives were upfront and honest, wondering why they were invited since wildland challenges weren't something on the top of their list at an operational level. After days of peer exchange, eyes were opened and wheels were turning. Topics presented and discussed included: overviews of the ten departments' wildland fire programs, capacity and partnerships; outreach and education; fuels management; regulations and planning; effective response; and presentations from regional- and state-level stakeholders. The last exercise of the FDX was for each department to create its own post-exchange action plan – something related to what they've learned and can take home to implement or share. OKCFD representatives were ready to get to work.

Over the next year, maintaining contact with other FDX participants to seek guidance, OKCFD personnel worked diligently to implement their post-exchange action plan and didn't stop there. Since no significant wildfire had threatened the metro-area since 2011, and rainfall had been plentiful, they felt prepared and didn't anticipate much risk.

OKCFD shared what they learned with their leadership, got green lights to move forward with planning, and worked hard to get buy-in from other personnel. The department will write and implement a Community Wildland Protection Plan. As part of that plan's foundation, WUI risk areas will be identified and additional research will be conducted. OKCFD has established and maintains open lines of communication with local- and state-level partners and has assembled a Wildland Advisory Committee, including stakeholders, to write a sustainable plan.

The department started its community outreach by sending a survey to residents to learn about the awareness level of those they serve. Using results from the survey and other research, education modules were developed to distribute to firefighters, stakeholders, and the public. These modules outlined mitigation procedures designed to lessen or eliminate the risk of residing, working in or performing outdoor activities in the WUI. These modules also include information about landscapes of historical, economic, and cultural value, in addition to endangered plant and animal species and watersheds. The department was able to implement a program to train many of its firefighters in wildland firefighting, earning "red cards" (Incident Qualification Card).

To understand the increasing threat of wildfire and growth of WUI is imperative, even for larger, well-established fire departments. Recognition and buy-in are the first steps to start the identification, research, and preparation or planning stages. Mitigation, response, and recovery follow suit once a well-developed, active plan is in place and updated regularly. The tenacity and hard work of OKCFD personnel will pay off. We hope they never have an opportunity to follow their plan, but if they do, they'll be prepared, the community will be aware and informed, and residents and responders will be safer.





Preparation





Preparation is defined by the Department of Homeland Security and the Federal Emergency Management Agency as:

“a continuous cycle of planning, organizing, training, equipping, exercising, evaluating, and taking corrective action in an effort to ensure coordination during incident response.”



Specific Categories



RISK ASSESSMENT

All communities have some level of risk. It is incumbent upon fire service leaders to objectively evaluate that risk to properly prepare the responders and the community.

There are several location-specific considerations that factor into risk:

- » **Fire ecology** – vegetation and relative health (e.g., insects and disease), fire cycle, local weather influences (e.g., drought)
- » **Topographical influences** – wind, aspect and slope, location of development, and recognition of prevailing wind patterns
- » **Situational awareness** – the local and regional risks, and when they are most likely to occur
 - Improvements adjacent to natural vegetation
 - Construction types and materials – new and existing
 - Community fire IQ – understanding, experience, Ready, Set, Go! (RSG!) Program participation
 - Ability to communicate to the public in emergencies
 - ◆ Reverse 911
 - ◆ Phone Apps
 - ◆ Backup plans

» **Economic impact – tourism, aesthetics etc.**

» **Infrastructure**

- Key components and resiliency
 - ◆ Road systems – access/egress, bridges
 - ⊙ Are they vulnerable in a wildfire?
 - ◆ Mining
 - ◆ Energy production
 - ◆ Water sources, systems, watersheds
 - ⊙ Natural and unnatural
 - ⊙ Capacity and time of year
- Utilities – resistance to fire, plan for triage and rebuild after the fire, propane tanks and natural gas distribution, pipelines, continuity of service
- Health care – hospitals, EMS, nursing homes
 - ⊙ Impacts of smoke, fire, and resistance to fire
- Key employers – continuity of business
 - ⊙ How vulnerable?
- Schools
- Key residential facilities
 - ◆ Corrections
 - ◆ Group homes

Additional Resources:

- * [State Risk Assessment Websites](#)¹
- * [National Fire Danger Rating System](#)²
- * [Community Wildfire Protection Plan \(CWPP\) - Leaders Guide](#)³
- * [FAC Self-Assessment Tool](#)⁴
- * [Wildland-Urban Interface Wildfire Mitigation Desk Reference Guide](#)⁵
- * [Emergency Preparedness Resources for Businesses](#)



RELATIONSHIPS

Once you have established risk, it is critical that you identify and communicate with partner agencies. Roles need to be clearly established, as well as the ability to seamlessly assimilate and utilize Unified Command.

» Possible partners

- Traditional
 - ◆ Neighboring fire jurisdictions
 - ◆ Law enforcement (local, state, county)
 - ◆ Emergency management
 - ◆ Land management agencies (parks, BLM, state, BIA, USFS)
 - ◆ Bureau of Reclamation
 - ◆ Tribal Partners
- Non-traditional
 - ◆ Public works
 - ◆ Planning/zoning/code enforcement
 - ◆ Water departments/irrigation districts
 - ◆ Key private landowners
 - ◆ Homeowner/Neighborhood Associations
 - ⊙ Interested/invested citizens – community advocates
 - ◆ Utilities
 - ⊙ Gas
 - ⊙ Pipeline
 - ⊙ Electric
 - ◆ Natural Resources Conservation Service (NRCS)/Conservation Districts
 - ◆ School districts
 - ◆ 4H/Cooperative Extension Service/ Animal Control
 - ◆ Fish and Wildlife – state and federal
 - ◆ Parks – local, state and federal
 - ◆ DOT/Highway/Roads
 - ⊙ Identify agency contacts and process for requesting modifications of traffic and/or closures; Non-governmental Organizations (NGO's) like the Nature Conservancy (TNC)
 - ⊙ High-risk/vulnerable areas

- ◆ Municipal and county government
 - ⊙ Which legislative bodies and agency administrators do you report to in a large wildland incident?
 - Who is the contact?
 - How to contact?
 - ⊙ Air Pollution Control Board
 - Impacts on prescribed burns
 - Impacts on burnout
 - Expertise to assist in managing smoke for community and FF impacts
- ◆ Coroner/Medical examiner – What arrangements can be made if you have a large-scale incident with fatalities in your jurisdiction?
 - ⊙ When will the coroner be called?
 - ⊙ What are the conditions of access to the scene?

POLITICAL SUPPORT

With risk established and partner agencies identified, you need the political leaders to be both informed and to buy into the cooperative efforts to manage wildland fires.

- » **Know who you report to and their level of commitment, comfort, and understanding about the role your agency will play in wildland response. Do your elected officials understand the risks, statistics, and general response needs in your community?**

- Local
- Regional
- Beyond





JURISDICTIONAL RESPONSIBILITY

Know which agency is the lead. Are there shared responsibilities or is this “no man’s land”?

AGREEMENTS

In order to respond outside your normal operating area, you will need an agreement. Typical agreements include who, what, where, when, why, and how, and agencies are used to request or provide assistance and/or resources among jurisdictions. States may participate in interstate compacts and intrastate agreements that encompass local jurisdictions. Check with your state or federal Emergency Management or Land Management Agency for details. Authorized officials from each of the participating jurisdictions and/or organizations should collectively approve agreements prior to response.

There are numerous types of agreements that will help a jurisdiction be prepared. These agreements should usually cover how to activate response and respond, cost-share or cost recovery, and billing procedures. Consideration as to availability, timing, and reliability of any outside resources needs to be considered and monitored throughout the fire season.

» **Basic – agreements to support mutual aid needs – no finance component**

- Automatic Aid: agreements that permit the automatic dispatch and response of requested resources without incident-specific approvals. These agreements are usually basic contracts; some may be informal accords. There is usually no/minimal exchange of funds. The jurisdictions will need to define:
 - ◆ Expectations of response (resources)
 - ◆ Timing of response
- Mutual Aid (Local): agreements between neighboring jurisdictions or organizations that involve a formal request for assistance and often cover a larger geographic area than automatic mutual aid. Generally, short-term assistance with no formal resource order and usually no payment/reimbursement involved. The jurisdictions will need to define:
 - ◆ Expectations of response (resources)
 - ◆ Timing of response

» **Intermediate –**

- Regional Mutual Aid: substate regional mutual aid agreements between multiple jurisdictions that are often sponsored by a council of governments or a similar regional body. May be for an immediate need such as structure protection or a planned need. Generally involves a resource order, typing and credentialing, and reimbursement after a set time period.

- Statewide/Intrastate Mutual Aid: agreements that are often coordinated through the State that incorporate both State and local governmental and non-governmental resources in an attempt to increase preparedness statewide. Usually a planned need and reimbursed costs, operational, and finance agreements to support local and regional response.
- Jurisdictions need to consider the following:
 - ◆ Agreements can vary based on amount of effort, time, and ownership
 - ◆ Mobilization plans
 - ◆ Master agreements might exist or can be used
 - ◆ States to federal, and vice-versa, allowing local governments to access federal fire resources and participation
 - ◆ Compacts
- Regional Agreements for exchange of resources across state and national boundaries for payment

» **Advanced –**

- Interstate Agreements: out-of-state assistance through the Emergency Management Assistance Compact (EMAC) or other formal state-to-state agreements that support the response effort. Planned-need and full-cost reimbursement.
- Detailed finance evaluation involving multiple agreements with understanding or mobilization, EMAC and FMAG, etc.

Additional Resources:

- * [2015 California Fire Assistance Agreement⁶](#)
- * [NWCG Standards for Interagency Incident Business Management⁷](#)





TRAINING

Training can be local, regional, or based on national standards. There are a number of ways an agency can determine to what level(s) and what standards to train personnel:

- » **Local** – basic wildland training to meet localized response to wildland incidents that ensure accountability and safe and effective operations.
 - Fire Chief/Local Authority Having Jurisdiction (AHJ) can approve within a district or for response in agreed-upon areas (Mutual Aid Agreements) not generally accepted on state or federally managed or funded fires
 - Partners – basic understanding of Incident Command System (ICS) for public works, utilities, and law enforcement to include a basic understanding of risks and fire behavior
- » **Regional** – intermediate training that is more formalized to begin the process of meeting 310-1 for all personnel in positions assigned, Incident Command System (ICS) 100, 200, 700, and 800.
 - NIMS Wildland Fire Qualification System Guide, PMS 310-1 (federal standard for wildland fire personnel – levels and task books – universally accepted) Red Card. There are several ways to meet PMS 310-1:
 - ◆ Crosswalk⁸ – this takes prior learning (most often structural FF) equivalency and provides partial credit towards PMS 310-1 credentials (uses NFPA)
 - ◆ RPL – recognition of prior learning
- » **National** – PMS 310-1 compliance training to meet local and regional response needs. IMT training to include Incident Command System (ICS) 300 and above, including position-specific training.

Additional Resources:

- * [National Incident Management System: Wildland Fire Qualification System Guide⁹](#)



COMMUNICATIONS

There are different levels to which communications decision-making can be applied. The basic concept of interoperability, at whatever level you decide, is critical.

- » **Basic** – capacity for command and tactical frequencies that adjoining agencies have agreed upon and are functional
- » **Intermediate** – field-programmable radios with support to facilitate additional channels
- » **Advanced** – regional communication plan with pre-programmed banks with area cooperators
 - Expanded dispatch – ability to maintain continuity of operations by separating incident traffic and triaging system demand

COMMUNITY NOTIFICATION

The ability to inform community members on emerging incidents and provide basic instructions.

- » **Basic** – identified source for information and the plan to keep updated
- » **Intermediate** – system redundancy, small-scale drill
- » **Advanced** – automatic notification systems (phone, text, social media), Emergency Alert Systems (EAS), Integrated Public Alert and Warning System (IPAWS) large-scale drill

Additional Resources:

- * [Integrated Public Alert and Warning Systems \(IPAWS\)](#)¹⁰

PERSONAL PROTECTIVE EQUIPMENT

The level of Personal Protective Equipment (PPE) should be commensurate with the risks.

- » **Basic** – personnel have the ability to alter structural gear to facilitate wildland operations
- » **Intermediate** – all personnel have NFPA 1977 Compliant brush gear
- » **Advanced** – all personnel are issued full complement of PPE, tools, and equipment for their assignments to include shelter, packs, etc.

Additional Resources:

- * [Personal protective clothing and equipment for wildland firefighting](#)¹¹



PERSONNEL & STAFF

Does your organization have the capacity to staff operational and overhead positions on any likely moderate- to large-scale incident? If not, what is the contingency for adequate Incident Management Team (IMT) staffing?

APPARATUS & EQUIPMENT

Every jurisdiction must decide how to appropriately equip their agency for response.

- » **Basic** – meets minimum local anticipated needs.
- » **Intermediate** – meets local needs and deployment standards for regional response.
- » **Advanced** – apparatus complement meets risk and deployment needs with depth to include T-6 (brush trucks) pumps, porta tanks, tenders, hose complements (meets federal and state standards).
- » **Specialized** – if your agency intends to address a specific regional need (Rapid Extrication Module, for example), this involves very specific equipment and important training requirements.

Additional Resources:

- * [Firefighter Equipment](#)¹²

PRE-INCIDENT PLANNING

Similar to pre-planning for high-occupancy or high-hazard structures in your jurisdiction, response agencies should pre-plan wildland and wildland–urban interface areas, as well.

- » **Basic** – tactics related to location and time of year.
- » **Topographical Influences** – in-depth planning including partners and regional exercises.
 - Law enforcement evacuation included.
 - Water sources.
 - Deployment.
- » **Advanced** – site-specific planning including fuels, and topography.
 - All partners – advanced evacuation, water-system planning.
 - Modeling.
 - Full-scale drills with community.
 - Developing written or electronic pre-incident plans or maps.

