Funny River Fire

AK-KKS-403140

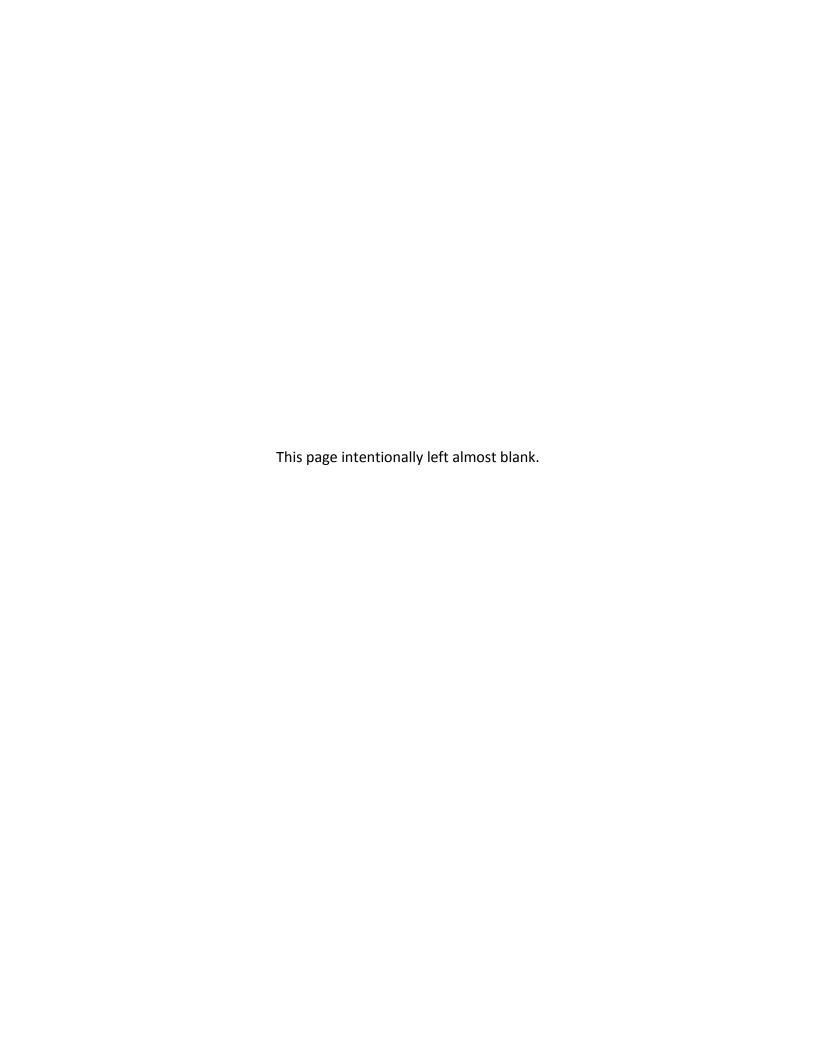


Photo Courtesy: Kristi Bulock, USFWS

May 20 – June 7, 2014

Alaska Type 2 Black IMT

Rob Allen, Incident Commander



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Incident Overview

May 19-20

At 1608 on May 19 Helicopter 13AT reported a wildfire 3 miles south of Soldotna airport along the Funny River Horse trail in a small stand of birch. Winds were out of the east at 12-15 mph. The Chena IHC had been staged in Soldotna and was mobilized to the fire along with Forestry engines. Orders were placed for Air attack, tankers, dozers, as well as additional crews and a helicopter. Gannett Glacier was mobilized from Mat-Su Area.

By 2000 winds had increased to 25 miles per hour and had shifted out of the north pushing the fire south toward Tustumena Lake. Air Attack estimated the fire's size to be 200 acres. The Alaska Type 2 'Black' Long Team, under the command of Incident Commander Rob Allen, was ordered for delivery 5/20.

At 2225 Air Attack reported the fire to be 4.5 miles from Tustumena Lake, 6.9 miles long, about ¾ of a mile wide, 2500 acres with a ½ mile head of 200 foot flame lengths. At 0030 on 5/20 the initial attack Incident Commander reported flame lengths of 125 feet and erratic fire behavior. The Funny River Fire quickly increased to over 20,000 acres and initial attack forces attempted to establish an anchor at its heel. The Black Team Logistics and Operations Section Chiefs arrived in Soldotna early in the afternoon of 5/20 and began preparations for the rest of the Team's arrival.

The incoming Black Team's initial objectives were assume command of the fire at 0600 on 6/21, contain the northeast side of the fire, and begin line construction south toward Tustumena Lake along the west flank.

