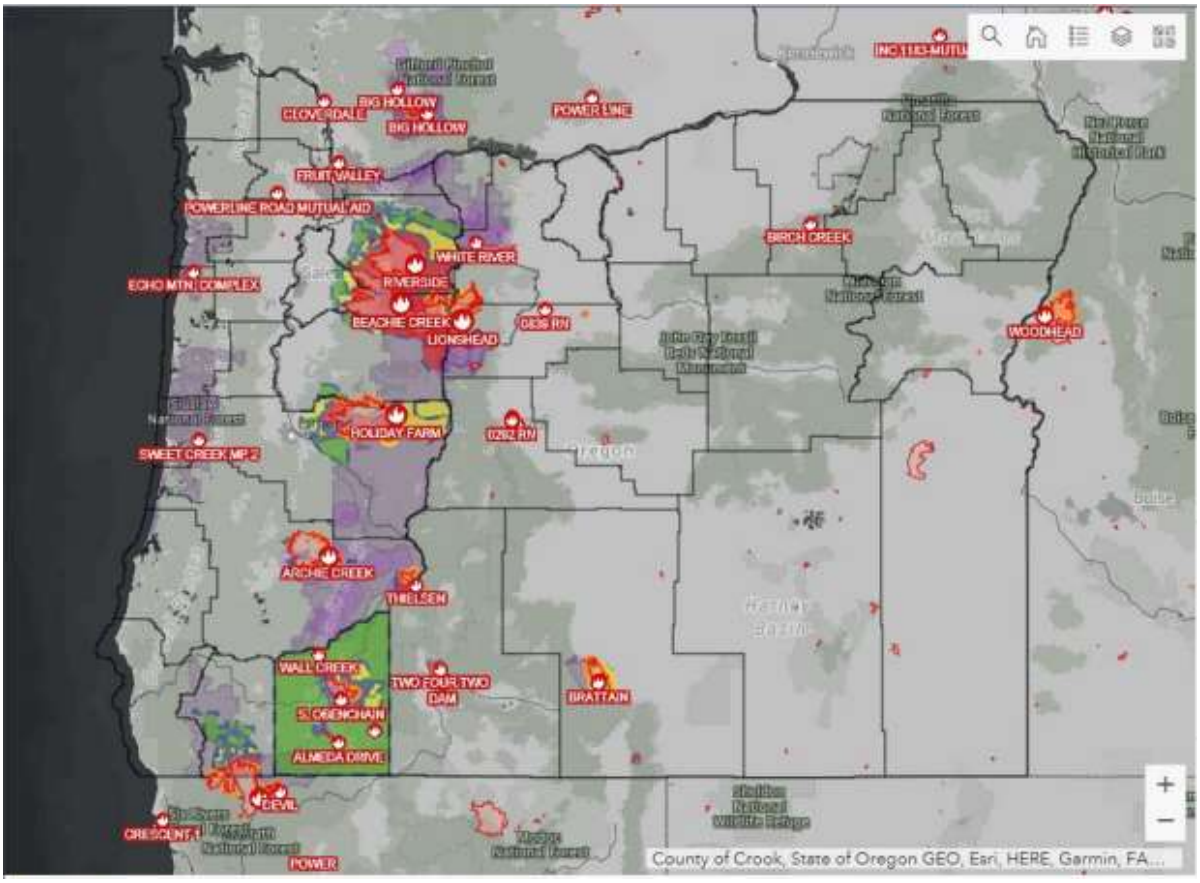
# STATE OF OREGON AFTER-ACTION REVIEW

## SEPTEMBER 2020 WILDLAND FIRE AND WIND EVENT




*Map source: CISA Region 10_OR WA Wildfire SITREP 15_18 SEP 20*

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FINAL

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# Contents

# Executive Summary

This after-action review (AAR) focuses on efforts by the State of Oregon to respond to widespread wildfires during September 2020 that were ignited due to critically hot, dry, and windy conditions. Oregon's firefighters worked tirelessly save lives, protect critical infrastructure, public and private property, and contain the wildfires. The Governor of the State of Oregon, the Oregon Department of Forestry (ODF), and the Office of the State Fire Marshal (OSFM) took action to respond to the wildfires and mitigate the loss of life and property. The Emergency Coordination Center (ECC) and the state Joint Information Center (JIC) expanded operations to support the fire response.

The extraordinary scope and destruction of the September 2020 wildfires must be underscored – within 24 hours 12 counties were battling conflagrations. The wildfire encroachment on rural and urban communities causing one-sixth of Oregon's population to be under evacuation notice is unprecedented. By the end of the response phase, nine Oregonians had tragically lost their lives and over one million acres of public and private land burned. Recovery efforts will be on-going for many years. The AAR identifies areas of success and opportunities for improvement for Oregon to take proactive action in helping the state better prepare and respond to future wildfire events.

## Methodology

The information collected for this report was derived from individuals and organizations that were identified as stakeholders through OEM, OSFM, ODF, and the State Resilience Officer. Local and tribal firefighter stakeholders were excluded from this review, as this is an evaluation of systems and coordination effectiveness, not an evaluation of firefighting decisions and actions. The information was gathered through online surveys, as well as interviews held virtually either one-on-one or in small groups. Documentation related to the response and initial recovery operations for this event was reviewed, including situation reports, after-action reports, articles, incident action plans, executive orders and other documentation.

## Preparedness

The primary state agencies for firefighting, outlined in Emergency Support Function 4 (ESF 4) of Oregon's Emergency Operations Plan, are ODF and OSFM. ODF is charged with the protection of approximately 16 million acres, including state and county forest land, private timber land, wildland areas within organized fire protection districts. As incidents grow beyond the capacity of local and expanded mutual aid partnerships, OSFM engages resources for fire response in support of state, federal, and local wildland, rural, and urban firefighting agencies.

Preparation for the 2020 Wildland Fire season occurred concurrently with the ongoing COVID-19 response. OSFM and ODF worked on developing COVID plans for Fire Camps. The 2020 Mobilization Readiness Review Guide outlined COVID-19 safety for safely mobilizing resources during the COVID-19 pandemic. Significant effort was required to modify the standard pre-

season firefighter training process to address COVID-related risks, a process which is typically very hands-on and involves significant interpersonal interaction.

Through the enterprise-wide response to COVID, there were processes and relationships built and fine-tuned that were instrumental to the wildfire response. COVID-19 support activities were active as fire season approached, so partners were already in disaster mode and there was no "warm up" period needed for the wildfires. Combined with strengthened connections, clear roles and deference to expertise, this allowed for a more effective overall response to this unprecedented event.

## Response

The 2020 fire season was well underway in August 2020. On August 20, 2020, a statewide State of Emergency was declared due to the imminent threat of wildfire. Within 24 hours of the arrival of strong winds on September 7, 2020, 12 counties were battling conflagrations. ODF and OSFM leveraged state, regional and national firefighting resources to protect life and property and the state ECC and the state JIC activated to support coordination of the expanded response efforts across the state.

From the dozens of fires that started or were exacerbated throughout the wind event, five grew to more than 100,000 acres. Many fires threatened or crossed the wildland-urban interface, placing over 500,000 Oregonians under some level of evacuation notice. At one-point, the American Red Cross almost 2,000 survivors in congregate shelters and 2,210 people housed in hotel rooms. Hundreds of people were originally reported missing and tragically, there were nine confirmed fatalities.

A Presidentially-declared Major Disaster Declaration was granted on September 15, 2020. With the help of multiple federal government agencies, forest landowners, contractors and many volunteer-based agencies, Oregon was able to contain the fires – after more than 1 million acres burned – and move fully into the recovery phase.

## Findings

The federal National Response Framework defines 31 core capabilities that in general must be accomplished in incident response. Observations on Oregon’s wildfire response efforts can be organized into these core capabilities: Planning, Public Information and Warning, Operational Coordination, Fire Management and Suppression, Mass Search and Rescue Operations, Fatality Management Services, Infrastructure Systems, Mass Care Services, Operational Communications, and Recovery.

## Areas of Success

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| **Planning** | **Firefighting Response Planned for and Practiced**—ODF and OSFM supported and augmented district firefighting resources using all available options. Conflagration declarations authorized engagement of expanded resource options from across state agencies as well as national and international assets. |
| **Public Information and Warning** | **NWS Warning**—Early identification of the wind threat, assessment of the potential amplification of fire risk, and communication to state and local partners enabled the local and state emergency management systems to lean into the response.<br>**State JIC Activation**—State JIC operations began within 24 hours of incident onset using existing OEM staff. A practice of regular communication and coordination with the Governor's Office and key stakeholders was established. |
| **Operational Coordination** | **Federal Partner Integration**—The Oregon FIT, FEMA Region X, DHS CISA, and other federal resources were proactive and integrated very well. The FEMA presence was critically important in assisting with declaration requests, which brought in resources and funding, and facilitating the transition from response and recovery.<br>**Improved Relationships and ECC Role Knowledge**—ECC operations were more coordinated and effective when compared to the COVID-19 response.<br>**Liaisons from OEM**— The deployment of state liaisons to affected counties is very positively received. |
| **Fire Management and Suppression** | **COVID-19 Safety**—Pre-incident planning for Fire Camps embraced best practices to protect first responders from COVID-19 and resulted in zero Fire Camp outbreaks.<br>**Response Leadership**—ODF and OSFM have a strong, well-coordinated team. They excel at communication and coordination between their agencies, with state agency leadership, and among teams. They prioritize strong coordination with communities by integrating local government into incident management teams. |
| **Mass Search and Rescue Operations** | **Federal Search and Rescue Teams**—The skills and capabilities brought by the US&R team provided great support to state response. In addition to search support, damage assessments and reports development were extremely valuable.<br>**Strong County Search and Rescue System**—Oregon's County Search and Rescue (SAR) system seamlessly engaged with FEMA's US&R team. |
| **Fatality Management Services** | **Mobile Morgue Deployment**—This was the first deployment of the mobile morgue in a real-life incident; it has been an asset of the Medical Examiner's Office since 2014. |

## Areas of Success

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| **Infrastructure Systems** | **Lifeline Reporting**—The Lifeline Reporting format helped to identify at-risk power lines that were at risk from the fires and allowed the infrastructure specialists to work with stakeholders for load balancing in Oregon that mitigated downstream/down state power impacts.<br>**Integration of EMAC Resources**—Critical Infrastructure/Key Resources (CIKR) resources from the State of Washington and the US Coast Guard were integrated into the Infrastructure Branch allowing the CIKR lead and the Infrastructure Branch to focus on analytical work for CIKR priorities. |
| **Mass Care Services** | **Mass Care Partnerships**—The American Red Cross, Salvation Army, and other non-governmental organizations stepped up to handle a significant part of mass care operations, including sheltering, feeding, and donations and volunteer management. The Red Cross in particular carried a heavy load supporting sheltering across the state. |
| **Operational Communications** | **Critical Infrastructure Monitoring**—The Infrastructure Branch monitored a great diversity in state assets, including public safety communications towers, cellular towers, water systems, waste water systems, and power infrastructure. |
| **Recovery** | **Speedy Declarations**—FEMA provided strong support and helped get the declarations turned around in three to five days.<br>**State Recovery Plan Operationalized**—The Recovery Coordinator leveraged EMAC to bring in planners focused on recovery planning. Their work transitioned the recovery plan to an integrated recovery action plan.<br>**State Agency Support to Recovery Operations**—State agencies provided high-level experts to lead recovery support functions. |

## Areas of Improvement

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| **Planning** | **ICS/ESF Integration**—Many people staffing ESF positions are rarely activated to support ECC operations, therefore struggle to integrate into the NIMS-ICS structure and the planning process. They may have had the training, but have never really engaged in a structured planning process.<br>**Coordination vs. Operations**—When local and tribal jurisdictions are overwhelmed by an incident, there are too many demands to articulate what help is needed. The state must be organized and trained to take on more of the burden of executing response activities. The current posture is insufficient to manage statewide incidents. |

## Areas of Improvement

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| **Public Information and Warning** | **Notification System Failures**—Community alert and warning systems are a locally controlled service. To work, all phone and text systems rely on communication towers to be intact and powered. Some communication towers were lost to fire, rendering some systems inoperable.<br>**Lead Agency Incorporation into the JIC**—State JIC operations were successful in sharing and amplifying accurate and timely information to communities threatened by or affected by the fires. However, ODF communications staff were not folded into the state JIC, echoing the JIC disconnect between OHA communications and the state JIC from the early COVID-19 response.<br>**Outreach Equity**—While greatly improved, the ability for incident outreach to support the most vulnerable needs additional work. |
| **Operational Coordination** | **Staffing Shortfalls**—OEM cannot fully staff needed ICS positions in the ECC during initial stages of an activation. This leaves the response at a disadvantage in the first hours and potentially the first days of a response.<br>**Ops Center Limitations**—Many people staffing the ECC describe OPS Center as inadequate for disaster response in a statewide emergency. The system does not have an inventory of resources, which makes it very difficult and time consuming for locals when requesting assistance. It does not have collaboration tools, which are invaluable in the COVID environment which has maximized virtual support and engagement. |
| **Fire Management and Suppression** | **Take Action on Wildfire Council Recommendations**—Oregon has experience decades of increasing wildfire incidents and associated suppression costs. Investment is needed to help Oregon to create fire-adapted communities, restore and maintain resilient landscapes, and respond safely and effectively to wildfire. |
| **Fatality Management Services** | **Family Assistance Center**—There is concern about the capacity for a family assistance center to meet equity, faith, and cultural consideration needs of disaster survivors. |
| **Infrastructure Systems** | **Limited Training and Maintenance on Strategic Technology Reserve**—Equipment in the Strategic Technology Reserve trailers is not trained on with any regularity, especially with more rural community partners. When leveraged in this response, most of the equipment was not in a ready state, with software requiring updates before deployment. |

## Areas of Improvement

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| **Infrastructure Systems** | **Public Safety Power Shut-offs**—Public Safety Power Shut-offs (PSPS) are a vital part of wildfire prevention and suppression. More knowledge is needed on how to request and execute shut-offs to maintain to power for critical community infrastructure systems like public safety communications systems, traffic lights, water and wastewater systems, and healthcare facilities. |
| **Mass Care Services** | **DHS Ownership of Mass Care Function—**Staffing gaps at DHS, including a vacancy in the state Mass Care Lead role, created a gap in disaster response-related institutional knowledge, and challenges connecting with mass care operational partners with subject matter expertise.<br>**Over-reliance on Non-Governmental Organizations—** There is an over-reliance on the American Red Cross and other non-governmental organization to execute the full mass care mission.<br>**Linkage with ESF 12 for Eligibility Validation**—During the wildfire, replacing SNAP benefits became a large part of the mass care mission. ESF 6 needed detailed, specific power outage information from ESF 12 to determine an individual's eligibility for SNAP replacement. There is not a streamlined method for gathering and providing this information. |
| **Operational Communications** | **Unified Information Sharing with Locals**— The speed and unpredictability of wildfires creates operational communication challenges. Still, the horizontal and vertical coordination of communications during response could be improved. Local emergency managers learned information from their senior and elected officials rather than the ECC. Local emergency managers felt their credibility suffered when officials asked about details, they were unfamiliar with.<br>**Trusting Local Input**—Several localities shared frustrations about state-level entities not trusting local input. For example, one road closure eliminated an evacuation route on a non-fire threatened road. The 'on-the-ground' information was dismissed, rather than being trusted and used to support decision-making. |
| **Recovery** | **Damage Assessment**— There is no common tool for damage assessment across disciplines. It was also discovered that the calculation of damage did not sufficiently capture the needs of people suffering non-structure related wildfire losses, such as timber or crops. Oregonians facing those types of losses were unable to access relief offered through federal emergency funds. |

## Areas of Improvement

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| **Recovery** | **Deliberate Planning and Training**—This was the first time the State Recovery Plan was used and there was a significant learning curve for all involved. Facilitation of the enterprise recovery operation is being managed by two people, which is not sufficient for a state-wide implementation. |

## Opportunities and Recommendations

The State of Oregon's wildfire response revealed opportunities and recommendations for the state to pursue further. These include:

- Coordination vs. Operations. The state should establish a workgroup to outline what a shift from the coordination posture to an operations posture requires.
- Outreach Equity. JIC equity planning should continue to build on improvements realized through the COVID-19 and wildfire responses of 2020. This includes assessing outreach successes and failures, then working to fill identified gaps.
- Notification System Failures. There is strong support for the state having a role in local and tribal notifications; home rule authorities are raised as concerns. Exploration of state supported systems, lower tech options, and no-tech options should also be explored.
- Lead Agency Incorporation into the JIC. Examine how recent state JIC activations have not succeeded in folding in Lead Agency personnel. Identify the road blocks to effective collaboration and support of Lead Agencies.
- Outreach Equity. Explore options for adding public information specialists with additional language skills or how to embed other language speakers into the JIC to be present as messaging is developed. Develop specific plans for communications with vulnerable communities.
- Staffing Shortfalls. OEM staffing should be expanded to provide capacity for full operational support. Expansion of the liaison concept can provide better support to local and tribal communities.
- Ops Center Limitations. Engage state, tribal, and local stakeholders to define requirements for an effective information management system, then compare the desired requirements against Ops Center's capabilities.
- Take Action on Wildfire Council Recommendations. Proceed to implement the recommendations established by the Governor's Council of Wildfire Response.
- Integration of EMAC Resources. Consider pre-scripting Critical Infrastructure/Key Resources staffing resource requests for EMAC fulfillment.
- Lifeline Reporting Integration. Commit to an evaluation existing reporting formats used by ESF agencies (i.e., situation reports, situation status reports, lifeline reporting, etc.)

during ECC operations. A decision should be made about where reports link into the daily planning cycle, and how/when each should be leveraged during response operations.