Additional Resources:

- * [Wildland Fire Incident Management Field Guide](#)¹³

Case Study

Barnegat Township, NJ

WILDLAND PREPAREDNESS HAS POSITIVE IMPACT ON OTHER HAZARDS

The Barnegat Volunteer Fire Company, located in Barnegat Township, New Jersey, protects about 20,000 residents and has an initial response area of approximately 41 square miles of residential, commercial, agricultural and bayfront property. The township sits on the eastern edge of 1.1 million acres of undeveloped forest known as the Pine Barrens. Since 1926, there have been numerous wildfires greater than 100 acres, and the community has a significant special needs population of retired and elderly individuals, including eight senior communities that border the undeveloped forest.

The department has been instrumental in introducing wildfire preparedness into their community. They started as one of the nine RSG! Program pilots in 2010, and since then have become leaders in creating partnerships on the local, county, state, and national level.

RSG! Program encourages fire departments to become leaders in wildfire preparedness and work collaboratively with key stakeholders in their community to become fire-adapted. The department has used the RSG! Program to forge relationships and create familiarity, build an understanding of the wildfire threat across disciplines, build community trust, and create a virtual communication infrastructure within their community.

The department established relationships and created familiarity in their community by holding frequent community meetings and becoming the trusted source for wildfire preparedness information. They took their special needs populations into consideration and developed a yearly outreach program in the senior communities. They also communicated their priorities and concerns with other stakeholders, while being sensitive to the demands placed on other services in their community.

They gained the community's trust by exhibiting confidence in the security and protection of property in a wildfire incident. They also worked diligently with the police department and other key stakeholders to create an understanding of the evacuation process. Everyone knew what their role was in the event of an evacuation, and it was understood among the stakeholders that when the department says it's time to go, it's time to evacuate.

The department worked with their partners to create a virtual communications infrastructure in their community. They utilized social media, local websites for stakeholders, phone chains, and a reverse 911 system.

The framework in which the department built with the RSG! Program helped them become the first municipality in their state to complete a Community Wildfire Protection Plan (CWPP) and become a model fire-adapted community. It also allowed them to become instrumental in the writing of certifiable wildfire preparedness actions for a state program, mentor other fire departments and aid the state forest fire service in their wildfire preparedness efforts.

The department's hard work and partnership building were put to the ultimate test in 2012 when Hurricane Sandy hit the township. At that time, the community had a CWPP that was in place. The CWPP outlined the roles of all community stakeholders, evacuation routes to the coastline, and shelters that should be used.

Thanks to due diligence of the department and their partners in writing the CWPP, they were able to reverse their wildfire evacuation plan and safely evacuate residents from the coastline inland towards the forest. The hurricane evacuation was streamlined and successful due to the work and relationship building the department did with the police department and other stakeholders in their community around wildfire preparedness.

Preparedness considerations for the local chief gleaned from this department, include:

- » Partnership building is key to success. It takes the input of all community stakeholders to succeed.
 - It doesn't stop at the local level. Don't hesitate to get county, state and national stakeholders involved too.
- » Preparedness programs can serve as a catalyst to bring the community together.
- » Think outside the box. Community Wildfire Protection Plans can be used for all hazards, not just wildfires.



*This case study is dedicated to the memory of **John Cowie** of the **Barnegat Volunteer Fire Company** and **New Jersey Forest Fire Service** for his dedication and hard work to protect his community from the threat of wildland fire.*

Case Study

Orange County, CA

WILDFIRE EDUCATION IS THE FIRST STEP TOWARD WILDFIRE SAFETY

The combination fire department in Southern California protects over 1.6 million residents and has an initial response area of approximately 553 square miles. The area is comprised of urban, suburban, rural, and undeveloped/wilderness. Personnel is trained at all levels for responses including structure and wildland fire, hazardous materials, extrication, technical rescue, aircraft fire, and emergency medical response.

The department is heavily involved in efforts to educate people in the community and create an opportunity for personal action and preparedness. They are one of two fire departments credited with the creation of the RSG! Program that is managed by the International Association of Fire Chiefs in cooperation with the USDA Forest Service.

To adopt the program in their community, the department conducted extensive door-to-door canvassing for several months to inform residents about the RSG! Program. Through their efforts, the department was able to reach 44% of the residents who lived within the fourteen high-risk communities they targeted. The program resulted in 28% of households making home improvements that increased their home's survivability in case of a wildfire.

The department found that the RSG! Program is effective in creating awareness of wildfire risk among residents and identifying areas where home hardening is necessary. Two-thirds of residents who were aware of the program chose to have a Wildfire Home Risk Assessment conducted on their residence, and after the assessment, 96% of those residents made some change to their home.

As part of their initial outreach efforts, the department created materials for residents including a DVD, postcard, door hanger, assessment form, and the first RSG! Program Action Guide. The Action Guide was the most accepted resource among residents. This still proves true today as the English National Action Guide is the most requested resource by members of the National RSG! Program.

Over the years, the department has continued to expand its community outreach by creating a web-portal that provides a shared awareness, between the department and homeowners, of the risk of wildfire. The portal contains an online home assessment form, wildfire hazard maps, and resources related to the three tenets of the RSG! Program, including these Ready, Set and Go videos¹⁴.

Due to these efforts, the department has seen a significant increase in resident engagement. Now they present to at least one homeowners association meeting each week. They also work closely with property managers to get the RSG! Program information on community websites and in monthly community newsletters. According to department personnel, the goal of their program is to educate everyone, so people in the community understand their risk and can make the best decisions to protect themselves, their family, and their property against the threat of wildland fire.

The department's outreach efforts were shown to be effective in October 2017 when a fire threatened one of the neighborhoods that were part of their initial RSG! Program rollout. The fire was able to be stopped at a house where the department had spent time educating the resident about fire-resistant construction and fuel-modification zones. The department's outreach and the homeowner opting to have their house built with fire-rated roofing, exterior sprinklers, and fire-resistant vegetation, played a significant role in saving the home.



The day after the fire, the department continued its outreach in the affected neighborhood. They went door-to-door to talk to residents about what they could do to prepare for future fires and conducted home assessments as needed.

Successes like this have led other existing communities to work with the department to update or create new fuel-modification plans to meet current standards. Similarly, the department is working with CALFIRE Land Use Planning to establish and ensure state laws surrounding WUI requirements are met in all wildland interface areas related to defensible space, access, and water.

The department's commitment to outreach has also yielded results from builders in the community. The State of California has Chapter 7a building codes, which are wildland-urban interface building codes. It has now become a standard practice for builders in their communities to build to 7a building code standards for all new homes in the WUI, not just the most highly threatened areas.

Preparedness considerations for the local chief gleaned from this department, include:

- » **Engage your residents in wildfire preparedness.**
 - Incorporate wildland fire preparedness into your existing fire prevention programs.
 - Talk to residents face-to-face to establish a line of open communication.
- » **Home assessments are a great tool to empower residents.**
 - Explain to residents why defensible space and home hardening are important.
 - Give residents actionable items that they can do and make them part of the solution.
- » **Involve key community stakeholders in the conversation.**
 - Builders, land managers, elected officials, HOAs, and other community groups all play an important role in wildland fire preparedness.
 - Form a community coalition to encourage discussion and find new solutions.
 - Reference state and local land use planning.



Mitigation





COMMUNITY STAKEHOLDERS ARE CRITICAL TO YOUR SUCCESS

Adapting to wildfire is a perpetual community process in which federal, state, and local land managers play an important role. They are often the catalyst to helping communities reduce risk. How fire professionals work with local communities at risk, and which risk reduction tools take priority, is a local decision based on capacity and need. Helping community members understand their roles and responsibilities in this effort is key.

Understanding the context of the environment you are going to be working in is critical to your success as a Fire Chief. Wildland risk mitigation may be the most politically contentious area of your responsibility. There are many reasons for this. Some stakeholders may believe mitigation is not beneficial or cost-effective. Mitigation can be difficult to quantify and measure, which can be a challenge when trying to effect change, secure funding, and maintain or increase resources.

Knowing the right time to take something forward in an effort to expand current programs is essential. Understanding your stakeholder priorities and what is important to them at that time will be part of your success. It is also important to know when it will be difficult to improve current programs or add new ones. The financial

viability and legal implications of your programs based on current local economic conditions should also be considered.

How do your programs connect to local, regional, state, and national programs? At first, this may be difficult to establish. Your partnerships and relationships with key stakeholders can assist you in understanding how your local priorities connect to the larger context. As difficult as this may be, mitigation of risks will provide benefits far in excess of the effort.

Identifying and implementing the best WUI mitigation project(s) can be challenging and will require significant buy-in from all the stakeholder groups you have identified. Incrementally phasing in these projects (as depicted in the chart below), documenting your success, and communicating your progress at each step will help to ensure the overall success of your programs.

The outcomes of this section are to reduce wildfire risks, increase safety for both civilians and firefighters, increase emergency response capacity, to have a knowledgeable and prepared community, reduce economic impact, and improve ecosystem health.

The Phases of Mitigation

Phase I

Focus on low-cost high-output strategies. Use pre-packaged programs (e.g., Ready, Set, Go! Program).

Education

- Understand your wildfire risk
- Use prevention education: communicate risk to public and community leaders

Collaboration

- Solicit buy-in from stakeholders
- Establish community partnerships
- Engage local, state, and federal resources
- Encourage voluntary compliance through education

Mitigation Efforts

- Lead by example
- Evaluate best practices
- Leverage existing regulations
- Document accomplishments

Phase II

Build on Phase I accomplishments, reduce vegetation, protect assets, and build capacity.

Plan Development

- Research programs that benefit your community
- Develop a plan with partners to organize mitigation efforts
- Capitalize on training opportunities

Phase III

Build on Phase I and II accomplishments, enhance and sustain established programs. Engage other agencies/ companies that will benefit from risk reduction.

Maintenance

- Define wildfire risks and impact to community
- Build and nurture stakeholder collaboration
- Plan strategic fuel mitigation projects
- Integrate and align local, regional, and state plans



Specific Categories



PHASE I

Establish Chief’s intent to mitigate wildfire risk to ensure the highest level of life safety, property protection, and incident stabilization.

Objective – Focus on low-cost, high-output strategies:

- » **Education of Community – agency acts as a catalyst for engagement including**
 - Use risk-assessment resources and methodologies to educate agencies and communities to recognize and accept wildfire threat (e.g., your regional wildfire risk-assessment portal).

Additional Resource:

- * [Wildland-Urban Interface \(WUI\) Toolkit](#)¹⁵
 - Conduct prevention education to communicate wildfire risk to the public and local leadership through all media channels.

Additional Resources:

- * [IAFC Ready, Set, Go! Program](#)¹⁶
- * [NFPA Public Education](#)¹⁷
- * [Firewise USA](#)¹⁸
- * [FEMA WUI Training](#)¹⁹

- Cultivate the ability to conduct home and community risk assessments with Home Ignition Zones (HIZ) and NFPA FIREWISE USA.

Additional Resources:

- * [Fire Adapted Communities](#)²⁰
- * [Firewise USA](#)²¹
- * [FEMA WUI Training](#)²²

- Educate the public on appropriate actions when warnings are issued.

Additional Resources:

- * [IAFC Ready, Set, Go! Program](#)²³
- * [Emergency Alerts](#)²⁴
- * [NVFC Wildland Fire Assessment Program as a resource for conducting home assessments](#)

» **Collaboration of Stakeholders – form partnerships**

- Solicit buy-in from community members, homeowners associations, local business, government (city, county, state, federal), non-profits, agencies/ companies with exposures to risks, and emergency service organizations.

Additional Resources:

- * [Fire Adapted Communities](#)²⁵
- * [FEMA WUI Training](#)²⁶
- * [CWPP Community Guide](#)²⁷
- * [CWPP Leader’s Guide](#)²⁸



» Plan Development

- Research the development and implementation of public and individual programs like the Community Wildfire Protection Plan (CWPP) process and the IAFC RSG! Program.
- Capitalize on existing free training opportunities including the IAFC Fire Department Exchange (FDX) program online, National Fire Academy (NFA) WUI Courses, and the NFPA FIREWISE USA Training portal.
- Solicit assistance from state and federal fire management agencies.
- Identify possible funding sources, local, state, and federal grant opportunities.

Additional Resources:

- * [CWPP Leader's Guide](#)²⁹
- * [FDX](#)³⁰
- * [RSG! Program](#)³¹
- * [Understanding the Wildfire Threat to Homes](#)³²
- * [Assessing Structure Ignition Potential from Wildfire Training](#)³³
- * [Wildland-Urban Interface: Fire-Adapted Communities](#)³⁴
- * [FEMA WUI Training](#)³⁵

PHASE II

Mitigation Planning Efforts

Objective – To build on Phase I and work towards reducing, removing, and replacing vegetation, protecting critical assets, building local capacity, and reducing home ignitability:

» Mitigation Efforts

- Consider developing, at the city- or county-level, general plans for dealing with wildfire.
- Implement efforts to protect critical assets. Lead by example by mitigating the risk to fire department infrastructure.
- Evaluate peer fire department wildfire programs for applying best practices and lessons learned.
- Continue to educate and encourage residents to own their role in risk reduction (FIREWISE USA Principles, RSG! Program, and the National Fire Danger Rating System).

- Establish a community partnership for the development and implementation of the Community Wildfire Protection Plan (CWPP).
 - ◆ As part of CWPP, establish demonstration sites to illustrate value and benefits of fuel breaks, defensible space, resilient structures, and other fuels-reduction projects.
- Evaluate existing regulations/ordinances that can be leveraged to mitigate wildfire risk (e.g., weed abatement, outdoor restrictions, tree ordinances).
- Encourage the use of fire-resistant materials and construction.

