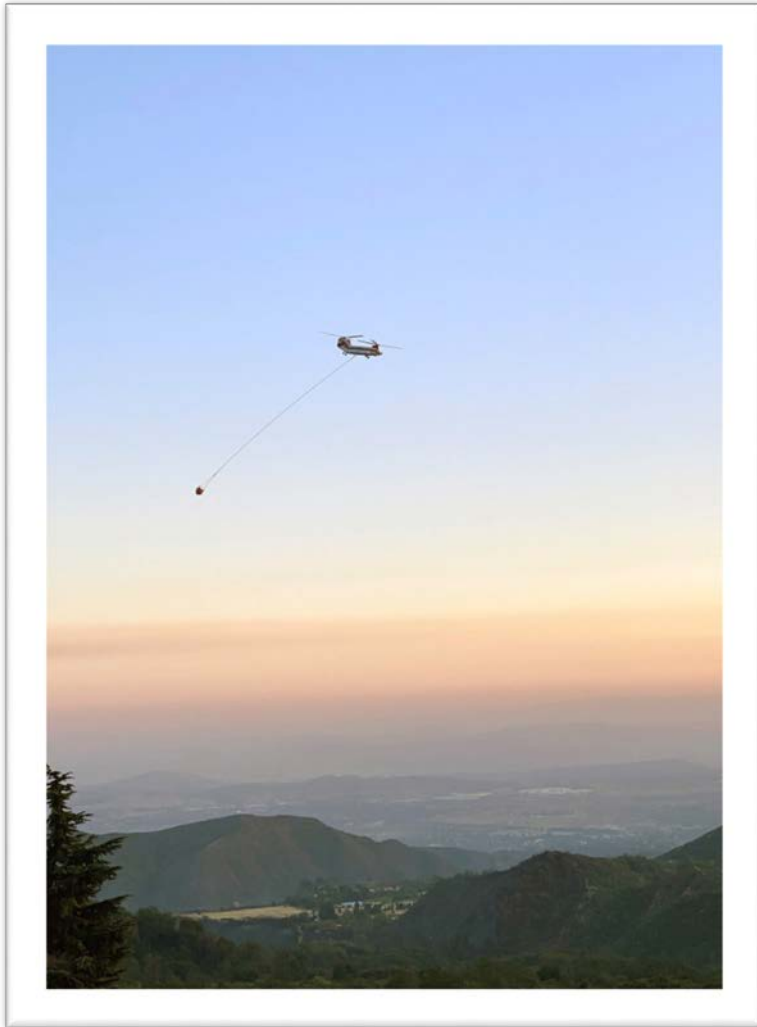




# INCIDENT SUMMARY

GRIZZLY CREEK FIRE, CO-WRF-00348

ALASKA  
INCIDENT MANAGEMENT TEAM

Norm McDonald – Incident  
Commander  
Tom Kurth – Deputy Incident  
Commander



## **TIMELINE**

The Alaska Incident Management Team received notification of an order for the Grizzly Creek Fire on August 21, 2020. Plans to mobilize to the incident began soon after. Most of the Alaska contingent of the IMT traveled from Alaska to Denver via the National Interagency Coordination Center (NICC) contracted jet on Sunday, August 23 while team members in the Lower 48 flew commercially or drove to the incident. On Monday August 24, the team was in-briefed by Great Basin Team I at the Grizzly Creek ICP, located in Eagle, Colorado at 1700 hours. The team shadowed Great Basin Team I on August 25 and transfer of command officially occurred at 0600 hours on August 26.



When the Alaska IMT assumed command, the majority of the fire was burning in the White River National Forest. It stood at an estimated 32,302 acres and 61% containment, and had 806 personnel assigned. The Colorado Department of Transportation had reopened Interstate 70, which had been closed for two weeks due to fire activity, on August 25, the day before the Alaska Team assumed command of the fire.

Fire threats to the I-70 corridor, adjacent roadways and bridge infrastructure, railroad, gas and major power infrastructure (major power lines and Shoshone Power Plant) were mostly mitigated by the time the Alaska Team assumed command of the fire. Concerns had shifted to the potential for flooding and debris flows in burned areas in the event of heavy rainfall. The two watersheds that supply the primary water source for the community of Glenwood Springs were threatened by the potential for debris flow and flooding. Closure orders also remained in effect on both U.S. Forest Service and Bureau of Land Management lands.

Much of the remaining uncontained line in the northwest corner of the fire in the No Name and Grizzly Creek drainages was in very steep, rugged terrain with serious safety and access concerns for firefighters. Similarly, there was an open section of line on the southern edge of the fire in the Cinnamon and Devil's Hole drainages. Operations personnel conducted a successful, multi-day burnout operation on indirect control lines in the southeast corner of Division X near Bair Ranch to secure that section of open line. Other efforts included strengthening and reinforcing control lines on the northeast side of the fire in Divisions T and Q, as well as the southeast side of the fire in Divisions A and Z. Operations personnel in Division T continued flanking the fire and were able to obtain full containment in Division T to the point where the fire spilled off the canyon wall into the Grizzly Creek drainage.

Containment lines were challenged by back-to-back wind events on August 30-31 with winds gusting to 40 mph both days. Control lines held, and a relief in weather conditions followed soon after. Nearly one-quarter of an inch of rain fell over the fire on the evening of September 1, which dampened fire behavior and provided opportunities for firefighters to increase containment along No Name Creek in Division N. Three hotshot crews worked for three days in the steep, difficult terrain to secure a key section of line in the northwest corner of the fire that provided protection for the community of Glenwood Springs and boosted containment by 7%. Although difficult to measure; the amount of effort, planning, and implementation required to secure

that difficult section of line was immense. Deputy Incident Commander Tom Kurth described the effort as “a major accomplishment.”

