Wildfires and the Pandemic - What's Ahead

Our world has changed! The COVID-19 virus is presenting a novel challenge to our communities and first responders, and we must adapt our wildfire management practices as well, starting today.

Historically, communities and first responders prepare for a wildfire and then respond to the fire's complexities. This has been a rather localized practice with a localized involvement. As wildfires have grown in size and scale, we are much more reliant on neighboring resources and in some cases multistate/international response. History has shown that there has always been some type of "reserve capacity" available in the system to combat the challenges.

In the 2000's, the nation began to experience hurricane seasons overlapping with fire seasons. These multi-hazard incidents began to acutely stress our nation's incident management system and resources because we had to share scarce resources. This scenario came and went over the years and the system seemed to cope with it.

Today with COVID-19, we have no choice but to begin thinking outside the box on how we will address our wildfire challenges. Let's look at these challenges as our nation is focused on "stay at home" directives:

Preparation

- <u>Burn bans</u> Certain jurisdictions are banning burn days and prescribed fires because of the inherent hazards complicated by an already stressed response force. Consideration should be given to improving the sophistication of monitoring and reporting on burn progress with technology.
- Parcel inspections Many agencies have a defensible space program
 that relies on staff driving around and performing parcel inspections to
 determine what parcels need mitigation. These crews may be impacted
 from doing this task due to the abundant number of EMS calls they are
 addressing.
- <u>Defensible space work</u> What should we do when defensible space work needs to be performed, but the property owner cannot do it? Will there be contractors available to do such work and will property owners have the available finances to pay for it?
- Community mitigation The issue about home fire insurance rates will
 not end soon, due primarily to many state legislative sessions being
 suspended because of the COVID-19. It is extremely important now to
 have individual property owners recognize their responsibility and threats.
 Shared and individual mitigation actions are being impacted due to the
 "social distancing" direction. Some individuals needing to rent tools are



- sometimes finding closed rental vendors, therefore mitigation efforts are being compromised.
- <u>Training</u>, <u>Certs & Quals</u> Crews must conduct annual readiness training
 as part of wildfire season preparation. The entire response system is built
 on certification and qualifications to ensure a viable resource response.
 Education and physical testing are part of this annual process. "Social
 distancing" directives and cancellation of courses have compromised this
 system.

Response

- Incident management Incident management teams (IMTs) are already being assigned to help address COVID-19 issues. While this may not be a huge problem today, it begins to stress this resource's future capability as wildfires emerge. The nation's wildland fire system has a series of IMT classifications in relationship to incident complexities. As incidents escalate, the challenge will be to have enough and capable IMTs to address complex incidents as local, state and federal staffing pools diminish.
- <u>Logistical support</u> Local, state and federal caches of equipment and private vendor support is also being shared with the COVID-19 effort. Will we be able to get mobile food units, food deliveries, temporary housing and technical services? Can small cramped mobile food units be reconfigured to prevent COVID-19 from exposing an entire incident?
- <u>Firefighting resources</u> Personnel and equipment resources are already being multi-tasked today. As the COVID-19 peak impact is still unknown, we are unsure at this point what our resource availability level will be for all size and scale wildfire incidents. We should not expect business to be the same regarding our own expectations for work production, work/rest cycles and filling of resource orders. Like health care workers, firefighters first concern is their families and then the incident, so how do you "keep you eye on the ball"?
- **Evacuations** Incident commanders will order evacuations if a wildfire necessitates them. Due to stressed resource availability, evacuations may occur earlier and be greater in scale. The challenge will be:
 - o Are there enough law enforcement resources to do evacuations?
 - o Can we notice endangered populations?
 - Will residents leave their secured/isolated homes that they have stocked with food and toilet paper and go to an evacuation shelter?
 - Will less urgent evacuations have to be weighed against "social distancing" needs?
 - If people do not feel safe to evacuate, they may stay and may not be prepared to stay and defend. This situation may further endanger 1st responders trying to facilitate rescues.
- <u>Emergency shelters</u> Shelters have proven to be essential, yet they are scarce in numbers and inability to house large populations. Emergency



- or evacuation shelters usually congregate public masses into crowded environments violating today's "social distancing" orders. This problem is further exacerbated by animal welfare concerns. Will evacuees become the new homeless population in their secured cars?
- <u>Safety</u> Wildland firefighters will be torn between "social distancing" and performing mission tasks. Both objectives will be critical to the long-term success. The industry has historically found it a difficult task to find any respiratory protection that firefighters will wear during a wildfire, nonetheless a pandemic exposure. Also as we embark in this new world, there's still a lot of unknowns like if smoke or vegetation can transmit COVID-19?