Additional Resources:

- * [Fire Adapted Network](#)³⁶
- * [CWPP Community Guide](#)³⁷
- * [IAFC Fire Department Exchange](#)³⁸
- * [IAFC Ready, Set, Go! Program](#)³⁹
- * [Fire Adapted Communities](#)⁴⁰
- * [National Fire Danger Rating System](#)⁴¹
- * [Firewise USA®](#)⁴²
- * [NVFC Wildland Fire Assessment Program as a resource for conducting home assessments](#)

PHASE III

Enhancement and Sustainability of Mitigation Plans

Objective – To build on Phase I and work towards reducing, removing, and replacing vegetation, protecting critical assets, building local capacity, and reducing home ignitability:

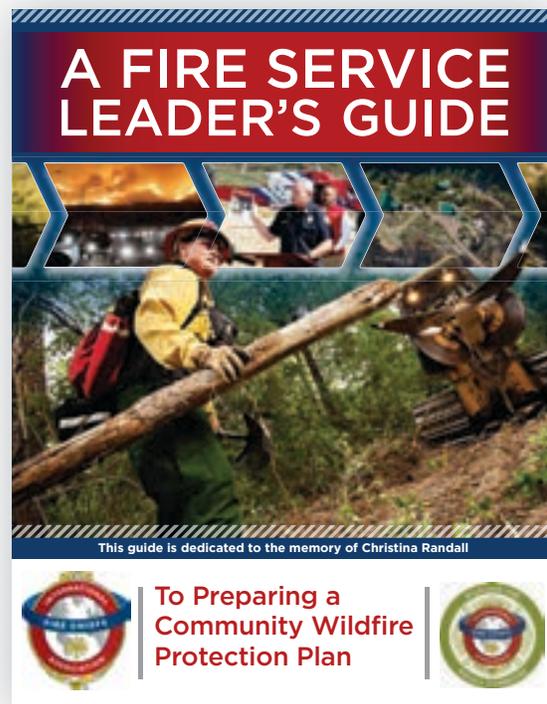
» Maintenance

- Annually review/update CWPP and mitigation plans to ensure recommendations are relevant and implemented.
- Annually update/enhance multi-agency collaboration, coalitions, working group Memorandum of Understanding (MOU), and inter-agency local agreements to maximize local/regional efforts.
 - ◆ Consider a strategic plan for long-term wildfire mitigation.
- Leverage mitigation efforts into operation advantages through strategic-fuels mitigation planning, including prescribed fire and large-scale mechanical fuels treatment.

- ◆ Community protection zones, evacuation routes, and critical infrastructure.
- Integrate and align local and regional plans into state plans.
 - ◆ Hazard mitigation plans
 - ◆ Land management plans
 - ◆ Community wildfire protection plans
 - ◆ Land use planning/comprehensive plans
 - ◆ Fire and building codes
 - ◆ Climate resiliency plans
 - ◆ Post-fire recovery plans
- Long-Term Planning Efforts
 - ◆ Research grant opportunities to enhance mitigation capacity, including the FEMA Hazard Mitigation Grant Program (HMGP), Pre-Disaster Mitigation Grant (PDM), and state grant opportunities.
 - ◆ Advocate for the adoption of local codes (e.g., building, planning, zoning, and fire prevention codes) that require ignition-resistant home design and building materials to be adopted and enforced.
 - ◆ Using established wildfire mitigation training programs, adopt formal training for staff and relevant cooperating agencies.
 - ◆ Utilize risk assessments to determine the need for regulatory measures like structural hardening, vegetation management standards, and integration of fire management planning into land management plans.

Additional Resources:

- * [Fire Adapted Network](#)⁴³
- * [CWPP Community Guide](#)⁴⁴
- * [FEMA WUI Training](#)⁴⁵
- * [IAFC Fire Department Exchange](#)⁴⁶
- * [IAFC Ready, Set, Go! Program](#)⁴⁷
- * [NFPA Public Education](#)⁴⁸
- * [Wildfire Risk Assessment Portal](#)⁴⁹
- * [Fire Adapted Communities](#)⁵⁰
- * [National Fire Danger Rating System](#)⁵¹
- * [FEMA AFG Grant](#)⁵²
- * [FEMA Hazard Mitigation Grants](#)⁵³
- * [Firewise USA](#)⁵⁴
- * [NVFC Wildland Fire Assessment Program as a resource for conducting home assessments](#)⁵⁵



Case Study

Centennial, CO

SOUTH METRO FIRE RESCUE GETS CREATIVE TO MITIGATE HIGH-RISK RESIDENTIAL AREAS

The career department in the Rocky Mountain Region protects over 500,000 residents and has an initial response area of 300 square miles. The area is comprised of suburban residential developments, an airport, and undeveloped wilderness on the typical grasslands and buttes of the western plains. Personnel is trained at all levels for responses including structural firefighting, emergency medical services, aircraft firefighting and rescue, hazmat operations, water rescue and recovery, Special Weapons and Tactics (SWAT) Medic, Urban Search & Rescue, technical rescue, Tracked Response and wildland-urban interface firefighting.

The department has a robust wildfire preparedness education and mitigation plan. This plan includes an innovative approach to mitigating risk in residential communities. Instead of using traditional mastication machinery, the department has partnered with neighborhoods to use goats. The department looked for alternative mitigation techniques after residents voiced concern over the noise and unpleasantness of mastication machinery.

Every summer, the department collaborates with homeowners associations for Ready, Set, "Goat!", a campaign to mitigate high-risk areas in residential communities. Over the course of four weeks, a herd of about 300 goats graze on acres of open land to remove ladder fuels from scrub oak that would enable a wildfire to ignite the tree canopies. The goats also eat surface fuels such as grasses and noxious weeds.

Since 2015, the department has seen a significant reduction in the amount of scrub oak and other ladder fuels that grow back in the mitigated areas. After multiple treatment years, the scrub oak stops growing branches and leaves that would be considered ladder fuels, and it returns in less dense, smaller groves. Scrub oak responds to mastication and wildfire in denser groves; it responds to goat browsing differently and should be more resilient to low- and moderate-intensity wildfires.

Along with the mitigation benefits, the annual campaign and associated open house turned into an educational platform for the department and other agencies promoting mitigation and preparedness. The campaign receives significant interest from residents and the media, which gives the department access to a larger audience to educate the community about their wildfire risk and the importance of preparedness. Wildfire mitigation has become popular among the target neighborhoods.

Additionally, the department has been able to offer an educational opportunity for local students to study the long-term impact of goat mitigation. Students from Rock Canyon High School are currently researching the changes in the soil and biodiversity in the mitigated areas.

The department has been able to turn needed mitigation in high-risk areas into a fun, community-wide learning event.

Mitigation considerations for the local chief gleaned from this department, include:

- » Mitigation doesn't have to be the same in every community. Consider alternative methods.
- » Make your mitigation activities a community event. It is a great way to educate the community about why you are doing the work.
- » Consider all the learning opportunities your mitigation activities may provide.
- » Engage students to study mitigation and wildfire.
- » Community risk reduction is better when other community partners are involved.



Case Study

Tallahassee, FL

STATE-LEVEL MITIGATION: A SUCCESSFUL MODEL

The Florida Forest Service is a 1,250-person state agency that protects and manages over one million acres of forest resources for the state. The agency's key components include wildfire prevention and suppression to protect homeowners from the threat of wildfire in their state's natural, fire-dependent environment. To serve this need, the agency has four regional Wildfire Management Teams that have specialized equipment to facilitate prescribed burning and heavy-duty mowing units to reduce fuel through cutting, mastication, and thinning.

Along with working to reduce fuel load, these teams work with 15 mitigation specialists to provide education to landowners and homeowners about the hazards of not mitigating. This is a key part of their mitigation strategy because it is important that individuals understand their wildfire hazard, that mitigation is an ongoing process and what action they can take to reduce their hazard. By taking the time to educate, the agency empowers individuals, HOAs, and landowners to take personal responsibility for the mitigated land.

To reinforce this message, the agency implemented from the top down a statewide RSG! Program. The program encourages individuals to be *Ready* with personal responsibility, to be *Set* with situational awareness and to *Go* and act early in the event of a wildfire.

To implement the program, the agency led the development of a statewide RSG! Program partnership that involved state, county, federal, and private partners who were committed to making the program successful. The partnership worked together to customize a state RSG! Program Action Guide and to develop a process to start the program on the ground.

To further expand the state's RSG! Program, the agency developed RSG! Program videos, PSAs and RSG! Program kits with grant funding from the United States Forest Service. They involved the partnership to create the videos and PSAs, both in English and Spanish. They included these resources in their state-specific RSG! Program kits along with other customized materials. These kits have been instrumental in their outreach efforts because they have allowed the agency to make a personal connection with residents. They have helped the agency engage with local fire departments, so they can go out as a united front to talk to residents about wildfire preparedness.

Through all their efforts and partnerships, the agency has grown their statewide RSG! Program from less than 20 participating fire departments to more than 80 participating fire departments and have given out over 300 RSG! Program kits and 20,000 RSG! Program guides statewide.

The agency shows that a successful mitigation strategy encompasses more than mastication, chipping, and thinning. It involves educating individuals.

A successful mitigation strategy encompasses more than reducing hazardous fuels through the use of prescribed fire, mastication, chipping and thinning.

- » **A successful mitigation strategy includes more than just mastication, chipping, and thinning.**
 - It is important for residents to understand their wildfire threat and why mitigation is necessary.
- » **Involve other stakeholders in your outreach to make sure that your message is having the impact you want.**
 - Consider town, county, state, federal, or private partners that have an interest in wildfire preparedness.
- » **Customized resources can help to make more of an impact on residents.**
 - Include photos of your area in brochures and flyers to help residents better understand their wildfire threat.





Response





WILDLAND FIRES ARE HAPPENING MORE OFTEN AND IN MORE PLACES

Whether you have experienced large wildland fires, or not, sooner or later you are going to have a wildland event that will impact your community. In recent years, the Chimney Top 2 fire spread from Great Smoky Mountains National Park into the city of Gatlinburg, Tennessee, killing 14 people, forcing 14,000 to evacuate, destroying or damaging 2,500 structures, to the Camp Fire in Butte County, California that caused more than 85 fatalities, 153,000 acres burned, and 18,800 structures destroyed. Fires today impact communities more than ever.

Most agencies have Automatic Aid and Mutual Aid Agreements (i.e., neighbors helping neighbors). We have all sent and received assistance from neighbors in

times of need. Helping jurisdictions when they have a need is a very similar concept that just expands the definition of friends and neighbors.

Wildland fire is a year-round, nationwide issue. “Traditional” wildland fire resources are strained and falling short of meeting the resource needs of the incidents. Nationwide, the number of “unable to fills” (UTFs) in 2017 was staggering. Requests for everything from engines to overhead resources went unfilled as many agencies were unable or unavailable to engage.

Response can be broken into two categories: The first describes an event that exceeds your local capabilities; the second deals with providing resources outside of your local area.



Specific Categories

RECEIVING RESOURCES WHEN HOSTING THE INCIDENT

All agencies have a responsibility for wildland fire. Some have the capability to manage routine incidents, but no agency has the capability to manage the largest and most complex wildland incidents alone. This part of “Response” describes considerations for incidents that exceed your local capability.

Establish Your Levels of Response

- » Determine your local capabilities to respond. Know when you are going to exceed those capabilities.
- » **Automatic and mutual aid** – Be familiar with the capabilities and ability of neighboring agencies to assist when you’ve exceeded your capacity.
- » **Emerging incident** – When an incident is emerging, where do you find resources beyond those typically found locally or with mutual or automatic aid?
 - **What?** – Resources (e.g., crews, aircrafts, dozers)
 - **How?** – How do you request additional resources outside of mutual and automatic aid agreements? How do you order them?
 - **Who?** – Partners might include emergency management, state agencies, tribal agencies, federal agencies, and non-traditional partners.
 - **Where** – Where are they located, and what is there effective response time?

» **General Things to Consider –**

- Your priorities are always life safety, incident stabilization, and property conservation.
- Initial documentation is important. Document strategy, tactics, objectives, Incident Action Plan (IAP), sketch map, utilization of resources.
- Do a risk assessment. Evaluate values at risk.
- Need for evacuations, road closures, etc.
- Notifications
 - ◆ State or Local Enforcement (LE), transportation, public works, etc.
 - ◆ The public.
- Communications
 - ◆ Radio traffic management. Command and tactical frequencies, air-ground, logistics.
 - ◆ Do you have interoperability with incoming units?



- 
- Do you need an Incident Management Team (IMT)?
 - ◆ Complexity analysis can assist in making this decision.
 - ⊙ Red Book⁵⁵
 - ◆ In-brief – You will need to prepare to tell the incoming team members what you’ve done, what you’ve learned, and what your values at risk are.
 - ⊙ Plan for a delegation of authority.
 - ⊙ Identify your values at risk.
 - ⊙ Current Incident Action Plan (IAP) with accurate resource accountability.
 - ⊙ Any local priorities/stakeholders.
 - ◆ Your role – Once an IMT is in place, you still might be needed as an agency administrator, cooperater, liaison, or a member of Unified Command.
 - ◆ Opportunities for engagement – attendance at planning meetings, public meetings, cooperater meetings, etc.
 - Cost-share agreements – There are multiple ways that you can calculate costs. The best practice is to have these established before an incident.
 - ◆ Black acres – Pay by percentage of fire burned per jurisdiction.
 - ◆ You order, you pay.
 - ◆ Percentage of effort (cost apportionment) – Fiscal responsibility based on resources committed by jurisdiction or functional assignment.
 - What happens when your first responders are affected by the event?
 - ◆ Loss of property, loss of friends and neighbors.
 - ◆ COOP – Continuity of operations, backfill and coverage of responders.
 - Demobilization priorities – Orderly release of resources as incident de-escalates.

RESOURCE MOBILIZATION

Responding to fires outside of your area provides an opportunity to gain experience in wildland firefighting and support the national interagency response network.

Responding outside traditional, mutual, or automatic aid necessitates fire-service leaders to create a process and guidelines that facilitate response in a manner that both supports the system and maintains adequate services inside your community. In most cases, these decisions should be educated and be made well in advance of the request.

