The primary goal of this After Action Review (AAR) was, through the course of a facilitated discussion between key stakeholders, to identify significant successes or issues during the fire response and provide recommendations as appropriate.
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1. Preface

Purpose and Intent of this After Action Review (AAR)
In accordance with National Park Service (NPS) Reference Manual 18, Wildland Fire Management (RM-18), a national-level review may be conducted for any wildland fire that involves servicewide or national issues including: significant adverse media or political interest, multi-regional resource response, a substantial loss of equipment or property, or a fatality or multiple, serious fire-related injuries. For the Carr Fire, the NPS Chief of Fire and Aviation, William Kaage, elected to utilize a one-day focused After Action Review (AAR) format with key representation from the California Department of Forestry and Fire Protection (CAL FIRE), U.S. Forest Service (USFS), Bureau of Land Management (BLM), and National Park Service (NPS). The purpose of the review was, through the course of a facilitated discussion between key stakeholders, to identify significant successes or issues during the fire response and provide recommendations as appropriate. These may be NPS-specific wildland fire practices or external practices with wildland fire partners. Issues, successes, and recommendations may be in planning, operations, administration or management, which could be addressed at the local, regional, and/or national level to improve future incident response. In accordance with standard AAR principles, individual’s names have not been credited to specific comments. Agency affiliation has been included to the extent needed to give constructive context to the discussion points.

A Novel Approach to a Large Fire Review
Traditionally, a wildland fire of the scale and complexity of the Carr Fire would be reviewed by a team comprised of half dozen or more highly experienced personnel over the course of a full week or more on-site. The review would entail dozens of separate interviews and several weeks of follow-up work by the team members to synthesize the findings and recommendations into an extensive report culminating over the course of several months. Unfortunately, incidents of this complexity are becoming more of the norm than the exception, and there is not a realistic capacity within the Service for each qualifying incident to receive the traditional level of review and analysis. In light of this, an AAR format was adopted for the Carr Fire with four primary topics of emphasis provided to two NPS facilitators via delegation of authority from the Chief to conduct the review. The non-punitive intent of the review was emphasized to all participants at the onset of the AAR that was conducted on November 27, 2018 at the USDA Northern California Training Center in Redding, California.
2. Review Purpose

An After Action Review (AAR) was conducted on November 27, 2018 involving personnel from the National Park Service, the United States Forest Service, The Bureau of Land Management and CAL FIRE. Four main topics were discussed: 1) Interagency Cooperation; 2) Incident Management; 3) Incident Administration and Finance; and, 4) Post Fire Response. A total of 19 recommendations were generated from these discussions. The recommendations offer practices to be sustained and actions that could improve future performance.

3. Introduction

Discovery of Carr Fire
The Carr Fire was reported on the afternoon of Monday, July 23, 2018, near the intersection of Highway 299 and Carr Powerhouse Road, in the Whiskeytown Unit of the Whiskeytown–Shasta–Trinity National Recreation Area (WHIS) on NPS-administered lands and in a Federal Responsibility Area (FRA) wildfire response zone. The fire was started by the mechanical failure of a travel trailer. The fire quickly spread to a State Responsibility Area (SRA) protected by CAL FIRE.

Command Structure
At the inception of the incident, the NPS and the CAL FIRE Shasta Trinity Unit (CA-SHU) coordinated a Type 3 incident management team (IMT) under unified command. Three days later, on July 26, 2018 at 0700, the fire was transitioned to CAL FIRE IMT-1 (IMT-1). On July 27, IMT-1 entered unified command with the City of Redding Fire Department. On July 31 at 0700, IMT-1 entered unified command with the USFS as the fire spread onto U.S. Forest Service administered lands.

Rapid Fire Growth
On the evening of July 26, the fire experienced rapid growth when fuels, weather and topography aligned creating an intense fire vortex. The vortex was determined to have wind speeds in excess of 165 mph, the equivalent of an F3 tornado. The fire jumped the Sacramento River, making its way into the city of Redding, causing the evacuation of 38,000 people. Evacuations also took place in Summit City, Keswick, Lewiston, Shasta Lake City, Igo, Ono, and French Gulch. During this event two firefighting personnel and four civilians died. Three firefighters suffered burn injuries as did multiple civilians.

