

## West Region Wildfire Council Meeting Minutes 4/13/17

| Last Name   | First Name | Affiliation          |
|-------------|------------|----------------------|
| Austin      | Tom        | Log Hill Fire        |
| Bennett     | John       | Telluride Fire       |
| Chappell    | Randy      | BLM                  |
| Ellis       | Steve      | DFPC                 |
| Falk        | Lilia      | WRWC                 |
| Gomez       | Jamie      | WRWC                 |
| Gottlieb    | Paul       | MCSP                 |
| Lewis       | Brandon    | BLM                  |
| Mattivi     | Junior     | Ouray County         |
| McCarthy    | Jim        | Log Hill Village HOA |
| Menz        | Mary       | Ouray Plaindealer    |
| Odom        | Luke       | DFPC                 |
| Rogers      | John       | Log Hill Fire        |
| Rowan       | Tad        | Montrose Fire        |
| Tarantino   | Mike       | WRWC                 |
| Trojanowski | Adam       | DFPC                 |
| Winslow     | Steve      | DFPC                 |

### Introductions

Lilia Falk facilitated the meeting and initiated a round of introductions. She then introduced Steve Ellis the West Area Fire Management Officer for the Colorado Division of Fire Prevention and control who presented on his time on the Beaver Creek Fire in 2016.

**Presentation: “2016 Beaver Creek Fire: Tactics and Lessons Learned” presented by Steve Ellis, the West Area Fire Management Officer for DFPC and the Delegated Agency Administrator to the Beaver Creek Fire for the State of Colorado.**

[Click here to view the presentation](#)

On June 19<sup>th</sup>, 2016 a human caused fire started on USFS land in Jackson County 24 miles northwest of Walden, Colorado. The Beaver Creek Fire would not be 100% contained until October 10<sup>th</sup>, as it burned for 113 days and consumed more than 38,000 acres of forest. Because of the fuel type, values at risk, and attention to firefighter safety the Beaver Fire would be managed unlike any previous fire in Colorado history.

The day the smoke was reported a mutual aid initial attack consisting USFS engines from Colorado and Wyoming, the Jackson County Volunteer Fire Department and the Carbon County, Wyoming Fire Warden arrived on a 25 acre fire burning in standing dead lodgepole pine. As the fire started to grow Jackson County was put on the hot seat. There is only one fire jurisdiction that covers the entirety of Jackson County, which meant that the county simply did not have the resources to fight a catastrophic wildfire. As the fire began to grow it was clear that resources would need to be ordered

from out of the county, which included their own logistical challenges. Logistics for a large scale fire camp are challenging in Jackson County as there are only three restaurants in the town of Walden and a small grocery store, the nearest chain grocer is more than 60 miles away. Furthermore the county was worried about the affects the fire would have on the counties revenue. There are only 1,700 permanent residents in Jackson County. The small communities of Jackson County rely heavily on revenue from tourism during the summer months, and community members had a legitimate fear of a large fire deterring tourism to the area. All of these factors associated with the Beaver Creek Fire presented challenges to Jackson County, but there was one major factor that presented a real challenge to the county: cost.

In total the Beaver Creek Fire ended up costing \$35 Million. How this significant cost would be covered was a major concern to all parties involved with the fire. After about 30 days the fire was being managed by three Federal Agencies, two states and one Wyoming County. This added a tremendous complexity in incident management decisions as well as a complexity in determining how the fire costs would be covered. Jackson County did set up an Emergency Fire Fund 25 years prior to the Beaver Creek Fire and this fire was the first candidate to receive EFF in the county. When assistance from the Emergency Fire Fund is accepted the incident becomes managed under the direction of the Colorado Division of Fire Prevention and Control. Because of this the Beaver Creek Fire became a state responsibility fire, and DFPC assumed control on June 21<sup>st</sup>, 2016. With four addendums the cost share with the State of Colorado ended on August 19<sup>th</sup>.

Ellis then started explaining the many political factors that influenced management of the Beaver Creek Fire. These concerns were threatened secondary residences on USFS and private lands, the risk of falling snags, and the health of the forests.

The Beaver Creek Fire was burning in a dense lodgepole forest type that experienced a high severity bark beetle epidemic in the 1990's. The resultant mortality from this beetle outbreak was approximately 80%. Ellis described the fire behavior on the Beaver Creek Fire as burning in thousands of toothpicks. When the relative humidity rose over night the fuels would absorb a little moisture, but by the following afternoon the fuel moistures of the standing dead trees were minimal. Ellis explained that at times the fire intensity was high and spot fires were thrown over a mile away. Because of the sometime intense fire behavior on the Beaver Creek it became ineffective and risky to fight a direct attack on the fire. The incident managers had to take a step back and observe what the values at risk were for this incident and what risks they were willing to take to protect those values. Throughout much of the burn area managed fire on the landscape could be very beneficial at regenerating beetle killed forests.