May 21-26

Early on 5/21 the fire impacted the Funny River Road. The Alaska Type 2 IMT took command of the fire at 0400 and Forestry and CES engines, along with crews, were able to keep the fire from crossing the road to the north. The IMT was able to move into the new ICP at Skyview School. Crews continued to develop an anchor point on the north end of the fire. The following day the fire continued to grow on the northeast, southeast, and southwest corners. Crews made good progress burning along Funny River Road and dozers began to work east across the northern edge of the fire. Crews and dozers continued to secure the western flank. CL-215s worked to slow growth to the west and southwest. The fire made a late run to the southeast toward Bear Creek Subdivision, and a load of smokejumpers was deployed to initiate structure protection. Type 1 crews from the Lower-48 arrived at ICP and were briefed for the 5/23 operational shift.

On 5/23 the fire continued to burn actively through the peak burn period, as well as during the night. Dozers continued to build direct line east from Funny River Road and prepared a contingency hoselay along the fuelbreak. Dozers continued to work toward the southwest and a squad that hiked in to Coal Creek Lake began to work north toward the dozer line. Engines

assessed structures in the Pollard Loop area while smokejumpers and an IHC prepared to burn out along the Intertie powerlines. At Bear Creek, smokejumpers and a Type 2 IA crew plumbed structures and prepared to burn out. CL-215s continued to support suppression efforts in Divisions A and H. The Borough issued an advisory for the Pollard Loop area, warning that evacuation may become necessary.

On 5/24 strong winds produced active crown fire runs in spruce with single and group tree torching common around the perimeter. In Division A crews began burning from the fuel break west towards Funny River Road. In Division X dozers continued to work toward the southwest and the squad spiked at Coal Creek Lake continued constructing handline north to tie in with the dozer line. In Division H the fire backed into the Intertie powerline right-of-way, where an IHC crew and smokejumpers went direct to contain the fire's western edge. Riparian areas in the southwest corner were assessed for containment potential. CL-215s and helicopter buckets continued to support suppression efforts in Divisions A and H.

5/25 - Fire weather indices remained high, with extreme preseason availability of black spruce stands. Continued strong winds and continuous black spruce produced active crown fire runs late in the burn period. Spotting was observed up to 1/2 mile ahead of the fire, crossing the Kenai River. Active suppression on these spots limited fire establishment north of the river. Crews in Division A worked to contain a slop over the fuel break and aerial resources worked to slow the advance of a spot over the Kenai River. Residents in the Funny River area remained under an evacuation order. The squad at Coal Creek Lake continued to work north to tie into the dozerline in Division X. In Division H Smokejumpers and an IHC crew continued direct line north to the division break. Dozers and crews worked south from the powerline toward Tustumena Lake. At Bear Creek smokejumpers and a crew mopped up around the subdivision and prepared to burn out around the Pipe Creek cabin.

Strong westerly winds on 5/26 produced active crown fire runs (Rank5) in the fire's interior and away from values at risk. Black spruce continued to exhibit extremely low fuel moistures due to pre-greenup growth and seasonality.

May 27-29

Cooler conditions and light to moderate rain observed over the fire area gave a reprieve to fire fighters. Despite the moisture however, fuels under closed canopies continued to remain markedly dry. Ground moisture remained frozen ten inches below surface feather moss in most spruce stands. Crews progressed with direct suppression tactics around the north, west and south flanks, tying in with natural barriers. Old burn scars helped to slow fire progression to the northeast. Inaccessible terrain to the east posed difficulties for fire fighters. Evacuation orders were lifted in the Funny River communities. Structure protection efforts began for private and public structures east of the fire along the south shore of Skilak Lake, Killey River and the east shore of Tustumena Lake.

May 30-June 6

Fuels dried considerably on Friday, May 30 with Chinook winds affecting the western edge of the fire area. Isolated pockets on the west side of the fire displayed very active backing due to 40+ mph easterly winds and limited precipitation. On the following day continued high winds were accompanied by significant precipitation over the entire fire area which decreased fuel availability. Precipitation continued to saturate fuels on 6/1 and fire activity was minimal. Crews and equipment made good progress toward containment goals and the IMT began to release crews and equipment from the fire. The incident suppression repair plan was signed and work began on repair of some dozerlines. At 0600 on June 6 the IMT transferred command of the fire to Tim Soliday's Type 3 organization.