Although local or state requirements may differ, these types of responses generally necessitate compliance with national standards for training equipment and apparatus. National standard references include NWCG 310-1⁵⁶ which provides training standards for wildland firefighters, and the Red Book which provides standards for equipment and apparatus:

- » 310-1 for personnel and training
- » 2018 Interagency Standards for Fire and Fire Aviation Operations
- » Red Book⁵⁷

You will want to think through what resources you are willing and able to provide while ensuring adequate coverage at home. For many, there is a big difference in what can be sent to a neighbor for a few hours versus what can be sent out of the state for up to two weeks. There are a number of ways that you can provide resources:

- » Single resources can be an individual who fills an overhead position, such as Task Force Leader or Line EMT.
- » Equipment such as engines or water tenders/tankers.
- » Strike teams/task force which is generally assembled with/from your local mutual aid partners and respond to the incident together on one resource order.



AGREEMENTS

In order to respond outside your normal operating area, you will need an agreement. Typical agreements include who, what, where, when, why, and how, and are used to request or provide assistance and/or resources among jurisdictions. States may participate in interstate compacts and intrastate agreements that encompass local jurisdictions. Check with your state or federal emergency management or land management agency for details. Authorized officials from each of the participating jurisdictions and/or organizations should collectively approve agreements prior to response.

- » **Automatic Aid:** Agreements that permit the automatic dispatch and response of requested resources without incident-specific approvals. These agreements are usually basic contracts; some may be informal accords.
- » **Local Mutual Aid:** Agreements between neighboring jurisdictions or organizations that involve a formal request for assistance and generally cover a larger geographic area than automatic mutual aid. Generally, these involve short-term assistance with no formal resource order and usually no payment/reimbursement involved.
- » **Regional Mutual Aid:** Substate regional mutual aid agreements between multiple jurisdictions that are often sponsored by a council of governments or a similar regional body. May be for an immediate need such as structure protection or a planned need. Generally involves a resource order, typing and credentialing, and reimbursement after a set time period.
- » **Statewide/Intrastate Mutual Aid:** Agreements, often coordinated through the state, that incorporate both state and local governmental and nongovernmental resources in an attempt to increase preparedness statewide. Often cover a planned need and reimbursed costs.
- » **Interstate Agreements:** Out-of-state assistance through the Emergency Management Assistance Compact (EMAC) or other formal state-to-state agreements that support the response effort. These typically cover a planned need and full-cost reimbursement.

Additional Resources:

- * [Resource Mobilization Plan](#)⁵⁸



**JOINT POWERS AGREEMENT
BETWEEN THE
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT,
FORESTRY DIVISION
AND
SAN JUAN COUNTY
FOR
WILDLAND FIRE PROTECTION AND SUPPRESSION**

AUTHORITIES

1. Forest Conservation Act, NMSA 1978, §§ 68-2-6, 68-2-8 and 68-2-24
2. Joint Powers Agreements Act, NMSA 1978, § 11-1-1 *et seq.*
3. Disaster Location Act, NMSA 1978, §§ 12-11-23 through 12-11-25
4. Tort Claims Act, NMSA 1978, § 41-4-1 *et seq.*
5. Federal Cooperative Forestry Assistance Act of 1978, P.L. 95-313
6. Fire Prevention and Protection NMSA 1978, § 3-18-11
7. Counties; Powers; Ordinances, NMSA 1978, § 4-37-1

PURPOSE

This Agreement is made pursuant to NMSA 1978, § 11-1-1 *et seq.* between the Energy, Minerals and Natural Resources Department, Forestry Division (EMNRD) and the County of San Juan (County), who may hereinafter be jointly referred to as the "Agencies".

This Agreement for Wildland Fire Protection and Suppression's purpose is to document EMNRD's and the County's agreement and commitment to mutual wildland fire suppression and management assistance and cooperation.

Words and phrases used herein may have different meanings or interpretations for different readers. In order to establish a common understanding, words and phrases as used herein are defined in Exhibit A, Glossary.

RECITALS

WHEREAS, federal, state, county, and municipal lands are intermingled or adjacent, and wildland fires on these intermingled or adjacent lands may present a threat to lands one or both of the Agencies own, administer, or control;

WHEREAS, EMNRD is the designated state agency responsible for coordinating wildland fire suppression services among county and municipal fire departments, cooperating state agencies, and cooperating federal agencies pursuant to NMSA 1978, §§ 68-2-6, 68-2-8, and 68-2-24;

WHEREAS, NMSA 1978, § 68-1-11 provides that employees or agents of governmental entities who authorize volunteer firefighters not certified according to national wildland firefighting standards to respond to wildland fires shall not be subject to criminal liability solely for allowing those volunteer firefighters to engage in firefighting activities;

WHEREAS, EMNRD has responsibility for wildland fire suppression on non-municipal and non-federal lands within New Mexico and the County has responsibility for wildland fire suppression on lands within the boundaries of its designated fire protection districts;

WHEREAS, it is to EMNRD's and the County's mutual advantage to coordinate efforts for the prevention, readiness, detection, suppression, and response to wildland fires, in and adjacent to their areas of responsibility, to avoid duplication, and to improve efficiency or effectiveness;

WHEREAS, the control of wildland/urban interface fires in any jurisdiction may require the mobilization of personnel and other resources beyond the jurisdictional capability, and supporting agency resources may need to be organized and maintained for an extended period of time; and

WHEREAS, EMNRD and the County are public agencies as defined in NMSA 1978, § 11-1-2;

THEREFORE, In consideration of the mutual premises and conditions herein made, EMNRD and the County agree as follows:

1. Definition of Responsibilities:

A. EMNRD – The state agency that has responsibility for wildland fire suppression on non-municipal, non-federal, and non-tribal trust lands within New Mexico.

B. County – The entity with responsibility for wildland fire suppression on lands within the boundaries of its designated fire protection districts.

2. Resource Mobilization Plan (RMP): A statewide plan that establishes:

A. personnel and equipment standards for the County's resources that the County may make available to EMNRD for wildland fire suppression and management;

B. procedures by which EMNRD can request, mobilize, coordinate, and demobilize the County's resources used for wildland fire protection and management; and

C. rates and specific procedures and administrative methods by which

EMNRD will reimburse the County for the services of qualified and requested resources.

The Agencies shall annually review and, upon mutual agreement, modify the RMP; provided, however, that if such review is not completed, the latest RMP agreed upon by both parties shall remain in full force and effect.

3. Non-Reimbursable Assistance:

A. EMNRD shall not pay the County for the first four hours of initial attack expenses incurred by a County fire department responding to a fire within its own County designated fire protection district.

B. EMNRD shall reimburse the County for the first four hours of initial attack expenses incurred by County fire departments that respond to fires outside of their County designated fire protection district.

C. EMNRD shall not reimburse for resources it does not request.

4. Reimbursable Assistance: EMNRD shall reimburse the County in the following circumstances: a) initial attack fire suppression for situations that are not included in the Non-Reimbursable Assistance Paragraph; b) for extended attack wildland fire suppression; and c) wildland fire management activities.

EMNRD and the County shall designate a local contact person or persons who have authority to mobilize resources while assuring that adequate resources are retained for their own fire suppression responsibilities. Resource requests must be recorded by the resource order or similar tracking system. Requests not documented in this manner are not reimbursable.

EMNRD shall only reimburse the County for resources requested, qualified, and mobilized under this Agreement. The County shall notify EMNRD of all wildland fires in its jurisdiction within 24 hours and within that same 24-hour period, notify EMNRD of fire departments that are assisting the County in the suppression effort through mutual aid. All wildland fire mobilizations other than mutual aid shall only be at EMNRD's prior request. All County resources EMNRD requests and the County mobilizes outside of the County's jurisdiction shall meet the standards outlined in the RMP.

5. County Reimbursement Rates:

A. **Reimbursement of Personnel:** EMNRD shall reimburse the County for paid career firefighter employees' regular pay, including overtime, pay differentials, benefits, travel, and per diem from their mobilization until their demobilization following procedures defined in the RMP. These paid career firefighter employees shall at all times remain covered under the County employee benefits, including workers' compensation. EMNRD shall not hire paid career firefighter employees during the incident.

During initial attack or extended attack, EMNRD may hire requested and RMP-qualified County volunteer firefighters as State of New Mexico emergency employees upon check-in at the incident. Emergency firefighter employee pay rates shall be established in the RMP and shall be based on job qualifications and job function at the incident. Firefighters EMNRD employs shall be individually reimbursed as state employees from their mobilization until their demobilization, following procedures defined in the RMP. Firefighters EMNRD employs shall be eligible as state employees for workers' compensation coverage.

B. Reimbursement for Equipment Use: EMNRD shall reimburse the County for use of equipment that meets the RMP standards as follows:

1) using the RMP wet rate when staffed wholly by paid career firefighters or volunteer firefighters whose qualifications including fitness; training and experience; equipment; and wildland personal protective equipment meet the RMP standards. EMNRD shall reimburse the County for use of equipment that meets the RMP standards;

2) using the base wet rate when staffed wholly by volunteer firefighters whose training and experience meet the RMP standards but do not meet the fitness standards; or

3) using the base rate when staffed wholly or partly by volunteer firefighters whose fitness, training, and experience do not meet the RMP standards.

EMNRD shall reimburse County for use of Federal Excess Property Program (FEPP) equipment at the FEPP rate whether staffed by paid career firefighters or volunteer firefighters that meet the RMP standards or by volunteer firefighters whose fitness, training, and experience do not meet the RMP standards.

6. No New Capital Outlay: The EMNRD Forestry Division Line Officer shall review all requests for all property purchases or replacements. Only reimbursable or expendable materials are eligible for reimbursement. Supply numbers (S#) will be issued by the EMNRD Forestry Division Line Officer for all property that is approved for reimbursement.

7. General Billing Procedures for Reimbursable Fire Assistance: EMNRD will reimburse the County for fire suppression resources when:

- A. EMNRD requests the resources;
- B. EMNRD approves the use of County equipment; and
- C. the County notifies EMNRD of the fire within 24 hours.

EMNRD shall only pay for County fire department resources within the fire department's

designated fire protection district when suppression work exceeds four hours.

8. Billing Estimates/Timeframes: On wildland fires where the County incurs costs pursuant to this Agreement, the County shall submit an EMNRD approved reimbursement form for reimbursement as soon as possible, but not later than 45 days after the fire is controlled.

9. Billing Estimates/Timeframes for Incidents with FEMA-Approved Grants: If an incident has been approved as a Fire Management Assistance grant through FEMA, the County shall submit the bill for reimbursement to EMNRD within 45 days from the designated incident period date as per FEMA Disaster Assistance, Fire Management Assistance Grant Program, 44 C.F.R. Part 204, as amended.

10. Billing Content: The County shall identify bills by funding code, fire name, location, jurisdictional unit, and appropriate order number; shall provide EMNRD with adequate documentation supporting the bills; and shall certify each bill to be true and correct.

11. Payment Due Dates: All bills shall have a payment due date 60 days after the date of receipt. If EMNRD cannot make payment before the 60 days expire, then EMNRD may request a 30-day extension from the County with oral or written justification.

12. Disputed Billings: EMNRD shall mail written notice to the County within 60 days of receipt of a bill that fully explains why a bill is being contested. EMNRD shall pay the uncontested portion of the bill. Contested items shall be resolved not later than 60 days of receipt of the written notice; thereafter, the County shall issue a corrected bill for payment by EMNRD. If the contested portion is not resolved within 60 days, EMNRD may deny this portion.

13. Payments: Payments shall refer to the bill number and fire name and shall be sent to the appropriate billing address as indicated in Exhibit B.

14. Independent Action on Lands Protected By Another Agency: Except as otherwise limited in the Local Operating Plan, nothing herein shall prohibit either EMNRD or the County, on its own initiative and without reimbursement, from going upon lands another Agency protects to engage in wildland fire suppression, when such fires threaten lands that are the Agency's protection responsibility. In such instances, the party taking action shall immediately notify the Jurisdictional Agency. Actions taken shall be consistent with the Jurisdictional Agency's fire management and suppression policies.

INTERAGENCY COOPERATION AND COORDINATION

- 15. National Guard Assistance:** EMNRD may seek National Guard assistance for wildland fire emergency purposes at the state level through the State Forester to the Governor, for a Governor's Declared Emergency on multi-jurisdictional wildland fires. The Incident Commander shall advise the State Forester upon the termination of the wildland fire emergency for purposes of demobilizing the National Guard. At that time the State Forester shall advise the Governor and the Adjutant General's Office of the Military Affairs Department that the fire emergency no longer exists.
- 16. County Government Resources:** If EMNRD requests County resources, those resources shall be considered EMNRD-provided resources, except as provided in the Non-Reimbursable Assistance and Reimbursable Assistance Paragraphs.
- 17. EMNRD as Liaison for County Resources:** EMNRD shall act as coordinator for County resources the County provides for wildland fires that are outside of the County's fire protection districts.
- 18. Emergency Declarations:** If the cost of a wildland fire on non-federal, non-municipal, non-tribal trust lands within the County's boundaries meets the Federal Emergency Management (FEMA) threshold EMNRD may request an Emergency Declaration for financial assistance pursuant to the State Civil Emergency Preparedness Act, NMSA 1978 § 12-10-1 *et seq.*
- 19. Incident Command System:** EMNRD and the County shall operate under the concepts defined in the National Interagency Incident Management System (NIIMS) or its successor and its component, the Incident Command System (ICS), as appropriate for providing qualified resources and for the management of incidents this Agreement covers.
- 20. Communication:** EMNRD and the County authorize each other to use their radio frequencies on wildland fires where they are providing assistance.
- 21. Local Operating Plan:** The Local Operating Plan shall establish and map County fire department designated fire protection districts and response areas and shall outline the details of implementing this Agreement. The Local Operating Plan shall designate EMNRD and the County's authorized representatives, and contact addresses and telephone numbers for resource mobilization and billing. The Local Operating Plan shall not supersede this Agreement's terms and shall be consistent with this Agreement.