Critical fire conditions returned on September 2, when hot, dry weather returned for five straight days, with temperatures climbing in the mid-80s to mid-90s and relative humidity dipping into the high single digits or low teens. A Red Flag Warning was issued for September 7. As expected, the hot, dry weather caused some interior flare-ups of unburned islands of fuel within the perimeter that required holding actions from helicopter bucket work in the Grizzly Creek Drainage.



A major swing in weather occurred on the morning of September 8, when a strong cold front reached the fire area in the early morning hours. The front brought much colder temperatures, a mix of rain and snow, and periods of gusty winds. Subfreezing low temperatures are forecasted for several days in the next coming week.

Due to safety concerns and access issues, about 7 miles of uncontained line remains on the north side of the fire in Division T near the bottom and on the steep slopes of the Grizzly Creek drainage. After the arrival of the cold front on September 8, the last remaining 6.6 miles of uncontrolled line on the south side of Division Z in the Cinnamon and Devil’s Hole drainages was obtained, which boosted overall containment of the fire to 91%. Containment in the Grizzly Creek area likely will not be achieved until a season ending weather event occurs. Due to the terrain and fuel types, no further movement or escalation of fire spread is anticipated. However, indirect and direct control lines may remain in place until the threat of escape has been mitigated.

With approximately 63 miles of dozer line constructed during initial and extended attack, suppression repair efforts played a major role in the operational campaign. As of September 8, approximately 55 fireline miles and 74 points had been repaired. The incoming Type 3 team will continue suppression repair on the 11 remaining fireline miles and 97 points.

| Grizzly Creek Fire 91% Contained |                            |                                    |                          |
|----------------------------------|----------------------------|------------------------------------|--------------------------|
| <u>Division</u>                  | <u>Contained Line (mi)</u> | <u>Uncontrolled Fire Edge (mi)</u> | <u>Percent Contained</u> |
| Div A                            | 8.97                       | 0.0                                | 100%                     |
| Div N                            | 7.49                       | 0.0                                | 100%                     |
| Div Q/T/W                        | 29.94                      | 7.12                               | 76%                      |
| Div X                            | 7.2                        | 0.0                                | 100%                     |
| Div Z                            | 20.28                      | 0.0                                | 100%                     |
| <b>Grand Total:</b>              | <b>64.8</b>                | <b>7.12</b>                        | <b>91%</b>               |

During the Alaska IMT’s two-week tenure, the fire grew by 164 acres and containment increased by 30%. At the time of transfer of command from the Alaska IMT to a Type 3 team, the Grizzly Creek Fire stood at 32,431 acres and 91% containment.

The Incident Command Post was located at the Eagle County Fair and Rodeo Grounds in Eagle, CO. Most of the operational personnel camped at several spike camps throughout the fire area. At the peak, the Alaska IMT supported 8 different spike camp locations with logistical and other support.

# **COMMAND**

## **Strategic Direction and Course of Action**

On August 25, 2020, the Alaska IMT took operational control of the Grizzly Creek fire after a transfer of command from the Great Basin Team 2. The Alaska IMT continued full suppression efforts under delegation from the USFS, BLM and the State of Colorado. To the extent possible, the IMT used direct tactics to contain the fire. In areas where the fire was burning in remote and inaccessible terrain, indirect contingency lines in more favorable topography and fuel types were used in order to reduce the risk to firefighters. These sections were monitored by lookouts and kept in check using buckets during critical fire weather days. The chosen strategy minimized risk to incident personnel while protecting values at risk.

Resource advisors were relied upon to ensure minimal impact to watersheds and private inholdings within the fire area. Suppression repair planning was conducted cooperatively by the IMT, the USFS, BLM, and the State of Colorado to prevent long term degradation caused by suppression activities and to encourage natural regeneration of the fire area. At the time of transfer of command to Eric White's Type 3 organization a Burned Area Emergency Rehabilitation (BAER) team was beginning its assessment of damage caused by the wildfire itself.

An after-action review of the Grizzly Creek Incident highlighted an outstanding safety record with only minor reportable injuries. COVID mitigations were successful with zero reported COVID cases during the IMT's assignment. Incident objectives were achieved with minimal exposure. Community and cooperator relationships were strengthened, and costs were commensurate with the objectives considering that over 3 billion dollars in property and utilities were protected.

## **Key Decisions**

- **Use of spike camps-** Originally developed to encourage social distancing as a COVID-19 mitigation effort. Spike camps provided additional benefits including reduced risks of driving on I-70, reduced costs, and increased productivity with less travel times and lessened impacts to the communities of Glenwood Springs and Eagle due to fewer fire personnel in town.
- **Contingency Line-** In order to reduce risk to firefighters while limiting the long-term potential for the fire to escape, the Alaska IMT left two pieces of contingency line in place and unrepaired.
- **Use of COVID Task Force-** Several models for managing the risk of COVID spread were discussed during the Alaska IMT spring training. On Grizzly Creek the IMT implemented a COVID Task Force comprised of a Deputy IC, a Medical Unit Leader, Safety Officer, and a Comp Claims Unit Leader. The task force made the needed connections with county health officials to expedite testing and provide clear direction for isolation and quarantine should the incident have a positive COVID test.
- **Mobilization and Demobilization using the NICC Jet-** With the support of both the Alaska GACC and the Rocky Mountain GACC, the Alaska IMT was able to use the NICC Jet for travel to and from Alaska. Although the Alaska IMT traveled with fewer than the preferred number of passengers, the Unit as One concept was kept intact and reduced exposure potential that three airport stop-overs would have introduced if commercial flights were used.