- Limited Training and Maintenance on Strategic Technology Reserve. A training and maintenance schedule should be developed to ensure these communications tools are immediately deployable to field personnel trained in putting the equipment to use.
- Public Safety Power Shut-offs. Educate ECC staff and decision-makers on the nature and role that PSPSs serve.
- Over-reliance on Non-Governmental Organizations. The state should provide leadership and facilitate an examination of mass care capacity across Oregon. This review needs to engage local and tribal partners, local, state and national NGO partners, as well at state agencies with mass care responsibilities.
- Critical Infrastructure Monitoring. Consider developing a cadre of GIS experts to scale up staffing during large incidents to support visual communication. Identify and train GIS staff from other state agencies to support ECC operations.
- Trusting Local Input. Identify opportunities and mechanisms for quick collaboration to validate the local reality.
- State Recovery Plan Operationalized. Encourage deploying staff through EMAC to assist other states in implementing recovery strategies. These experiences will broaden and deepen recovery knowledge, which will benefit Oregon's recovery from the next large event.
- Damage Assessment. The state should establish a common tool for damage assessment. There are technology tools and services that facilitate unified collection of damage assessment data at the level needed to prepare declaration requests.
- Deliberate Recovery Planning and Training. Capture the challenges and adjustments that have been (and will be) identified in the wildfire recovery effort and refine the plan to be more effective and efficient in future events. Share the lessons learned with communities across the state to help them establish a localized recovery framework.

# 1. Introduction

This after-action review focuses on efforts on the State of Oregon to respond to the multiple wildfires that were present across the state, from September 7th, 2020 through September 30th, 2020. This is an evaluation of systems and coordination effectiveness, not an evaluation of firefighting decisions and actions. The intent is to identify areas of success and opportunities for improvement for Oregon to take proactive action in helping the state better prepare and respond to future wildfire events.

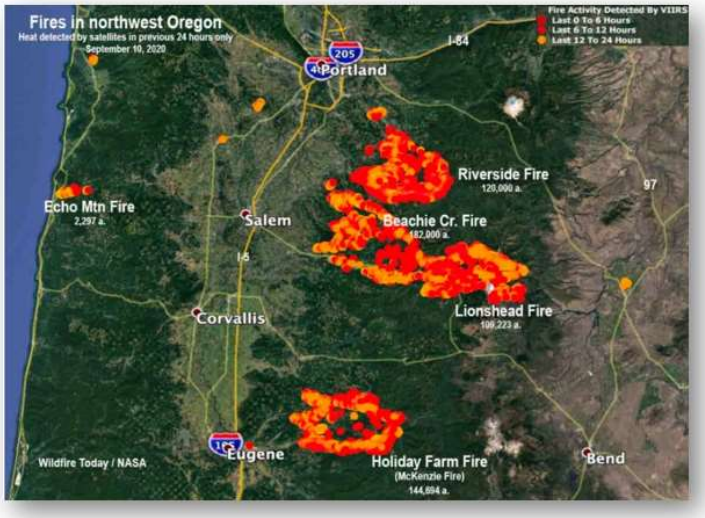
# 2. General Description of the Incident

Leading into Labor Day weekend, the National Weather Service (NWS) warned of a potential high-wind weather event that could exacerbate existing wildfires in Oregon and would likely ignite more. The high-wind event was forecast to start September 7 and was expected to last several days with average sustained winds of 20-30 mph with 50-60 mph gusts.

On September 7, multiple wildfires ignited across the state due to critically hot and dry conditions. The Governor of the State of Oregon, the Oregon Department of Forestry (ODF), and the Office of the State Fire Marshal (OSFM) took action to respond to the wildfires and mitigate the loss of life and property. The Emergency Coordination Center (ECC) and the state Joint Information Center (JIC) expanded operations to support the fire response.

Over the next seven days, with advice and recommendations from OSFM, Governor Brown declared multiple emergency conflagrations – defined as a large disastrous and destructive fire that threatens human life, animal life, health, and/or property – allowing needed regional and national resources to be deployed across the state to begin combatting the fires more effectively. In addition, significant state, regional, and federal resources, including from the Federal Emergency Management Agency (FEMA), supported state coordination efforts in response and initial recovery.

**Figure 1. Fires in NW Oregon 9-10-20**

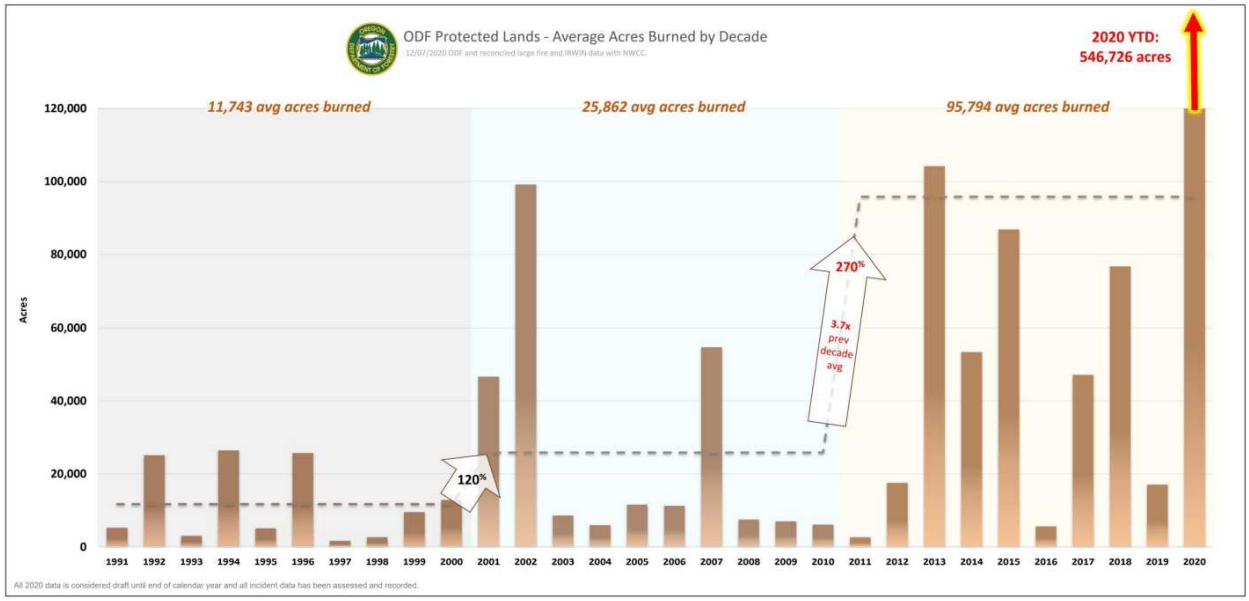



Oregon's firefighters worked tirelessly save lives, protect critical infrastructure, public and private property, and contain the wildfires. With the assistance of multiple state and federal

government agencies, forest landowners, many volunteer-based agencies, and residents, Oregon was able to control and extinguish many of the fires and move toward the recovery phase. Planning for recovery began as early as conditions on the ground allowed and communities began the recovery process as soon as an area was declared safe. On September 28, a joint Preliminary Damage Assessment (PDA) was conducted and validated significant damage in multiple counties. By the end of the response phase, nine Oregonians had tragically lost their lives and over one million acres of public and private land burned. Recovery efforts will be on-going for many years.

The extraordinary scope and destruction of the September 2020 wildfires must be underscored – within 24 hours 12 counties were battling conflagrations. The wildfire encroachment on rural and urban communities causing one-sixth of Oregon's population to be under evacuation notice is unprecedented. The historic response to control, suppress, and extinguish fires across Oregon follows decades of increasing wildfire incidents and associated suppression costs (see Figures[1] 2 and 3). The lessons from these incidents relate to the broader challenge of any agency being stretched beyond capacity.

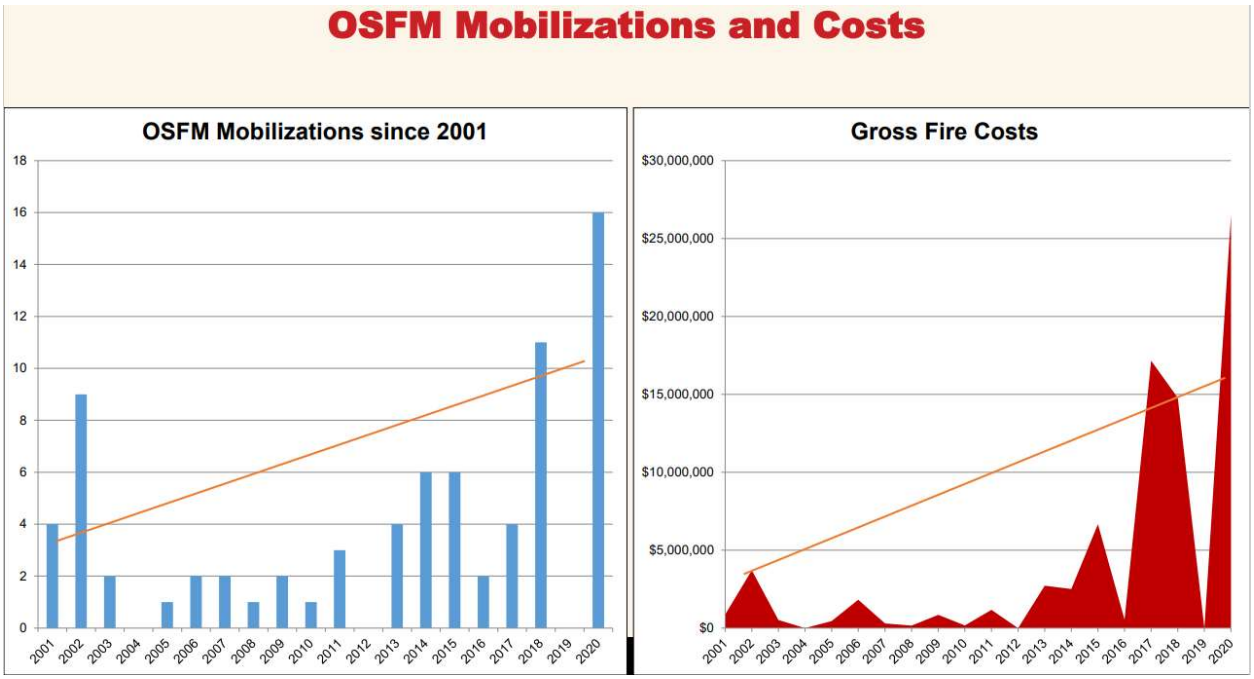
**Figure 2. ODF Protected Lands Average Acres Burned by Decade (1991-2020)**




ODF calculated gross large fire suppression costs from 2006 to 2020. From 2006 to 2012 the average gross costs were $9.7 million. From 2013-2019, the average gross cost increased to $70.7 million. The fires in 2020 alone are estimated at $133.9 million. These figures do not include recovery cost estimates.

[1] From presentations to the House Veterans and Emergency Preparedness Committee by ODF and OSFM, December 18, 2020

**Figure 3. OSFM Mobilizations and Costs (2001-2020)**




# 3. Oregon's Preparedness Posture

This section identifies aspects of the State of Oregon's planning and preparedness activities that positioned the state to manage wildland fires.

## State's Structure for Firefighting

The primary state agencies for firefighting, outlined in Emergency Support Function 4 (ESF 4) of Oregon's Emergency Operations Plan, are the Oregon Department of Forestry and the Office of the State Fire Marshal.

ODF is responsible for protecting the state's forestlands and conserving forest resources. ODF is the sole firefighting resource operated by the State of Oregon and is charged with the protection of approximately 16 million acres, including state and county forest land, private timber land, wildland areas within organized fire protection districts. ODF is also under contract with the federal government to protect Bureau of Land Management land, west of the Cascade Mountains.

ODF's 12 Forest Protection Districts operate throughout Oregon and provide for the prevention and suppression of wildfire through aggressive initial attack. The Forest Protection Districts are funded by the state and landowners, for initial fire attack only. Each ODF District has emergency procurement authorities to enter into national contracting agreements for firefighting resources and local Incident Resource Agreements (IRAs) with private companies for heavy

equipment (dozers), water tenders, and hot shot-type hand crews. These local resources are available to ODF usually within two-hours of call out.

In areas where ODF boundaries overlap with organized local fire protection district boundaries, ODF is charged with protecting the wildland areas, providing perimeter control on structures - ODF is not trained with appropriate PPE or allowed to attack structure fires - while fire districts are trained and equipped to attack both structure and wildland fires. These overlapping areas are common, and ensures seamless continuity for a complete and coordinated fire protection system. In areas where state and federal wildland areas border each other, ODF fire attack authority is limited to circumstances where a fire on federal property directly threatens state protected land. ODF and federal agencies have in place a 24-hour mutual aid agreement where limited fire protection resources are shared. After 24-hours, cost share agreements must be developed, depending on the complexity of the event.

ODF has in place three overhead incident management teams that can respond and fully implement the incident command system and a disciplined, supported planning process within 48-hours. Additionally, OSFM has three incident management teams with similar capabilities.

The OSFM mission is to protect citizens, their property, and the environment from fire and hazardous materials. OSFM coordinates and directs the Oregon Fire Mutual Aid System, which is used to respond to all hazards events when requested by county fire defense board districts once local capacity has been exhausted.

As incidents grow beyond the capacity of local and expanded mutual aid partnerships, OSFM engages resources to support fire response in support of state, federal, and local wildland, rural, and urban firefighting agencies (Figure 4). The Oregon Fire Service Mobilization Plan is used to mobilize fire resources to any incident beyond local fire service capabilities necessary to protect life, property, and the environment. The mobilization plan establishes operating procedures for the most practical use of state resources during all-hazard emergencies that are beyond the capabilities of local resources and assumes fire departments and districts have mutual aid agreements to respond to local emergencies.

The designation of a Conflagration by the Governor authorizes the State Fire Marshal to bring in state-level response resources as well as out of state resources through Emergency Management Assistance Compact (EMAC) requests. OSFM also plans and implements the response by structural firefighting forces when the Governor declares a conflagration (Conflagration Act - ORS 476.510 to 476-610).

**Figure 4.**


## Oregon's 2020 Wildland Fire Preparedness Levels

Preparation for the 2020 Wildland Fire season occurred concurrently with the ongoing COVID-19 response. The COVID experience provided a mixed blessing by offering a valuable experience in statewide coordination and communications yet also significantly impacted fire preparedness and operations.

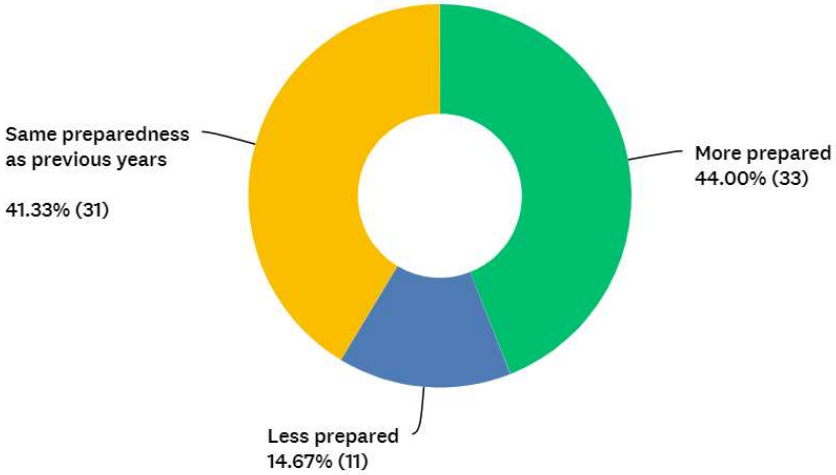
OSFM and ODF utilized all of their Type 1 and Type 2 Incident Management Teams during Oregon's COVID-19 response. Several Incident Management Teams (IMTs) rotated through the ECC providing structure and leadership to facilitate the state efforts to combat the pandemic. With IMT leadership, ECC support agencies learned to operate more effectively within an ICS structure and by utilizing a well-tested planning process. The IMTs learned of the complexities associated with bringing together diverse agency representatives, with varying levels of ICS training and experience, to collaborate on a response to a once in a century threat. From February to May, OSFM and ODF leadership provided guidance and support to the COVID-19 Multi-Agency Command (MAC).

In addition to providing MAC Support, OSFM and ODF worked on developing COVID plans for Fire Camps. The 2020 Mobilization Readiness Review Guide outlined COVID-19 safety for safely mobilizing resources during the COVID-19 pandemic. These efforts pulled funding and resources from normal fire season preparations to focus on developing and implementing COVID mitigation plans. Significant effort was required to modify the standard pre-season firefighter training process to address COVID-related risks, a process which is typically very hands-on and involves significant interpersonal interaction.

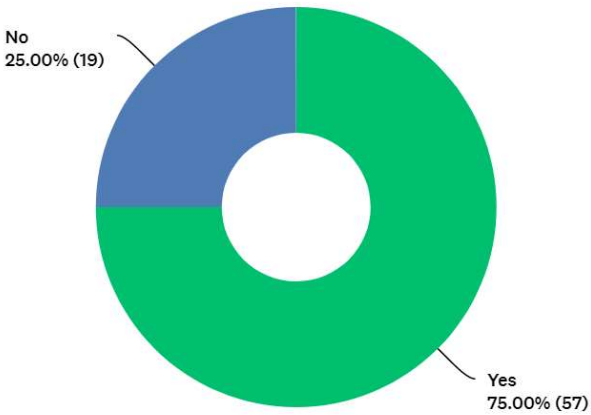
Through the enterprise-wide response to COVID, there were processes and relationships built and fine-tuned that were instrumental to the wildfire response. Lessons learned about things that worked and did not work and were leveraged and applied to the wildfire response. Some examples include the ubiquitous use of ICS forms, the effective integration of a wide range of new partners, and the development of regular, detailed situation reports. In fact, many COVID-19 support activities in place and active as fire season approached, so partners were already in disaster mode and there was no "warm up" period needed for the wildfires. Combined with strengthened connections, clear roles and deference to expertise, this allowed for a more effective overall response to this unprecedented event.

In multiple surveys, responders were asked to share their perspective on how prepared state agencies were to support fire response and how COVID-19 affected preparedness. As shown below, most felt more prepared or similarly prepared as compared to previous years. A much smaller percentage felt less prepared.