EMNRD and the County's authorized representatives, as specified in the Plan, shall develop a Local Operating Plan and conduct an annual review. If a review is not completed, the latest Local Operating Plan agreed upon by both parties shall remain in full force and effect.

22. EMNRD Firefighter Qualifications, Equipment, and Personal Protective Equipment: EMNRD firefighting personnel assigned to emergency fire suppression work shall be qualified according to the then current National Wildland Fire Qualifications Guide NWCG 310-1 and RMP guidelines. Firefighting equipment and personal protective equipment shall be properly configured and equipped for wildland fire suppression operations per National Wildfire Coordination Group (NWCG) standards.

23. County Firefighter Qualifications, Equipment, and Personal Protective Equipment:

A. **Non-Reimbursable Assistance:** For non-reimbursable assistance, the County's personnel qualifications, equipment, and personal protective equipment shall meet the County's standards and applicable State Fire Marshal rules.

B. **Reimbursable Assistance:**

1) **Paid Career Firefighters:** In order for EMNRD to reimburse assistance that paid career firefighters provide, the County shall ensure personnel qualifications including fitness; training and experience; equipment; and wildland personal protective equipment meet the RMP standards.

2) **Volunteer Firefighters on Extended Attack on Lands Under Federal Jurisdiction:** In order for EMNRD to reimburse assistance that volunteer firefighters provide on extended attack on lands under federal jurisdiction, the County shall ensure personnel qualifications including fitness, training and experience; equipment; and wildland personal protective equipment meet the RMP standards and that any federal land management agency ordered them.

All resources EMNRD mobilizes pursuant to B.1) and B.2) may receive a performance rating by the fire department supervisor. County shall submit such performance rating for review by EMNRD. A firefighter who receives a deficient performance rating shall not be considered by EMNRD as a qualified resource for future EMNRD incidents until re-qualified as prescribed in the RMP.

3) **Volunteer Firefighters on Initial Attack or Extended Attack on Lands Under Non-Federal Jurisdiction:** For extended attack on lands under non-federal jurisdiction where the Incident Commander has requested the assistance; or for initial attack in areas that are EMNRD's initial attack responsibility, EMNRD shall reimburse assistance provided by volunteer firefighters who have had basic wildland fire training and use equipment and wildland personal protective equipment that meet the RMP standards but who do not meet the RMP's fitness or training and experience standards.

24. Law Enforcement and Preservation of Evidence: Forestry Division law enforcement agents may conduct wildfire investigations on non-federal, non-municipal, and non-tribal lands. In addition, the County Sheriff's Office or County Fire Marshal

may conduct wildfire investigations on non-federal and non-tribal trust lands. Forestry Division law enforcement agents and the County Sheriff's Office or County Fire Marshal may assist each other with or coordinate a wildland fire investigation. The Forestry Division and County shall render mutual assistance in the gathering of evidence to the fullest extent practicable. As initial action is taken on a wildland fire, the initial attack forces shall preserve information and evidence pertaining to the wildland fire's origin and cause.

WILDLAND FIRE SUPPRESSION

25. Fire Notifications: EMNRD and the County shall immediately notify each other of wildland fires burning on or threatening non-federal, non-municipal lands, non-tribal trust lands.

26. Incidents:

A. EMNRD and the County shall establish a Unified Command and coordinate fire suppression resources.

B. The parties involved in the fire incident shall participate jointly in strategy sessions to reach mutual agreement on strategy and tactics within the EMNRD's policies and guidelines.

The County's failure to comply with conditions stated in A or B above, is grounds for denial of payment by EMNRD

27. Protection Priorities: The protection of human life is the single, overriding suppression priority. Once firefighters have been committed to an incident, these human resources become the highest value to be protected. The Incident Commander shall set priorities for protecting communities and community infrastructure, other property and improvements, and natural and cultural resources based on human health and safety, the values to be protected, and the protection costs.

28. Appropriate Suppression Action Policies: All fire suppression action shall be consistent with EMNRD's fire suppression policy and this Agreement's terms. The Local Operating Plan shall document procedures and criteria for the Agencies' representatives to communicate special land management considerations to Incident Commanders. The Incident Commander shall incorporate special conditions in the incident planning process, subject to delegation of authority.

29. Fire Reports: On incidents where the County makes the initial attack the County shall furnish a copy of its fire report to EMNRD within 30 days after the fire is controlled.

30. Structural Fire Suppression: Nothing in this Agreement is intended to make EMNRD responsible for structural fire suppression.

31. Aircraft: All aircraft orders shall be processed through EMNRD. EMNRD shall not reimburse the use of aerial resources not processed through EMNRD.

32. Procurement: Whenever EMNRD or the County is responsible for an incident's management, they shall comply with state procurement laws.

FEDERAL EXCESS PROPERTY PROGRAM (FEPP)

33. FEPP Equipment: EMNRD may provide the County with such FEPP firefighting equipment, as available and as it deems appropriate for use under the Federal Cooperative Assistance Program for placement with the County's fire department for fire prevention and control work. The exchange of FEPP equipment shall be documented in writing by EMNRD and the County's authorized representatives as specified in the Local Operating Plan.

34. License Plates: EMNRD shall provide official-use license plates for FEPP vehicles EMNRD makes available to the County for its fire department's use.

35. Equipment Maintenance: The County shall maintain the FEPP equipment EMNRD provides in good condition, reasonable wear and tear excepted, and make the equipment available to EMNRD for inspection upon reasonable request.

36. Equipment Use: The County shall use FEPP equipment EMNRD provides exclusively for fire purposes. Failure to comply with FEPP guidelines may result in EMNRD removing the equipment from the County's fire department.

37. Accessories or Alteration of Equipment: The County shall obtain EMNRD's written approval prior to adding accessories or altering any of the property provided pursuant to this Agreement. The County shall not sell, junk, or trade FEPP equipment. The County shall return FEPP equipment to EMNRD for disposition. Title to all accessories, tools, sirens, or other property that the County adds to equipment EMNRD furnishes shall remain with the County. The County may remove such property prior to the return of equipment to EMNRD, provided that removal does not materially damage the equipment.

38. Receipt of Equipment: The County shall transport the FEPP equipment EMNRD provides to and from locations EMNRD designates in writing, and upon the time of transfer of the equipment to the fire department, when necessary, paint and add such decals or insignias as EMNRD prescribes.

39. FEPP Insurance Coverage: The County shall obtain insurance coverage for the equipment EMNRD provides in accordance with the General Services Department, Risk Management Division's minimum requirements. EMNRD shall be named as co-insured. County shall provide EMNRD proof of insurance upon request.

40. Notification of Accident: The County shall immediately (within 24 hours) notify

EMNRD if the equipment EMNRD provides is involved in an accident.

GENERAL PROVISIONS

41. Appropriations: Nothing in this Agreement shall be construed as obligating EMNRD or the County to expend money in excess of appropriations authorized by state or local laws. The terms of this Agreement are contingent upon sufficient appropriation and authorization being granted by the New Mexico State Legislature and the County. If sufficient appropriation or authorization is not granted, either party may terminate this Agreement, or suspend performance pending approval of sufficient appropriation or authorization, upon written notice from one to the other. Either party's decision as to whether sufficient appropriations are available shall be final, binding and accepted by the other.

42. Mutual Sharing of Information: EMNRD and the County shall furnish to each other, or otherwise make available upon request, such maps, documents, instructions, records, and reports including, but not limited to, fire reports, employment records, and investigation and law enforcement reports as either party considers necessary in connection with the Agreement, in accordance with applicable state and federal rules and regulations.

43. Accident Investigations: Whenever a fire-suppression related accident involving County equipment or personnel hired by EMNRD occurs, the County shall immediately (within 24 hours) notify EMNRD. A team made up of representatives from affected agencies shall conduct an investigation. Upon the investigation's completion, EMNRD shall provide the information to the General Services Department, Risk Management Division

44. Non-Wildland Fire and Medical Aid Responses: This Agreement is limited to wildland fire protection and does not include medical aid responses not related to or a result of a wildland fire or structural fire suppression.

45. Previous Agreements: This Agreement is intended to terminate and replace the following agreement for wildland fire protection:

- Joint Powers Agreement No. 03-521-0400-0181 (Wildfire Suppression)
- Joint Powers Agreement No. 04-521-0400-0198 (Resource Mobilization)

Where other agreements that conflict with this Agreement exist, this Agreement shall supersede all others.

46. Suppression and Damage Collection: Nothing in this Agreement shall preclude EMNRD or the County from collecting damages and suppression costs from third parties (civil actions for recovery shall be taken independently) under the civil liability provisions of federal or state statutes or common law in a manner applicable law provides. However, whenever such collections have the effect of reducing the Billing

Agency's net expenditures, then the bill shall be reduced proportionate to the amount collected.

47. Employment Policy: Except as provided in the County's Reimbursement Rates Paragraph, County's employees shall not under this Agreement's terms become State of New Mexico employees. As a result of this Agreement the County, its agents, and employees shall not accrue leave, retirement, insurance, bonding, or any other benefits afforded to State of New Mexico employees. EMNRD employees shall not under this Agreement's terms become the County's employees. As a result of this Agreement EMNRD, its agents, and employees shall not accrue leave, retirement, insurance, bonding, or any other benefits afforded to the County.

48. Workers' Compensation: Except as provided in the County's Reimbursement Rates Paragraph for the purposes of Workers' Compensation coverage, employees of the State of New Mexico and the County are covered under the New Mexico Workers' Compensation Act, NMSA 1978, § 52-1-1 *et seq.*, while assigned to assist in suppressing wildland fires on lands within the County's jurisdiction or within EMNRD's jurisdiction.

49. Insurance: Except as provided in the County's Reimbursement Rates Paragraph, EMNRD and the County shall provide insurance coverage for all injury or damage to persons or property, including third parties, that occurs as a result of the Agencies' respective actions and all personnel, agents, and volunteers the Agencies' respectively entrust; provided, however, this section shall not be read nor implemented inconsistently with the Tort Claims Act. EMNRD and the County shall maintain continuous insurance coverage of the activities described in this Agreement in effect.

50. Waiver of Claims: EMNRD does not have the authority to indemnify or hold the County harmless from all claims, liabilities, losses, damages, charges, etc. EMNRD and the County shall each be responsible for errors, omission, and negligence of their employees to the extent provided under the New Mexico Tort Claims Act, NMSA 1978, §§ 41-4-1 *et seq.*

51. Third Party Claims: Any liability to third parties that may arise under the performance of this Agreement shall be determined solely under the New Mexico Tort Claims Act, NMSA 1978, §§ 41-4-1 *et seq.*

52. Disposition, Division, or Distribution of Property; Return of Surplus Funds: Upon this Agreement's expiration or termination, if EMNRD or the County has property or funds in its possession belonging to the other, the same shall be returned in proportion to the Agencies' original contribution.

53. Strict Accountability for Receipts and Disbursements: EMNRD and the County shall be strictly accountable for receipts and disbursements relating hereto and shall make all relevant financial records available to EMNRD, the Department of Finance and Administration (DFA), the County and the New Mexico State Auditor upon

request, and shall maintain all such records for three years after this Agreement has expired or has been terminated. These records shall be subject to examination and audit for three years after final payment.

54. Equal Opportunity Compliance: EMNRD and the County agree to abide by all federal and state laws and rules and regulations, and executive orders of the Governor of the State of New Mexico, pertaining to equal employment opportunity. In accordance with all such laws of the State of New Mexico, both parties assure that no person in the United States shall, on the grounds of race, religion, color, national origin, ancestry, sex, age, physical or mental handicap, or serious medical condition, spousal affiliation, sexual orientation, or gender identity, be excluded from employment with or participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity performed under this Agreement. If either party is found not to be in compliance with these requirements during the life of this Agreement, that party agrees to take appropriate steps to correct these deficiencies.

55. Performance: Any party shall have the right to enforce this Agreement by any available remedy under the State of New Mexico's laws.

56. Duration of Agreement: This Agreement shall not become effective until approved by the DFA Secretary and shall be ongoing unless terminated. Either EMNRD or the County may terminate participation in this Agreement by written notification to the other at least 90 days prior to the termination date. By such termination, neither party may nullify obligations already incurred for performance or failure to perform prior to the noticed termination date.

57. Amendment: This Agreement shall not be altered, changed, or amended except by instrument in writing executed by the parties hereto and approved by the DFA Secretary. This Agreement may be amended at any time by all parties' written, mutual consent.

EXHIBIT A

GLOSSARY OF TERMS

Agencies: The New Mexico Energy, Minerals and Natural Resources Department (EMNRD), Forestry Division, and the County of San Juan.

Agency Representative: An individual assigned to an incident with full authority to make decisions on all matters affecting that Agency's participation at the incident.

Authorized Representative: Agency official designated in this Agreement or in the Local Operating Plan who has authority to make decisions on matters related to this Agreement including approval of the Local Operating Plan, mobilization of resources, cost apportionment agreements, delegation of authority to the Incident Commander, Agency Representatives during incidents, and the acquisition of FEPP equipment.

County Jurisdiction: The County's jurisdiction, for this Agreement's purposes, is defined as the County's designated fire districts.

Closest Forces Concept: The philosophy of committing the closest available appropriate resources, regardless of agency, for initial attack or for critical need.

Extended Attack: A wildland fire incident that has exceeded the initial attack resources' suppression efforts.

Extended Attack Incident: A wildland fire that initial attack forces have not contained or controlled and for which more firefighting resources are arriving, en route, or the initial attack incident commander is ordering. Extended attack implies that the incident's complexity level has increased beyond the initial attack incident command's capabilities.

Fire Management: Activities and programs that include the use of fire as a resource management tool, and protection of values from unwanted, uncontrolled wildland fire.

Incident Command System (ICS): The common emergency incident management system used on any incident or event and tailored to fit the incident/event's specific management needs.