Recovery

- <u>Repopulation</u> Recovery starts with ensuring the environment is safe for residents' repopulation. Utility companies and public works crews may be stressed for available crews, therefore repopulation may be delayed. News of delayed repopulation efforts after the fire wildfire may cause future evacuation orders to be dismissed.
- <u>Disaster assistance staff</u> Local, state and federal disaster staff availability may be compromised due to competing efforts with COVID-19, thus delaying personal and the larger society economic recovery.

So what are the options?

In the fire service and emergency management, we adopted the saying, "We will improvise and overcome" when presented challenges outside of our normal environment. We can anticipate these needs and plan for them. This model is currently being done for the COVID-19 by using Navy hospital ships and invoking the Production Defense Act (PDA).

The overall fire service (local, state, federal) must immediately identify with the challenges listed previously and develop work-arounds. As we do not know when/if the COVID-19 will peak, we must think outside of our traditional paradigms.

Let's look at some options that can be implemented individually or collectively as situations dictate:

Preparation

- Defensible space
 - Inspections Perhaps notify parcel owners from recent records that they need to do defensible space work and explain why.
 Conduct a simple outreach program to all parcel owners explaining the current situation and try to create an intrinsic rationale for compliance.



Use of retardants – If residents cannot do any work, a fairly simple option is to spray (homeowner or contractor) a fire retardant product on vegetation around structures. Retardants are available at local homeowner stores and can endure a fire season environment if there is minimal rainfall. Retardants will not extinguish a wildfire's embers, but they will greatly inhibit their expansion.

Community Mitigation

- O Homeowners Try to appeal to homeowners that can do their own work. They can perform mitigation work individually and maintain their "social distancing." Ask them to try to assist neighbors, especially those who cannot help themselves. Whatever green waste they generate, ask them to dispose the waste by using existing practices and if not able to due to volume, temporarily store the waste in an area away from structures. Direct them to contact their FIREWISE or local Fire Safe Council representative for assistance.
- Maintenance Educate people about how to properly maintain their homes from an ember intrusion following insurance, FIREWISE and local education programs. At a minimum, try to get a non-combustible clear 0-5' zone immediately adjacent to structures.
- Ready, Set, GO! If all else fails, this is the single most important option we have. People must begin to get prepared today for a wildfire by taking preventive steps, maintaining their situational awareness and GO! when directed or uncomfortable at their earliest moment. Staying to defend is only an option when you cannot leave, but you have to prepare for that situation today, not when the wildfire is knocking on your door.

Training, Certs & Quals

We have little or no time to conduct refresher training or physical ability tests. We need to accept existing certs and quals and also need to utilize staff as needed based upon their demonstrated capabilities. <u>Great start</u> - Refer to the FMB memo dated March 21, 2020 (Appendix A) for federal guidance and consider using it for state and local use too.

Response

Incident Command

Expectations – Yes, it will be lonely at the top, because we may be going way from the standard firefighting performance norms. The first step in addressing response is to prepare the policy makers, public and our troops. All parties need to be made aware that their historical response performance expectations may not occur during



- the near future and the sooner they hear this, the better. With limited resources, our #1 priority is life safety!
- Incident Management Teams We have fallen into a practice that we will call a "team" to handle a certain complexity of incident. These teams are comprised of mixed staff from local, state and federal agencies, all which are affected by the COVID-19 issues. As the pool of IMTs is stressed, each incident should develop an organizational structure to handle their incident's complexities and not wait for the "varsity" to come.
- Logistics The fire service differs from the military in that we respond and logistics follows vs. large-scale military operations that need logistics as part of the initial effort. We must create a logistical supply chain that will not suffer the same issues as neighborhood markets with empty shelves before we start essential tactical operations. Like health care workers, Personal Protective Equipment (PPE) must be available so firefighters can focus on their assignments knowing that they can help protect their families from exposure.
- Finances & Jurisdiction At this time, it is imperative that we use the closest resource concept and focus on life safety, property conservation and perimeter control and not jurisdiction. The incident objectives balanced with available resources should drive actions with finance concerns following up. This has occurred in the past during major fire sieges. Consideration should also be given to enact Stafford Act funding in advance of wildfires, as done for the COVID-19.
- Firefighters With the traditional military resources being committed and the abundance of unemployed workers in the nation, consideration should be given to staff up augmented staffing options in either a full-time or part-time status. Training should be focused on the wildfire mission so training requirements could be minimized. Another option is to reach out to retirees to perform incident base camp functions, open seasonal dispatch centers and hire seasonal firefighters as full-time staff ASAP.
- Aerial resources While aerial drops do not fully contain a wildfire, they can slow its progress until resources can arrive. They can also slow a fire's spread rate to allow tactical operations and evacuations to occur. Studies have shown a larger national aerial fleet is needed and that early aerial drops result in smaller acres lost. The problem is that aerial contract(s) periods do not always correspond to when wildfires occur. Consideration should be given to maximizing aerial contracts as an initial dispatch capable resource along with corresponding support needs (i.e. Lead planes, retardant operations, etc.).