**Question**: Compared to previous years, how prepared were state agencies to support fire response? (**75 responses**)




**Question**: Was state agency preparedness different from previous years due to COVID-19? (**76 responses**)



Observations from those that felt more prepared include:

- Earlier coordination on prevention and coordination due to the wind event
- More communication and planning for large fire event suppression
- Components of the fire protection system were adjusted to meet Oregon's COVID and Wildfire Response
- There was better communication between Emergency Support Function (ESF) partners as a result of the coordination, collaboration, and response to COVID-19
- Practice in conducting virtual work; more work done via email, phone calls, video conference platforms
- The state had a better understanding of how to team with the FEMA Incident Management Assistance Team (IMAT) and federal partners
- Personal Protective Equipment (PPE) requirements and use
- Organization underneath Incident Command System (ICS) for our section, FEMA presence

Observations from those that felt less prepared include:

- Agencies that routinely respond to these events were ready, but auxiliary entities that got pulled into it were not prepared, which complicated the response
- Less available staff and time due to two simultaneous emergencies
- Larger and different event type than usual, while COVID is still on-going
- Wildland fire has been in the wilderness setting, yet the September 2020 fires brought it the urban setting; damage assessments were a critical even while active fire was going

## 4. Wildland Fire Response

The 2020 fire season was well underway in August 2020. Pacific Northwest Coordination Center firefighting resources from Oregon, California and Washington were heavily engaged in seasonal response, stretching resources from each state.

**NWS Red Flag Warning-9/6/20**

- NWS Red Flag Warning for northwest Oregon and southwest Washington starting 11 a.m. Monday (9/7) through 8 p.m. Wednesday (9/9), indicating critical fire conditions.
- Predicting a strong east wind event starting Monday and continuing through at least Tuesday night.
- East winds and dry conditions in late summer historically have resulted in some of northwest Oregon's largest wildfires.

On August 20, Governor Brown issued Executive Order 20-35, proclaiming a statewide State of Emergency due to the imminent threat of wildfire. The proclamation put all state government agencies on notice to provide personnel, equipment, and facilities to support the response to the impacts of the wildfire emergency as requested by ODF and OSFM. ODF exercised Ops Plan Smokey to initiate both ground and aviation National Guard resources. Oregon Health Authority (OHA) is tasked to provide guidance and mitigation assistance related to COVID-19 at wildland fire facilities and camps, emergency shelters, and evacuation

centers. The proclamation authorized requests for assistance through the EMAC. The Oregon Office of Emergency Management (OEM) is designated as the coordinating agency.

In advance of Labor Day weekend, the NWS warned of a potential high-wind event that would exacerbate existing wildfires and would likely ignite more fires due to the dry weather conditions. The high-wind event was expected to start the morning of September 7 and last several days with average sustained winds of 20-30 mph with 50-60 mph gusts. The Governor, ODF, and OSFM prepared to respond to the wildfires, support counties, cities and tribal nations, and minimize the loss of life and property. Due to the potential for expansive wildfires resulting from the wind event, the ECC and the state JIC, activated on September 8 at 0900 to support coordination of the expanded response efforts across the state.

The high winds started in earnest during the late afternoon of September 7. The already burning Lionshead and Beachie Creek fires were exponentially aggravated by the high-wind event and multiple new wildfires ignited across Oregon due to critically hot and dry conditions. Of the dozens of fires that started or were exacerbated throughout the wind event, five grew into megafires (+100,000 acres):

- Archie Creek
- Beachie Creek
- Holiday Farm
- Lionshead
- Riverside


ODF and OSFM leveraged state, regional and national firefighting resources to protect life and property. Between September 7 and September 14 Governor Brown declared emergency conflagrations for 12 fires and declared a statewide emergency conflagration, which allowed the federal government to send requested resources that the state could use to begin combatting the fires more effectively. FEMA pushed resources into Oregon including an IMAT and staffing support to the state ECC.

At the peak of firefighting efforts, there were more than 7,500 personnel from 39 states and five Canadian provinces assigned to fires in Oregon. Many of the fires threatened or crossed the wildland-urban interface, placing over 500,000 Oregonians under some level of evacuation notice. At one-point, the American Red Cross (Red Cross) had 15 open shelters, with almost 2,000 survivors in congregate shelters, and was monitoring nine independent shelters. Additionally,

Red Cross housed 2,210 people in 1,170 hotel rooms. Hundreds of people were originally reported missing and tragically, there were nine confirmed fatalities.

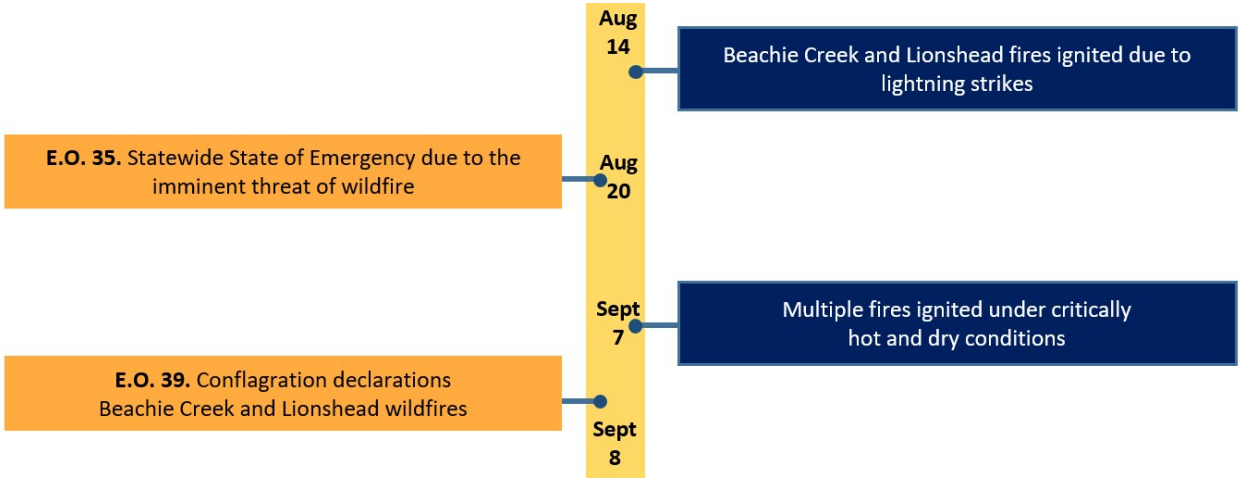
With the increase in acres burned and the number of active wildfires, it became apparent that the response and recovery for this event would be beyond the capability of the state and that other government-based entities. The state recovery specialists worked with FEMA on multiple disaster declaration requests and received a Presidentially-declared Major Disaster Declaration on September 15, 2020. With the help of multiple federal government agencies, forest landowners, contractors and many volunteer-based agencies, Oregon was able to contain the fires – after more than 1 million acres burned – and move fully into the recovery phase. The recovery process began as soon as an area was declared a safe zone.

On September 28, a joint Preliminary Damage Assessment (PDA) was conducted and validated significant damage in nine counties. The Individual Assistance PDA estimated over 4,000 homes destroyed and the Public Assistance PDA estimated costs for this disaster at roughly $380,228,948. Ultimately, there were 172,427 threatened structures that were saved, with an estimated value of $43,463,314,807.

## Emergency Authorities

In addition to the statewide emergency declaration on August 20, 2020 (E.O. 20-35) due to the imminent threat of wildfire, Governor Brown declared emergency conflagrations for 12 fires during September (Figure 5). On September 9th, 2020, Governor Brown issued an emergency conflagration for the entire state (E.O. 41-20).

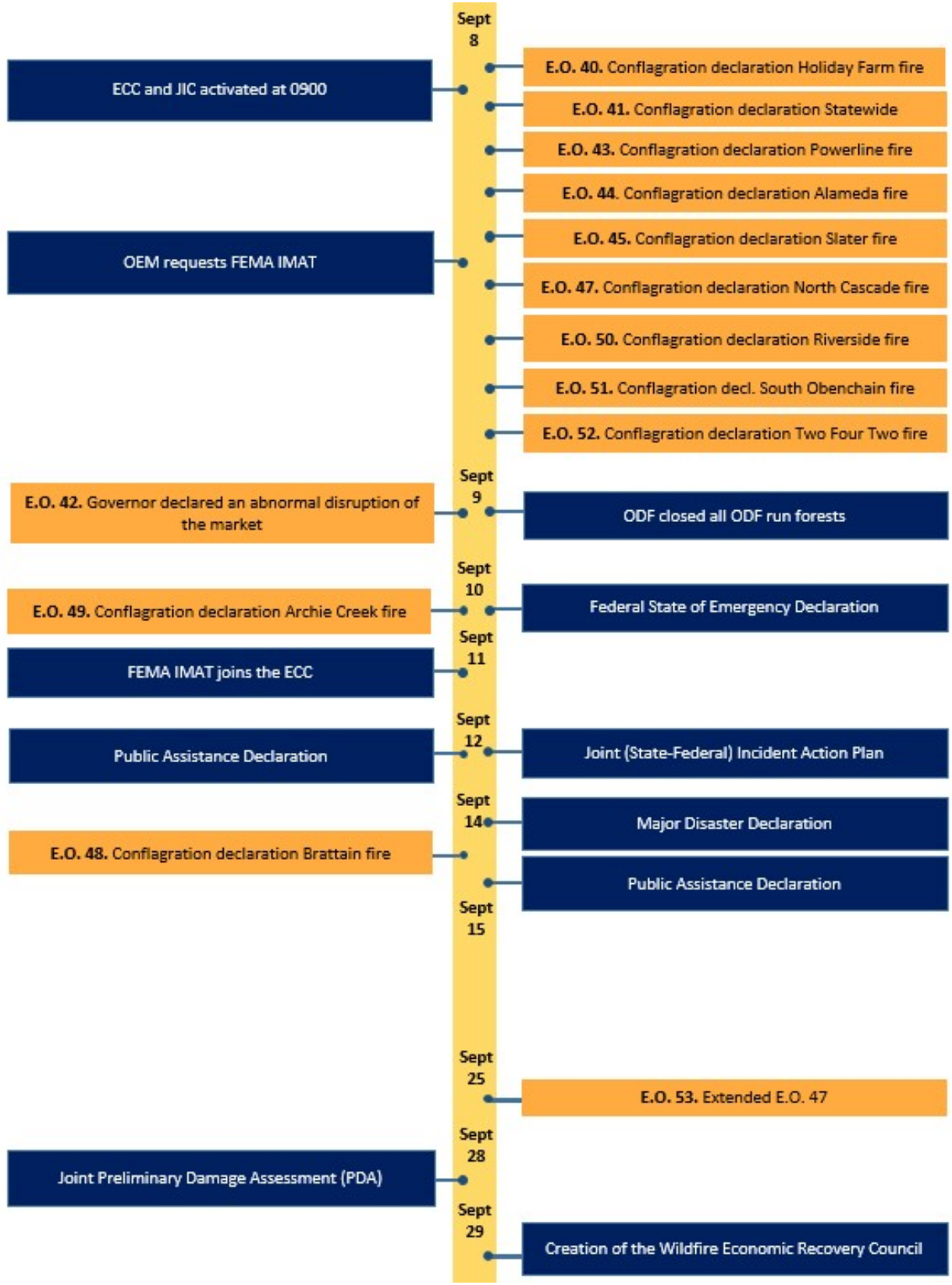
**Figure 5.**[2]




*Timeline continues on next page.*

[2] Executive Orders are listed on the dates where verbal proclamation was given by the Governor. Signed Executive Orders documenting the Conflagration declaration often came days or weeks later.

**Figure 5 (continued).**



# Emergency Coordination Center

## ECC Staffing and Support

Due to the ongoing response to the COVID-19 pandemic, the transition to supporting and coordinating the dramatically expanded state response to the wildfires was relatively seamless. Interagency communication was already occurring, in particular via virtual platforms, and to a degree not seen in previous ECC activations.

An ongoing challenge for ECC activation is existing OEM staffing levels not allowing for the complete staffing of the ICS structure. In these instances, critical ICS positions are filled by personnel from partner agencies. OEM's organic staffing levels did create a cap to ICS system scaling, limiting their ability to fully support this rapidly expanding incident without outside assistance. From the start, the state coordination capability is at a disadvantage with their limited capacity to pull from within to expand the management structure to meet the needs of the incident.

ECC staff reported excellent coordination with the Governor's office and other state executive officials and were empowered to execute their primary coordination functions. The ECC reported good connectivity to ODF and OSFM, as well as the Red Cross. ESF support staff operated from the ECC as well as virtually, with most acknowledging that in person coordination is ultimately more collaborative and efficient. Many ESF positions still lack staffing depth, with some seating only one person. The inability to fill a position in shifts creates added stress and exhaustion for those supporting ECC operations over multiple shifts.

## Facility

To accommodate large number of state agency representatives and adhere to COVID-19 protocols, OEM used the dedicated ECC space as well as other space within the building. Making this work required a high degree of creativity and flexibility. Some supporting agencies executed from their Agency Operation Centers (AOC), which reduced the need for physical presence in the ECC. While the Department of Public Safety Standards and Training (DPSST) campus was utilized to support the expanded COVID-19 enterprise response, relocation to DPSST was not considered an option since that facility was supporting ongoing training for the fire response.

Those use to operating out of the ECC found the space adequate, but other agency and partners found the facility inadequate follow COVID-19 protocols with the large number of people engaged in state coordination and response to major incidents. The state should strongly consider developing a space that is sized and equipped to support major incidents.

## Technology

The ECC relies on Ops Center software to manage requests for assistance from local jurisdictions. In less dynamic, smaller incidents that system is sufficient to support the receipt, validation, approval, and processing of requests. In the wildfires, coordination and work flow

for ECC supporting agencies was impeded by Ops Centers' lack of collaborative functionality and stove-piped information sharing. The technology bright spot was the appreciated use of Geographic Information System (GIS) platforms and the dedicated support of the GIS professionals managing those system.

Any plans for an expanded space as noted above, should include integration of adequate information and data technology hardware, software, training, and organic subject matter expert support.

## Critical Infrastructure Branch

The Critical Infrastructure Branch was largely successful in developing, analyzing and providing actionable intelligence to state and local decision-makers. Numerous major Critical Infrastructure/Key Resources (CIKR) sites were protected as a result of this work. The Lifeline reporting format was particularly helpful in supporting critical decision-making regarding the prioritization of threatened CIKR sites.

Despite many major successes in protection, several sites were lost due to the speed, intensity, and breadth of wildfire activity across the state. Another challenge was the difficulty in creating an effective, timely feedback system from field decision-makers back to the Infrastructure Branch.

## Integration of Federal Partners

The integration of federal partners into state coordination efforts was largely successful. The many pre-existing relationships among state and federal officials across numerous disciplines allowed for a rapid integration process. In particular, the assistance provided by the FEMA IMAT team and FEMA Integration Team (FIT) were noted as an essential component in the success of the ECC's efforts.

Despite these successes, there was some confusion and resulting challenges related to the terminology and understanding of the role of the ECC – Emergency Coordination Center vs. Emergency Operations Center. This seemingly minor nomenclature difference reinforces the need to structure systems and operations within the well-established National Response Framework, the National Incident Management System and the Incident Command System to avoid confusion as staffing is augmented with people from other states.

## EMAC Support

The many resources received through the EMAC process were essential in the state's coordination and response efforts. EMAC resources filled a number of essential ICS positions in the ECC and were critical in the operationalization of the Recovery Plan. There were 35 missions/positions filled using EMAC resources from 15 states. This included urban-wildland interface fighting assets, more than 20 ECC staffing positions, and communications equipment. As noted above, there was some initial, and avoidable, confusion over Oregon's ECC

terminology and structure and other state's EOC terminology and structure for deployed resources.

### Incorporation of Unique Assets into the Response

As the incident developed, a plan was successfully executed to consolidate all mass fatality management functions into a single mobile morgue unit. The unit's tasking included the identification of deceased individuals, coordination of family notification and reunification of remains, and accurate mortality data reporting. This was the first deployment of this resource, an asset of the State Medical Examiner, to a real-world incident.

Two other unique resources that provided essential support included the deployment of the Civil Air Patrol and the Strategic Technology Reserve. The Civil Air Patrol brought in handheld communications equipment and flew missions to capture aerial imagery to support critical infrastructure decision making. This was especially helpful for the ESF 12 assessment of hazardous trees and determining which areas should be prioritized for hazardous tree removal. The Strategic Technology Reserve is 12 trailers with deployable communications equipment. Unfortunately, maintenance of the equipment was not sufficient, requiring all software to be updated before deployment.

## Alert and Warning

Alert and Warning systems are a critical component of community preparedness and emergency response. For events with warning, community members need to hear about potential threats and take action to prepare in case that threat becomes reality. Those in the response community need to act on warning information to get response systems activated, organize resources (e.g., people, places and things), and establish communication and coordination with partners.

### Notification of Potential Event

A majority of survey responders indicated that they were notified of the impending wind event and the potential for the rapid spread of wildfires. The notifications came from multiple sources including:

- Weather services
- News outlets
- Local governments
- State government
- Federal government
- Work communications

The majority of respondents found that the pre-fire notifications and the shared information were both timely and accurate.

**Notification Mechanisms:**
Survey respondents received warnings about the wind event in many ways:

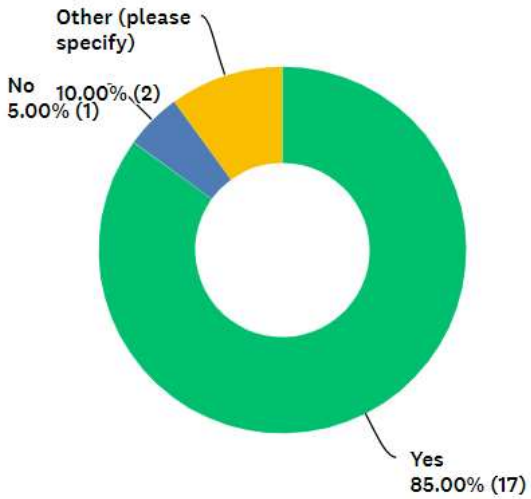
- Text Alert
- Email
- Direct Phone Call
- Scheduled Coordination Calls
- News Outlets
- In-person Communication

## Community Warning Systems

Wildfires have the potential to move and shift quickly based on terrain, fuel, and weather factors. Communities need to warn residents when immediate action is needed for public safety. The majority of responders to the local and tribal survey indicated they have an alert and warning system, but some indicated it only reaches parts of the community.