Largest Fire in Whiskeytown History and One of the Largest in California History
The fire burned 229,651 acres making it the 7th largest in California history, including 38,595 acres of NPS lands, before it was 100% contained on August 30, 2018. The Carr Fire destroyed at least 1,604 structures, of these at least 1,077 were homes, while damaging 277 others. It was one of the most destructive fires in California history, and caused over $1.659 billion (2018) in
damages. At its height, the fire engaged as many as 4,766 personnel from multiple agencies. A complete timeline of events is contained within the CAL FIRE Post-incident Action Summary produced by CAL FIRE IMT-1.

4. After Action Review Participants, Agency, and Role on the Incident

**National Park Service**

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
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<tbody>
<tr>
<td>Robin Wills</td>
<td>PWR Regional Fire Management Officer</td>
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<tr>
<td>Mike Minton</td>
<td>PWR Regional Duty Officer</td>
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<td>Dan Buckley</td>
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<td>Missy Forder</td>
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**United States Forest Service**

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<th>Name</th>
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<tr>
<td>Gwen Sanchez</td>
<td>AD Ops / North Ops</td>
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<td>James Courtright</td>
<td>Deputy Forest Fire Management Officer</td>
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<td>AREP / OSC1(t)</td>
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<td>Daniel Eiszelle</td>
<td>Intelligence</td>
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<td>Curtis Stanley</td>
<td>Deputy GACC Manager / Duty Chief</td>
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**Bureau of Land Management**

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<tr>
<td>Walter Herzog</td>
<td>AREP</td>
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<tr>
<td>Tim Bradley</td>
<td>AREP / READ</td>
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<tr>
<td>Nate Gogna</td>
<td>North Ops / Ops Support</td>
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<tr>
<td>Alan Bittner</td>
<td>Northern California District Manager (phone)</td>
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**CAL FIRE**

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<th>Name</th>
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<tr>
<td>Tom Lubas</td>
<td>Day 1 &amp; Day 3 Unified Incident Commander</td>
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<td>Sean Kavanaugh</td>
<td>Day 2 Unified Incident Commander</td>
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<td>Brett Gouvea</td>
<td>IMT-1 Unified Incident Commander</td>
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<td>Mike Weber</td>
<td>Duty Chief</td>
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<td>Mark Kendall</td>
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<td>Scott Jones</td>
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<td>North Ops / OCC</td>
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<td>Phillip Selegue</td>
<td>North Ops / Intel</td>
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5. Four Emphasis Topics for AAR

These four emphasis topics were developed by the NPS Pacific West Region Fire Management Office in collaboration with NPS Division of Fire and Aviation staff at the NPS Fire Management Program Center located in Boise, Idaho. Subtopics were meant to be a guide and not considered to be all-inclusive. There was discretion provided to the facilitators for the conversation to go where participants felt it needed to so long as all of the basic topics were covered.

1. Interagency Cooperation
   - Communication, shared objectives, and mobilizing fire engines through the Farm Bill.

2. Incident Management
   - Incident fatality responses, resource availability and allocation, incident strategy, pre-incident coordination and preparedness, and public outreach and information sharing.

3. Incident Administration and Finance
   - Multiple incident numbers and the incident’s cost share agreement.

4. Post Fire Response
   - Watershed protection strategies, anticipated threats, and possible outcomes.

6. Topic 1: Interagency Cooperation

Duty Officer Coverage
On the day the Carr Fire ignited, a USFS fire duty officer was providing coverage for the Whiskeytown National Recreation Area (WHIS) during the planned absence of the unit’s fire management officer. This individual was well acquainted with the local area and cooperating fire agencies, and this was cited as a positive contribution to the level of interagency cooperation experienced throughout the incident. Having a cadre of high-quality relief duty officers to draw from throughout increasingly long and intense fire seasons will continue to be a necessity.

*Recommendation: All wildland fire management units are encouraged to develop a roster of high-quality, relief duty officers from their interagency organizations as part of their pre-season fire preparedness planning.*

Unified Command
Unified command was entered into by the NPS and CAL FIRE early on the first day of the incident. This contributed to a generally strong, positive communication and coordination environment throughout the life of the incident, despite the tremendous amount of incident
complexity that was being addressed including fire personnel and civilian fatalities, and the
direct, profound impact of the fire to the local communities. Daily unified command meetings, as
well as, agency administrator and agency representative meetings following the daily unified
command meetings reinforced this strong communication. Consistency of representation for the
NPS at the unified command table was understandably a challenge due to competing priorities
associated with other concurrent large fires, an NPS Hotshot fatality within the NPS Pacific West
Region, and the long duration of this fire.