## **Incident Objectives**

Objectives were derived from the WFDSS, Leaders Incident Documents and the Letter of Delegation. For much of the incident the objectives remained the same. At the time of transfer to Eric White's Type 3 organization, the incident objectives were as follows:

- Provide for firefighter and public safety by assessing and mitigating risk in order to develop and implement sound tactical operations. Ensure all resources have a clear understanding of assignments and associated hazards.
- Protect homes, businesses, communities, utility infrastructure, transportation corridors, county watersheds and other values from immediate and long-term threats. Contain the fire where it is safe to do so. Have contingency plans for uncontained fire edge.
- Coordinate initial attack response with federal and non-federal partners to reduce the threat of new fires in the area.
- Repair suppression damage on private and public lands as described in the Suppression Repair Plan. Prioritize repair on private lands where possible.
- Maintain and enhance relationships with agency partners, cooperators, stakeholders, and the public through timely and accurate information exchange. Ensure long-term strategies are communicated.
- Follow CDC, local, state and federal COVID-19 mitigation guidance, and protocols to reduce exposure and protect firefighters and the public from virus spread.
- Treat all personnel with dignity and respect by providing a harassment free, zero-tolerance work environment.
- Ensure financial and documentation packages are prepared in accordance with agency requirements and agreements are closed out when no longer necessary.

## **Agency Administration**

The wildfire decisions made by Grizzly Creek Agency Administrators not only considered the values on the lands that they manage, but also took into account life, property and values outside the boundaries of their administrative units. A full suppression strategy was used to protect values including the community of Glenwood Springs, utilities, both power and gas, critical watersheds, railroad right of way and the I-70 corridor.

Agency Administration was orchestrated in person at the Grizzly Creek ICP, and virtually through Teams meetings and teleconference calls. Input from Agency Administrators was solicited every day and focused on operational input, as well as confirmation that the team was acting within the delegation of authority and the current WFDSS decisions.

## **Liaison Officer**

The Liaison staff worked with land agencies and sheriff authorities in Garfield and Eagle counties to coordinate lifting of pre-evacuation notices established prior to the AK Teams arrival. Staff provided real time support to CDOT and other IMT staff during short term extreme weather events and traffic issues along I-70 in order to assist with safety of fire personnel and the public.

Liaisons facilitated the integration of cooperators into Public Information video messaging and community meetings and helped livestock owners, rafting and hunting outfitters, and property owners gain access through closed areas by coordinating with agencies, Operations and Public Information. Collocating the Liaison tent with the Cooperators' tent improved communication between the IMT and Cooperators and provided transparency into team decision-making.

## **COVID-19 Mitigation Measures**

Multiple COVID-19 mitigation measures were taken to reduce the risk of exposure to incident personnel. Most members of the IMT traveled to the incident together on the NICC jet. At the incident, the Alaska IMT required daily mandatory temperature checks for Team members and anyone entering ICP. Color-coded bracelets were issued to ensure that any symptomatic personnel could be identified in a timely fashion and quarantined if necessary.

Team members and all those on the incident were required to wear facemasks when social distancing was not possible. All personnel adhered to CDC recommendations for social distancing, wearing facemasks, and maintaining proper hygiene. These mitigation measures were emphasized daily in morning briefings and on numerous signs that were posted in high-visibility



areas around the ICP. Functional areas practiced the “Module of One” philosophy, doing their best to avoid entering other sections unless masked and distanced. Every effort was made to keep in-person meetings and briefings as small as possible, with all meetings featuring a virtual component to reduce face-to-face participation. Meetings were held in large circles with chairs strategically placed to promote social distancing. Firefighters remained in spike camps, only coming into the ICP as necessary to prevent large gatherings of personnel in one place. The preventative COVID-19 measures not only reduced exposure to the virus, but also other illnesses such as camp crud. Several personnel, including the entire Finance Section worked virtually or at off-campus sites to keep the number of people at ICP to a minimum. Other measures such as touchless food distribution also contributed to lessening the risk of transmission.

## **Fire Behavior**

Most of the fire growth occurred before August 20. Fuels were extremely dry with ERCs at record highs at the start of the incident and remaining above historical maximums until wetting rains moderated fuels temporarily at the end of August.

Lower elevation fuels consisted of Gambel Oak, Pinyon Pine and Juniper. In drainages and higher elevations, fuels transitioned to mixed conifer, Aspen and open high alpine meadows. Fire behavior was greatly reduced when the fire burned onto the plateau areas above Glenwood Canyon, largely due to the fuel type change. Aspen and high elevation meadows are currently barriers to spread but will become more available for combustion as freezing temperatures begin to occur regularly overnight.

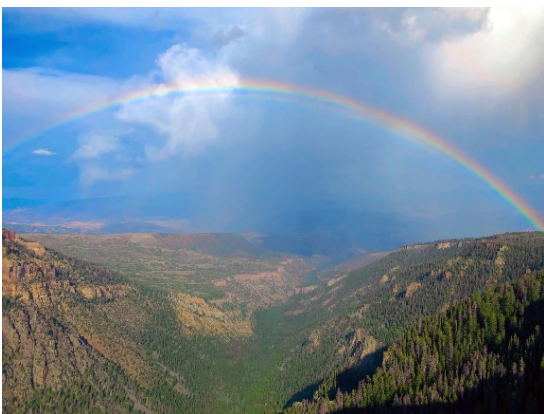


The Grizzly Creek fire is the largest fire to occur on the Eagle, Sopris and Rifle Ranger Districts of the White River National Forest. Historically, peak dryness in Western Colorado is experienced in early to mid-July and is moderated by the arrival of monsoonal moisture. 2020 did not have an influx of monsoonal moisture and peak dryness of fuels occurred a month later than normal. Season ending events in the area also have regularly been experienced later in the fall. In 2019, maximum ERCs occurred in October.