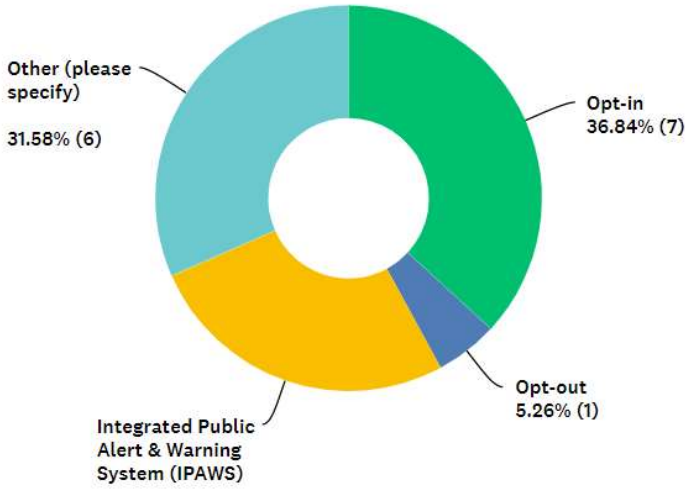
**Local and Tribal Survey**

**Question**: Does your community have an emergency alert and warning system?
(**20 responses**)




**Local and Tribal Survey**

**Question**: What type of system is it?
(**19 responses**)

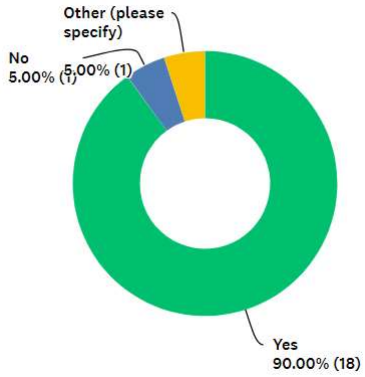
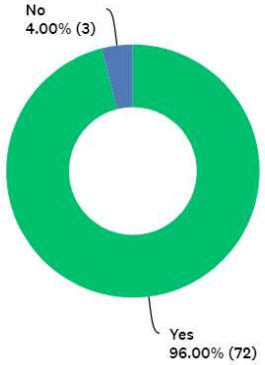



Most are opt-in systems requiring a resident to actively sign-up to receive messaging and the patchwork of phone services from landlines to cellular services creates a less than comprehensive system for warning communities about approaching danger.

In many areas the wildfires damaged or destroyed communications infrastructure relied on by alerting systems for delivering messages. Some cellular communications towers were completely destroyed; some lost power and relied on generators to continue running leading to refueling challenges. In one area, the central office for the phone company was lost to the fire,

eliminating landline phones as well. All these factors contributed to varying degrees of success in getting emergency messaging out to threatened communities.

Recognizing a multi-layered, multi-nodal system for community notification improves the odds of providing accurate information to people in a timely manner, survey responders were asked if there is a role for the state providing alerts and warnings to localities and tribal nations.

| **Question**: In your opinion, is there a role for the state in city, county, or tribal alerts and warnings? | **Local and Tribal Survey Responders (20 Responses)** | **State ECC Agencies and Partners Survey Responders (75 Responses)** |
|---|---|---|
| |  |  |

An overwhelming majority of respondents agreed there is a role for the state. Explanations for supporting this perspective include:

- Needs to be there as a backup in case of failure at the local, city, county, and tribal level
- Having multiple notifications is NOT a bad thing, and helps to cut down on failure
- Overall coordination and resource availability
- Consistent messaging
- All levels of government need to be involved and coordinated
- Include non-governmental organizations (NGOs) to ensure communication to underserved populations

There is a recognized tension between the role of the state in community notification and home rule authority. The respondents offered these cautions:

- Local jurisdictions have the authority and capability for alerts and warnings
- There is a role for the state is providing access to alert and warning capabilities, so all jurisdictions have access, but not in determining or sending alerts and warnings

Survey responders suggested capabilities related to alerts and warnings that are currently lacking, but would be desirable include the following:

- Statewide or state contract for an alert and warning system (current OR-Alert effort)
- Backup alert and warning point in the event of local system degradation/disruption
- Funding to enable other notification systems such as sirens and or speakers

- State involvement in problem solving around wildfire and rural residents where; planning on how to alert everyone
- Accurate translation
- A page that shows all active alerts in the state so better coordination can be made.
- Statewide system that all Counties use. The state SHOULD NOT initiate warnings in Counties unless requested or coordinated with the County
- A mandatory system for all citizens that is multifunctional for numerous types of disasters and can also provide verbal warnings in different languages.

Coming out of the 2020 wildfire season, the Statewide Interoperability Coordinator (SWIC) has procured a system to help fill the gap in alerting and early warning. As that systems is established and brought online, collaborative evaluation with state, tribal, county and city partners should be pursued to clearly outline how this system can and should be deployed to support community resilience.

## Support to Tribal Nations and Local Jurisdictions

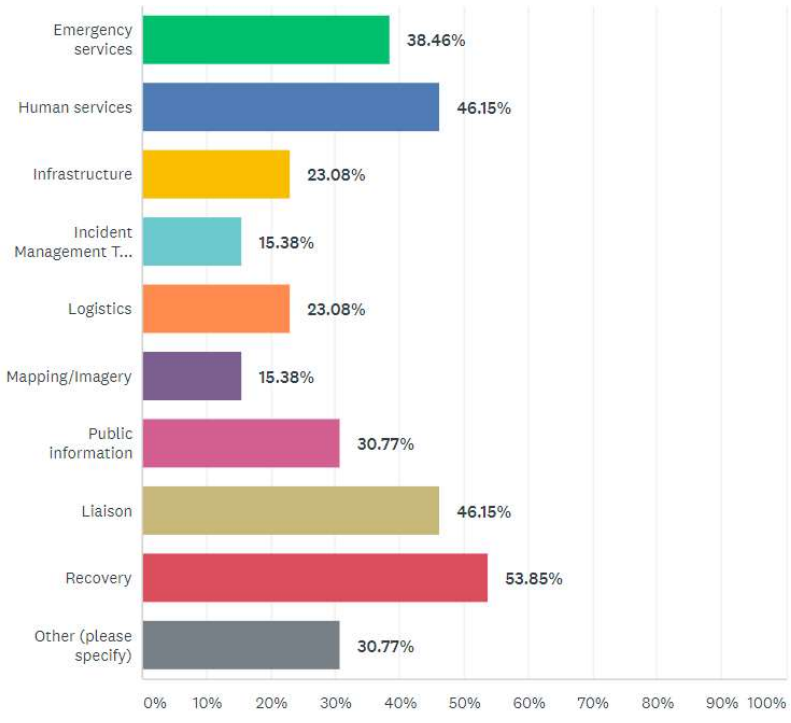
The state was effective in providing support to tribal nations and local jurisdictions. Counties knew that resources within the state were limited; the challenge of limited firefighting resources across the northwest region was addressed as well as possible. If resources could be moved into an affected area, they were. The use of EMAC and the FEMA IMAT worked very well. The state communications operations was able to take some of the burden off local emergency managers and county public information officers by handling some media questions and legislative inquiries. Sending OEM folk out into affected communities as liaisons helped establish connections and relationships with communities continues to improve.

The ECC established coordination calls for affected communities, which provided the counties and tribes had a place to report out for their communities and obtain answers to pending questions or concerns. At the request of local communities, the calls started with updates from tribes and counties and then state agencies, which was appreciated.

*(Graph on next page.)*

**Local and Tribal Survey**

**Question**: What type of support did your community request from the state?
(**13 responses**)




## Mass Care Operations

The September fires were easily one of the greatest tests of Oregon's mass care systems to date, particularly given the concurrent threat from a highly transmissible viral contagion. Despite the many COVID-19 related risks and challenges, many partners in mass care were already aligned and working well together as the wildfire threat emerged. The primary agencies for mass care efforts were the Oregon Department of Human Services (DHS) and the American Red Cross for immediate response efforts, and the Department of Housing and Community Services (DHCS) for initial recovery planning and mid- to longer-term housing support needs. There were significant challenges in mass care support including lack of situational awareness and communications. This was exacerbated by lack of expertise and a large-scale mass care event in a global pandemic. All these challenges were magnified by the fact that this fire and wind event was an unprecedented in scope, scale, speed and intensity.

Recent staffing changes at DHS, including losing the state Mass Care Lead, created a gap in disaster response-related institutional knowledge, and challenges connecting with mass care operational partners with subject matter expertise. There was strong coordination between the Red Cross and ECC leadership including discussions ahead of the September events related to planning for non-congregate sheltering options because of the COVID environment. The Red Cross had meetings and discussions around how to shelter in a COVID environment, studied the FEMA Public Assistance Non-Congregate Sheltering policy, and agreed upon Temporary Evacuation Points as the first evacuation point. The adaptation of non-congregant sheltering protocols had been addressed in a statewide OEM/ODHS sponsored call with County Emergency Managers in June 2020.

During the incident, however, real time information sharing was limited which affected situational awareness specifically around transitioning from response to recovery. Many of the processes to support the information needs of different entities with responsibility or interest in the safety and welfare of the sheltered population and the mass care needs of residents in impacted communities were not in place. ODHS had identified many lessons learned through their supporting role in the state's COVID non-congregate isolation and quarantine overflow sheltering but the timing of the disaster did not allow integration of those lessons into the existing ESF 6 strategies.

**Perspective:**
In response to a local request, McIver State Park was made available to shelter evacuees in recreational vehicles and trailers. The state provided services including black/grey water dumping service, overnight security, and the park rangers coordinated site reservations and managed the evacuees at the park.

Additionally, the timing of the disaster was such that the Red Cross lessons learned for implementing non-congregate sheltering in a federally declared disaster from events in other parts of the country had not yet been integrated into the plans for mass care service at the state level. These factors, as well as animal sheltering, added additional layers of complexity on a disaster that would have strained the statewide capability for mass care under normal circumstances.

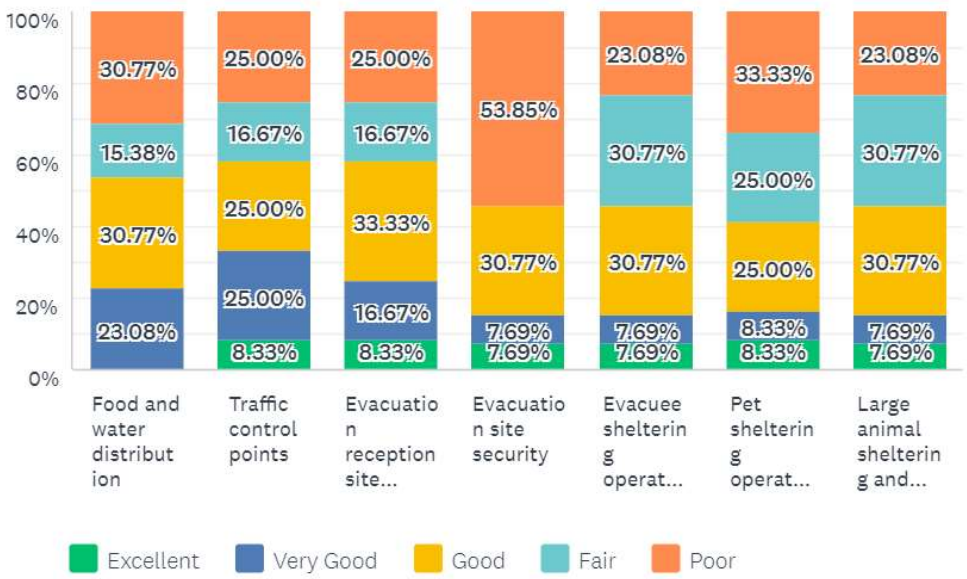
Mass Care partners were stretched thin working to connect with local, tribal jurisdictions and state level operations. As federal resources and commodities were brought in, DHS was challenged to receive, integrate, and distribute those assets. Externally from business partners, like motels, there was a lack of clarity around which Mass Care partner was meant to pay for accommodations.

In the review survey, survey responders from the local and tribal level evaluated the state supported mass care operations more negatively than ECC agency and response partner survey responders. While survey responses do not represent comparative sample sizes across the two surveys, it is important to acknowledge areas where assessments are most different, like evacuation site security.

**Local and Tribal Survey**

**Question**: How do you evaluate the following state-supported mass care operations?

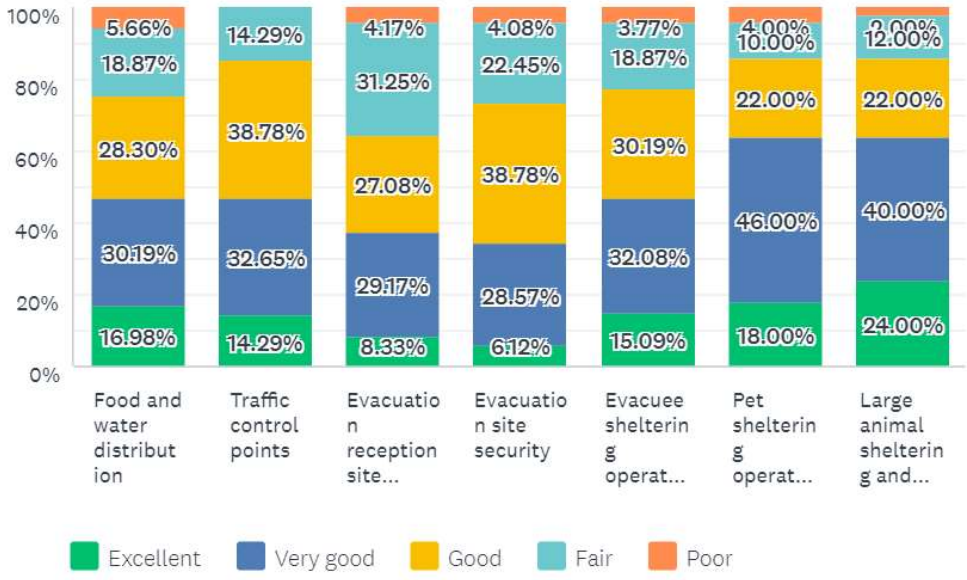
(**14 responses**)




**ECC Agencies and Partners Survey**

**Question**: How do you evaluate the following state-supported mass care operations

(**57 responses**)




Overall, though it was one of the most challenging mass care responses to date, thousands of Oregonians were taken care of, multi-agency partnerships were forged and strengthened, and creative solutions were developed under extreme and pressing conditions including activating Travel Oregon and their network to leverage local hotel owners through the Mass Care response.

## Joint Information Center

The JIC was activated on September 8, 2020 at O900 with existing OEM staff. In the initial stages of the incident, the JIC established a practice of regular communications and coordination with the Governor's Director of Communications as well as with key stakeholders including Oregon State Police (OSP), ODF, and OSFM. FEMA was integrated into these calls early

on. Initial press briefings occurred on a daily basis alongside staff from the Governor's Office and coordinated with the Governor's assigned press contingent. One example that highlights the level of cooperation between the JIC and the executive communications team was the receipt of the Governor's draft remarks by the JIC prior to the regularly scheduled press conferences.

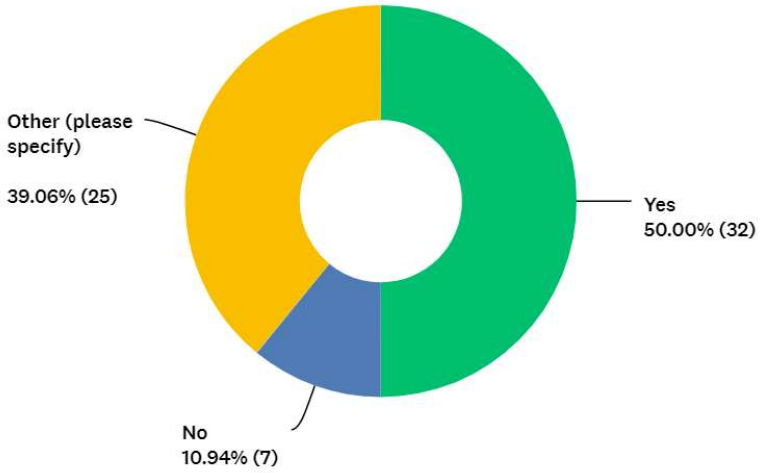
JIC staff participated in twice-daily ECC coordination calls. These calls eventually transitioned to once per day with JIC staff representing ESF14. As the incident progressed and JIC operations expanded, attempts were made to acquire additional state agency resources through the emergency public information collaborative (EPIC) system. However, these attempts were largely unsuccessful due to partner agencies being "tapped out." At this point, requests for JIC staffing resources were pushed through EMAC pathways. A legislative liaison was established early in the incident that provided a stabilizing connection between the JIC and legislators. As incident activity diminished over time, regular legislative briefings occurred.

JIC staff worked to incorporate equity consideration into messaging and outreach methods during wildfire response. Local and tribal responders to the assessment survey recognized outreach to communities of color, people with disabilities, people with limited English proficiency or limited literacy, and people experiencing homelessness. Those with technology limitations were identified as a group potentially missed by public information efforts. It is recognized that more work needs to be done to get accurate messaging out quickly in a variety of languages, through a variety of culturally relevant formats and media outlets. Partnering with trusted community leaders, trusted stakeholders and community-based organizations.

**ECC Agencies and Partners Survey**

**Question**: Was the state of Oregon's communication inclusive of all Oregonians?

**(64 responses)**




## 5. Initial Recovery

At the onset of the fire response, OEM designated the State Disaster Recovery Coordinator to begin strategizing and coordinating to start recovery operations. The initial focus was on

preparing federal declaration requests for the Governor to submit to FEMA. This includes the emergency declaration, major disaster declaration, public assistance declarations, and then individual assistance declarations. The recovery coordinator huddled with FEMA staff to get those requests crafted and submitted as quickly as possible. One challenge became clear quickly – existing damage assessment processes and reporting tools do not provide quick, consistent damage assessment information that is essential to declaration requests. There is no common tool for collecting damage assessment and an expansive incident like the wildfires magnified the damage assessment challenges.

The September 2020 wildfires was the first-time recovery needs were widespread enough to require the state to facilitate and coordinate recovery across Oregon. The State Disaster Recovery Coordinator brought in planners through EMAC to turn the 2018 Oregon Disaster Recovery Plan into an integrated action plan. The planners brought in using EMAC allowed the Disaster Recovery Coordinator focused on declarations, as they worked on teeing up recovery operations.

Short-term recovery focuses on stabilizing communities[3]. This phase of recovery addresses health and safety needs beyond rescue, the assessment of damages and needs, the prioritization and restoration of basic infrastructure, and the mobilization of recovery organizations and resources.