Immediate: Acting without the intervention of another objective or cause. Occurring, acting, or accomplished without loss or interval of time.

Initial Attack: Preparedness and response to conduct the first wildland fire suppression actions with local resources.

Initial Attack Forces: Wildland fire suppression resources of agencies initially dispatched to a wildland fire in accordance with a pre-existing Local Operating Plan or

mobilization guide.

Multi-jurisdictional Incident: A wildland fire that is burning on more than one jurisdiction's lands or that threatens to burn on to another jurisdiction within the next operational period.

Protection Area Maps: The Local Operating Plan's official maps.

Qualified Resources: Those resources meeting or exceeding the minimum standards for use at an incident as prescribed in the Resource Mobilization Plan.

Reimbursable or expendable materials: Reimbursable commonly refers to the use of County equipment such as engines with personnel, graders, water tenders, etc. Expendable refers to items that are usually considered to be consumed during the suppression effort and are not recordable as returnable inventory.

Requested Resources: Those resources the Jurisdictional Agency specifically requests from the Supporting Agency in accordance with this Agreement.

Resources: All personnel, equipment, and aircraft available for assignment of tasks.

Resource Mobilization Plan (RMP): A statewide document that describes the specific standards, methods, procedures, protocols, and rates by which this Agreement will be implemented. The RMP will not supersede this Agreement's terms and shall be consistent with this Agreement.

Structural Protection: To protect structures from the threat of damage from advancing wildland fire. This normally does not include an attack on the fire that is inside the structure. It involves the use fire control lines and the extinguishment of spot fires near or on the structure.

Structural Fire Suppression: Defined as interior and exterior actions to suppress and extinguish a burning structure or improvement associated with standard structure fire protection, equipment, and training.

Suppression: All the work of confining and extinguishing a wildland fire beginning with its discovery through the incident's conclusion.

Values to be Protected: Include property, structures, physical improvements, natural and cultural resources, community infrastructure, and economic, environmental, and social values.

Wildland Fire: Uncontrolled non-structural fire burning in wildlands such as forest, brush, prairie, or cropland fuels, or conflagrations involving such fuels and structures.

Wildland: Lands with few or no permanent improvements.

EXHIBIT B
FINANCIAL PLAN

Billing Addresses:

All bills for services provided to the state pursuant to the Reimbursable Assistance Paragraph shall be mailed to the following address for payment:

Forestry Division, EMNRD
District Forester – Chama District
HC 75, Box 100
Chama, NM 87520

All bills for services provided to San Juan County pursuant to the Reimbursable Assistance Paragraph shall be mailed to the following address for payment:

Fiscal Agent
San Juan County
100 S. Oliver Dr.
Aztec, NM 87410

QUALIFICATIONS

Personnel responding (sending or receiving) need to be qualified commensurate with the duties, tasks, and capabilities of the position they are filling.

The NIMS Guideline for the National Qualification System (NQS) defines a common language and approach to qualify and certify deployable emergency personnel to enhance interoperability and the effectiveness of mutual aid. Qualification, as used in NIMS, refers to the provision of documentation – typically, badges or identification cards which validate an individual’s identity and qualifications to fill an incident position.

The Incident Qualification System (IQS) is a software program that allows the user to track incident qualifications, experience, task books, and fitness levels for individuals within various roles throughout your agency.



TYPING

Equipment and apparatus responding (sending or receiving) need to be qualified commensurate with the duties, tasks, and capabilities of the position they are filling.

Additional Resources:

- * [Red Book](#)⁵⁹
- » [NWCG and FEMA \(NIMS\) Typing.](#)
 - * [Wildland Fire Incident Management Field Guide](#)⁶⁰
 - * [Field Operations Guide](#)⁶¹

BILLING PROCEDURES

Billing procedures are detailed in the agreement:

- » **Incident billing documentation** – the forms required to document time worked.
- » **Non-billable items** – for example, agency overhead personnel performing agency-specific duties.
- » **Billable costs** – firefighter and equipment costs.
- » Establish the rates to be used.
- » A generally accepted foundational concept: Everyone is entitled to recover actual costs of providing assistance.



OBTAINING A RESOURCE ORDER

In most agreements with assistance-for-hire provisions, a resource order is the permission to respond and to recover costs. Resource orders can come from a variety of state and federal agencies depending upon your agreement. The resource order commits your resources to a specific incident and includes such information as reporting date, time and location, authorization for rental cars, laptops, etc.

Example

Run Date: 8/15/2016 15:02 CDT
Server: rossreports.nwccg.gov

RESOURCE ORDER	Initial Date/Time	2. Incident / Project Name				3. Incident / Project Order Number		Financial Codes	
EQUIPMENT	08/14/16 1327	HAPPY HOLLOW				CO-LSD-000363		KL49 [P]	
5. Descriptive Location HAPPY HOLLOW		6. TWN	RNG	SEC	Base MDM	8. Incident Base / Phone Number CO-CRC (Dispatch) 970-826-5037		9. Jurisdiction / Agency Little Snake Field Office	
		6N	100W	1	6th PM, CO			10. Ordering Office Craig Interagency Dispatch Center	
		LAT. 40 29 57 N							
		LONG. 108 34 16 W							
11. Aircraft Information									
Bearing	Distance	VOR	Contact Name	Frequency Type	Assigned Frequency	Reload Base	Other Aircraft / Hazards		
294	39	EKR	Juniper Mtn	Repeater	RX: 172.7250 TX: 164.5250 131.80	4V0			
64	43	VEL	FIRETAC 8	Tactical	172.5875	EEO			
253	58	CHE		Air to Air	126.450	VEL			
			SOA Repeater	Repeater	163.3875 TX 172.5875 RX 110.90	CAG			
			NIFC Tac 1	Tactical	168.050 000.00	RIL			
						SBS			
						GJT			
						EGE			
						RWL			
						20V			
						BJC			

12. Request Number	Ordered Date/Time	From	To	Qty	Resource Requested	Needed Date/Time	Deliver To	From Unit	To Unit	Assigned Date/Time	Resource Assigned Unit ID	Resource Assigned	M/D Ind	Estimated Time Of Departure	Estimated Time Of Arrival	Released Date	Released To
E-6	08/14/16 1720 MST	CO-CRC (Dispatch) 970-826-5037	CO-CRC	1	Engine, Type 6	08/16/16 0800 MST	Happy Hollow Fire	CO-GJC	CO-CRC	08/15/16 1402 MST	CO-GJS	ENGINE - T6 - Vail - Brush 3 (VAIL FIRE & EMERGENCY SERVICES BRUSH 3 (14)) (CO-GJC)	M	08/15/16 1430 MST	08/15/16 1630 MST		
Travel Mode AOV		Financial Code KL49		Special Needs NEED TO BE SAW QUALIFIED AND 4X4			Reporting Instructions From Maybell, Co: Northwest on CO Hwy 318. About 8-9 miles, turn west (left) on Moffat County Rd 10. Pass the 10/25/153 junction and cross the river on the bridge. About 3 miles later, BLM road 1610 is flagged in pink. Turn south (left)										

13. User Documentation		
Req. No.	Documentation	Entered By
E-6	Called Rick Balentine, Aspen FD - their T3 Engine is not available. He said to change their status to available locally. He apologized for not already doing that.	Gloria Holley (CO-GJC) 08/14/2016 1748 MST

13. User Documentation		
Req. No.	Documentation	Entered By
E-6	Grand Junction FD will get back to me with roster information	Gloria Holley (CO-GJC) 08/14/2016 1759 MST
E-6	Steve/CRC said they are retrieving this order. Do not need T3 Engine. I notified Stacy at Grand Junction FD that this order was being retrieved.	Gloria Holley (CO-GJC) 08/14/2016 1907 MST
E-6	Email to pcada@vailgov.com	Christine Arredondo (CO-GJC) 08/15/2016 1402 MST
E-6	Request E-6 - Engine, Type 6 - [CO-LSD-000363] HAPPY HOLLOW has been filled with ENGINE - T6 - Vail - Brush 3 (VAIL FIRE & EMERGENCY SERVICES BRUSH 3 (14)) (CO-GJC) by Christine Arredondo@CO-GJC ROSS.	Christine Arredondo (CO-GJC) 08/15/2016 1402 MST

HAPPY HOLLOW	CO-LSD-000363
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Run Date: 8/15/2016

15:02 CDT

WHEN ASSIGNED TO AN INCIDENT

- » **Arriving on the scene** – Check-in and obtain a briefing assignment. Most, if not all, large incidents will have an Incident Management Team (IMT) running the show. When an Incident Management Team (IMT) is not in place, check-in with incident command.
- » **Documentation** – Make sure you are keeping records associated with your agreement.
- » **Demobilization** – Make sure you are formally released from the scene and have completed the required documentation process. Appropriate demobilization is as important as proper check-in.



Case Study

Fritch, TX

TIMING IS EVERYTHING: LESSONS FROM DOUBLE DIAMOND WILDFIRE

The following was extracted from the Double Diamond Facilitated Learning Analysis.

Knowing that risk was high and wildfire inevitable, local Texas response agencies started proactively planning in early 2014. The fire department collaborated with local law enforcement (LE), county emergency management, and the National Park Service to develop an area defense plan which included Incident Command System (ICS) organization, evacuation procedures, safety zones, staging areas, and response procedures. It was a great start, but the plan was not yet complete before time ran out.

In late spring of 2014, many area firefighters had been working on a motor vehicle crash, a structure fire, and a 400+ acre grass fire. The local, all-volunteer fire department was dispatched to a wildfire, and they were unable to “catch” it. Because of stakeholder pre-planning, the county emergency management coordinator recognized the elements of the defense plan scenario and initiated a request for a Declaration of Disaster within minutes of the fire starting. In the state of Texas, this declaration allows LE the ability to enact mandatory evacuations and the fire department authority to perform tactical operations on private property.

The stakeholders’ defense plan allowed ample time for local officials to activate an organized response before the fire hit the designated community, but the fire had other plans. Because it had started in the wildland-urban interface (WUI) with perfect fire conditions, it cut their plan times drastically. Local officials moved forward to the part of the plan that had the town burning and began the evacuation process.

While there was ICS, it was heavily fire-centric. Law enforcement was afforded significant latitude in overseeing and implementing the evacuation process along with safety and accountability of LE personnel. Officers dealt with residents’ emotional response to evacuation orders, adapted to the conditions of occupants, and assisted with the release of pets and livestock. Residents who did not have a place to go outside of the fire’s patch were instructed to evacuate to one of two designated areas that were identified in the area defense plan.

The ability to act quickly, implement a plan and adapt that plan to changing conditions — combined with response agency personnel that are familiar with one another and have planned together — made evacuation outcome a success.

As initial attacks failed, and conditions became more favorable to the fire, the decision was made to switch efforts to initiating burn-out operations as had been developed in the defense plan, since there was no way to get in front of the fire that was quickly going from house to house and jumping roads one after another. The firefighters had practiced similar scenarios using sand table exercises that included the pre-identified staging areas, water sources, safety zones, lookouts, control lines, and firing operation blocks from the defense plan. From the start, incident command (IC) realized additional resources would be necessary but faced a multitude of challenges including inexperience in managing such a large-scale incident, lack of personnel to complete ICS, communication issues, and the fact that Operations Section hadn't been established even though there were a plethora of incoming resources.

Communications continued to be an issue between staging, command and the field, and at times, resources were not efficiently utilized. Smoke conditions, lack of maps, and unfamiliarity of locale also posed very serious challenges that were met by the IC escorting equipment to assigned areas.

The fire continued to spread, and the incident grew in size and complexity. ICS roles were lost to an immediate need for field personnel. During the evening hours, a major wind shift presented, and even though firefighters were aware of its approach, they were surprised at how quickly it occurred. Resources and operations were moved and adjusted accordingly.

Twelve hours into the incident, the fire was contained at 2,202 acres burned. Three hundred and sixty-eight structures were lost; 374 structures were saved. There were no fire-related injuries or deaths.



As a local chief in rural or WUI areas, facing such a large-scale incident is certainly not out of the question. Ask yourself are you prepared; do you have plans in place; have you practiced or discussed the plans with area stakeholders, personnel and potential resources; do you have the ability and capacity to adapt throughout the incident?

Response considerations and lessons learned from this incident, include;

» **Response starts with planning**

- Collaborating with local and state partners and having an area defense plan in place was a vital part of this response.
- The defense plan provided firefighters the knowledge, skills, and understanding to successfully implement the tactical plan.
- Training with local, state, and federal agencies provided familiarization.

» **Capacity and adaptation**

- Does your organization have a plan in place to meet the needs of an expanding incident?
- How do you supplement your local expertise when it may be overwhelmed in the first few critical hours?

» **Communications**

- Address frequency management ahead of time when working with multiple agencies that use different frequencies and different radio systems.
- Consider the number of shared tactical frequencies to establish multiple divisions.
- Do you know how to communicate with aircraft, if requested?
- An incident is not the optimal time for poor or ineffective interpersonal communications.
 - ♦ Enhance inter- and intra-agency cooperation.
 - ♦ Consider identifying how tactical and strategic objectives used by different agencies or departments may affect the management of an incident.

Planning was a major factor in the outcome of this response. As this incident illustrates-plans must be fluid, leadership and field personnel must be able to adapt to change quickly, whether facing rogue residents or fast changing fire behavior. The defense plan in place was “based on Monday through Friday staffing levels,” but as luck would have it, additional personnel were just coming back in service from another fire. Capacity plays a big role in every response; call early for what you think you might need and make sure you have the ability and personnel to expand ICS as the incident grows.

Case Study

Columbus, MT

A LOCAL FIRE CHIEFS REMINDER TO PRACTICE EXTREME OWNERSHIP

The combination fire department located in a generally rural area in the northwest part of the U.S. protects about 6,000 residents and has an initial response area of approximately 650 square miles. Personnel is trained at all levels for responses including structure and wildland fire, hazardous materials, extrication, technical rescue, swift water rescue, all hazard-all risk incident teams, and emergency medical response.