**Recommendation:** Initiate stakeholder engagement early on all incidents that
demonstrate a likelihood to impact multiple jurisdictions. Early, forthright, open
dialogue is critical, and was cited on this incident with contributing to the success of the
IMTs response to multiple firefighter fatalities and incidents within the incident.
Consistency of personnel within unified command representation has value and is a best
practice worth striving for.

Ultimately as the fire progressed, the City of Redding Fire Department and USFS also entered
into the unified command organization as well. However, in part, due to the fact that the BLM
had previously delegated Direct Protection Area (DPA) for its lands within the fire’s planning
area to the NPS and CAL FIRE, the BLM did not enter into either unified command or the cost
share agreement for the incident. In retrospect, the BLM, at times, felt underrepresented in the
decision making cycle considering that over 63K acres of BLM land were impacted and they
were the largest single landowner by percentage (28%) affected by the fire. This was not borne
from a lack of trust, but rather simply that things can fall through the cracks on highly complex
incidents when you don’t have representation at the proper hierarchical level in the process.

**Recommendation:** Participation in the cost-share agreement is not a mandatory
prerequisite to joining a delegation of authority or leader’s intent letter to an incident
management team (IMT). All primary landowners with values at risk in the fire planning
area should receive consideration for inclusion in the decision making process. The
transfer of DPA among federal agencies is intended to provide efficiency in fire response,
but is not intended to replace agency administration on complex, long-duration incidents.

This incident had both NPS and USFS ICs participating in the unified command organization.
There are no prohibitions against incident commanders (ICs) from different departments being
delegated authority for incident command on the other’s lands. This is common practice. Given
the lack of qualified federal Type 1 and Type 2 ICs available to participate in unified command
outside of standing IMT commitments, particularly during national planning levels 4 and 5,
strong consideration should be given to delegating authority to a single federal incident
commander (IC) in situations where multiple federal agencies are seeking representation in a
unified command organization.
Recommendation: A future topic for discussion within the California Wildland Fire Coordinating Group (CWCG) should be the subject of agency DPA versus agency ownership and how that relates to agency administration, agency representation, delegations of authority, and ultimately unified command. When feasible, a single federal IC should be delegated authority to represent all of the affected federal agencies in unified command.

Long-term Planning and WFDSS
WFDSS decisions were published for the incident, but had limitations in application due to some outdated or redundant objectives and requirements across the fire planning area. WFDSS can be an excellent platform for developing, documenting, and communicating long-term plans and objectives for an incident among all of the fire management units within a fire’s planning area.

Recommendation: WFDSS needs to be reviewed annually at the unit level to ensure that management requirements and strategic objectives are current and applicable. Consideration should be given to ordering fire behavior analysts (FBAN), long-term analysts (LTAN), and strategic operational planners (SOPL) to help supplement the planning section within any IMT. These positions need to be well integrated with the IMT, and can assist with communicating the long-term plan for an incident to stakeholders and the public alike. The SOPL position, in particular, can be a highly effective position in bridging any gaps or inconsistencies between the agency administrator leader’s intent and operations on the fire.

Incident Complexity and IMT Selection
For the first three days of the incident, the fire was managed under a robust CAL FIRE Type 3 organization comprised of many individuals that had Type 1 or 2 IMT qualifications. The origin of the fire was clearly under NPS responsibility, but the greatest immediate threat from the incident was to State Responsibility Areas (SRA) outside of the Federal Responsibility Area (FRA). The decision to utilize a California State Type 1 IMT was the correct one given the values at risk on SRA nearby. A question remains as to how to best select the proper IMT each time in a complex multi-jurisdictional area so that the fire ownership doesn’t delay engagement by the most suitable IMT for the job. The complexity of the incident location and proximity to high value areas may have indicated that a higher level of IMT organization be requested a day or two earlier than was the case. Changing fire environment conditions outside of the historical norms indicate that fire managers need to anticipate fires having a higher resistance to control than they have historically, and request a higher level of incident management team earlier accordingly. The ridge, road, or river that has been helping contain fires for decades may not be effective anymore under a worsening fire environment climate. Five of the seven largest wildfires in California state history have occurred since 2012 (Rim, Rush, Ranch, Thomas, Carr).
**Recommendation:** Continue to use the right IMT for the job based on the primary responsibility area, relative risk, and anticipated complexity of an incident. The Organizational Assessment and Relative Risk modules within WFDSS and the Indicators of Incident Complexity located within the IRPG are standardized resources to help objectively determine incident complexity. Complexity and risk assessments, as well as any changes, should be documented by ICs. The CWCG should further address the issue of IMT utilization in complex multi-jurisdictional areas to help ensure efficiency of wildfire engagement statewide.