## **Fire Weather**

The winter snowpack was below average and melted early in 2020. The region received well-below average precipitation during the spring and early summer and was nearly completely dry in the two weeks prior to ignition.

Strong high-pressure ridging over the Great Basin has been dominant for most of the summer, and during the first week of September. This feature has brought very warm and dry conditions to the region.



While most days were dry, thunderstorms did occasionally move over the fire area during the third and fourth weeks of August, and produced gusty outflow winds (up to 45 mph), lightning, and light precipitation. Wetting rains did finally occur over portions of the fire August 29th, and across the entire fire from the evening of August 31st through the early morning of September 1st, where two tenths of an inch of rain was observed. A cold front brought an early taste of winter to the region Tuesday, September 8th, with the weather expected to moderate through the rest of the second week of September.

The general wind has had a hard time getting into the lower elevations of the fire, even when strong thunderstorm outflows have been more influential. Much of the wind is terrain driven versus synoptically driven.

## Operations

### Key Decisions

- The most critical decision involved inserting ground resources into No Name Creek to work to secure the northwest portion of the fire with direct line.

### Significant Events

- To date we have had no operational resources test positive for COVID. Numerous spike camps supported engines in small groups and crews were mostly self-sufficient not requiring catering or mingling with other groups.
- An excellent safety record was maintained throughout the incident.



### Notable Successes

- The Operations Section hosted numerous trainees throughout the section including 2 OSCI, 2 OPBD, 7 DIVS, 5 TFLD, 5 HEQB.
- Having Agency Administrators, Representatives, Cooperators at ICP for information sharing and receiving made it easy to solve problems, ask clarifying questions, and build trust.
- Assigning a “Utilities Coordinator” enabled Operations to work directly with utilities in the I-70 corridor so they could complete their work without interfering with fire suppression and repair work. Utilities included CDOT, Excel Energy, Holy Cross Energy, Black Hills Energy, Century Link, Sturgeon Electric and Hooper Corporation, Union Pacific Railroad, Amtrak.
- Re-opening Adventure Land Park, and allowing access for hunting permittees, land/cabin owners, as well as range operations while continuing our suppression and repair work helped to foster good relationships with communities.
- Worked with local USFS representative to clear Hanging Lake Trail of slash and prepare it for re-opening.
- The IMT READ coordinator was critical for identifying, prioritizing, and coordinating the repair work in all divisions. Up to 10 READs were assigned to the incident and the single point of contact between the READs and the Operations section ensured work was initiated in a timely matter and was coordinated with the suppression divisions.
- The Alaska Team continues to train and retain team members, building depth and resilience.
- The Alaska Team feels very comfortable working with numerous spike camps in remote areas and delivering food and supplies in multiple ways. Delivering briefings via radio and in the virtual environment is not new to us and is generally considered normal operations. This experience enables us to adapt to the unique challenges in 2020.

### Air Operations

Helicopter Pax Delivered  
206

Pounds of Cargo  
33,870 lbs

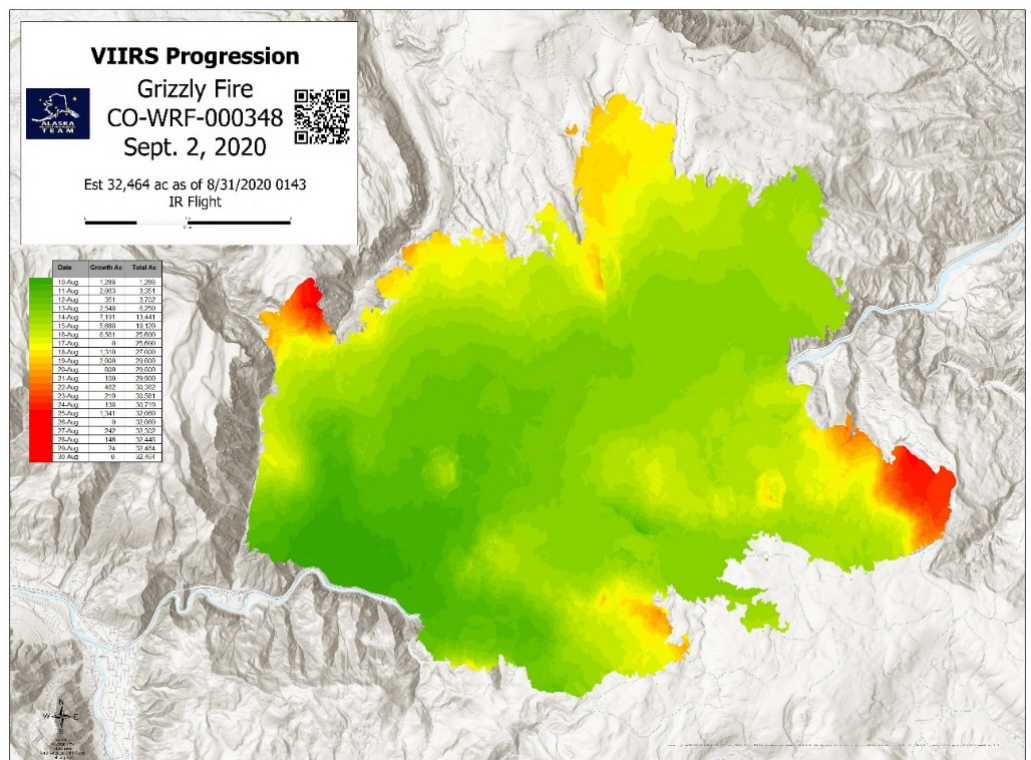
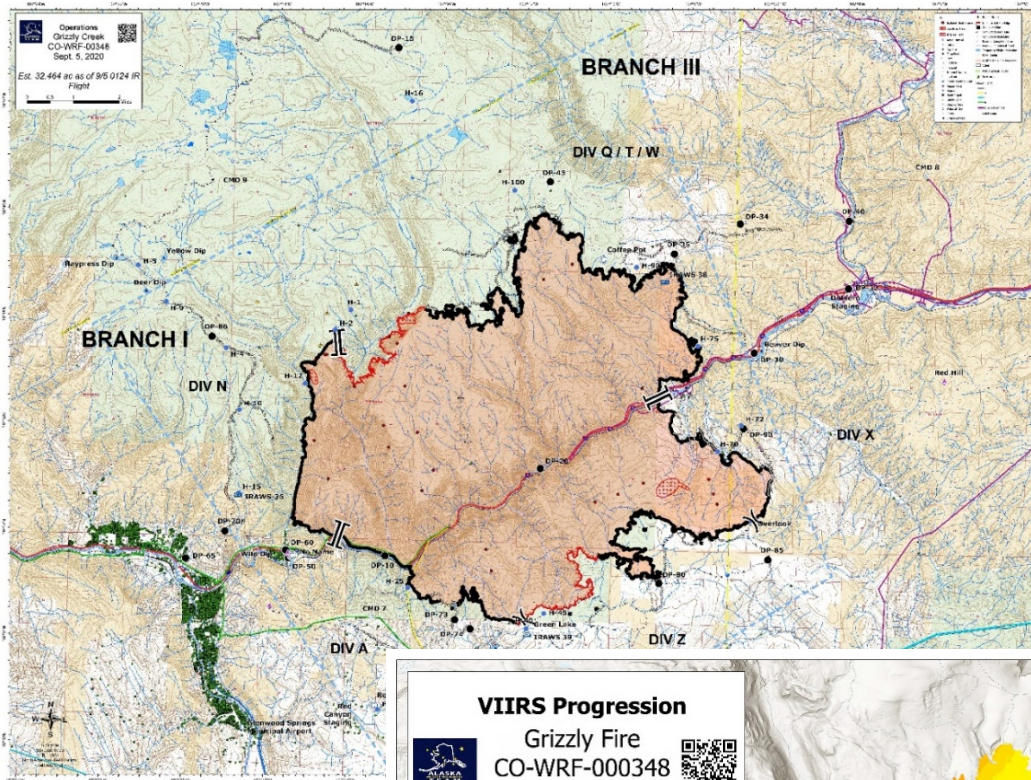
Gallons of Water  
206,713