On a warm summer day, the fire department responded to a wildfire call which, in the end, consumed approximately 10,000 acres in just over a day. The initial local response was timely, but the fire and required structure protection proved more than the small department could tackle, and reinforcements were called. They included multiple, local mutual aid units responding from nearly 50 miles away, county assistance team (CAT) – a Type III Incident Management Team – and multiple additional Strike Teams. Ultimately, bringing in these resources resulted in suppression and no structures lost, except for an outbuilding. The response, however, was not without confusion nor a clear understanding of assignments and accountability challenges.

The following captures the local chief's reflections on the response effort and considerations for future incidents.

Each department is set up to handle “its norm.” When you add resources, it’s easy to throw off the span of control and exceed your management capabilities. The addition of resources also creates accountability issues, especially if the personnel is not built into resource ordering. It’s easy for first-due personnel to get caught up in response and suppression efforts or lose sight of the ‘big picture’ because this is where they and their friends and families live and work, and they have a higher level of responsibility to protect their jurisdiction. As with many large-scale incidents with local, combination and volunteer mutual aid response, the Incident Commander doesn’t always get what’s requested and doesn’t ever completely know the qualifications of the responders. The closest resources may not necessarily be the most appropriate and may not have the capacity to help with command. The neighboring chief may be serving as part of an operational crew.

Resource ordering, assigning, accountability, and sustainment can be very overwhelming for a local chief. With this comes the transition of incident command (IC) to an 'outside' team. This isn't always easy. In theory, the local chief should be integrated into the more involved Incident Command System (ICS) because all incidents start and end locally. Shortly after the IC transition, the local chief stepped out of a command role and had to step into a division supervisor role as events unfolded that created a situation where a particular division lacked leadership. Some poor decisions were made, and there was no clear plan for division personnel. This quickly morphed into the local chief being in a line suppression role. In this role, it's impossible for a local chief to maintain involvement at the command level. It's important to keep in mind where the ultimate responsibility of an incident lies.

During the incident, with the IMT in command, mutual aid units were released, but not all IMT resources were in place yet. Not long after, the fire ramped up, and there were five homes in its path, one of which happened to be the local fire chief's. Mutual aid was reordered, which is not optimal in a rural setting with most of the personnel being volunteers. This part of the incident was the premise of an epiphany for the local chief; IMT objectives may not correspond with the local chief's objectives, especially when his home is at risk.

One particular Strike Team also presented a learning opportunity. While locals needed and were glad for the assistance, this team was very experienced in forest/timber suppression tactics but had little or no experience with grassland suppression. It was difficult for this team to engage in active suppression assignments simply due to lack of training with this type of topography and fuel. The team later thanked the local chief saying they learned a lot. An important takeaway in this situation is the importance of understanding local fire behavior and pre-incident interaction with area response crews. As a local chief or even an IMT, you can order the world, but you never know what you're going to get. It's vital for local leadership to remain objective, emotionally detached and resolution-oriented during a large-scale incident.

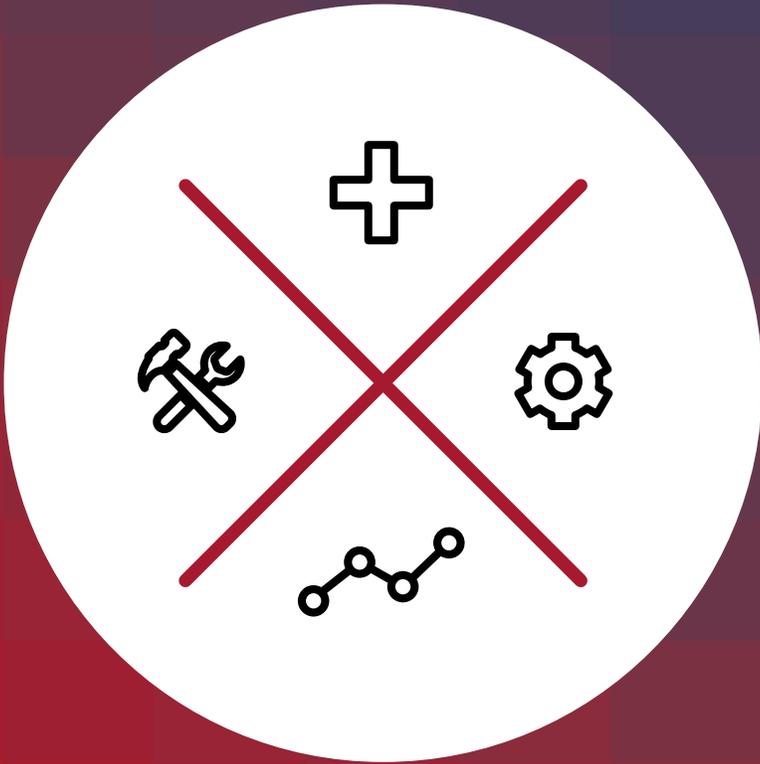
Response considerations for the local chief gleaned from this incident, include:

- » **Order whatever you think you might need early:**
 - Be aware that you will not know the experience level of the added resources. Be ready to adjust.
 - Don't release resources until you're certain you no longer need them.
- » **Maintain involvement with IC. The outcome of the incident is ultimately your responsibility:**
 - Do your best to remain objective, setting emotions aside.
 - Transitioning IC from local to another level can be difficult.
 - Know that your objectives and those of an IMT may not coincide. Work it out at the onset.
 - As a local chief, you still have a responsibility to be involved in the command process.

- » Consider the impact resource orders will have on your span of control and adjust accordingly:
- Ensure you have a plan of accountability for those resources
 - Identify personnel that wasn't in the ordering system that arrived with the equipment and add them to your accountability system
 - Understand that you may have to supplement an IMT's equipment until all of theirs arrives
 - Plan on most of your first-due and mutual aid personnel not returning after a single operational period. They'll do what they can while you have them, but many have other work/personal commitments.

Local responders and leadership learn something from each and every event or incident they're involved in. This fire was no exception. From a suppression perspective, you can't ask for much more. It was put out, structure loss was minimal, and no one was hurt. From an incident-management perspective, many lessons were learned, and it's important as the local chief to apply these prior to the next incident. Build and rebuild relationships with agencies you might request assistance from, understand your capabilities and theirs, as well as their qualifications, and even on the best days-expect the unexpected.





Recovery





WILDLAND FIRES ARE FELT LONG AFTER THE BLAZE IS OUT

Recovery consists of those capabilities necessary to assist communities affected by a wildland fire to recover effectively, including, but not limited to: rebuilding infrastructure systems, providing adequate interim and long-term housing, restoring health, social, and community services, promoting economic development, and restoring natural and cultural resources (National Disaster Recovery Framework, 2011). Recovery may be the most challenging aspect of a wildland fire, due in part to the following six factors:

- » The recovery process begins at the start of the incident.
- » There is extreme pressure to return to normal.
- » There are a large number of complex requirements associated with external funding sources.
- » The length of the recovery process can take decades in some cases.
- » During the recovery process, community circumstances may get worse before getting better.
- » Due to a communication breakdown, citizens of the affected community may not feel they have a voice in recovery decisions.

Recovery is fundamentally different from the response and requires long-term leadership, new partnerships, community involvement, planning, and priority-setting to address the short-term and long-term recovery elements.

Implementing recovery efforts requires clear direction, ongoing communication, coordination of resources, compliance, transparency with community stakeholders, and strategies for restoring essential services. The responsibility for recovery rests with many groups in a community, but the understanding of what constitutes recovery will help the Fire Chief lead in this process.

Successful recovery depends on all recovery stakeholders having a clear understanding of pre- and post-disaster roles and responsibilities (National Disaster Recovery Framework, 2011). Clearly defined roles and responsibilities are a foundation for the unity of effort among all recovery partners to jointly identify opportunities, foster partnerships, and optimize resources. Pre-disaster recovery planning is the first step in identifying roles and responsibilities for recovery. Additionally, pre-disaster recovery planning enables the community to effectively direct recovery activities and expedite a unified recovery effort.

The National Disaster Recovery Framework identifies 15 recovery functions that may be addressed during the recovery phase of a wildland fire disaster. These recovery functions assist in returning to normal operations as quickly and efficiently as possible after an incident. Each recovery function is activated on an incident-by-incident basis, which may result in full or partial activation. Each recovery function identifies lead and support agencies, activities to be completed, the concept of operations, and roles and responsibilities.





Specific Categories



EMERGENCY MANAGEMENT

The purpose of **Recovery Function (RF) #1** – Emergency Management (EM) is to assess available resources within the authority having jurisdiction (AHJ) and to request state and federal resources when the resources needed to recover from wildland fire or disaster are beyond what the AHJ and community response partners are able to provide. RF #1 also coordinates recovery activities among other stakeholders with a role in recovery.

A jurisdiction may take the following actions to develop their (EM) capability:

- » Identify the process for local, state, and federal disaster declaration assistance.
- » Determine the level of EM capability within jurisdiction resources.
- » Define trigger points for requesting state and federal resources and the threshold for doing so.
- » Determine level and source(s) of support for out-of-jurisdiction EM resources.
- » Develop an Emergency Operations Center (EOC) capability for recovery.
- » Hold practice EOC activations, involve stakeholder agencies, and ESF representatives.
- » Identify partners to aid in recovery. For example, the Humane Society, Red Cross, Friend Groups, community groups, etc.



ADMINISTRATION AND CONTINUATION OF GOVERNMENT

The purpose of **Recovery Function (RF) #2** – Administration and Continuation of Government (COG) – is to provide information regarding continuity of operations, so the mission-essential functions of the AHJ will continue through the recovery process. RF #2 also provides for the administration of the disaster recovery program.

A jurisdiction may take the following actions to ensure administration and continuity of government:

- » Define existing continuity-of-government capability and plans.
- » Define mission-essential functions to identify gaps and potential liabilities in COG plans.
- » Hold yearly COG exercises to test established plans.

PUBLIC INFORMATION AND COMMUNITY RELATIONS

The purpose of **Recovery Function (RF) #3** – Public Information and Community Relations – is to outline activities related to the dissemination of public information following an emergency, wildland fire, or disaster. Following an incident, the public information officer (PIO) collects, processes, and disseminates disaster information to the public and AHJ personnel. The PIO also coordinates with media outlets to provide live or taped interviews regarding the incident throughout the recovery process.

A jurisdiction may take the following actions to facilitate rapid and accurate public information efforts:

- » Consider leveraging social media verified accounts, especially Twitter, to communicate time-critical messages.
- » Through a joint information center or similar structure, ensure consistency in messaging content.
- » Streamline communication procedures to facilitate rapid communications.
- » Work collaboratively with partners and organizations to ensure consistent messages are being heard.

INDIVIDUAL ASSISTANCE, VOLUNTEERS, AND DONATIONS

The purpose of **Recovery Function (RF) #4** – Individual Assistance (IA), Volunteers, and Donations – is to inform survivors about local, state, and federal IA programs, and explain how to apply, provide convenient sites where the public can apply for grant assistance programs in a post-emergency environment, and volunteer assistance to survivors as needed. Additionally, RF #4 references procedures for placing spontaneous volunteers; receiving donations of goods, services, and cash, and coordinating with established voluntary agencies during and following an emergency or disaster.

A jurisdiction may take the following actions to prepare for assistance efforts and handle volunteer and donation responses:

- » Identify potential brick-and-mortar assistance information and application sites.
- » Develop procedures to handle an influx of spontaneous volunteers.
- » Consider partnering with community agencies to handle requests for assistance.
- » Prior to recovery, consider developing general messaging that addresses sources of assistance and types of donations needed after a disaster, so that PIOs can communicate needs early in an event. This helps reduce unnecessary and wasteful donations.
- » Involve partner agencies in practice EOC activations and consider practice activation of donor and assistance sites.
- » Identify governmental agencies to assist the community, or use for logistical or operational assistance.





SECURITY AND RE-ENTRY

The purpose of **Recovery Function (RF) #5** – Security and Re-entry – is to promote and facilitate the timely re-entry of essential response and recovery personnel, government officials, property owners, and business owners into the city following an incident. Following a large-scale disaster, RF #5 also provides uniform guidance to law enforcement personnel who direct access into the affected areas.

A jurisdiction may take the following actions to ensure timely re-entry after an incident:

- » Engage with law enforcement early to evaluate and test evacuation and re-entry plans and procedures.
- » Develop and confirm messaging to be used in re-entry announcements.
- » Leverage verified social media to communicate re-entry procedures.
- » Develop verification and accountability procedures for re-entry.

HEALTH AND SAFETY

The purpose of **Recovery Function (RF) #6** – Health and Safety – is to provide procedures to ensure that health and safety issues are adequately addressed following an emergency or disaster.

A jurisdiction may take the following actions to adequately address health and safety issues:

- » Engage with the Health Department to develop respiratory impact messaging.
- » Develop biosurveillance procedures to increase awareness of respiratory illnesses after a fire and the impact on the EMS and health care systems.
- » Develop messaging on basic safety in accessing and searching through building remains.
- » Consider messaging related to spoiled food, contaminated water, and injured or dead/decaying animals.
- » Develop messaging about alternate power and heat (e.g., generators, space heaters etc), long-term housing, carbon monoxide (CO), and fire.
- » Communicate regarding areas closed due to risk, as well as alternate route and timelines.
- » Work with governmental and nongovernmental agencies to perform an initial assessment of properties or provide needed tools and/or resources.

COMMUNITY INFRASTRUCTURE

The purpose of **Recovery Function (RF) #7** – Community Infrastructure – is to reference plans and procedures for performing the timely removal, transport, storage, elimination, and/or recycling of debris. RF #7 also references information on how to handle rebuilding or repairing damaged public infrastructure.