**Impacts to Responders**
Responders, managers and agency administrators were personally and profoundly impacted by this fire. This certainly and naturally entered into decision making. The complexity increased when people who were working the incident were also affected by the fire (loss of home or evacuation, family displaced, injuries, fatalities). Everyone involved in the incident response felt additional stress to do an excellent job, and also took on a high level of ownership. WHIS elected to host an NPS All-Hazard IMT at the unit during the course of the Carr Fire to provide support specifically to the Recreation Area as it dealt with the complexities associated with nearly the entire landmass of the unit being impacted by the fire, loss of infrastructure and facilities, and the displacement of residents and employees. CAL FIRE has been increasing employee support services in the last few years. Clinicians are assisting in making decisions on how much and what kind of support that responders need.

**Recommendation:** The NPS All-Hazard team and CAL FIRE providing employee support services (ESS) were both considered successes and other units being severely impacted by an event of this magnitude should consider doing the same. Ensure that any IMTs operating within proximity of each other are in strong communication through daily IC calls or meetings to avoid any duplication of effort or confusion to the extent possible in an already chaotic environment.

**Farm Bill Engines**
The Farm Bill was exercised for the first time to mobilize fire engines to California and resulted in some administrative and dispatching challenges. There was a delay in getting agreements signed and conflicting direction on the ability for Farm Bill engines to be reassigned within the GACC. Although the state had the ability to order the engines, they lacked an efficient payment mechanism for them. The NPS volunteered to cover the upfront cost of the engines with a pledge for reimbursement to them by the state.

**Recommendation:** Expectations of the reassignment of resources needs to be communicated to the GACC early on to decrease administrative paperwork and the chasing down of resources out in the field. Local government fire engines that already have some agreement with a federal agency should be mobilized on that agreement first.
7. Topic 2: Interagency Management

Incident Fatality Response
Overall, the AAR participants felt the incident response to the fatalities was handled appropriately and the correct leaders were identified quickly to begin their agency-specific notification process. California has a Serious Accident Review Team (SART) and they were utilized on this incident. The state felt that the federal support response was adequate and they assisted by taking other loads off CAL FIRE so they could focus on the fatality response. It was noted that the California Master Cooperative Wildland Fire Management and Stafford Act Response Agreement (CFMA) does not discuss how to manage incident fatalities. It comes down to the incident commander, agency administrator, and corresponding jurisdiction to sort this out.

Recommendation: There is an opportunity for the CWCG to include direction on fatality response in the CFMA during the next revision. The California Fire Assistance Agreement (CFAA) covers California local government fire response and also needs to include adequate direction on incident fatality response.

Resource Availability and Allocation
Resource availability was down significantly statewide and nationally during the Carr Fire. The incident experienced, as did the entire wildland firefighting system, a lack of mid-level fireline supervision (HEQB, DIVS, TFLD). The U.S. military and firefighters from New Zealand and Australia were utilized on this incident. With engine availability being at a premium, the incident used state and private contractor engines. This resulted in challenges with Virtual Incident Procurement (VIPR) contract length and reassignment rules.

Recommendation: Efficiencies need to be built into the dispatch system in regards to contract resources that allow for contract resources to be reassigned by the GACC based upon location, availability, and incident need, and to not cycle back into the Virtual Incident Procurement (VIPR) system for reassignment.

Due to all units in the region being at drawdown levels or lower, incident assigned and committed resources were still covering local initial attack in addition to being assigned to the Carr incident. This resulted in a dynamic situation where incident resources would be taken off the incident to attack new fires or support other ongoing fires based on rapidly shifting priorities due to explosive fire growth. ICs were coordinating short-term loans of immediate need resources amongst themselves within the GACC.

Recommendation: In lieu of an established lend-lease program, GACCs, ICs, unit fire program managers, and duty officers, are encouraged to continue strong daily
communication to solve short-term resource shortage issues and address immediate life safety threats posed by rapidly escalating incidents. Resource accountability is especially challenging in these situations and must be stressed among the coordinating entities.