Flight Hours  
74.2

Air Attack Flight Hours  
180.7

## Significant Challenges and Resolutions

- Numerous resources in critical positions (DIVS, TFLD) were timing out as we arrived. The only available resources much of the time were trainees. We emphasized the over-abundance of trainees without trainers in briefings and had qualified positions listed as critical needs. Additionally, we ensured that a trainee was not supervising a subordinate position trainee ie. TFLD t over a HEQB t.
- Radio dead spots in deep canyons and broken terrain made communications difficult. The Communications Unit listened to our needs and found an additional location for a repeater which improved the situation.
- Inclement weather was a challenge for driving. Early notification of probable precipitation allowed rolling stock to move to safe places (either off the hill, to blacktop, or hold in place).



## **Logistics**

### **Key Decisions**

- The decision to move the COVID-19 coordinator to the medical unit staff created a working relationship that allowed better dissemination of information and coordination of supplies. This relationship and collaboration increased awareness of overall firefighter health and fitness.
- The IMT used a Type 2 Crew for camp help when camp crews were not available nationally.



### **Notable Successes**

- Working with the remote Finance Section and the Buying Team worked well.
- Eight separate spike camps were supported at the peak of the incident. Having multiple Food Unit Leaders was critical to the IMT's ability to support multiple spike camps logistically.
- Operations gave timely information and overall communication between sections was excellent.
- An on-site chainsaw repair vendor provided a quick turnaround for repairs and took the burden of purchasing saw parts off of the Buying Team.

### **Challenges and Resolutions**

- Not having finance on site to provide documentation/clarification with comp/claims, land use and equipment agreements. Established a meeting schedule with expanded dispatch, finance, buying team and Alaska team logistics chiefs and supply unit leaders to discuss issues.
- Preparing and delivering 650 individually wrapped meals to 8 locations required more time and effort than standard catering/hot cans.

#### **Food Unit:**

Meal Count Total: 22,804

Breakfast 7,476

Lunch 8,230

Dinner 7,098

#### **Facilities:**

3 Shower Units

Potable water used: 365,000 gl

15 Land Use Agreements

#### **Communications:**

4 Repeaters

9 Command radio kits

3 Logistic radio kits

144 radios issued

#### **Supply:**

101 pumps issued

34 chainsaws

75 miles of hose (1" & 1 1/2")

#### **Ground Support:**

49 NERV Rentals

30 UTV Rentals

2 Fuel Tenders

## **Safety**

### **Key Decisions**

- The IMT disengaged firefighters off of the fireline on multiple occasions due to safety concerns. Back-to-back wind events with gusts of 40 mph threatened to topple fire-weakened trees and a soaking, overnight rainfall kept firefighters off the line until late morning due to slippery footing and dangerous road conditions.