A jurisdiction may take the following actions to handle debris after a fire:

- » Conduct a “debris summit” to gather stakeholders in debris management and define roles and responsibilities in debris management and removal.
- » Identify debris/biohazard destinations and determine their impact on landfill lifespans.
- » Engage with air-quality agencies in the event debris burning is necessary.

UTILITY RESTORATION

The purpose of **Recovery Function (RF) #8** – Utility Restoration – is to describe how the AHJ will coordinate with utility providers and other stakeholders for the restoration of utilities to pre-emergency conditions as quickly as possible following an emergency or disaster.

A jurisdiction may take the following actions to account for the restoration of utilities after an event:

- » With stakeholder input, develop utility impact and hazard maps to identify critical areas for restoration.
- » Preplan for potential infrastructure failures (e.g., water systems, electrical systems, pump stations, city infrastructure).



PLANNING AND MITIGATION

The purpose of **Recovery Function (RF) #9** – Planning and Mitigation – is to expedite repair, restoration, or rebuilding of habitable structures. This recovery function educates residents affected by an incident regarding the existing permitting requirements to repair or rebuild structures following a wildland fire. Furthermore, RF #9 facilitates the integration of the existing hazard-mitigation plans and flood-plain management into recovery efforts.

A jurisdiction may partner with local contractors to take the following actions to prevent wildland fire flooding:

- » Re-seed ground cover with quick-growing or native species.
- » Mulch with straw or chipped wood.
- » Construct straw, rock or log dams in small tributaries to prevent flooding.
- » Place logs and other erosion barriers to catch sediment on hill slopes.
- » Install debris traps to modify road and trail drainage mechanisms.
- » Modify or remove culverts to allow drainage to flow freely.
- » Add drainage dips and construct emergency spillways to keep roads and bridges from washing out during floods.
- » Remove critical safety hazards.
- » Plant grass to prevent the spread of noxious weeds.
- » Install warning signs.



ECONOMIC RESTORATION

The purpose of **Recovery Function (RF) #10** – Economic Restoration – is to coordinate resources to restore the AHJ’s economy following an emergency or disaster.

A jurisdiction may take the following actions to ensure economic recovery after a fire:

- » Identify resources (e.g., Small Business Administration, local economic boards, housing and building associations) for economic recovery and package them for rapid communication post-disaster.
- » Develop an economic restoration committee to investigate possible funding sources.
- » Develop a continuity of business planning.
- » Plan messaging related to tourism and travel.

ENVIRONMENTAL AND HISTORIC PRESERVATION

The purpose of **Recovery Function (RF) #11** – Environmental and Historic Preservation – is to minimize the environmental effects of a wildland fire, follow regulations regarding historic properties, expedite recovery of the AHJ, and organize response efforts to achieve maximum reimbursement to the AHJ for expenses related to environmental and historical preservation recovery activities following an incident.

A jurisdiction may take the following actions to address environmental and historic values at risk:

- » Obtain an inventory of critical community environmental and historic values.
- » Develop a consistent damage-assessment process to rapidly identify damages and initiate restoration options.





FINANCE

The purpose of **Recovery Function (RF) #12 – Finance** – is to establish procedures and oversee mechanisms for tracking emergency-related expenditures so the AHJ can maximize reimbursement.

A jurisdiction may take the following actions to ensure cost recovery:

- » Identify specific available funding sources (i.e., state, federal, national, private local foundations, businesses, etc.).
- » Develop proper accounting and financial tracking systems.
- » Put in place cost-recovery for fire department activities.
- » Engage with your community’s financial agencies to clarify roles, responsibilities, and processes.

HOUSING

The purpose of the **Recovery Function (RF) #13 – Housing** – is to identify and determine pre-incident housing activities and to establish transitional housing and long-term housing opportunities and activities after an emergency or disaster within the AHJ. The ultimate objective is to assist citizens with repairing, rebuilding, and returning to permanent housing as quickly and efficiently as possible after a wildland fire disaster.

A jurisdiction may take the following actions to ensure the provision of housing options:

- » Engage with community housing agencies to determine the scope of potential needs.
- » Evaluate the condition of the current infrastructure.
- » Identify state, federal, and other agencies that can provide assistance with housing needs.
- » Identify potential financial sources for short- and long-term housing.
- » Evaluate short- and long-term life safety issues related to temporary housing, including fire, potable water, refuse, and sanitation.
- » Identify opportunities to prevent future recurrence of disasters through mitigation efforts or housing codes and ordinances.



EDUCATION

The purpose of **Recovery Function (RF) #14** – Education – is to identify specific activities to minimize disruptions to schools and provide a rapid return to normal operations. This recovery function also lists the actions schools can take to support AHJ recovery operations.

A jurisdiction may take the following actions to maintain continuity of education services:

- » Engage with community educational agencies to determine the scope of potential needs.
- » Evaluate condition of current education facilities.
- » Identify state and federal agencies that can provide funding assistance for educational services within a community.
- » Identify opportunities for your organization to further educate the public on risk.

TRANSPORTATION

The purpose of **Recovery Function (RF) #15** – Transportation – is to establish a coordinated system for facilitating transportation in the AHJ following a wildland fire disaster. In response to an incident, individuals might be transported from their home or care facility to a location outside the area that is at risk from a known hazard. Once conditions are deemed safe, these individuals will need to be transported back to their homes or care facilities. In addition, transportation resources might be needed to transport needed supplies into, and around, the AHJ.

A jurisdiction may take the following actions to continue the provision of transport services:

- » Identify critical transportation routes and preplan.
- » Evaluate current transportation infrastructure to include mass transit for evacuations.
- » Engage with the public, educational, and private transit agencies in developing emergency service plans.
- » Develop emergency fueling points.
- » Develop plans for care facilities, hospitals, and other high-risk facilities.

Additional Resources:

- * [VOAD](#)⁶²
- * [Continuity of Business \(FEMA\)](#)⁶³
- * [Continuity of Government \(FEMA\)](#)⁶⁴
- * [Fires and Wildfires: Health Information Guide](#)⁶⁵
- * [Centers for Disease Control and Prevention - Wildfire](#)⁶⁶

Case Study

Colorado Springs, CO

WHEN THE FIRE IS OUT, REBUILDING BEGINS

The Waldo Canyon Fire started on June 23, 2012, in the Pike National Forest just west of Colorado Springs, CO. Over the 18-day fire duration, it burned 18,247 acres and claimed two civilian lives. As the fire intensified it grew and spanned into multiple jurisdictions, it was elevated to a Type 1 incident. As the fire neared Colorado Springs, a large-scale evacuation was ordered for the northwest portion of Colorado Springs and neighboring areas totaling 32,000 residents. The Waldo Canyon fire destroyed 347 homes, making it the most destructive wildfire in Colorado history at the time, later surpassed by the Black Forest Fire the following year. In the aftermath of the fire, there was a comprehensive After Action Review completed and several reports were generated by national organizations to draw upon the lessons learned and identify recommendations and national takeaways. The partnerships and collaboration across organizations helped Colorado Springs not only during the response but during the lengthy recovery.

This case study focuses on the considerations for post-fire recovery, especially re-entry considerations given the large-scale evacuations conducted during the fire. It is important to note that the comprehensive WUI Fire Evacuation Appendix to the Colorado Springs Emergency Operations Plan (EOP) was a major asset during the fire. The plan outlined in the Appendix addressed messaging, transportation, evacuation, and re-entry. The Colorado Springs Fire Department (CSFD) was heavily involved in the development of the plan and the Appendix.

During the final days of fire response, recovery efforts were underway with residents of certain areas being allowed re-entry. The re-entry was evaluated and announced on a street-by-street basis until the mandatory evacuation was lifted. The Colorado Springs Police Department (CSPD), the National Guard, as well as other local and state law enforcement agencies, were critical in both blocking re-entry during evacuation orders and patrolling during the re-entry day.



It was noted that CSPD did not have enough capacity to block all re-entry points and identified a need for additional partnerships and resources. The CSPD also conducted patrols of evacuated areas in order to dissuade looting and other illegal activity while residents were away from their homes.

Given the extensive evacuations and the significant number of homes destroyed or damaged there were numerous requests from residents to re-enter and assess the damage. After several rounds of deliberations, the policy group, elected officials, and other key leaders having authority over the jurisdiction, outlined procedures for residents to return for one day to visit their home sites in evacuated areas. These conditions were set to address health and safety concerns. During the visit, CSFD staff provided escorts and were on site providing support to the residents as they surveyed the damage to their properties.

As media outlets pressed for information, issues started to arise with conflicting media reports as different outlets attempted to be the first to issue “breaking news” regarding structure losses, evacuations, and fire behavior. The utilization of a Joint Information Center (JIC) to direct news outlets to one location would have established consistency across reports. Another takeaway was that the inclusion of a disclaimer would protect statements from PIOs as the incident was ongoing. While the JIC was critical to information sharing during response and recovery, the need for a JIC plan was identified post-fire and recommended to strengthen efforts during future incidents.

The community's response to both volunteer and provide donations was overwhelming, and while there is certainly a benefit to having an abundance of volunteers, a level of organization and structure is necessary to properly coordinate these efforts. To try and mobilize volunteers an existing community-wide volunteer effort, the Community Advancing Public Safety (CAPS) program was utilized. While CAPS was resourceful during response and recovery, the Colorado Springs community also developed a group specifically targeting recovery. Immediately after the fire was contained, the Mayor of Colorado Springs initiated the formation of the group Colorado Springs Together. This team is a non-profit organization comprised of government, private-sector, and representatives from the affected neighborhoods that assist in recovery and supporting the needs of the community following the disaster.

As the community looked toward rebuilding, the CSFD identified an opportunity to assist the community in creating ignition-resistant structures as a part of future fire prevention. Taking the lessons learned from the structure loss during the fire, CSFD worked with local home builders and building authorities to develop guidelines for ignition-resistant construction. In addition, the CSFD worked with existing and new partners to develop, and have Colorado Springs adopt, a WUI mitigation ordinance.

As a takeaway, while there are extensive action items that require immediate attention during post-fire recovery, there is an opportunity to identify long-term solutions when the community is recovering from personal experience and are potentially more receptive to suggestions which would reduce the ongoing threat.

The devastation of the Waldo Canyon Fire captured national attention. The extensive research and study of this fire led to lessons learned that have been shared beyond the limits of the impacted jurisdictions.

Additional resources are available with more information on the IAFC resource page.

Recovery considerations for fire chiefs gleaned from this incident, include:

- » **Collaboration and interagency cooperation was critical for the re-entry process:**
 - WUI Fire Evacuation Appendix to EOP contained valuable re-entry information.
 - Numerous requests for re-entry had to be fielded by the officers on site contacting their chain of command to get permission:
 - ◆ It was determined that a re-entry task force established after initial evacuation orders would streamline this process. The task force would be a single point-of-contact to assess the need for anyone requesting re-entry during the evacuation.
 - Temporary one day visit alleviated a lot of requests and community concern:
 - ◆ Considerations and procedures should be clearly outlined to address health and safety concerns.
 - ◆ Provide residents with safety handouts, trash bags, dust masks, and gloves.
 - ◆ Establish perimeters and check-in stations where each vehicle is given a dashboard placard with information on the residence being visited.
 - ◆ Numerous agencies were present and provided patrol, CSFD provided crews on apparatus to drive through the neighborhood and specifically focus on the hardest hit sites.
 - ◆ During hot and dry weather conditions, provide comfort items to returning residents (i.e., sunscreen, water, and facial tissues).
 - ◆ Primary jurisdiction should provide a very visible presence of personnel and apparatus in the re-entry area to distribute comfort items and to support residents.

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- » **Formation of a formal group to organize and oversee volunteer and recovery efforts:**
 - Recommended that a local Volunteer Organizations Active in Disasters (VOAD) chapter be mobilized to address that need.
 - Colorado Springs Together was a non-profit organized specifically for recovery efforts of the Waldo Canyon Fire:
 - ♦ Utilized resources from companies like The Home Depot and Lowe's.
 - ♦ Peer support is critical to recovery, which is still ongoing for victims of the Waldo Canyon Fire.
 - » **Establishment of Joint Information Center (JIC):**
 - Develop a JIC plan for the locality; the plan should define roles and responsibilities for all JIC functions during response and recovery. During the Waldo Canyon Fire, the absence of a pre-existing JIC plan led to confusion on roles and information sharing amongst PIOs.
 - Pointing all media to the JIC facilitating consistent information being reported.
 - Inclusion of a disclaimer would protect organizations. Language along the lines of “This is to the best of our knowledge at this point in time,” as the situation is evolving and changing.
 - Ensure the JIC location has adequate resources (equipment and connectivity) for the information requirements. During the Waldo Canyon Fire, the JIC did not have enough landline telephones and lacked recording capabilities.
 - Ensure the JIC has adequate support for media representatives (e.g., power, parking for satellite trucks and other vehicles, etc.).
 - » **Identify potential opportunities for wildfire risk reduction:**
 - Use the post-fire atmosphere as a catalyst for adopting new codes and ordinances. Identify new partners (e.g., building construction, contractors, neighborhood leaders, friends groups, and homeowners associations) who could be helpful by incorporating wildfire risk reduction in rebuilding efforts.
 - If you encounter increased attention and receptiveness within the community to wildfire preparedness, then create a teaching moment to reinforce your outreach and mitigation efforts.

RESOURCES ON WALDO CANYON FIRE

- * Waldo Canyon Fire Final After Action Report⁶⁷
 - * 4/3/13 Waldo Canyon Fire After Action Report Presentation⁶⁸
- * Colorado Springs WUI Mitigation Ordinance⁶⁹
- * Recovery Resource Guide: Waldo Canyon Fire⁷⁰
- * Lessons Learned from Waldo Canyon, Fire Adapted Communities Mitigation⁷¹
Assessment Team Findings



Resources



The link below will direct you to the interactive guide that contains the resource links:

www.iafc.org/WuiChiefsGuide



PHOTOGRAPHY CREDITS

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