**Incident Strategy**
All participants agreed that the incident strategies were clear with life, property and resource priorities identified. The unified command did a good job in recognizing that each agency had their own policies and objectives, and that was sometimes challenging. While it was agreed that the overall full-suppression and control strategy was consistent and well understood, incident objectives and priorities kept changing as direct attack and contingency plans evolved. This resulted in agencies having different perceptions of the plan for short periods of time as resources were diverted to the initial attack of new wildfire starts and priorities changed.

**Recommendation:** Agencies need to continue to recognize they have differing policies and objectives. Long-term planning tools, including those available in WFDSS, should be utilized by SOPs and LTANs and communicated to the unified IC for the respective agency. This unified IC would advocate to incorporate WFDSS and PACE modeling into the long-term strategic decision making process during the incident.

**Pre-incident Coordination and Preparedness**
AAR participants agreed that all agencies had good pre-incident coordination and preparedness prior to the fire. Annual coordination meetings had taken place and the CFMA and CFAA were both signed and current. The topic of duplicate incident numbers and ordering resulted in administrative headaches and extra work by all parties.

**Recommendation:** A pre-season SOP be developed that articulates that only one incident number be generated corresponding to the jurisdiction of the point of origin of the fire. This is would be incorporated into the LOP/Local AOP which is tiered under the CFMA.

**Public Outreach and Information Sharing**
It was agreed that public outreach and information sharing was generally well coordinated during the Carr Fire. CAL FIRE had all agencies embedded in the public information office for the incident. The IMT held seven community meetings during the course of the incident. Getting all the agencies together could be challenging at times and a joint information center (JIC) was never established due to the lack of a media market with other high-profile incidents happening across the state and country. The City of Redding deferred to the incident for information dissemination due to dealing with the fire’s impact to the city, and the needs and welfare of the responders whose lives were directly impacted.

**Recommendation:** It was agreed that the standard procedure should continue having PIO representation from each participating agency. The need for a joint information
center should be evaluated on a case-by-case basis on all complex, multi-jurisdictional incidents.

The Shasta and Trinity county sheriff’s offices implemented their evacuations and communications very differently.

**Recommendation:** Expanded discussions with FIRESCOPE and the county sheriffs within California to address consistency of evacuation procedures and communications between the 58 county law enforcement entities across California.

### 8. Topic 3: Incident Administration and Finance

**Multiple Incident Numbers**

The fire was started on NPS lands at WHIS with a Shasta-Trinity National Forest (SHF) incident number originally being generated for the incident. This was corrected within several days of the start of the fire and a corresponding NPS incident number was created. Concurrently, and due to historical local dispatching and ordering processes, a duplicate incident was created through the CAL Fire Shasta Unit dispatch center with a CA-SHU identifier. This resulted in resources being ordered through two different pipelines. Subsequently, questions arose along the way about incident ownership, cost share, and potential reimbursements through the FEMA Fire Management Assistance Grant Program.

**Recommendations:** A standard SOP should be implemented, whereby only one incident number is generated according to the ownership of the origin point of the fire. This standard would be incorporated into the LOP/Local AOP which is tiered under the CFMA. This will result in clearer communication and understanding of resources ordered by the fire and from a single dispatch ordering point. In cases where a secondary incident must be created for any reason it must be correctly nested under the parent incident in ROSS and IROC to ensure proper resource statusing and accountability. Incident ownership can be transferred within these systems and should be done as early as possible if need be. Additionally, evaluate and determine best fire management dispatching practices and options for the WHIS program in light of the incident (state vs. federal). Include scenarios revolving around complex DPA and jurisdictional boundary issues in pre-season preparedness planning. Practice how this might look in terms of incident number, accounting information, single ordering point, agency administrator roles, unified command, cost share, and resource statusing and accountability.
Cost Share Agreement
The cost share agreement for this incident began to be discussed about one week into the life of the incident. The NPS and CAL FIRE agreed to share the cost of the incident with concurrence with the City of Redding as to the terms of the agreement. A cost apportionment team (CAT) was used to delineate incident cost by effort. Assigned resources noted their daily assignment on their crew time report and the daily incident action plans could also be used to track incident effort. There is no need for multiple federal agencies to participate in the cost share so long as one agency agrees to bear the entire federal portion of financial responsibility. The cost share agreement was generally regarded as without significant controversy.

Recommendation: Continue early engagement with partners when cost share is anticipated to efficiently come to consensus about cost apportionment early in the incident.