**Short-term Recovery Goals and Objectives:**
**Focus**: Stabilizing
**Timeline**: Up to one month
Short-term recovery activities may include:

- Mass care and sheltering.
- Removal of debris on primary transportation routes.
- Supporting businesses with temporary infrastructure.
- Providing ongoing surveillance and response to the public health impacts of a disaster.
- Identifying those in need of emotional/psychological support.
- Providing emergency and temporary medical care
- Assessing and understanding risks and vulnerabilities to mitigate impacts.

Short-term recovery activities are guided by the state EOP and coordinated through the state Emergency Coordination Center.

## Recovery Missions

- September 16, Oregon's request for a major disaster declaration was received, and affected residents were able to begin applying for disaster assistance
- September 22, FEMA approved more than 1,000 one-time $500 payments in assistance through the Critical Needs Assistance program
- September 23, Housing Taskforce established with a focus on temporary housing solutions while examining long-term options for residents displaced by the fires. Debris Management Taskforce established (led by the Oregon Office of Emergency Management, Department of Environmental Quality and the Department of Transportation). In coordination with federal partners, this team worked with counties to develop and

[3] Section 2.3.2, Oregon Disaster Recovery Plan, March 2018

implement processes for large-scale assessment and removal of household hazardous waste and debris.

- September 24, Jackson County, in partnership with local cities and the Medford School District, opened a Multi-Agency Resource Center to assist survivors of the Alameda and Obenchain fires.
- September 26, The Oregon Employment Department launched Disaster Unemployment Assistance, providing financial support to people whose ability to work has changed due to the wildfires. (Eligible counties: Clackamas, Douglas, Jackson, Klamath, Lane, Lincoln, Linn and Marion)
- September 28, U.S. Small Business Administration assistance launches
- September 30, The Oregon Law Center launched a series of tools to help renters navigate next steps, end rental agreements, and apply for assistance.

## Recovery Plan Roles and Responsibilities

| Section | Coordinating Agency/Team |
|---|---|
| Basic Plan | Office of Emergency Management |
| **State Recovery Functions** | |
| SRF 1 - Community Planning and Capacity Building | Oregon Department of Land Conservation and Development |
| SRF 2 - Economic Recovery | Business Oregon |
| SRF 3 - Health Services | Oregon Health Authority |
| SRF 4 - Social Services | Oregon Department of Human Services |
| SRF 5 - Disaster Housing | Oregon Housing and Community Services |
| SRF 6 - Infrastructure Systems | Oregon Department of Administrative Services; Oregon Department of Energy; Oregon Department of Transportation; Public Utility Commission of Oregon |
| SRF 7 - Natural and Cultural Resources | Oregon Department of Environmental Quality |

Based on feedback gathered, it was clear that response operation staff (specifically OEM) leaned forward in their posture towards recovery during the initial response phase, but the transition was challenging for ESFs that had concurrent response and recovery responsibilities. While the Disaster Recovery Framework was a great jumping off point, this was the first time that a large scale, multijurisdictional, recovery effort was launched since the creation of this plan. Some state agencies understood their roles and how to navigate the transition, but others

only knew that they were named in the plan and not how they were supposed to execute their leadership or support roles. From the federal to local level, there was a resounding agreement that staffing challenges were a key gap.

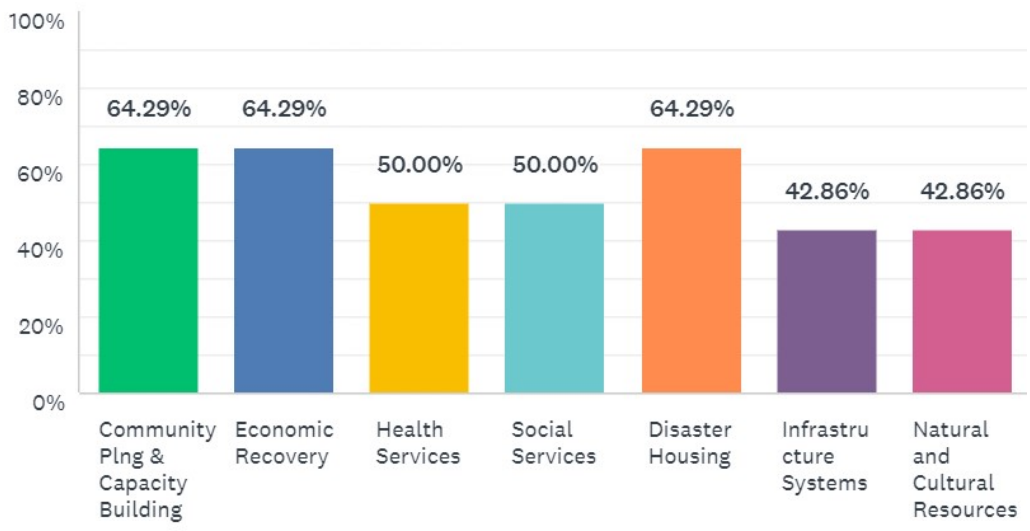
On September 29, Governor Brown announced the formation of the Wildfire Economic Recovery Council, which was then convened on October 5, 2020. The Council's aim is to build a roadmap for recovering and rebuilding from the 2020 wildfires. The Council is comprised of more than 40 leaders from across the state, including elected officials, business and nonprofit representatives, philanthropy community leaders, tribal leaders, federal representatives, state agencies, and the Governor's office. The Council is co-chaired by the State Treasurer and Labor Commissioner and an appointed Wildfire Recovery Director within the Governor's Office manages the Council. On January 4, 2021, the Council released their draft Key Findings and Recommendations report[4].

At the local level, the survey showed that Community Planning and Capacity Building, Economic Recovery, and Disaster Housing are the most commonly active recovery functions, but all recovery functions were noted as being in play.

**Local and Tribal Survey**

**Question**: What recovery functions are active in your community? (Select all that apply)

(**14 responses**)

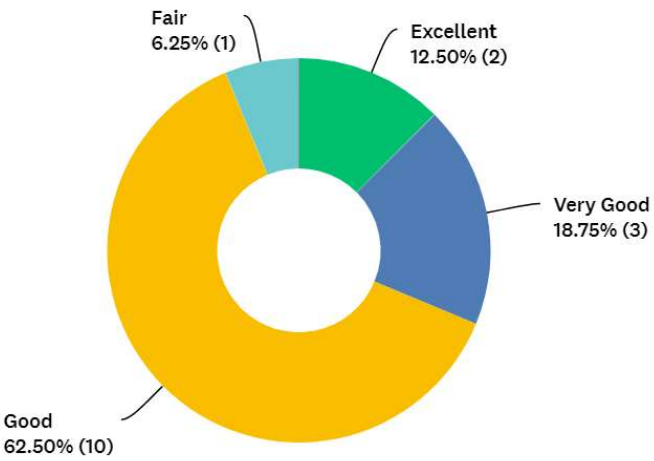



Recovery efforts of this magnitude are new at the local and tribal level as well, so guidance from state and federal partners greatly influenced perceptions on how the process was unfolding. Local and tribal survey respondents rated the quality of recovery support positively. The number of people that answered this question is small, but it is good that none rated the support as poor and only one rated it as fair.

[4] https://www.oregon.gov/gov/policy/Documents/WERC-2020/Jan042021-DRAFT-Wildfire-Economic-Recovery-Council-Report.pdf

**Local and Tribal Survey**

**Question**: In your opinion, what quality of support are state and federal agencies providing on recovery missions.
(**16 responses**)




### Recovery Information Center

Transition to the Recovery Information Center (RIC) was relatively smooth. Response efforts were still active in some geographies when initial recovery began. Though the JIC became smaller as part of its move to becoming a RIC, it benefitted from the ability to hire temporary subject matter experts to support RIC operations. Cross-agency knowledge was able to be leveraged through creative job-sharing efforts, and embedding public information officers into different State Recovery Function groups.

## 6. Capabilities Analysis

The National Response Framework[5] outlines core capabilities that are the activities that generally must be accomplished in incident response. No core capability is the responsibility of any one party or single level of government and interdependencies exist among many of the core capabilities. Organizing observations from an after-action review by the associated core capability helps link identified strengths, opportunities, and recommendations for improvement to national guidance and helps track progress through incidents and exercises over time. The categories listed below were selected as areas of evaluation to organize identified strengths and areas for improvement for enterprise response to the Wildland fires of September 2020:

- Planning
- Public Information and Warning
- Operational Coordination
- Fire Management and Suppression
- Mass Search and Rescue Operations
- Fatality Management Services

[5] There are 15 core capabilities aligned with the Response mission area. https://www.ready.gov/sites/default/files/2019-06/national_response_framework.pdf

- Infrastructure Systems
- Mass Care Services
- Operational Communication
- Recovery[6]

## PLANNING

Conduct a systematic process engaging the whole community as appropriate in the development of executable strategic, operational, and/or tactical-level approaches to meet defined objectives.

### STRENGTHS

➔ **Firefighting Response Planned for and Practiced**

**Analysis**: Wildfire is a known and recurring threat across Oregon, and the September 2020 collection of fires was extraordinary. Burdened by resource limitations from surrounding state partners, ODF and OSFM supported and augmented district firefighting resources using all available options. The Governor's Conflagration declarations authorized engagement of expanded resource options from across state agencies as well as national and international assets. Preparation for fire season – planning, training, exercising, coordination with partners, etc. – established the foundation for an overall successful response.

### AREAS FOR IMPROVEMENT

➔ **ICS/ESF Integration**

**Analysis**: The struggle to understand the overlay of ICS on the ESF organizing structure for ECC operations continues. Many people staffing ESF positions are rarely activated to support ECC operations, therefore struggle to integrate into the NIMS-ICS structure and the planning process. They may have had the training, but have never really engaged in a structured planning process ('the Planning P'). Those well-versed in ICS can interpret this as resistance to ICS when in reality, it's often the non-public safety person's first time actually working in a fully functioning incident management ICS structure. In these circumstances, the ESF folks will often, predictably and completely understandably, revert to their normal day-to-day ways of doing business. This dynamic is exacerbated in the COVID environment, with many supporting ECC operations remotely.

[6] The Recovery mission area includes five core capabilities.
https://www.fema.gov/emergency-managers/national-preparedness/frameworks/recovery

**Recommendation**: To combat this challenge, consider developing just-in-time training that can be deployed if ECC activation is anticipated, or immediately after activation to reinforce the temporary management structures, roles and responsibilities in the ECC.

➔ **Coordination vs. Operations**

**Analysis**: Larger incidents like the September wildfires reveal to need for state emergency management to be organized for operations, not simply coordination. When local and tribal jurisdictions are overwhelmed by an incident, their ability to voice their needs for support are diminished; there are simply too many demands to articulate. The state must be organized and trained to take on much more of the burden of executing response activities. The current posture is insufficient to manage statewide incidents.

**Recommendation**: The state should establish a workgroup to outline what a shift from the coordination posture to an operations posture requires. This includes, but is not limited to, assessment of authorities, policies, processes, reporting structures, staffing, spaces, technology, and equipment. Once outlined, the scope of work and timeline for implementation should be defined and put into action.

## PUBLIC INFORMATION AND WARNING

Deliver coordinated, prompt, reliable, and actionable information to the whole community through the use of clear, consistent, accessible, and culturally and linguistically appropriate methods to effectively relay information regarding any threat or hazard, as well as the actions being taken and the assistance being made available, as appropriate.

### STRENGTHS

➔ **NWS Warning**

**Analysis**: Early identification of the wind threat, assessment of the potential amplification of fire risk, and communication to state and local partners enabled the local and state emergency management systems to lean into the response and provide significant support to local and state firefighting resources.

➔ **State JIC Activation**

**Analysis**: State JIC operations began within 24 hours of incident onset using existing OEM staff. JIC staffing was augmented with state and local public information specialists, as well as contracted staffing. In the initial stages of the incident, the JIC established a practice of regular communication and coordination with the

Governor's Office and key stakeholders. Overall, JIC leadership felt empowered by the Governor's Office and OEM leadership to carry the communication mission, and were equally satisfied with the resources available to support them. The state JIC worked to amplify local messaging, but often found smaller communities too overwhelmed and filled the gap to push out information.

**Opportunity**: Continue building linkages with state and local public information officers to build collaborative relationships. Work to ensure smaller fires are reflected in outreach information as well.

➔ **Use of GIS**

**Analysis**: The ESRI ArcGIS platform and GIS staff provided excellent support to public information efforts. GIS staff used a Story Map template and an established SOP developed in previous fire incidents. This was leveraged for the September fires and by JIC staff relied on the outputs to support their messaging.

➔ **Outreach Equity**

**Analysis**: The is increased awareness among OEM staff to the wide variety and complexity of vulnerable communities, including language, culture, homelessness, mental health challenges, and so on. Significant efforts were made to communicate with Black, Indigenous, and Persons of Color (BIPOC) communities and other at-risk populations through translation services, social media, and radio. The JIC leveraged diversity and equity teams from DHS and OHS, and then hired a specialist to support English/Spanish translation.

**Opportunity**: JIC equity planning should continue to build on improvements realized through the COVID-19 and wildfire responses of 2020. This includes assessing outreach successes and failures, then working to fill identified gaps.

## AREAS FOR IMPROVEMENT

➔ **Notification System Failures**

**Analysis**: Community alert and warning systems are a locally controlled service. There are multiple systems with varied capabilities to reach community members. The heavy majority are opt-in systems relying on individuals to sign up to receive alerts. To work, all phone and text systems rely on communication towers to be intact and powered. Some communication towers were lost to fire, rendering some systems inoperable. Each community needs to evaluate fire notifications to determine if messages were sent out and received; if there were problems the root source needs to be identified.

**Recommendation**: The most perfect system has the potential for technological failure, so multiple layers of notification system options increase the chance that an individual will hear of a threat and respond accordingly. There is strong support for the state having a role in local and tribal notifications; home rule authorities are raised as concerns. Exploration of state supported systems, lower tech options, and no-tech options should also be explored, especially for more rural areas frequently threatened by wildland fires.

➔ **IPAWS Support to Locals**

**Analysis**: One locality "contacted OERS" with a request to get an IPAWS alert out but was advised to submit the request in Ops Center. The fire was moving so fast, that by the time it would take for an OpsCenter request to go through it would have been too late.

**Recommendation**: If the state does establish a role supporting notifications to local and tribal communities, clear protocols and training should be established to avoid any delays in issuing notifications. Alert and warning responsibility cannot be held hostage to internal process.

➔ **Lead Agency Incorporation into the JIC**

**Analysis**: State JIC operations were successful in sharing and amplifying accurate and timely information to communities threatened by or affected by the fires. However, ODF communications staff were not folded into the state JIC. Fire communications specialists continued to operate independently, echoing the JIC disconnect between OHA communications and the state JIC from the early COVID-19 response.

**Recommendation**: Convene a planning meeting with agency communications staff to examine how recent state JIC activations have not succeeded in folding in Lead Agency personnel. Identify the road blocks to effective collaboration and support of Lead Agencies. If necessary, adjust job aides and checklists to reinforce mechanisms to establish a unified JIC.

➔ **Outreach Equity**

**Analysis**: While greatly improved, the ability for incident outreach to support the most vulnerable needs additional work. For example, seasonal farmworkers were at extreme risk if working in agricultural areas not just from the fire, but from the days and weeks of wildfire smoke that made outside working conditions hazardous. It is not clear if this population was adequately informed or communicated with about fire and smoke risks.

**Recommendation**: More relationship building with community-based organization, partnerships in message development and distribution, and establishment of feedback channels to allow JIC staff to gauge where messages are reaching and where additional focus is needed.

**Recommendation**: Explore options for adding public information specialists with additional language skills or how to embed other language speakers into the JIC to be present as messaging is developed.

**Recommendation**: Develop specific plans for communications with vulnerable communities. This planning effort should focus on identifying available resources and establishing mechanisms to engage these resources to support emergency response. This effort would be most successful if established with a state agency-wide perspective and will likely require a full-time position.

## OPERATIONAL COORDINATION

Establish and maintain a unified and coordinated operational structure and process that appropriately integrates all critical stakeholders and supports the execution of core capabilities.

### STRENGTHS

➔ **ECC Activation**

**Analysis**: Acting on threat warnings from the National Weather Service, and in coordination with ODF and OSFM, the ECC activated to support response to the wildfires. Often, wildfire response does not require the support provided by the ECC. With this threat, it was clear that a broad expansion of fire activity would require significant state support. The ECC capability to support fire response has improved each year due to major fires every year since 2013. ODF and OSFM as primary agencies for ESF 4 and the Lead Agencies in fire incidents are very strong leads. Even with this year's large-scale incidents, the fundamental ECC organization effectively engaged supporting ESFs and functioned very well.

➔ **Federal Partner Integration**

**Analysis**: The Oregon FIT, FEMA Region X, DHS CISA, and other federal resources were proactive and integrated very well. The FEMA presence was critically important in assisting with declaration requests, which brought in resources and funding, and facilitating the transition from response and recovery. Federal deployable teams were requested and engaged, many for the first time in Oregon. FEMA staff were

noted to be excellent problem solvers able to get resources moving more quickly than expected.

➔ **Improved Relationships and ECC Role Knowledge**

**Analysis**: ECC operations were more coordinated and effective when compared to the COVID-19 response. This improvement is greatly connected to the COVID-19 ECC activation as many lessons were identified and addressed. Since ESF personnel had activated for an extended period of time before the fires, most were comfortable in their role, new their partners, and understood the system. The wildfire incident is a known and practiced response, leading to strong leadership and decision-making from the ESF 4 lead agencies and shared expectation about response roles for ECC staff.

➔ **Liaisons from OEM**

**Analysis**: The deployment of state liaisons to affected counties is very positively received. Having someone in the local Emergency Operations Center (EOC) from the state ECC was appreciated and facilitated good communication and coordination. This is especially true in small communities.

**Opportunity**: Recruit and train additional state agency staff to serve as a local liaisons during emergency response.

## AREAS FOR IMPROVEMENT

➔ **Staffing Shortfalls**

**Analysis**: OEM cannot fully staff needed ICS positions in the ECC during initial stages of an activation. Resources must be brought it from other agencies, other states, or federal partners. This leaves the response always at a disadvantage in the first hours and potentially the first days of a response. Direct support to affected communities through the liaison role – a very positively received engagement – is also limited by staffing and cannot be uniformly executed without additional staff

**Recommendation**: OEM staffing should be expanded to provide capacity for full operational support. Expansion of the liaison concept can provide better support to local and tribal communities.