### **Notable Successes:**

- There were no positive cases of COVID-19 documented on the incident.
- A stellar safety record with no lost time due to injuries despite more than 800 firefighters on the incident at its peak.
- Two IWI simulations provided significant learning opportunities for all. Field Safety Officers interacted with base camp managers and divisions to minimize issues and concerns before they grew in scope.
- The incident provided an excellent training opportunity for the Team SOFI trainee.

| <b>Safety Statistics</b>            |           |                      |           |
|-------------------------------------|-----------|----------------------|-----------|
| <b>Total Patient Contacts - 177</b> |           |                      |           |
| <b>Treated and Released:</b>        |           |                      |           |
| <b>Stomach</b>                      | <b>2</b>  | <b>Nose</b>          | <b>3</b>  |
| <b>Foot Care</b>                    | <b>9</b>  | <b>Insect Bites</b>  | <b>4</b>  |
| <b>Back</b>                         | <b>12</b> | <b>Allergies</b>     | <b>9</b>  |
| <b>Headache</b>                     | <b>10</b> | <b>Preventative</b>  | <b>60</b> |
| <b>Eye</b>                          | <b>5</b>  | <b>Strain/Sprain</b> | <b>1</b>  |
| <b>Ear</b>                          | <b>5</b>  | <b>Altitude</b>      | <b>1</b>  |
| <b>Laceration</b>                   | <b>6</b>  | <b>Muscular</b>      | <b>4</b>  |

### **Challenges and Resolutions**

- Much of the firefighting on this incident took place in steep, rugged terrain at high elevations. Safety Officers worked closely with Operations to place a heavy emphasis on safety during daily briefings. Firefighters were encouraged to take their time and not take any undue risks.
- Dangerous driving conditions on steep, twisty, narrow dirt roads and on Interstate 70 posed a high risk. Firefighters were spiked out in camps close to the fireline to reduce the need for driving. Driving safety was a daily topic in morning briefings.

## **Public Information**

### **Key Decisions**

- Due to concerns related to COVID-19, in-person crowd gatherings used in the past for things like community meetings, traplines, etc. were largely replaced by virtual meetings on Microsoft Teams and Facebook Live events and live videos.
- The relatively small Information staff (10 on-site PIOs initially, dropping down to seven one week into the incident), used three virtual PIOs to help ease the work load for on-site PIOs. Virtual PIOs were able to post to Inciweb, monitor and respond to email, distribute products via email, ensure 508 compliance, document media coverage, provide training, write a transition plan and handle other duties that didn't require being on-site.

- A monitor in the information shop was used to connect virtual workers with on-site staff through Microsoft Teams. This allowed virtual PIOs to listen, observe, and participate with on-site PIOs in real time and maintain a common operation picture for the incident. Microsoft Teams was also used for nightly PIO briefings and virtual PIOs were able to attend and contribute in a team setting.
- Information staff focused on virtual interaction with the public to adhere to COVID-19 mitigations while also meeting the objective of getting timely, accurate information to the public.
- Traplines on both the east and west sides of the fire were dismantled to reduce COVID exposure to both PIOs and the public



### Notable Successes

- Use of Facebook Live to broadcast community meetings helped mitigate COVID concerns while still providing the local communities access to timely, accurate information. Information officers were able to document questions from the public that were then answered at the end of the meeting.
- Incorporating virtual PIOs to assist with daily assignments helped ease the workload on a relatively small information shop and allow on-site PIOs to focus on tasks that needed to be accomplished on site or in person.
- Featuring staff (i.e. Agency Administrators) from the White River National Forest in video PSAs about mountain bike safety in Forest closure areas and prevention messaging for the Labor Day Weekend. This is a practice the Alaska IMT info shop plans to use in the future to enhance relationships with agencies and cooperators, as well as build credibility with the local audience.
- Using video equipment and facilities provided by both Eagle and Garfield counties to broadcast community meetings on Facebook Live reduced some of the preparation time and work involved in holding public meetings.
- Produced messaging advising stakeholders of potential impacts of flash flooding and critical fire weather conditions (i.e. Red Flag Warning) and were prepared to respond with real-time messaging, if necessary.

### Information Stats

#### Social Media Reach

1,018,585 from August 25 to September 7.

#### Facebook Likes

31,075

#### Post Engagements

165,489

#### Video Views

Total of 53 videos received 331,165 views

#### Community Meetings

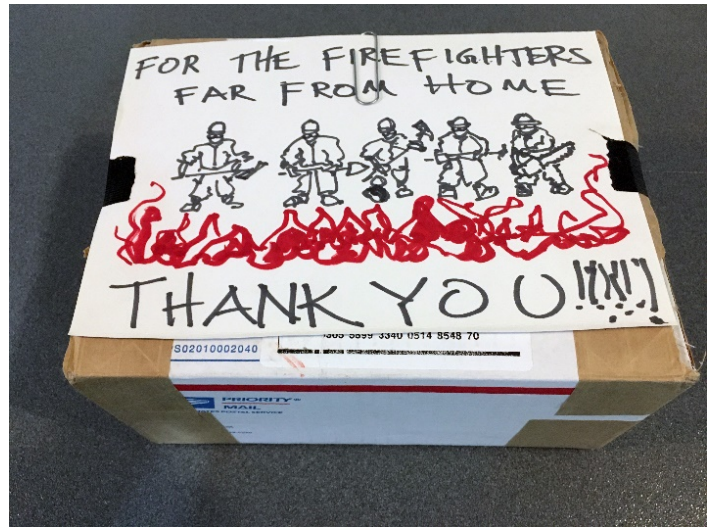
4

#### Phone Calls

274

## Significant Events

- The information office facilitated three different VIP visits that included two U.S. Senators and a former Colorado Governor who is running for the U.S. Senate. Two of the visits were on the same day at the same time in different places, requiring the PIO shop to create modules for each visit while also preparing for a community meeting that night.



## Significant Challenges and Resolutions

- Learning how to operate efficiently and smoothly in a virtual environment and become familiar and proficient in Microsoft Teams. The PIO shop tapped into the skill sets of its diverse team to help identify and implement best practices within the Teams environment.