With the limited values at risk and high mortality forests it became imperative that the incident managers on the Beaver Creek Fire to account for firefighter safety. Just 18 months before the fire started a falling snag had seriously injured a firefighter in the same area as the Beaver Creek. This incident brought to attention the risks of working in a lodgepole forest that has been dead for over two decades. The naturally shallow root system of the lodgepole pine has a drastically reduced stability after its mortality and fire on the ground further compromises that stability. Because of this the Incident Management Teams responsible for managing the Beaver Creek Fire made the decision not to engage the fire within beetle killed stands. To protect firefighter safety, personnel would not cut line or mop up any hot spots inside beetle killed areas. Instead crews would fight fire aggressively in the sage, reinforce lines around timber with burnouts, and fight interior hotspots aerially.

The major values at risk within the Beaver Creek Fire were secondary cabins and residences on private land and on USFS 99 year leases. Overall 131 structures were at risk from the Beaver Creek Fire and 17 were lost including one home. Ellis explained that all though these secondary structures did not have much monetary value they were much more valuable to many of the homeowners than their primary residences. These homeowner's cabins in the woods have been in the family for generations and they have been visited every summer for years. Ellis explained that because the various road closures associated with the fire, homeowners were not allowed to access their properties for most of the summer. The structures on Forest Service leases presented unique mitigation challenges as the homeowner owned the structure but the federal government was the owner of the land. A homeowner in this situation does not have the freedom to mitigate the wildfire risk as any fuels treatment on Forest Service land require federal permission and a NEPA process. In this instance firefighters became responsible for the mitigation of these properties as well as the suppression of the fire itself. Structure

protection became the primary responsibility of many responding units on this fire as they mitigated fuels, set up sprinklers and applied structure wraps. There were some challenges with these structure protection methods though. Sprinkler systems cannot run continuously, they require pumps to be fueled and water sources filled. This prompted Ellis to ask rhetorically “can this be done everywhere?” which the obvious answer was no. Many structures were wrapped with a heat shielding foil, the same material that firefighter emergency shelters are made of. These wraps have been proven effective at directing the radiant heat from a passing flame front but they too have their challenges. The structure wraps are incredibly expensive costing tens of thousands of dollars per building. The wraps require personnel to climb on the roof and balance on ladders which present additional safety hazards. And the structure can only stay wrapped for a finite timeframe before the building material starts to absorb moisture causing warping and rot. Despite all of the resources allocated towards structure protection during this fire a structure was lost 39 days after the Beaver Creek started. This was an unusual consequence related to how the Beaver Creek Fire was managed as the fire kicked around for over a month before the structure was lost. Ellis tried to explain the public perception of this. If the responders went direct the fire may have been contained well before any structures were lost, but at what cost?

Ellis ended his presentation by explaining the great training opportunity the Beaver Creek Fire provided for firefighters. In total 2,200 firefighters were ordered to this incident as they rotated shifts through this long duration fire. There were 212 task books opened on the Beaver Creek Fire and 70 firefighters were recommended for certification.

The 2016 Beaver Creek Fire in Jackson County burned for over 100 days, consumed more than 38,000 acres and cost \$35 million. The incident management teams took an indirect approach at fighting this fire by letting it consume fuels within heavily beetle killed forests and staging their resources at structures and defensible locations. With the state of Colorado’s forest including millions of acres impacted by bark beetle the way the Beaver Creek Fire was managed may be the new normal for fire management in the state.

#### **Presentation: “Update on DFPC Resources” presented by Steve Ellis, the West Area Fire Management Officer for DFPC**

After presenting on the management of the Beaver Creek Fire, Ellis, presented to the council audience about the 2017 resources of the Colorado Division of Fire Prevention and Control. Ellis reported that the State of Colorado currently has two single engine air tankers available with a 1,000 gallon capacity. He then went on to explain that DFPC has been experimenting with a fire suppression gelling agent that has the capability to reactivate with the application of water. Ellis explained that the first load on every DFPC SEAT will contain this gelling agent and subsequent loads will drop retardant, unless the incident commander makes a different request of the tankers. Ellis then explained that DFPC has recently acquired five new Type 3 engines. These engines that are well adapted to engaging fire in WUI communities will be completely operational by the middle of summer. Although a new Type 3 engine will not be utilized in the West Region out of the Montrose Office, the West Region DFPC does have a fully staffed Type 4 engine and an available Type 6. To end his update on available DFPC resources, Ellis explained the aerial resources the state is making available. The Multi-Mission Aircraft is an advanced aircraft with high-tech infrared detection capabilities that can pinpoint heat sources thousands of feet above the ground. The State of Colorado owns two Multi-Mission Aircraft and they were responsible for detecting 27 starts in 2016. The MMA is a free service to Incident Commanders for initial size up and detection of new fires. The other DFPC resources that are available for the 2017 fire season are two helicopters. For the 2017 season DFPC has contracted two Bell Super 205++’s, one will be stationed in Canon City and the other one in Montrose. These Bell Super 205’s are bigger than the helicopters previously contracted by DFPC with a capacity of 200-250 gallons. These new helicopters are also more effective operating at higher elevations. Both of these helicopters are staffed with a ten man crew and are attached with a helitack chase truck. The Colorado Division of Fire Prevention and Control has numerous firefighting resources available to control wildfires throughout the state of Colorado over the summer of 2017.