Watershed Protection Strategies, Anticipated Threats and Possible Outcomes
On federal lands, all suppression rehabilitation has been completed and an interagency burned area emergency rehabilitation (BAER) team was assigned to assess immediate threats to life and property and future rehabilitation needs. Areas have been closed in debris flow zones and in proximity to high concentrations of hazard trees. An evacuation plan is being developed for the south end of the Recreation Area. A BAER plan was developed, but the NPS is behind schedule on the implementation of some of the recommendations. WHIS is hiring positions to implement the BAER plan. Fuels treatment data is being collected with a lot of interagency coordination of monitoring efforts for FY19.

Recommendation: Move forward with the NPS hiring of positions to implement the interagency BAER plan.

The BLM recognized the community has been impacted and is working to reopen mountain bike trails. Open mine hazards, culvert replacement, timber salvage, archeology and cultural resource preservation, and exotic plant management are the primary focus areas of the BLM.

The USFS was not as impacted as much as other landowners due to lower fire severity. There has been good communication channels with Sierra Pacific Industries as a private timber industry stakeholder. The USFS is working to rehabilitate roads for easier access to create piles for burning this winter and evaluate possible timber salvage harvest opportunities.

The state did an assessment, and is implementing some long term monitoring with surrounding stations. A plan is being created by CAL FIRE, City of Redding, and utility stakeholders to lay out potential debris flow paths, public messaging, and evacuation planning.
It was noted that it will be a challenge to fill contracts with demand for private contractor services outpacing the availability for certain types of equipment and operators.

*Recommendation:* Start contracting process early and coordinate use of equipment and resources.

### 10. Closing Remarks

**The AAR Process**
The AAR process represents a substantial level of efficiency over the traditional model for an NPS large fire review. There is both value and substantial challenges posed by bringing in two facilitators from out of the incident’s geographic area to conduct a review. The ability to look at an incident through a fresh set of eyes, or two, provides a valuable, unique perspective. However, reviewing an incident in a multi-jurisdictional fire management environment that operates under a wide host of overarching agreements is complex. Future large fire reviews conducted under this format would benefit from some additional pre-work being provided to the facilitators in terms of local operating agreements etc., to provide some early context to the discussions.

As with all reviews, participation and the level of it are essentially voluntary. It is not an investigation and it does not mandate individuals to speak on an issue. Overall, the level of candor and participation in this review was high. Discussions were conducted in a thoughtful and respectful manner. There was a certain amount of deference within the various agencies to the highest ranking members present in the room, but this is not uncommon or unexpected in hierarchical organizations like those engaged in fire management. As a result, certain voices provided more input than others, but overall, each of the participating agencies were well represented in the discussions.
11. Appendices

Delegation of Authority

United States Department of the Interior
NATIONAL PARK SERVICE
Fire Management Program Center
333 S. Development Avenue
Boulder, Idaho 83705

**ELECTRONIC COPY ONLY – NO HARD COPY TO FOLLOW**

November 13, 2018

To: Melissa Furder and John Catuldo, Carr Fire Review Team Co-Facilitators

From: Chief, Division of Fire and Aviation

Subject: Delegation of Authority, Carr Fire Review

In accordance with National Park Service (NPS) Reference Manual 18, Wildland Fire Management, (RM-18) and the 2018 Interagency Standards for Fire and Fire Aviation Operations, I am delegating authority to you to conduct a review of the Carr Fire, which started in Whiskeytown National Recreation Area (WHRN) on July 23, 2018. The purpose of this review is not punitive. The intent is to identify significant issues or successes during the fire response and to provide recommendations as appropriate. These may be NPS specific wildland fire practices or external practices with our wildland fire partners. Issues may be in planning, operations, or management, which could be addressed at the local, regional, and/or national level to improve future incident response.

I encourage the use of an after action review (AAR) process for task completion. I also ask that you use the attached list of Carr Fire AAR questions to guide the AAR. Your recommendations should identify what actions can be taken in the near future and actions that will take a longer timeframe to address. You should avoid duplication of other independent reviews that have occurred over the past few years in the region. Please ensure engagement at the park, region, and national office levels, and in appropriate with interagency partners and incident management team personnel.