## Finance

### Key Decisions

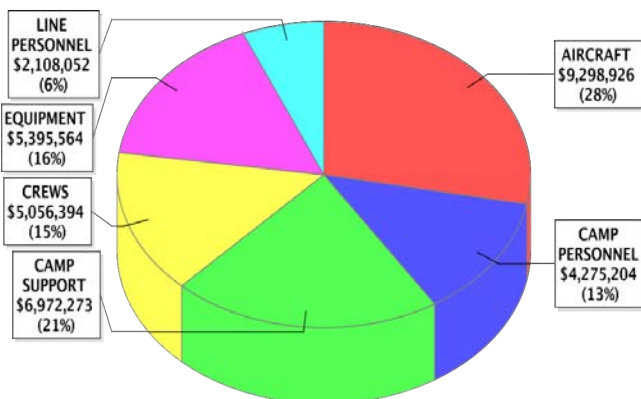
- Use of Microsoft Teams meetings vs GoToMeeting
- Carryover of Great Basin 2 check-in and demob forms/processes
- Located the Finance section at a remote location off campus to reduce the number of personnel at ICP due to concerns with COVID-19.
- Utilizing VNC Viewer for remote demobilization.

### Notable Successes

- Streamlining the process on how to assign workload within Teams to timekeepers.

### Significant Challenges and Resolutions

The requirement for electronic processing and documentation for the incident greatly hindered the efficiency of the finance section. Information security, limited internet access for personnel in the field, and varying levels of experience with working in a digital platform, were all contributing factors that kept the Finance section behind and unable to truly catch up with workload. The Finance section needs double the staffing, monitors to accompany laptops, and constant ITSS support to successfully support incident personnel and digital documentation requirements. Until Incident Business Operations are fully automated, the local agency would be better served to allow a paper process for finance section of the IMT. The documentation file can be scanned at the end of an incident. This will allow for an effective finance section and more thorough/accurate financial documents to be left for the home agency as well as a smooth transition if handed off to another team.



| Cost Breakdown by Acres and Ownership As of 9/8/20 |                |         |              |
|----------------------------------------------------|----------------|---------|--------------|
| Landowner                                          | Acres by Owner | % Acres | Cost Share   |
| USFS                                               | 28,092         | 86.65%  | \$25,076,744 |
| BLM                                                | 2,426          | 7.47%   | \$2,163,064  |
| Co State                                           | 1,908          | 5.88%   | \$1,701,206  |
| Totals:                                            | 32,431         |         | \$28,941,015 |
| Cumulative Total Cost to Date:                     |                |         | \$32,354,676 |

## Plans

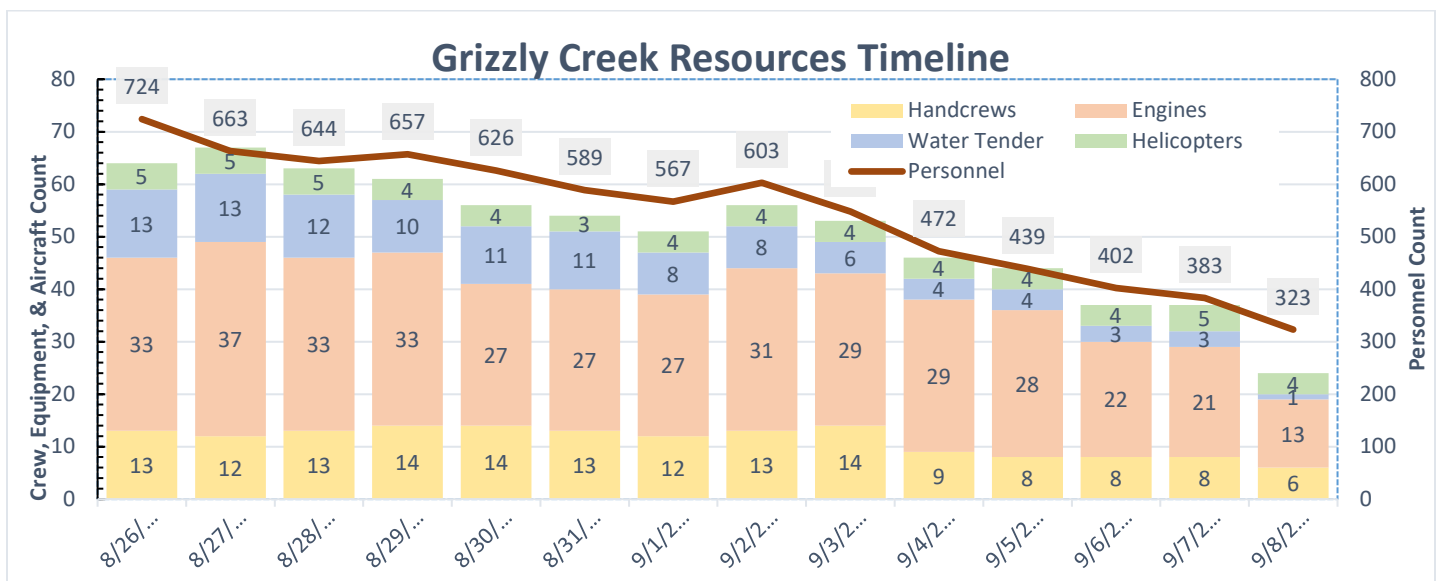
### Notable Successes

- Virtual and Teams meetings and briefings were a constant challenge but overall were successful.
- Having a hybrid of on-site and virtual positions was a challenge but overall communication was successful, and the team was able to operate efficiently in a new type of work environment.
- Utilizing a combination of the Colorado State Multi-Mission Aircraft and the National NIROPS program provided different levels of flexibility for receiving infrared perimeter and heat source data on the fire.
- A Long-Term Strategic Analysis was developed for the Grizzly Creek to help in guiding long-term direction on the fire. A Story Map was developed to convey the analysis and was published to the NIFC AGOL at <https://storymaps.arcgis.com/stories/3bef9e54c37243d4960baf52fb2f6364>. The use of a Strategic Operational Planner was used in creating this analysis.