- Private resources The first resources are usually agency firefighting resources and private resources often backfill Unable To Fill (UTF) needs. While private resources are usually not an initial dispatch resource, hiring practices could surely be streamlined to affect a quicker response.
- Technology For too long, the release of available proven technology has been withheld from firefighting resources. It's time certain restricted technology be quickly released and adapted for incident management purposes. Also, the implementation of the First Net system should be a high priority as well as ensuring public safety spectrum capability.
- Evacuations There is a dramatic need for a public safety driven and controlled IT app for public noticing and evacuations that speeds access to IPAWS in rapidly moving events. This IT app should have preprogramed evacuation routes downloaded, independent of cellular infrastructure support. As evacuations are ordered, try to have a corresponding repopulation plan ready. The first incidents ordering evacuations will pave the way for future evacuations. If the public complies and is repopulated efficiently, great! If not, subsequent evacuation orders will be riddled with issues due to the lack of public support.
- Emergency shelters There is no easy answer for shelters. Shelters require volunteers and health care workers to establish sites, which may or may not be available and maintaining "social distancing" may not be possible. A last resort may be people congregating in large parking lots in their cars and RVs until it is safe to return. The best resolve may be to "shelter in place" if the IC believes it can be done safely.
- Safety Develop a plan for employees who may have contracted the virus or expose others to the COVID-19 virus.

Recovery

<u>Repopulation</u> – Follow existing repopulation plans but consider allowing re-entry ASAP. If the public can re-enter ASAP, they will be more obedient to follow evacuation orders. Repopulation will not be picture perfect, but people can take care of animals, live in their RVs, camp or whatever and feel secure at their own home versus an evacuation shelter. All we have to do is to provide access and the utilities and traffic safety features can follow.

Closing

Life is full of the unexpected and how we react to the unexpected determines our fate/success. We can begin to address the impending wildfire and COVID-19 challenges today, unlike if an earthquake happened unannounced. We must



think outside the box, improvise and overcome, and survive, but time is of the essence.

The intent of this document is not to instill panic, but to generate contingency thinking in the face of the COVID-19 virus' impacts. This document is not a complete guide as each situation has their/it's own unique issues; this article is a simply thought-provoking tool. We have an opportunity and a narrow window to heed these thoughts/issues and begin respective contingency planning. Let's accept this challenge because like it or not, it is upon us. We can accept this challenge in a proactive role or face the consequences.

Take this topic to your respective crews and organizations; play the ultimate "what if" scenarios and build your continuity plans today!

References:

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https://www.nwcg.gov/committees/emergency-medical-committee/infectious-disease-guidance

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Appendices:

Appendix A – "FMB Memo 20-001.pdf"



Appendix A



FIRE MANAGEMENT BOARD

FMB Memorandum No. 20-001

21 March 2020

TO: Fire Management Board Members

FROM:

Leon Ben Jr., Chair, Fire Management Board LEON BEN BEN Date: 2020.03.21

SUBJECT: Adjustments to Wildland Fire Preparedness Activities for the 2020 Fire Year in

response to the Coronavirus disease (COVID-19) pandemic

The purpose of this memo is to provide the interagency wildland fire community with guidance on adjustments to wildland fire preparedness activities for the 2020 Fire Year. These activities include: Medical Clearance, Work Capacity Test (WCT), and RT-130, Wildland Fire Safety Training Annual Refresher (WFSTAR).

The Fire Management Board (FMB) has carefully analyzed the risk of responder exposure to the Coronavirus disease (COVID-19) in relationship to the need to evaluate the medical, physical, and training requirements of wildland firefighters as part of annual fire management preparedness. We distinguished requirements into two categories: 1) Employees new to the federal firefighting workforce, and 2) Incumbent/returning firefighters and firefighters who have transferred from one federal Bureau to another. To this end, the following alternatives will be implemented effective immediately. Agencies may elect more stringent direction if deemed prudent.