➔ **ECC Space Deficiencies**

**Analysis**: OEM accommodated the personnel augmenting ECC staffing by expanding to other rooms within the building housing the dedicated ECC location. While this

worked to an extent, it did not optimize the collaboration resulting from collocating people to execute the response. The added burden of COVID-19 social distancing created additional challenges to being in the ECC. Considering the remote support provided by some ESF staff, the expanded ECC space did not accommodate all supporting personnel. For effective response to a statewide incident, the current ECC footprint is not sufficient.

**Recommendation**: Reconfiguration existing ECC space, expansion into additional space, or moving to a different location needs to be explored if the state intends to provide robust support to affected communities in large disasters.

➔ **Ops Center Limitations**

**Analysis**: Many people staffing the ECC describe OPS Center as inadequate for disaster response in a statewide emergency. The system does not have an inventory of resources, which makes it very difficult and time consuming for locals when requesting assistance. It does not have collaboration tools, which are invaluable in the COVID environment which has maximized virtual support and engagement.

**Recommendation**: Engage state, tribal, and local stakeholders to define requirements for an effective information management system, then compare the desired requirements against Ops Center's capabilities. If Ops Center does not meet the majority of functionality as defined by the collaborative requirements process, research information management systems to find a system that better fits the state's needs and pursue procurement of the system.

## FIRE MANAGEMENT AND SUPPRESSION

Provide structural, wildland, and specialized firefighting capabilities to manage and suppress fires of all types, kinds, and complexities while protecting the lives, property, and the environment in the affected area.

### STRENGTHS

➔ **COVID-19 Safety**

**Analysis**: Pre-incident planning for Fire Camps embraced best management practices to protect first responders from COVID-19. Base camps eliminated congregant settings, incorporated regular health screening, and implemented a module concept. The COVID-19

**Perspective:**
9,250 individuals were assigned to fire camps at the peak of activity on September 9 (in Oregon and Washington). There were **ZERO** COVID-19 outbreaks.

modules assigned fire personnel to a specific group to minimize interaction. These COVID-19 mitigation measures resulted in zero Fire Camp outbreaks.

**Opportunity**: COVID-19 planning needs to continue for the coming year to ensure protection of communities and firefighters.

➔ **Response Leadership**

**Analysis**: ODF and OSFM have a strong, well-coordinated team. They excel at communication and coordination between their agencies, with state agency leadership, and among teams. They prioritize strong coordination with communities by integrating local government into incident management teams.

➔ **State Airspace Coordinator**

**Analysis**: Oregon Department of Aviation (DOA) was activated on behalf of Department of Forestry to de-conflict airspace between state and federal assets in Temporary Flight Restricted Areas. It has never been established that DOA would support ESF 4, but they stepped in to support when requested. Airspace coordination is becoming a bigger and bigger role in events like large wildland fires. Many aircraft are engaged in firefighting and damage assessments and need to be guided to avoid air accidents.

**Opportunity**: Permanently establish the role of State Airspace Coordinator in plans and response protocols. Train and practice with fire partners to establish understanding of the role, how to engage resources and the best timing to bring this position online.

## AREAS FOR IMPROVEMENT

➔ **Take Action on Wildfire Council Recommendations**

**Analysis**: The September 2020 historic response to control, suppress, and extinguish fires across Oregon follows decades of increasing wildfire incidents and associated suppression costs. In 2019 the Governor's Council of Wildfire Response issued a report on the current model for wildfire prevention, preparedness and response and assessed sustainability given increasing wildfire risks. The Council identified the need for comprehensive change and adopted the framework proposed by the National Cohesive Wildland Fire Management Strategy, which establishes three goals:

1. Create fire-adapted communities

2. Restore and maintain resilient landscapes

3. Respond safely and effectively to wildfire.

Oregon must make significant changes in all three areas.

**Recommendation**: ODF and OSFM recommend proceeding to implement the recommendations established by the Governor's Council of Wildfire Response.

## MASS SEARCH AND RESCUE OPERATIONS

Deliver traditional and atypical search and rescue capabilities, including personnel, services, animals, and assets to survivors in need, with the goal of saving the greatest number of endangered lives in the shortest time possible.

### STRENGTHS

➔ **Federal Search and Rescue Teams**

**Analysis**: The scope of the wildfire situation – multiple fires, multiple counties, and hundreds of unaccounted for people – inspired ESF 9 to request federal resources to support search and rescue. A federal Type 1 Urban Search and Rescue (US&R) team and a Type 2 Human Remains Dog team (11 handlers; 12 dogs) were requested and received. The diversity of skills and capabilities brought by the US&R team provided great support to state response. In addition to search support, damage assessments and reports development were extremely valuable. The task forces are self-contained, needing only lodging and feeding support. Due to COVID, local school facilities were available for use. The teams integrated easily and provided great value. There was little awareness of the spectrum of capabilities these resources could provide.

**Perspective:**
Each NIMS Type 1 US&R task force is composed of 70 members specializing in search, rescue, medicine, hazardous materials, logistics, and planning, including technical specialists such as physicians, structural engineers and canine search

**Opportunity**: Leverage imbedded Oregon FIT and FEMA Region X partners to have training on federal resources and teams that can be requested and deployed to support state response and recovery. Take advantage of trainings and exercises to hold 'special topic briefings' on unique resources that can be deployed during response. Educate the broader team on the dynamics involved with deployable assets.

➔ **Strong County Search and Rescue System**

**Analysis**: Oregon's County Search and Rescue (SAR) system is able to quickly between regular SAR and disaster SAR. The SAR system is self-sufficient allowing ESF 9 to work swiftly with County SAR Coordinators to establish search perimeters, and create maps and grids. SAR Coordinators coordinated with ESF 9 to get the US&R teams housed and quickly got them in the field. There was seamless engagement across team.

## FATALITY MANAGEMENT SERVICES

Provide fatality management services, including decedent remains recovery and victim identification, working with local, state, tribal, territorial, insular area, and federal authorities to provide mortuary processes, temporary storage or permanent internment solutions, sharing information with mass care services for the purpose of reunifying family members and caregivers with missing persons/remains, and providing counseling to the bereaved.

### STRENGTHS

➔ **Mobile Morgue Deployment**

**Analysis**: The mobile morgue has been an asset of the Medical Examiner's Office within the OSP since 2014. It is a difficult asset to stand up and with the potential for hundreds of fatalities based on the initial number of unaccounted for people, the decision was made to deploy it to Albany in anticipation of need. This was the first deployment of the mobile morgue in a real-life incident.

**Perspective:**
The federal US&R and the federal Disaster Mortuary Teams (DMORT) were available to support medical examiners, if needed.

**Opportunity**: Some ECC staff did not know Oregon had a deployable mobile morgue. Take advantage of trainings and exercises to hold 'special topic briefings' on unique resources that can be deployed during response. Educate the broader team on the dynamics involved with deployable assets.

### AREAS FOR IMPROVEMENT

➔ **Family Assistance Center**

**Analysis**: There was not an overwhelming need for a family assistance center to support those suffering a death in the family from the wildfire. There is concern about the capacity to meet the equity, faith, and cultural considerations if there were more fatalities

**Recommendation**: At the state-level, review and evaluate existing family assistance center planning guidance, templates, and training for equity and cultural considerations. Modifications should be made it needed, then pushed to local and tribal partners. Mass care partners at the state level should collaborate to align state-agency support to community-based family assistance centers, planning to augment with necessary equity specialists.

## INFRASTRUCTURE SYSTEMS

Stabilize critical infrastructure functions, minimize health and safety threats, and efficiently restore and revitalize systems and services to support a viable, resilient community.

### STRENGTHS

➔ **Lifeline Reporting**

**Analysis**: For Critical Infrastructure protection, the Lifeline Reporting format creates a visually powerful, easy to digest, report that clearly shows where the priorities lie. Using a stop-light chart format, the items in red are the highest priority, yellow indicates mid-priority, and green indicates low priority at that point in time. The September fire response provided a clear application of the reporting tool. For example, power lines that feed parts of California pass through Oregon and were at risk from the fires. Identifying the at-risk lines allowed the infrastructure specialists to work with stakeholders for load balancing in Oregon that mitigated downstream/down state power impacts.

➔ **Integration of EMAC Resources**

**Analysis**: CIKR resources from the State of Washington and the US Coast Guard were integrated into the Infrastructure Branch. This allowed information from other ESFs to be pulled in to build the CIKR Lifeline status report. This was used by the State Resilience Officer and mutual aid command on a daily basis. These additional resources allowed the CIKR lead and the infrastructure Branch to focus on analytical work for CIKR priorities.

**Opportunity**: Consider pre-scripting CIKR staffing resource requests for EMAC fulfillment. Assess current staffing skill sets and capacity, then prepare a collection of EMAC requests that can be specified based on the incident. This can improve the assessment of needs presented by an incident, and speed submission of EMAC requests.

➔ **Strategic Technology Reserve**

**Analysis**: Since 2011, Oregon Department of Transportation has owned and maintained 12 trailers with deployable communications tools, including repeaters, handheld radios, and more. With the destruction of communications towers, the availability of this state-owned asset can help establish temporary communication networks in support of response and basic public safety communications.

## AREAS FOR IMPROVEMENT

➔ **Lifeline Reporting Integration**

**Analysis**: Lifelines are a FEMA tool that has not been fully embraced by the state. In this incident, Lifelines were very useful for making decisions related to critical infrastructure protection; however, Lifelines have not been integrated into incident information sharing structures across the statewide enterprise. It may be that Lifelines provide a level of detail that supports a certain type of decision-making, but does not provide the level of detail necessary for other types of decision-making or for complete incident documentation.

**Recommendation**: Commit to an evaluation existing reporting formats used by ESF agencies (i.e., situation reports, situation status reports, lifeline reporting, etc.) during ECC operations. Determine the usefulness of each reporting format by mapping the level of detail captured and how it is used. Some formats may support decision-making, while others catalog the status of actions. A decision should be made about where reports link into the daily planning cycle, and how/when each should be leveraged during response operations.

➔ **Limited Training and Maintenance on Strategic Technology Reserve**

**Analysis**: The equipment in the Strategic Technology Reserve trailers is not trained on with any regularity, especially with more rural community partners. A system exists that allows counties to sign out the trailers for training, but a fee is charged that could be prohibitive. When leveraged in this response, most of the equipment was found to not be in a ready state, with outdated software requiring updates before deployment.

**Recommendation**: In the wake of the wildfires, the Strategic Technology Reserve trailers are being deployed to counties to be managed and maintained. The radios will be programmed for ham radio frequencies and SHARES frequencies. A training a maintenance schedule should be developed to ensure these communications tools

are immediately deployable to field personnel trained in putting the equipment to use.

➔ **SHARES frequencies**

**Analysis**: The Department of Homeland Security administered SHAred RESources (SHARES) High Frequency Radio program provides a means for users with emergency preparedness missions to communicate when landline and cellular communications are unavailable. ESF2 suggested using SHARES to fill the communications gap caused by the loss of public safety radio communications, but SHARES frequencies were not used. The state does not have a lot of deployable handheld radio kits, and people are not familiar with using these frequencies.

**Recommendation**: The state should prioritize education and training on the SHARES radio program. Training and education need to happen with local and tribal public safety partners. Funding for the purchase, programming, and maintenance of a larger radio cache should be considered. Training and exercising with this equipment will be critical for successful deployment during an emergency.

➔ **Public Safety Power Shut-offs**

**Analysis**: Public Safety Power Shut-offs (PSPS) are a vital part of wildfire prevention and suppression. During the wildfire response there were requests for shut-offs that were too broad, and if executed would have caused a cascade of important systems to go offline, such as public safety communications, traffic lights, water and wastewater systems, healthcare facilities, and such. It's important for all response players to understand that these shut-offs must be as narrowly defined as possible. PSPSs are a good thing, but cannot be a blanket effort.

**Recommendation**: Educate ECC staff and decision-makers on the nature and role that PSPSs serve. There are likely other unique response actions this applies to. Take advantage of trainings and exercises to hold 'special topic briefings' on unique elements of response. Educate the broader team on the dynamics involved with unique decisions or deployable assets.

## MASS CARE SERVICES

Provide life-sustaining and human services to the affected population, to include hydration, feeding, sheltering, temporary housing, evacuee support, reunification, and distribution of emergency supplies.

## STRENGTHS

### ➔ Mass Care Partnerships

**Analysis**: A significant part of the mass care operations would have not happened had it not been for Red Cross, Salvation Army, and other NGOs stepping up to handle sheltering, feeding, and donations and volunteer management. The Red Cross in particular carried a heavy load supporting sheltering across the state.

## AREAS FOR IMPROVEMENT

### ➔ DHS Ownership of Mass Care Function

**Analysis**: The staffing gaps at DHS, including a vacancy in the state Mass Care Lead role, created a gap in disaster response-related institutional knowledge, and challenges connecting with mass care operational partners with subject matter expertise. With the massive scale of the response and mass care needs, the DHS capacity was limited and readiness was not optimal. As the Mass Care lead agency, DHS should spearhead coordination and collaborative planning to maintain readiness to support mass care needs in large incidents.

**Recommendation**: DHS staff dedicated to the mass care mission need a structured, funded, ongoing training and exercise program for operations in declared emergencies. Relationship building with partners should be a noted priority.

**Recommendation**: Mass care planning and training should include a focus on information sharing. A concentrated effort to identify elements of information critical to decision-making is needed.

### ➔ Over-reliance on Non-Governmental Organizations

**Analysis**: At the local level across the state, there is an over-reliance on the American Red Cross and other NGOs to execute the full mass care mission. In smaller incidents, this may be manageable, but the scope of the September wildfires was beyond the capacity of the Red Cross to support. If the Red Cross could not support a County's request for mass care, those counties struggled.

**Recommendation**: The state should provide leadership and facilitate an examination of mass care capacity across Oregon. Planning assumptions and partnership agreements should be critically reviewed to understand real capacity for large-scale mass care operations. This review needs to engage local and tribal partners, local, state and national NGO partners, as well at state agencies with mass care responsibilities.

➔ **Linkage with ESF 12 for Eligibility Validation**

**Analysis**: The number of community members receiving SNAP benefits during COVID has grown very large. During the wildfire, replacing SNAP benefits became a large part of the mass care mission. ESF 6 needed detailed, specific power outage information from ESF 12-Energy to determine individual's eligibility for SNAP replacement. There is not a streamlined method for gathering a providing this information. ESF 12 needed to reach out to all the different utility providers to gather that information, which was very cumbersome and challenging.

**Recommendation**: Consider establishing a tool to support this information gathering need. The solution could be as simple as a uniform spreadsheet that outlines what information is needed to help community members to access benefits.

## OPERATIONAL COMMUNICATIONS

Ensure the capacity for timely communications in support of security, situational awareness, and operations by any and all means available, among and between affected communities in the impact area and all response forces.

### STRENGTHS

➔ **Critical Infrastructure Monitoring**

**Analysis**: The Infrastructure Branch did an excellent job developing information sharing tools and were well supported by the GIS team to produce mapping in the fast-paced environment. The GIS team worked hard to keep up with the latest details. Real-time cameras were used as much as possible to see where and when infrastructure assets had the potential to be overtaken by fire. There was great diversity in the assets that were monitored, including public safety communications towers, cellular towers, water systems, waste water systems, and power infrastructure.

**Perspective:**
Power lines that feed California pass through Oregon. Efforts of the Infrastructure Branch to work with multiple stakeholders for load balancing in Oregon succeeded in preventing downstream, down-state impacts.

**Opportunity**: Consider developing a cadre of GIS experts to scale up staffing during large incidents to support visual communication. Identify and train GIS staff from other state agencies to support ECC operations.

## AREAS FOR IMPROVEMENT

### ➔ Unified Information Sharing with Localities

**Analysis**: It is recognized that the speed and unpredictability of wildfires creates operational communication challenges. Still, the horizontal and vertical coordination of meetings and communications during response could be improved. Local emergency managers experienced learning information from their senior and elected officials rather than the ECC. Their credibility suffered when local government officials asked about details, they were unfamiliar with.

**Recommendation**: This is an incredibly difficult challenge in a fast-moving response and there are many factors – and likely personalities – involved. Consider looking at the schedule of coordination meetings and calls to identify what stakeholders are reached with each effort and any gaps or overlaps in information sharing. Explore technology options that can be used as the 'hub' of critical incident information, affording all partners a resource to confirm or debunk details related to the incident. If established, keeping such a site current throughout an incident will have to be a priority.

### ➔ Trusting Local Input

**Analysis**: Several localities shared frustrations about state-level entities not trusting local input. For example, a local representative shared weather pattern details specific to their area and felt ignored by outside decision makers. In another incident, road closures were issued without coordination with local communities affected by the closures. One road closure eliminated an evacuation route on a non-fire threatened road, creating a significant traffic backlog and additional stress to evacuating community members. The 'on-the-ground' information was dismissed, rather than being trusted and used to support decision-making. Local partners need to be leveraged to validate and refine information used at the state-level for decision-making. The challenge lies in avoiding micro-management of every detail.

**Recommendation**: Pursue a targeted review of decision-making during the fires, especially related to road closures. Look to identify decisions that did not align with ground truth. Then identify opportunities and mechanisms for quick collaboration to validate the local reality. Establishing these mechanisms, then training those at the local level expected to engage in the validation step is critical.

## RECOVERY

The Recovery core capabilities include Public Health, Healthcare, and Emergency Medical Services; Health and Social Services; Economic Recovery; Natural and Cultural Resources; and Housing. NOTE: This review assessed only initial recovery efforts, so successes and areas for improvement are noted generally, rather than by distinct recovery core capabilities.

### STRENGTHS

➔ **Speedy Declarations**

**Analysis**: FEMA provided strong support and helped get the declarations turned around in three to five days. Getting public assistance programs turned on and funding flowing to individuals was a big win.

➔ **State Recovery Plan Operationalized**

**Analysis**: Oregon executive leadership and state agencies leadership gave support and empowered the ECC to move forward with the recovery planning and execution. With trust in the system, the Recovery Coordinator leveraged EMAC to bring in planners focused on recovery planning. Their work transitioned the recovery plan to an integrated recovery action plan that allowed for requested resources and capabilities to be provided, without question since relationships were already build within the emergency management partners community.