### Significant Challenges and Resolutions

- Inheriting different virtual procedures and forms from previous teams is challenging and requires a decision to be made to keep going with the same method or change to a team standard.
- National IMT Section (IMRR) calls stressed the importance of workflow and product consistency for firefighters. If processes could be maintained between IMT's, firefighters would have an easier time completing virtual and paperless products. The IMT made decisions and adjusted according to the new guidance.
- Rental IT equipment had a high rate of failure.



## **Resource Advisor Coordinator**

### **Key Decisions**

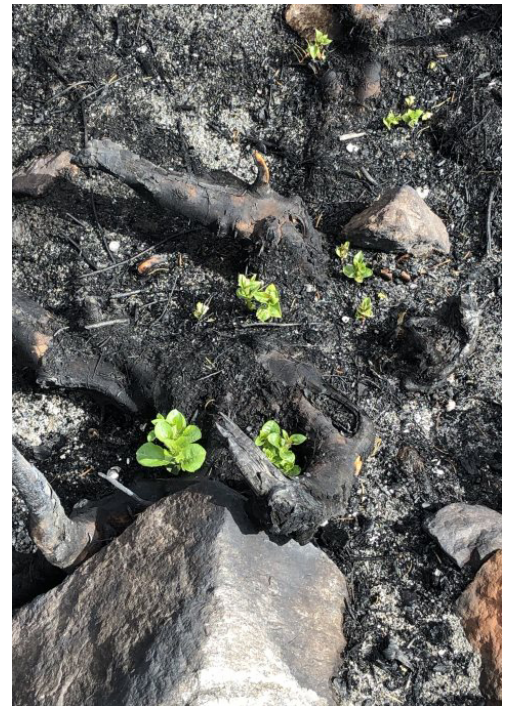
- Development of landowner repair waiver to ensure private property owner cooperation/involvement in repair prescriptions on private land.
- Conducted aerial reconnaissance with both USFS and BLM staff to identify suppression repair extent, relative impacts to land management units, and plan development.
- Focus READ camping in ICP as much as possible and begin READ meetings at 1900 each night.

### **Notable Successes**

- Tied Suppression Repair and READs together with common morning and evening meetings, fostered communication and effectively created a Suppression Repair/READ team. This enhanced communication and sense of team led to significant efficiency gains and the right people being at the right place at the right time and communicating the right information.
- Early coordination between READs, local agency GIS, IMT GIS and Situation Unit Leader to ensure proper management of READ, FOBS, and Suppression Repair geospatial data.
- Successful level of coordination with Planning OPS and Field Ops. Cooperation and information sharing with Divisions and Branches was also successful; no significant conflict or miscommunication between READ and Operations personnel.
- Engaged with local USFS Range Officer and livestock owner to arrange for movement of several hundred head of sheep and lambs within the incident perimeter.
- Supported PIO mission with photos and videos from repair effort. Bringing PIO staff to the field and arranging for video interviews with suppression repair staff.

### **Significant Challenges and Resolutions**

- Always a challenge to maintain accurate up-to-date data. Communication fostered between local agency GIS, READs, and IMT GIS. IMT GIS and SITL was outstanding, really impressive amount of GIS support on this incident.
- Span of control was an early issue with Lead READ and READs, this seems to be a common theme on incidents and an area where a READ Coordinator can have a significant positive impact. Loose operational control of READ field effort was addressed through communication, coaching, and active engagement in the effort in the field.
- A significant amount of private ranch land had suppression repair needs. Private lands repair prescriptions were the responsibility of the local Sheriff (Eagle and Garfield counties). Concern that some verbal agreements may not hold up were addressed by a repair waiver addressing any repairs below the “Stage One” level of repair.



## **Shared Experiences**

A global pandemic in the midst of national planning level 5, coupled with new technologies was a challenge for all functional areas of the IMT. Most obstacles were overcome; however, there is room for improvement as the IMT learns to deal with a new hybrid of virtual and on-site tasks.

### **Notable Successes**

- Successful use of personnel and cooperators working virtually and communicating among multiple locations via Microsoft Teams calls, Go-To Meeting, and Zoom.
- Implementing virtual processes to accomplish tasks such as check-in, demob, and timekeeping.
- Social distancing and use of face masks and other measures to reduce COVID-19 transmission.

### **Significant Challenges and Resolutions**

- There is still a learning curve for most IMT members of the use of new technologies such as Microsoft Teams, Firenet, and other new programs. New procedures and instructions in how to perform what were once routine tasks such as check –in, CTR submission, and demobilization are being developed in real time.
- Finance working at an off-site location helped to mitigate COVID concerns but caused a considerable amount of extra drive time for ITSS and other incident personnel.

### **Virtual Employee Considerations**

- Consider rostering a Technical meeting manager(s) (no fire experience necessary) to provide tech support and allow other staff to concentrate on existing jobs.
- Establish visual reminder of Virtual Employees (VE) including live feed on monitor (Facetime, Teams Chat, etc.), or photograph with phone number, etc. so all in unit know they have a VE to provide support if needed.
- Acquire a Virtual Tool Kit to include bluetooth tools such as speaker/microphone, extra laptop for virtual presence during the day, various connecting tools to manage different types of USB's, telescoping tripod for using smart phone as camera, etc. Standardize brands within team for exchange possibilities and so anyone can use another's equipment in a pinch.
- Daily communication with VEs is critical to success. To the extent practical, this should be scheduled to get into rhythm for work in section/unit.
- VEs should check in/out daily to help with accountability.
- Would be good to start early on an incident to develop and maintain a holistic contact list and manage it as a team rather than by unit. Who controls and how it gets sorted/updated needs to be addressed. (i.e. Incident Yellow Pages)

