KNP COMPLEX – TYPE 3 ORGANIZATION

LESSONS LEARNED REVIEW September 13, 2021

Learning from a Close Call

The primary goal of this Lessons Learned Review is to use the experiences of those working on the KNP Fire during the Type 3 organization to learn and continuously improve our practices in Parks during emerging incidents. Lessons Learned are drafted in a way that helps them garner relevance in any Park where an emerging incident of any kind is impacting day to day operations.

1. Preface

Purpose and intent of this Lessons Learned Review

In accordance with National Park Service (NPS) Reference Manual 18, Wildland Fire Management (RM-18), and Reference Manual 50B Occupational Safety and Health, a review of incidents with potential is encouraged through an open forum where participants can relay their perceptions of events to learn and share broader lessons service wide. It is well documented that for every accident there are many close calls or near misses. This Lessons Learned Review is an attempt to learn from one of these close calls.

2. Introduction

During the extremely busy fire season of 2021, two fires (Paradise and Colony) ignite in Sequoia Kings Canyon National Park (SEKI). With the region and nation in Preparedness Level 5 for extended durations, resources for initial attack and the remote location of these new fires places the Park in a difficult situation regarding how to manage these incidents.

A Type 3 Incident Management Team organization is built and assigned to the fires and begins to develop a range of management options to control the fires. During the Type 3 Team's engagement with the fire, significant and predicted fire spread forces evacuations and Park closures.

With resources spread thin, some Park employees are helping with the management of the incident. These same employees will eventually fall under the evacuation order issued by the Park. On the morning of Tuesday, September 14, a SEKI employee is headed from the Lodgepole area north of the fires to the ICP at park headquarters in the Ash Mountain developed area to help with logistics for the day. She is travelling down the Generals Highway, which is the shortest travel route from Lodgepole to Ash Mountain Headquarters.

The employee unexpectedly encounters debris on the road that results in a flat tire. The employee also realizes the fire is on both sides of the Generals Highway and all around her location. The employee calls for help.

3. Events Leading Up to this Call for Help

The Type 3 Team was not able to staff a day and night shift. Resources were therefore organized for day shift coverage. Fire behavior from the start of the fire had not posed a significant threat during the night. At 2200 hours on Monday, September 13, as resources were bedding down at the roping arena in Three Rivers, the Type 3 IC noticed some unexpected fire behavior from his location at Ash Mountain. Due to the amount of fire activity, the IC requested assistance from the IC Trainee to mobilize Operations and a Strike Team of engines to return to fireline duty at 2215 hours.

As a result of the fire behavior that evening, at 2241 hours the Type 3 Team recommended closure of the Generals Highway due to fire impacting the road and a large amount of debris coming down onto the road. That evening, the Type 3 Team also decided to issue an evacuation warning for the Lodgepole developed area. This evacuation order for the Lodgepole developed area would be issued for the next morning.

The Park leadership had completed and reviewed their Evacuation Strategy Document several months earlier and had been reviewing it since the fires began. There was also messaging communicated out to

all employees via reverse 911 and via all employee emails to contact Park Dispatch prior to making the drive from Lodgepole downhill to Ash Mountain or beyond.

As part of the anticipation for the closure, the Generals Highway was coned off for downhill traffic at Lodgepole. The uphill lane was left open because fire equipment was regularly patrolling this area. All evacuation traffic was directed to leave to the north away from the fire areas.

Fire behavior during Tuesday night was unusually active. The engine Strike Team discovered that the fire had crossed the Generals Highway just west and north of Potwisha. The Strike Team determined they could patrol the road to Hospital Rock while protecting Park infrastructure and a contractor's equipment in the Potwisha Campground.

The fire was actively making runs in the interior, adding more uncertainty as to where the fire had progressed. The Strike Team encountered much debris on the highway. Its members were glad the decision was made to close the road.

4. The Employee's Call for Help

As the Strike Team gathered at the Potwisha Campground in the early morning hours of Tuesday, September 14 to transition with incoming day resources, they overheard radio traffic to Park Dispatch from a Park employee who stated they had a flat tire and were surrounded by fire on the Generals Highway.

Rather than wait for Dispatch to request assistance, the Strike Team Leader (STEN)and Trainee (STENt) recognized they were the closest resource to the party calling for help and made the decision to see if they could reach the party from the south.

The Park employee tried to turn around and limp the vehicle back to the north towards Lodgepole—and communicated this to Park Dispatch. The Strike Team Leader and Trainee, in a pickup truck, made their way to Hospital Rock hoping to encounter the employee en-route. When they made it to Hospital Rock, they decided they could navigate farther up the Generals Highway. In the light of day and with fire behavior moderating under an inversion, they worked their way through the debris on the roadway in search of the stranded employee.