Your responsibilities include the following:

1. Organizing, managing, and conducting the individual fire review the week of November 27, 2018 in accordance with RM-18 and the 2018 Interagency Standards for Fire and Fire Aviation Operations using an AAR process.
2. Requesting technical, logistical, or other support, as required to conduct the AAR.
3. Preparing and submitting a final set of issues with recommendations to me by December 7, 2018.

Your team members should charge their travel, salary (if not prepayment funded), and any related costs to the Carr Fire account: WHIS- PFSLIA6019.00.1; Cost Center- PFWWHSF0; Fund—19X (for quicktime, use PFFSLLIA6019001).

You may contact Dan Buckley, Chief, Branch of Wildland Fire, 208-484-5161, or Chad Fisher, Wildland Fire Operations Program Leader, 208-830-1046, with questions or for support.

Attachments: Carr Fire AAR Questions
AAR Guidance from Interagency Standards for Fire and Fire Aviation Operations Chapter 18 RM-18 Chapter 17 3.5 National Level Review

Cc: Martha Lee, Deputy Regional Director, Pacific West Region
Robin Wills, Fire Management Officer, Pacific West Region
Tom Gersch, Acting Superintendent, Whiskeytown National Recreation Area
Dan Buckley, Chief, Branch of Wildland Fire
Chad Fisher, Wildland Fire Operations Program Leader
Karma Hope, Administrative Assistant, Fire and Aviation Management Division
NPS Memorandum
### Summary of Topics and Recommendations