**Opportunity**: Capture the challenges and adjustments that have been (and will be) identified in the wildfire recovery effort and refine the plan to be more effective and efficient in future events. Share the lessons learned with communities across the state to help them establish a localized recovery framework.

**Opportunity**: The state does not experience emergencies that rise to the level of requiring implementation of the recovery plan on a regular basis. Encourage deploying staff through EMAC to assist other states in implementing recovery strategies. These experiences will broaden and deepen recovery knowledge, which will benefit Oregon's recovery from the next large event.

➔ **State Agency Support to Recovery Operations**

**Analysis**: State agencies provided high-level experts to lead recovery support functions. Committing the right people and empowering them to execute in their role is essential to moving recovery forward.

**Opportunity**: Build on this excellent start by collaborating with other state agencies that may serve a role in recovery to other incidents. Identify key staff that will be needed to support recovery, then engage them in training to prepare them to fill that role.

## AREAS FOR IMPROVEMENT

### ➔ Damage Assessment

**Analysis**: Requests for federal declarations are built on quantified estimates of damage and costs associated with the incident. Declarations release funds to support qualifying impacted individuals, communities, local governments, tribal governments, and state agencies, so early damage assessment data is vital. The team preparing declaration requests could not get damage information fast enough, or with enough accuracy. There is no common tool for damage assessment across disciplines, with some relying on the FEMA damage assessment tool and others relying on the Red Cross damage assessment tool. It was also discovered that the calculation of damage did not sufficiently capture the needs of people suffering non-structure related wildfire losses, such as timber or crops. Oregonians facing those types of losses were unable to access relief offered through federal emergency funds.

**Recommendation**: At a minimum, the state should establish a common tool for damage assessment. There are technology tools and services that facilitate unified collection of damage assessment data at the level needed to prepare declaration requests. Many states have procured these tools at the state level, then shared system access with cities, counties and tribal partners to ensure data collection can be uniformly gathered in formats that readily translate into declaration requests.

**Recommendation**: Evaluate disaster-related relief programs supporting non-structural losses. The National Response Framework ESF 11 – Agriculture and Natural Resources includes 'natural and cultural resources and historic properties protection and restoration' in the scope. In addition to disaster declaration related relief, federal lead and support agencies for this national ESF could have existing authorities and programs to assist communities suffering these types of losses. Once the landscape of potential relief is understood, build and share tools to assist in applying to these programs.

### ➔ Deliberate Planning and Training

**Analysis**: As this was the first time the State Recovery Plan was used, there was a significant learning curve for all involved. There is skeleton staffing for recovery;

facilitation of the enterprise recovery operation is being managed by two people, which is not sufficient for a statewide implementation.

**Recommendation**: Capture the challenges and adjustments that have been (and will be) identified in the wildfire recovery effort and refine the plan to be more effective and efficient in future events. Share the lessons learned with communities across the state to help them establish a localized recovery framework.

**Recommendation**: Additional recovery staff are needed. Commit to the planned strategy to establish a regional staffing structure. The regional staff should support training and education on recovery processes and collaborate with local jurisdictions and tribes on recovery planning.

**Recommendation**: Build on relationships established with engaged state agency representatives to adjust and advance current recovery plan and integrated action plan.

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# Appendix 1—Acronyms and Definitions

| Acronym | Definition |
|---|---|
| AOC | Agency Operation Center |
| BIPOC | Black, Indigenous, Persons of Color |
| CIKR | Critical Infrastructure Key Resources |
| DHS | Department Human Services |
| DMORT | Disaster Mortuary Team |
| DOA | Department of Aviation |
| DPSST | Department of Public Safety Standards and Training |
| ECC | Emergency Coordination Center |
| EMAC | Emergency Management Assistance Compact |
| EO | Executive Order |
| EOC | Emergency Operations Center |
| EPIC | Emergency Public Information Collaborative |
| ESF | Emergency Support Function |
| FEMA | Federal Emergency Management Agency |
| FIT | FEMA Integration Team |
| GDC | Governor's Disaster Cabinet |
| GIS | Geographic Information System |
| IMAT | Incident Management Assistance Team |
| IMT | Incident Management Team |
| IRA | Incident Resource Agreement |
| JIC | Joint Information Center |
| MAC | Multi-Agency Command |
| NGO | Non-Governmental Organizations |
| NWS | National Weather Service |
| ODF | Oregon Department of Forestry |
| OEM | Office of Emergency Management |
| OHA | Oregon Health Authority |
| OSFM | Oregon State Fire Marshal |
| OSP | Oregon State Police |
| PDA | Preliminary Damage Assessment |
| PPE | Personnel Protective Equipment |
| PSPS | Public Safety Power Shut-off |
| RIC | Recovery Information Center |
| SAR | Search and Rescue |
| SHARES | SHAred RESources High Frequency Radio program |
| SWIC | Statewide Interoperability Coordinator |
| US DHS | United States Department of Homeland Security |
| US&R | Urban Search and Rescue |

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# Appendix 2—Report Methodology

The information collected for this report was derived from individuals and organizations that were identified as stakeholders through Oregon Emergency Management, Office of the State Fire Marshal, and the State Resilience Officer. Local and tribal firefighter stakeholders were excluded from this review at the request of the Oregon State Fire Marshal, as this is an evaluation of systems and coordination effectiveness, not an evaluation of firefighting decisions and actions. A thorough review of field-level fire response will be conducted by OSMF at a later date. The information was gathered through a series of online surveys, specific to each stakeholder group that was surveyed as well as interviews held virtually either one-on-one or in small groups. The contractor also reviewed documentation related to the response and initial recovery operations of this event and previous events. These documents included but were not limited to situation reports, after-action reports, articles, incident action plans, executive orders and other documentation.

## Stakeholders in the Review

Representatives from the following organizations participated in interviews during this project:

- American Red Cross
- Business Oregon
- City of Albany, OR
- Department of Administrative Services
- Department of Energy
- Department of Environmental Quality
- Department of Human Services
- Department of Justice
- Federal Emergency Management Agency
- Federal Emergency Management Agency, Region 10
- Governor's Office
- Lincoln City, OR
- Office of the Chief Information Officer
- Office of Emergency Management
- Oregon Department of Aviation
- Oregon Department of Forestry
- Oregon Health Authority
- Oregon State Fire Marshal
- Public Utility Commission
- Team Rubicon
- US DHS, Cybersecurity & Infrastructure Security Agency
- Wasco County, OR

The following stakeholders responded to the survey outreach during this project:

**Oregon ECC State Agencies and Partners**

*Surveys sent to 304 contacts – 83 responded*
*Response rate: 27%*

- American Red Cross
- Business Oregon
- Department of Administrative Services
- Department of Agriculture
- Department of Consumer & Business Services
- Department of Education
- Department of Environmental Quality
- Department of Human Services
- Department of Justice
- Department of Land Conservation & Development
- Department of Transportation
- Environmental Protection Agency
- Federal Emergency Management Agency
- Federal Emergency Management Agency, Region 10
- Governor's Office
- Office of Emergency Management
- Oregon Department of Aviation
- Oregon Department of Corrections
- Oregon Department of Fish & Wildlife
- Oregon Department of Forestry
- Oregon Department of Veterans Affairs
- Oregon Housing and Community Service
- Oregon Judicial Department
- Oregon National Guard
- Oregon Secretary of State
- Oregon State Fire Marshal
- Oregon State Parks
- Public Utility Commission
- Travel Oregon - Oregon Tourism Commission
- US Coast Guard
- US Department of Agriculture
- US Department of Defense
- US Department of Health & Human Services
- US Department of Homeland Security
- US Department of Transportation
- US DHS, Cybersecurity & Infrastructure Security Agency
- US Small Business Administration

**Tribal Nations and Cities & Counties**

*Surveys sent to 135 contacts – 27 responded*
*Response rate: 20%*

- Confederated Tribes of Siletz Indians
- City of Albany, Linn County
- City of Lincoln City, Lincoln County
- City of Portland
- City of Yamhill, Yamhill County
- Grant County
- Jefferson County
- Klamath County
- Lake County
- Lane County

**Oregon ECC State Agencies and Partners**

*Surveys sent to 304 contacts – 83 responded*
*Response rate: 27%*

- Clackamas County
- Community of Glide, Douglas County
- Coos County
- Douglas County
- Marion County
- Wasco County
- Washington County

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# Appendix 3—Improvement Plan

## Wildfire AAR Improvement Plan

The Improvement Plan is based on the observations, analysis, and recommendations identified during the after-action review process and captures actions to address recognized issues, assigns responsibility and sets completion targets. (Planning Elements are Planning, Organization, Equipment, Training, Exercise)

| Tracking # | Core Capability | Recommendation/ Opportunity | Corrective Action Notes | Capability Element | Primary Responsible Organization(s) | Completion Target Short-Mid-Long |
|---|---|---|---|---|---|---|
| 2020-WLDF-R-001 | Planning | **ICS/ESF Integration.** Consider developing just-in-time training that can be deployed if ECC activation is anticipated, or immediately after activation to reinforce the temporary management structures, roles and responsibilities in the ECC. | Need JIT as well as on-going regular training for the ECC component as well as ESF specific training. Ties into recovery training and exercise recommendations. 1) Make sure individuals have training on ECC, roles, responsibilities, Ops Center, etc. 2) JIT for any circumstances that may throw someone into a position in the ECC that is not as up to speed. | Training, Exercise | OEM for ECC general training. ESFs for ESF-specific training. | Short (3 to 9 months) for initial effort; On-going |

| Tracking # | Core Capability | Recommendation/ Opportunity | Corrective Action Notes | Capability Element | Primary Responsible Organization(s) | Completion Target Short-Mid-Long |
|---|---|---|---|---|---|---|
| 2020-WLDF-R-002 | Planning | **Coordination vs. Operations.** The state should establish a workgroup to outline what a shift from the coordination posture to an operations posture requires. This includes, but is not limited to, assessment of authorities, policies, processes, reporting structures, staffing, spaces, technology, and equipment. Once outlined, the scope of work and timeline for implementation should be defined and put into action. | Need to be clear what is meant by operations. Watch and Warning Center (24/7) capability is the desired end point. This includes the transfer of OERS from OSP to OEM, if that happens. | Planning, Training | OEM, OMD | Mid (9 to 18 months) |

| Tracking # | Core Capability | Recommendation/ Opportunity | Corrective Action Notes | Capability Element | Primary Responsible Organization(s) | Completion Target Short-Mid-Long |
|---|---|---|---|---|---|---|
| 2020-WLDF-O-003 | Public Information and Warning | **State JIC Activation.** Continue building linkages with state and local public information officers to build collaborative relationships. Work to ensure smaller fires are reflected in outreach information as well. | This is hard in a large incident. Much information stays local. | Planning | ODF/OSFM (ESF 4) for this incident; OEM, GO, and Lead Agency in other disaster situations, ESF 15 | Short (3 to 9 months) |
| 2020-WLDF-O-004 | Public Information and Warning | **Outreach Equity.** JIC equity planning should continue to build on improvements realized through the COVID-19 and wildfire responses of 2020. This includes assessing outreach successes and failures, then working to fill identified gaps. | Leverage Oregon Equity Framework, Leverage Racial Justice Council. GO Senate bill 288. | Planning | GO Equity specialists, GDC, DHS, OEM | Long (more than 18 months) |

| Tracking # | Core Capability | Recommendation/ Opportunity | Corrective Action Notes | Capability Element | Primary Responsible Organization(s) | Completion Target Short-Mid-Long |
|---|---|---|---|---|---|---|
| 2020-WLDF-R-005 | Public Information and Warning | **Notification System Failures.** The most perfect system has the potential for technological failure, so multiple layers of notification system options increase the chance that an individual will hear of a threat and respond accordingly. There is strong support for the state having a role in local and tribal notifications; home rule authorities are raised as concerns. Exploration of state supported systems, lower tech options, and no-tech options should also be explored, especially for more rural areas frequently threatened by wildland fires. | DAS purchased Everbridge. OR-Alert. Cities, counties, tribes can opt in. Budget in place to maintain it for next couple of years. Ability of the state to rapidly assemble and notify localities about people in need of assistance in evacuation - need to be able to share information that is already gathered (held by various agencies) and needs to be shared with those planning evacuations. Needs to be a planning effort, and also an operations coordination task. NOTE: Responsibility for alert and warning is at the local level. State efforts SUPPLEMENT local efforts. | Planning, Equipment | DAS, OEM, OHA, DHS | Mid (9 to 18 months) |

| Tracking # | Core Capability | Recommendation/ Opportunity | Corrective Action Notes | Capability Element | Primary Responsible Organization(s) | Completion Target Short-Mid-Long |
|---|---|---|---|---|---|---|
| 2020-WLDF-R-006 | Public Information and Warning | **IPAWS Support to Locals.** If the state does establish a role supporting notifications to local and tribal communities, clear protocols and training should be established to avoid any delays in issuing notifications. Alert and warning responsibility cannot be held hostage to internal process. | SOPs for support to locals | Planning, Training | OEM | Short (3 to 9 months) |

| Tracking # | Core Capability | Recommendation/ Opportunity | Corrective Action Notes | Capability Element | Primary Responsible Organization(s) | Completion Target Short-Mid-Long |
|---|---|---|---|---|---|---|
| 2020-WLDF-R-007 | Public Information and Warning | **Lead Agency Incorporation into the JIC.** Convene a planning meeting with agency communications staff to examine how recent state JIC activations have not succeeded in folding in Lead Agency personnel. Identify the road blocks to effective collaboration and support of Lead Agencies. If necessary, adjust job aides and checklists to reinforce mechanisms to establish a unified JIC. | Coordination; leverage pre-season meeting to accomplish this. | Organization, Planning | GO Communications staff, Communications Council, OEM, ESF 15 partners | Short (3 to 9 months) |

| Tracking # | Core Capability | Recommendation/ Opportunity | Corrective Action Notes | Capability Element | Primary Responsible Organization(s) | Completion Target Short-Mid-Long |
|---|---|---|---|---|---|---|
| 2020-WLDF-R-008 | Public Information and Warning | **Outreach Equity.** More relationship building with community-based organization, partnerships in message development and distribution, and establishment of feedback channels to allow JIC staff to gauge where messages are reaching and where additional focus is needed. | Leverage Oregon Equity Framework, Leverage Racial Justice Council | Planning | GO Equity specialists, GDC, DHS, OEM | Long (more than 18 months) |
| 2020-WLDF-R-009 | Public Information and Warning | **Outreach Equity.** Explore options for adding public information specialists with additional language skills or how to embed other language speakers into the JIC to be present as messaging is developed. | Leverage Oregon Equity Framework, Leverage Racial Justice Council | Organization | GO Equity specialists, GDC, DHS, OEM | Long (more than 18 months) |

| Tracking # | Core Capability | Recommendation/ Opportunity | Corrective Action Notes | Capability Element | Primary Responsible Organization(s) | Completion Target Short-Mid-Long |
|---|---|---|---|---|---|---|
| 2020-WLDF-R-010 | Public Information and Warning | **Outreach Equity.** Develop specific plans for communications with vulnerable communities. This planning effort should focus on identifying available resources and establishing mechanisms to engage these resources to support emergency response. This effort would be most successful if established with a state agency-wide perspective and will likely require a full-time position. | Leverage Oregon Equity Framework, Leverage Racial Justice Council | Planning | GO Equity specialists, GDC, DHS, OEM | Long (more than 18 months) |
| 2020-WLDF-O-011 | Operational Coordination | **Liaisons from OEM.** Recruit and train additional state agency staff to serve as a local liaisons during emergency response. | OEM added liaison personnel as limited duration staff. GRB positions in there to fund permanently. | Organization, Training | OEM | Short (3 to 9 months) |

| Tracking # | Core Capability | Recommendation/ Opportunity | Corrective Action Notes | Capability Element | Primary Responsible Organization(s) | Completion Target Short-Mid-Long |
|---|---|---|---|---|---|---|
| 2020-WLDF-R-012 | Operational Coordination | **Staffing Shortfalls.** OEM staffing should be expanded to provide capacity for full operational support. Expansion of the liaison concept can provide better support to local and tribal communities. | GO recommended budget has 23 FTE for OEM. Any additional bills with staffing are a plus. Senate Bill 105. POP 301 and 302 in GRB. | Organization | GO | Short (3 to 9 months) |
| 2020-WLDF-R-013 | Operational Coordination | **ECC Space Deficiencies.** Reconfiguration existing ECC space, expansion into additional space, or moving to a different location needs to be explored if the state intends to provide robust support to affected communities in large disasters. | Ability to reconfigure - short term thing. Looking at other space - long term. | Equipment | DAS, OEM | Long, (short for internal reconfiguration) |

| Tracking # | Core Capability | Recommendation/ Opportunity | Corrective Action Notes | Capability Element | Primary Responsible Organization(s) | Completion Target Short-Mid-Long |
|---|---|---|---|---|---|---|
| 2020-WLDF-R-014 | Operational Coordination | **Ops Center Limitations.** Engage state, tribal, and local stakeholders to define requirements for an effective information management system, then compare the desired requirements against Ops Center's capabilities. If Ops Center does not meet the majority of functionality as defined by the collaborative requirements process, research information management systems to find a system that better fits the state's needs and pursue procurement of the system. | Limit this recommendation to the requirements analysis | Equipment | OEM | Short (3 to 9 months) |

| Tracking # | Core Capability | Recommendation/ Opportunity | Corrective Action Notes | Capability Element | Primary Responsible Organization(s) | Completion Target Short-Mid-Long |
|---|---|---|---|---|---|---|
| 2020-WLDF-O-015 | Fire Management and Suppression | **COVID-19 Safety.** COVID-19 planning needs to continue for the coming year to ensure protection of communities and firefighters. | Advancement of vaccinations will the one change to the plans from last year. Is there an opportunity to capture these prevention/mitigation protocols in place as SOPs for future incidents? OSFM has after action details they can leverage to solidify SOPs. NOTE: Need to also include evacuation sheltering considerations re: infection control. | Planning | OSFM, ODF | Short (3 to 9 months) |