5. The Decision to Continue

As the STEN and Trainee made their way farther up the highway, they encountered significant debris and smoke on the road. They also identified several areas of hard black that they could fall back to if fire behavior picked up.

Fire behavior was described as smoldering on both sides of the road with an occasional flare up in isolated brush pockets in the fire's interior. Approximately one-mile past Hospital Rock the STEN and Trainee exited the fire area and found a government van (GOV) with a flat tire facing uphill towards Lodgepole. They spoke with the employee who was not in fire resistant clothing and had no idea the road had been closed nor had they expected to encounter fire on the drive down to Ash Mountain. The employee had driven the route on Monday evening without any concern or issue.

At that time, the two fires (Paradise and Colony) were not a direct threat to the roadway or the developed area and the road was still open for administrative use only. The STEN contacted Dispatch to inform them they had made contact with the employee and were going to transport them down to

Potwisha Campground to rendezvous with another employee and vehicle. The STEN was requested by Park Dispatch to change the tire out before driving back through the fire area. But the GOV had no spare tire. Rather than leave the vehicle there, they limped the van downhill through the burn area to the Potwisha Campground per the request of Park Dispatch.

6. Closures Not Known to All

During the ride down through the fire area, the employee relaxed and stated that she "had no idea about the fire's growth or that it had crossed the road" and confirmed that she didn't realize there was a hard road closure.

The Type 3 Team documented the recommended closure of the road and made assumptions the Park Staff would take care of the closure that evening. The closure was not staffed by law enforcement due to a shortage of resources, but it was coned off and signed as closed.

Because the employee had traveled the road the previous evening, they continued around the cones on Tuesday morning without contacting Dispatch. The employee was heading to assist with logistics for the incident.

After being picked up by the STEN and STENt, from the safety of their pickup while the GOV van was driven in front of them by the STENt, the employee videoed the fire burning on both sides of the road. The video footage shows pockets of brush burning on both sides of the road with large areas of smoldering.

The employee did have a Park radio and had received training on how to use it, however she had never had a reason to use the radio. This surprised the STEN because the employee did a good job in communicating her situation to Dispatch.

7. Near Miss Identified

As the events played out and everything resolved itself safely, the Type 3 Team realized this event could have become much worse. The Team reached out to the Regional Office for assistance in looking into learning from the situation that allowed this "Near Miss" incident to occur.

The Team was also working to transition the fire to a Type 1 Incident Management Team as the two fires burned together and increased significantly in both complexity and threats to values at risk.

All personnel involved in this incident performed with a sense of Duty, Respect, and Integrity. Communicating this near miss to leadership should be applauded as a successful example of our learning culture.

8. Lessons Learned

The Importance of Transferring Information

The most difficult period in any Park-wide incident is the transition from normal operations to some type of altered operations. Parks are encouraged to develop and practice Continuity of Operations Plans (COOP) not just for Visitor and Resource Protection (VRP) staff but for all divisions.

NPS units that have weathered large fire incidents, power outages and severe weather events all report accountability as the most difficult part of the COOP process and the part that most stresses managers.

Methodology for transferring critical information to staff is also a key component of the transition into a COOP. This near miss incident highlights the importance of information and accountability loops to staff.

- If a road is closed for safety reasons and cannot be staffed, make sure it is well marked and barricaded to ensure there is no question about the status of the travel corridor. The road's closure point is also a good place to post general information about the incident and reinforce employee and supervisor communications and accountability.

Supervisory Oversight and Employee Accountability Regarding Government Owned Vehicles
NPS vehicles should be maintained and inspected prior to use. Whether a vehicle is assigned to an individual or work group or part of a pool, the potential for small issues to be passed to the next user, such as empty fuel tanks or missing safety or maintenance equipment, is high without supervisory oversight and employee accountability.

- Assure Government Owned Vehicles are equipped with required and necessary safety and maintenance equipment such as spare tires, jacks, safety vest and other site-specific items necessary for the safe use of the vehicle. This is both an employee reporting issue and a supervisory control issue.

Radio Operations and Training
Employees should receive training on how to use portable radios and the radio infrastructure within their Park. In many Parks, portable radios are the employees' only link to help themselves or assist visitors in distress. Understanding of the radio system and identification of infrastructure weaknesses should be regularly communicated to employees.

- Ensure employees are trained on the use and maintenance of portable radios at the beginning of the season and offer refresher courses for returning or permanent employees.
- Establish a radio task force to identify solutions to known radio issues.

Provide for Peer Support and Positive Learning
Employees have vastly different risk tolerance. The way they see the world varies greatly.

- Allow employees who experience unplanned events and outcomes the opportunity to discuss this event with peers and others involved with the incident to provide for closure and positive learning and to allow for other support mechanisms to engage as needed or requested.

This Lessons Learned Review was compiled by:

Mack McFarland
Wildland Fire Safety Specialist
Fire Program Management Center
National Park Service