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<td>Interagency Cooperation</td>
<td>Duty Officer Coverage</td>
<td>All wildland fire management units are encouraged to develop a roster of high-quality, relief duty officers from their interagency organizations as part of their pre-season fire preparedness planning.</td>
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<tr>
<td>Interagency Cooperation</td>
<td>Unified Command</td>
<td>Initiate stakeholder engagement early on all incidents that demonstrate a likelihood to impact multiple jurisdictions. Early, forthright, open dialogue is critical, and was cited on this incident with contributing to the success of the IMTs response to multiple firefighter fatalities and incidents within the incident. Consistency of personnel within unified command representation has value and is a best practice worth striving for.</td>
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<tr>
<td>Interagency Cooperation</td>
<td>Unified Command</td>
<td>Participation in the cost-share agreement is not a mandatory prerequisite to joining a delegation of authority or leader’s intent letter to an incident management team (IMT). All primary landowners with values at risk in the fire planning area should receive consideration for inclusion in the decision making process. The transfer of DPA among federal agencies is intended to provide efficiency in fire response, but is not intended to replace agency administration on complex, long-duration incidents.</td>
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<tr>
<td>Interagency Cooperation</td>
<td>Unified Command</td>
<td>A future topic for discussion within the California Wildland Fire Coordinating Group (CWCG) should be the subject of agency DPA versus agency ownership and how that relates to agency administration, agency representation, delegations of authority, and ultimately unified command. When feasible, a single federal IC should be delegated authority to represent all of the affected federal agencies in unified command.</td>
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<tr>
<td>Interagency Cooperation</td>
<td>Long-term Planning and WFDSS</td>
<td>WFDSS needs to be reviewed annually at the unit level to ensure that management requirements and strategic objectives are current and applicable. Consideration should be given to ordering fire behavior analysts (FBAN), long-term analysts (LTAN), and strategic operational planners (SOPL) to help supplement the planning section within any IMT. These positions need to be well integrated with the IMT, and can assist with communicating the long-term plan for an incident to stakeholders and the public alike. The SOPL position, in particular, can be a highly effective position in bridging any gaps or inconsistencies between the agency administrator leader’s intent and operations on the fire.</td>
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<tr>
<td>Interagency Cooperation</td>
<td>Incident Complexity and IMT Selection</td>
<td>Continue to use the right IMT for the job based on the primary responsibility area, relative risk, and anticipated complexity of an incident. The Organizational Assessment and Relative Risk modules within WFDSS and the Indicators of Incident Complexity located within the IRPG are standardized resources to help objectively determine incident complexity. Complexity and risk assessments, as well as any changes, should be documented by ICs. The CWCG should further address the issue of IMT utilization in complex multi-jurisdictional areas to help ensure efficiency of wildfire engagement statewide.</td>
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<tr>
<td>Interagency Cooperation</td>
<td>Impacts to Responders</td>
<td>The NPS All-Hazard team and CAL FIRE providing employee support services (ESS) were both considered successes and other units being severely impacted by an event of this magnitude should consider doing the same. Ensure that any IMTs operating within proximity of each other are in strong communication through daily IC calls or meetings to avoid any duplication of effort or confusion to the extent possible in an already chaotic environment.</td>
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<tr>
<td>Interagency Cooperation</td>
<td>Farm Bill Engines</td>
<td>Expectations of the reassignment of resources needs to be communicated to the GACC early on to decrease administrative paperwork and the chasing down of resources out in the field. Local government fire engines that already have some agreement with a federal agency should be mobilized on that agreement first in preference over the secondary mobilization option provided by the Farm Bill. A mechanism for states to pay for Farm Bill engines would represent an efficiency gain.</td>
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<tr>
<td>Interagency Management</td>
<td>Incident Fatality Response</td>
<td>There is an opportunity for the CWCG to include direction on fatality response in the CFMA during the next revision. The California Fire Assistance Agreement (CFAA) covers California local government fire response and also needs to include adequate direction on incident fatality response.</td>
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<tr>
<td>Interagency Management</td>
<td>Resource Availability and Allocation</td>
<td>Efficiencies need to be built into the dispatch system in regards to contract resources that allow for contract resources to be reassigned by the GACC based upon location, availability, and incident need, and to not cycle back into the Virtual Incident Procurement (VIPR) system for reassignment.</td>
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<tr>
<td>Interagency Management</td>
<td>Resource Availability and Allocation</td>
<td>In lieu of an established lend-lease program, GACCs, ICs, unit fire program managers, and duty officers, are encouraged to continue strong daily communication to solve short-term resource shortage issues and address immediate life safety threats posed by rapidly escalating incidents. Resource accountability is especially challenging in these situations and must be stressed among the coordinating entities.</td>
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<tr>
<td>Interagency Management</td>
<td>Incident Strategy</td>
<td>Agencies need to continue to recognize they have differing policies and objectives. Long-term planning tools, including those available in WFDSS, should be utilized by SOPLs and LTANs and communicated to the unified IC for the respective agency. This unified IC would advocate to incorporate WFDSS and PACE modeling into the long-term strategic decision making process during the incident.</td>
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<tr>
<td>Interagency Management</td>
<td>Pre-incident Coordination and Preparedness</td>
<td>A pre-season SOP be developed that articulates that only one incident number be generated corresponding to the jurisdiction of the point of origin of the fire. This is would be incorporated into the LOP/Local AOP which is tiered under the CFMA.</td>
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<td>Interagency Management</td>
<td>Public Outreach and Information Sharing</td>
<td>It was agreed that the standard procedure should continue having PIO representation from each participating agency. The need for a joint information center should be evaluated on a case-by-case basis on all complex, multi-jurisdictional incidents.</td>
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<tr>
<td>Interagency Management</td>
<td>Public Outreach and Information Sharing</td>
<td>Expanded discussions with FIRESCOPE and the county sheriffs within California to address consistency of evacuation procedures and communications between the 58 county law enforcement entities across California.</td>
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<tr>
<td>Incident Administration and</td>
<td>Multiple Incident Numbers</td>
<td>A standard SOP should be implemented, whereby only one incident number is generated according to the ownership of the origin point of the fire. This standard would be incorporated into the LOP/Local AOP which is tiered under the CFMA. This will result in clearer communication and understanding of resources ordered by the fire and from a single dispatch ordering point. In cases where a secondary incident must be created for any reason it must be correctly nested under the parent incident in ROSS and IROC to ensure proper resource statusing and accountability. Incident ownership can be transferred within these systems and should be done as early as possible if need be. Additionally, evaluate and determine best fire management dispatching practices and options for the WHIS program in light of the incident (state vs. federal). Include scenarios revolving around complex DPA and jurisdictional boundary issues in pre-season preparedness planning. Practice how this might look in terms of incident number, accounting information, single ordering point, agency administrator roles, unified command, cost share, and resource statusing and accountability.</td>
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<td>Incident Administration and</td>
<td>Cost Share Agreement</td>
<td>Continue early engagement with partners when cost share is anticipated to efficiently come to consensus about cost apportionment early in the incident.</td>
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<td>Post-Fire Response</td>
<td>Watershed Protection</td>
<td>Move forward with the NPS hiring of positions to implement the interagency BAER plan.</td>
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<td>Threats and Possible Outcomes</td>
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<td>Post-Fire Response</td>
<td>Watershed Protection</td>
<td>Start contracting process early and coordinate use of equipment and resources.</td>
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