Employees New to the Federal Firefighting Workforce

- Medical Clearance: Obtain clearance through standard agency onboarding process.
 - O DOI Agencies: new hires will be required to complete baseline exams. If baseline exams are not possible to complete due to COVID-19 impacts, updated direction will be issued by individual agencies.
 - USFS: Effective immediately, any employee with responses on the eMedical Health Screening Ouestionnaire (HSO) that indicates that they must be cleared to the WCT by OF-178 Exam will temporarily not be required to complete a new OF-178 exam. Any employee who would normally complete an OF-178 exam will be directed by their unit HSQ Coordinator to provide the USFS Medical Qualifications Office with additional information in order to obtain a temporary medical clearance to the WCT for 2020.
- Work Capacity Test (WCT): Required to complete any related light, moderate, or arduous work capacity test.
 - Discourage reuse or sharing of pack test vests.
 - o Encourage use of weight appropriate bladder bags or individually issued fireline packs.
- Basic Firefighter Training: Required to complete S-130, Firefighter Training; S-190, Introduction to Wildland Fire Behavior; L-180, Human Factors in the Wildland Fire Service; IS-700, An Introduction to the National Incident Management System; and ICS-100, Introduction to the Incident Command System, and fire shelter proficiency training. The fire shelter training should be implemented using a standard fire shelter that no longer meets service parameters or a practice fire shelter as a one-person, one-time use.



Incumbent/Returning Firefighters/Transferred Federal Firefighters

- Medical Clearance: Required to complete a self-certification through their agency medical standards program.
 - o DOI Agencies:
 - The 3-year (36-month) periodicity requirement for all DOI exams expiring in 2020 is extended until December 31, 2020. Firefighters who were previously *Qualified* or *Qualified with Risk Mitigation* or *Waiver* that are due for a periodic exam may choose to complete a self-certification in lieu of completing a periodic exam. Upon expiration of the interim policy firefighters shall come back into compliance with exam periodicity.
 - All DOI non-qualified determinations will be required to follow the standard risk
 mitigation/waiver/review process. You must have been qualified via a risk mitigation,
 waiver or medical officer review and be considered medically qualified before
 functioning in an arduous capacity.

o USFS:

- Effective immediately, any employee with responses on the eMedical Health Screening Questionnaire (HSQ) that indicates that they must be cleared to the WCT by OF-178 Exam will temporarily not be required to complete a new OF-178 exam. Any employee who would normally complete an OF-178 exam will be directed by their unit HSQ Coordinator to provide the USFS Medical Qualifications Office with additional information in order to obtain a temporary medical clearance to the WCT for 2020.
- Work Capacity Tests (WCTs) are suspended for 2020. Employees will provide the local Incident
 Qualifications and Certification System (IQCS) account manager proof of medical clearance. Upon
 receipt of proof of medical clearance, the IQCS account manager will input a WCT competency
 based on the previously attained 2019 level (light, moderate or arduous). IQCS account managers
 will include appropriate documentation in the employees training record.
- RT-130, Wildland Fire Safety Training Annual Refresher (WFSTAR): Employees who have not
 completed RT-130 to date will be awarded the RT-130 competency. The competency will be
 awarded from their current expiration date identified in IQCS. This action will be implemented
 nationally through the agency's National Training Officer. The following actions are recommended
 in lieu of the formal training:
 - Complete a self-study refresher utilizing the WFSTAR videos and support materials. Employees should include topics that focus on entrapment avoidance and related case studies, current issues, and other hazards and safety issues.
 (https://www.nwcg.gov/publications/training-courses/rt-130/wfstar-catalog).
 - To compensate for the hands-on fire shelter training, employees are encouraged to watch the "New Generation Fire Shelter" video (https://www.nwcg.gov/committees/fire-shelter-and-personal-protective-equipment-subcommittee).
 - o Predicted service information (https://www.predictiveservices.nifc.gov/predictive.htm)
 - Utilize content from the Lesson Learned Center (<u>https://www.wildfirelessons.net/home</u>).

These exceptions apply to all Administratively Determined (AD) employees as well as applicable crew, water handling (engines and water tenders), and equipment contracts and agreements.



Background: Many wildland fire position qualifications require the completion of the RT-130, medical exam, and WCT. Based on the current situation and guidance related to COVID-19, the goal is to reduce impact and exposure to our employees while maintaining our ability to respond to incidents and carry out mission critical wildland fire activities.

Distribution:

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