| Tracking # | Core Capability | Recommendation/ Opportunity | Corrective Action Notes | Capability Element | Primary Responsible Organization(s) | Completion Target Short-Mid-Long |
|---|---|---|---|---|---|---|
| 2020-WLDF-O-016 | Fire Management and Suppression | **State Airspace Coordinator.** Permanently establish the role of State Airspace Coordinator in plans and response protocols. Train and practice with fire partners to establish understanding of the role, how to engage resources and the best timing to bring this position online. | Position was in Critical Infrastructure Branch. Coordinated with FAA, FEMA, especially re: drones. ODF is a partner in coordination. Also need Coordination with NW Coordination Center. | Organization | DOA, ESF 1 | Short (3 to 9 months) |

| Tracking # | Core Capability | Recommendation/ Opportunity | Corrective Action Notes | Capability Element | Primary Responsible Organization(s) | Completion Target Short-Mid-Long |
|---|---|---|---|---|---|---|
| 2020-WLDF-R-017 | Fire Management and Suppression | **Take Action on Wildfire Council Recommendations.** ODF and OSFM, as ES4 leads for the state, should strive to implement the recommendations established by the Governor's Council of Wildfire Response. Efforts should include a fire service listening and understanding tour, as well as examination of lessons learned from the 2020 fire season. The lessons learned from 2020 will help them prepare better for 2021 season. | During Jan 8 eBoard, implemented phase 1 of investment (25 LD OSFM, 33 LD for ODF, additional aviation assets and investments in resilient landscapes). OSFM looking to make those investments permanent. SB 287 - GO fire bill. | Planning, Organization, Equipment, Training, Exercise | OSFM, ODF, GO | Short (3 to 9 months) |

| Tracking # | Core Capability | Recommendation/ Opportunity | Corrective Action Notes | Capability Element | Primary Responsible Organization(s) | Completion Target Short-Mid-Long |
|---|---|---|---|---|---|---|
| 2020-WLDF-O-018 | Mass Search and Rescue Operations | **Federal Search and Rescue Teams.** Leverage imbedded Oregon FIT and FEMA Region X partners to have training on federal resources and teams that can be requested and deployed to support state response and recovery. Take advantage of trainings and exercises to hold 'special topic briefings' on unique resources that can be deployed during response. Educate the broader team on the dynamics involved with deployable assets. | NOTE - Federal teams leverage local and state experts. Team members are not necessarily federal employees. What are the available resources at the federal level? Special team briefings should address USAR, DMAT, DMORT and others. | Training | OEM | Short (3 to 9 months) |

| Tracking # | Core Capability | Recommendation/ Opportunity | Corrective Action Notes | Capability Element | Primary Responsible Organization(s) | Completion Target Short-Mid-Long |
|---|---|---|---|---|---|---|
| 2020-WLDF-O-019 | Fatality Management Services | **Mobile Morgue Deployment.** Some ECC staff did not know Oregon had a deployable mobile morgue. Take advantage of trainings and exercises to hold 'special topic briefings' on unique resources that can be deployed during response. Educate the broader team on the dynamics involved with deployable assets. | SRO is working with OSP to do a briefing on Mobile Morgue to OERS Council. Will also update on fatality management plans updates (Late March/early April). | Training | OSP, OHA | Short (3 to 9 months) |

| Tracking # | Core Capability | Recommendation/ Opportunity | Corrective Action Notes | Capability Element | Primary Responsible Organization(s) | Completion Target Short-Mid-Long |
|---|---|---|---|---|---|---|
| 2020-WLDF-R-020 | Fatality Management Services | **Family Assistance Center.** At the state-level, review and evaluate existing family assistance center planning guidance, templates, and training for equity and cultural considerations. Modifications should be made it needed, then pushed to local and tribal partners. Mass care partners at the state level should collaborate to align state-agency support to community-based family assistance centers, planning to augment with necessary equity specialists. | Part of the mobile morgue, deploy family assistance center (see above.) | Planning, Training | OSP, OHA | Short (3 to 9 months) |

| Tracking # | Core Capability | Recommendation/ Opportunity | Corrective Action Notes | Capability Element | Primary Responsible Organization(s) | Completion Target Short-Mid-Long |
|---|---|---|---|---|---|---|
| 2020-WLDF-O-021 | Infrastructure Systems | **Integration of EMAC Resources.** Consider pre-scripting Critical Infrastructure/Key Resources staffing resource requests for EMAC fulfillment. Assess current staffing skill sets and capacity, then prepare a collection of EMAC requests that can be specified based on the incident. This can improve the assessment of needs presented by an incident, and speed submission of EMAC requests. | OERS Council has a responsibility here. Each ESF needs to understand what type of resources they may need and have their mission assignments pre-scripted. Incorporated into ESF maturity path that OEM has outlined. | Planning | ESF Agencies | Mid (9 to 18 months) |

| Tracking # | Core Capability | Recommendation/ Opportunity | Corrective Action Notes | Capability Element | Primary Responsible Organization(s) | Completion Target Short-Mid-Long |
|---|---|---|---|---|---|---|
| 2020-WLDF-R-022 | Infrastructure Systems | **Lifeline Reporting Integration.** Commit to an evaluation existing reporting formats used by ESF agencies (i.e., situation reports, situation status reports, lifeline reporting, etc.) during ECC operations. Determine the usefulness of each reporting format by mapping the level of detail captured and how it is used. Some formats may support decision-making, while others catalog the status of actions. A decision should be made about where reports link into the daily planning cycle, and how/when each should be leveraged during response operations. | Look at what the FEMA RX information collection plan -- the information FEMA is looking for. Aligned on Lifeline model; can be sorted by ESF. Determine the best way forward to integrate up the line with what FEMA is looking for. CISA brought in their tools for the fires. Useful to see the crosswalk of the lifelines to highlight the interdependencies across the lifelines. Need to integrate RX tools (FEMA or CISA related). | Planning, Equipment | OEM, ESF Agencies, Fusion Center, Oregon Protective Security Advisor (CISA) - critical partner | Mid (9 to 18 months) |

| Tracking # | Core Capability | Recommendation/ Opportunity | Corrective Action Notes | Capability Element | Primary Responsible Organization(s) | Completion Target Short-Mid-Long |
|---|---|---|---|---|---|---|
| 2020-WLDF-R-023 | Infrastructure Systems | **Limited Training and Maintenance on Strategic Technology Reserve.** In the wake of the wildfires, the Strategic Technology Reserve trailers are being deployed to counties to be managed and maintained. The radios will be programmed for ham radio frequencies and SHARES frequencies. A training and maintenance schedule should be developed to ensure these communications tools are immediately deployable to field personnel trained in putting the equipment to use. | Establish a maintenance, training and testing program. Consider FSE once a year to test and train new staff. | Planning | DAS-SWIC | Long (more than 18 months) |

| Tracking # | Core Capability | Recommendation/ Opportunity | Corrective Action Notes | Capability Element | Primary Responsible Organization(s) | Completion Target Short-Mid-Long |
|---|---|---|---|---|---|---|
| 2020-WLDF-R-024 | Infrastructure Systems | **SHARES Frequencies.** The state should prioritize education and training on the SHARES radio program. Training and education need to happen with local and tribal public safety partners. Funding for the purchase, programming, and maintenance of a larger radio cache should be considered. Training and exercising with this equipment will be critical for successful deployment during an emergency. | Develop a training program, have liaisons from OEM and PHD-HSPR be included along with ODOT district personnel. Include trainings on OEM 3–5-year master training calendar. | Training, Exercise | DAS-SWIC, OEM, ODOT, OHA | Long (more than 18 months) |

| Tracking # | Core Capability | Recommendation/ Opportunity | Corrective Action Notes | Capability Element | Primary Responsible Organization(s) | Completion Target Short-Mid-Long |
|---|---|---|---|---|---|---|
| 2020-WLDF-R-025 | Infrastructure Systems | **Public Safety Power Shut-offs.** Educate ESF staff and decision-makers on the nature and role that PSPSs serve. There are likely other unique actions this applies to. Take advantage of trainings and exercises to hold 'special topic briefings' on unique elements of response. Educate the broader team on the dynamics involved with unique decisions or deployable assets. | Include PSPS awareness in annual Governor Wildfire Briefings, have energy providers also briefing local and tribal partners. Have liaisons from energy companies be embedded with IMTs. | Training | PUC, OEM, ODF, OSFM | Short (3 to 9 months) |

| Tracking # | Core Capability | Recommendation/ Opportunity | Corrective Action Notes | Capability Element | Primary Responsible Organization(s) | Completion Target Short-Mid-Long |
|---|---|---|---|---|---|---|
| 2020-WLDF-R-026 | Mass Care Services | **DHS Ownership of Mass Care Function.** DHS staff dedicated to the mass care mission need a structured, funded, ongoing training and exercise program for operations in declared emergencies. Relationship building with partners should be a noted priority. | Establish and maintain an emergency management program within DHS and OHCS. | Training, Exercise | DHS, OHCS | Short (3 to 9 months) |
| 2020-WLDF-R-027 | Mass Care Services | **DHS Ownership of Mass Care Function.** Mass care planning and training should include a focus on information sharing. A concentrated effort to identify elements of information critical to decision-making is needed. | Establish and maintain an emergency management program within DHS and OHCS. | Training | DHS, OHCS | Short (3 to 9 months) |

| Tracking # | Core Capability | Recommendation/ Opportunity | Corrective Action Notes | Capability Element | Primary Responsible Organization(s) | Completion Target Short-Mid-Long |
|---|---|---|---|---|---|---|
| 2020-WLDF-R-028 | Mass Care Services | **Over-reliance on Non-Governmental Organizations.** The state should provide leadership and facilitate an examination of mass care capacity across Oregon. Planning assumptions and partnership agreements should be critically reviewed to understand real capacity for large-scale mass care operations. This review needs to engage local and tribal partners, local, state and national NGO partners, as well at state agencies with mass care responsibilities. | Connect Non-profit organizations that have contracts for services with state agencies with state ESF structure, provide funding for continuity training and response, support request and provide timely situation awareness. | Planning, Organization | DHS, OHA, OHCS, OEM | Long (more than 18 months) |

| Tracking # | Core Capability | Recommendation/ Opportunity | Corrective Action Notes | Capability Element | Primary Responsible Organization(s) | Completion Target Short-Mid-Long |
|---|---|---|---|---|---|---|
| 2020-WLDF-R-029 | Mass Care Services | **Linkage with ESF 12 for Eligibility Validation.** Consider establishing a tool to support this information gathering need. The solution could be as simple as a uniform spreadsheet that outlines what information is needed to help community members to access benefits. | Train OEM, DHS and PHA-HSPR liaisons on a standard collection process and provide support during activations and trainings to local/tribal organizations. | Planning, Equipment | OEM, DHS, PHD-HSPR | Long (more than 18 months) |
| 2020-WLDF-O-030 | Operational Communications | **Critical Infrastructure Monitoring.** Consider developing a cadre of GIS experts to scale up staffing during large incidents to support visual communication. Identify and train GIS staff from other state agencies to support ECC operations. | Develop a GIS support team from ESF agencies, develop tools to share and use during training and activations. | Organization, Training | OEM, DAS-CIO | Mid (9 to 18 months) |

| | | | | | | |
|---|---|---|---|---|---|---|
| 2020-WLDF-R-031 | Operational Communications | **Unified Information Sharing with Localities.** This is an incredibly difficult challenge in a fast-moving response and there are many factors – and likely personalities – involved. Consider looking at the schedule of coordination meetings and calls to identify what stakeholders are reached with each effort and any gaps or overlaps in information sharing. Explore technology options that can be used as the 'hub' of critical incident information, affording all partners a resource to confirm or debunk details related to the incident. If established, keeping such a site current throughout an incident will have to be a priority. | Develop within the first 24-hours the 'battle-rhythm' for reporting out, reporting up and collecting data from local sources, private sector, liaisons and IMTs. This is a priority and will set the responder up with support and provide situation awareness to jurisdictions impacted by the event. | Planning, Equipment | GDC, ESF Agencies | Long (more than 18 months) |

| Tracking # | Core Capability | Recommendation/ Opportunity | Corrective Action Notes | Capability Element | Primary Responsible Organization(s) | Completion Target Short-Mid-Long |
|---|---|---|---|---|---|---|
| 2020-WLDF-R-032 | Operational Communications | **Trusting Local Input.** Pursue a targeted review of decision-making during the fires, especially related to road closures. Look to identify decisions that did not align with ground truth. Then identify opportunities and mechanisms for quick collaboration to validate the local reality. Establishing these mechanisms, then training those at the local level expected to engage in the validation step is critical. | Establish within the first 24-hours with local jurisdictions, IMT and liaisons. Expand Liaison training for all EFS and local partners. | Training | OEM | Mid (9 to 18 months) |

| Tracking # | Core Capability | Recommendation/ Opportunity | Corrective Action Notes | Capability Element | Primary Responsible Organization(s) | Completion Target Short-Mid-Long |
|---|---|---|---|---|---|---|
| 2020-WLDF-O-033 | Recovery | **State Recovery Plan Operationalized.** Capture the challenges and adjustments that have been (and will be) identified in the wildfire recovery effort and refine the plan to be more effective and efficient in future events. Share the lessons learned with communities across the state to help them establish a localized recovery framework. | Conduct an After-Action Review of the state recovery operations. After AAR, update all state plans for recovery operations. Review other AARs as well (EM Partners COVID-19). | Planning | SRO, OEM, ESF Agencies | Mid (9 to 18 months) |

| Tracking # | Core Capability | Recommendation/ Opportunity | Corrective Action Notes | Capability Element | Primary Responsible Organization(s) | Completion Target Short-Mid-Long |
|---|---|---|---|---|---|---|
| 2020-WLDF-O-034 | Recovery | **State Recovery Plan Operationalized.** The state does not experience emergencies that rise to the level of requiring implementation of the recovery plan on a regular basis. Encourage deploying staff through EMAC to assist other states in implementing recovery strategies. These experiences will broaden and deepen recovery knowledge, which will benefit Oregon's recovery from the next large event. | Update EMAC training for ESF staff, review ORS that support tort and liability statutes that provide protection on deployment. Consider supporting EMAC request for all-hazards events. | Exercise | OEM | Mid (9 to 18 months) |

| Tracking # | Core Capability | Recommendation/ Opportunity | Corrective Action Notes | Capability Element | Primary Responsible Organization(s) | Completion Target Short-Mid-Long |
|---|---|---|---|---|---|---|
| 2020-WLDF-O-035 | Recovery | **State Agency Support to Recovery Operations.** Build on this excellent start by collaborating with other state agencies that may serve a role in recovery to other incidents. Identify key staff that will be needed to support recovery, then engage them in training to prepare them to fill that role. | Conduct an After-Action Review of the state recovery operations. After AAR, update all state plans for recovery operations. Review other AARs as well (EM Partners COVID-19). | Planning, Training | SRO, OEM, DAS | Mid (9 to 18 months) |

| Tracking # | Core Capability | Recommendation/ Opportunity | Corrective Action Notes | Capability Element | Primary Responsible Organization(s) | Completion Target Short-Mid-Long |
|---|---|---|---|---|---|---|
| 2020-WLDF-R-036 | Recovery | **Damage Assessment.** At a minimum, the state should establish a common tool for damage assessment. There are technology tools and services that facilitate unified collection of damage assessment data at the level needed to prepare declaration requests. Many states have procured these tools at the state level, then shared system access with cities, counties and tribal partners to ensure data collection can be uniformly gathered in formats that readily translate into declaration requests. | Select a tool that can be used in the field for state liaisons, local, tribal and other special districts on damage assessments. Ensure the tool can roll up to next level of government. | Planning, Equipment, Training | DAS, OEM, ESF Agencies | Mid (9 to 18 months) |

| Tracking # | Core Capability | Recommendation/ Opportunity | Corrective Action Notes | Capability Element | Primary Responsible Organization(s) | Completion Target Short-Mid-Long |
|---|---|---|---|---|---|---|
| 2020-WLDF-R-037 | Recovery | **Damage Assessment.** Evaluate disaster-related relief programs supporting non-structural losses. The National Response Framework ESF 11 – includes 'natural and cultural resources and historic properties protection and restoration' in the scope. In addition to disaster declaration related relief, federal lead and support agencies for this national ESF could have existing authorities and programs to assist communities suffering these types of losses. Once the landscape of potential relief is understood, build and share tools to assist in applying to these programs. | Select a tool that can be used in the field for state liaisons, local, tribal and other special districts on damage assessments. Ensure the tool can roll up to next level of government. | Planning | DAS, OEM, ESF Agencies | Mid (9 to 18 months) |

| Tracking # | Core Capability | Recommendation/ Opportunity | Corrective Action Notes | Capability Element | Primary Responsible Organization(s) | Completion Target Short-Mid-Long |
|---|---|---|---|---|---|---|
| 2020-WLDF-R-038 | Recovery | **Deliberate Planning and Training.** Capture the challenges and adjustments that have been (and will be) identified in the wildfire recovery effort and refine the plan to be more effective and efficient in future events. Share the lessons learned with communities across the state to help them establish a localized recovery framework. | Using lessons learned from AARs and best practices, establish ongoing presentations to all ESFs; develop tools, procedures and training on an annual basis. | Planning | OEM, ESF Agencies | Mid (9 to 18 months) |

| Tracking # | Core Capability | Recommendation/ Opportunity | Corrective Action Notes | Capability Element | Primary Responsible Organization(s) | Completion Target Short-Mid-Long |
|---|---|---|---|---|---|---|
| 2020-WLDF-R-039 | Recovery | **Deliberate Planning and Training.** Additional recovery staff are needed. Commit to the planned strategy to establish a regional staffing structure. The regional staff should support training and education on recovery processes and collaborate with local jurisdictions and tribes on recovery planning. | Using lessons learned from AARs and best practices, establish ongoing presentations to all ESFs; develop tools, procedures and training on an annual basis. Be prepared to move state staff around to support recovery operations. | Organization, Training | GDC | Long (more than 18 months) |
| 2020-WLDF-R-040 | Recovery | **Deliberate Planning and Training.** Build on relationships established with engaged state agency representatives to adjust and advance current recovery plan and integrated action plan. | Using lessons learned from AARs and best practices, establish ongoing presentations to all ESFs; develop tools, procedures and training on an annual basis. Be prepared to move state staff around to support recovery operations. | Planning | GDC | Long (more than 18 months) |

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