Incident Objectives 5/21-5/26

- 1. Provide for the safety of the public and firefighters by implementing sound risk management and hazard mitigation practices.
- 2. Hold the fire using all appropriate means, consistent with the management priorities to protect the communities of Soldotna, Funny River, Kasilof, private structures along the Sterling Highway Corridor, and the Bear Creek Subdivision.
- 3. Prepare and disseminate public information for media, communities, and stakeholders.
- 4. Manage the fire consistent with values at risk with due consideration for cost containment.

Incident Objectives 5/27-5/30

- 1. Provide for the safety of the public and firefighters by implementing sound risk management and hazard mitigation practices.
- 2. Hold the fire using all appropriate means, consistent with the management priorities to protect the communities of Sterling, Funny River, Kasilof, and Soldotna, as well as allotments and private and public structures within the Sterling Highway Corridor and along the shores of Skilak and Tustumena Lakes.
- 3. Mop up to the degree necessary to make the likelihood of escape low: based on experience, terrain, fuel types and conditions, and current and predicted weather.
- 4. Prepare and disseminate public information for media, communities, and stakeholders.
- 5. Manage the fire consistent with values at risk with due consideration for cost containment.

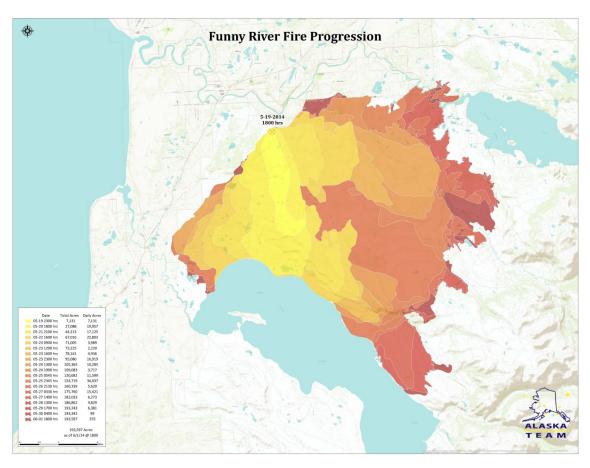
Incident Objectives 5/31-6/3

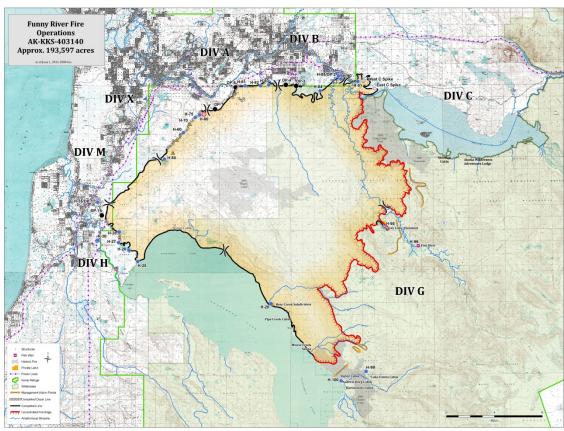
1. Consider the safety of the public and ensure that all operations are conducted with the least firefighter exposure necessary to meet the incident objectives.

- 2. Hold the fire using all appropriate means, consistent with the management priorities, to protect the communities of Sterling, Funny River, Kasilof, and Soldotna, as well as allotments and private and public structures within the Sterling Highway Corridor and along the shores of Skilak and Tustumena Lakes.
- 3. Mop up to the degree necessary to make the likelihood of escape low: based on experience, terrain, fuel types and conditions, and current and predicted weather.
- 4. Effectively communicate timely and accurate fire information to residents, media, and stakeholders to foster their understanding of the incident.
- 5. Manage the fire consistent with values at risk with due consideration for cost containment.
- 6. Use a Fire Prevention Education Team to take advantage of opportunities to educate and inform the public concerning strategic fire management in the wildland urban interface through cooperative efforts.

Incident Objectives 6/4-6/5

- 1. Consider the safety of the public and ensure that all operations are conducted with the least firefighter exposure necessary to meet the incident objectives.
- 2. Prepare to transfer command of the fire to a Type 3 organization, and provide them with the information and resources required to monitor the fire and act appropriately if it poses a future threat to communities and other values surrounding the fire.
- 3. Mop up the fire to the degree necessary to make the likelihood of escape low: based on experience, terrain, fuel types and conditions, and current and predicted weather.
- 4. Identify and repair damage that has resulted from fire suppression activities to prevent the long-term environmental degradation of the land and its natural resources, and to encourage recovery.
- 5. Effectively communicate timely and accurate fire information to residents, media, and stakeholders to foster their understanding of the incident.
- 6. Use a Fire Prevention Education Team to take advantage of opportunities to educate and inform the public concerning strategic fire management in the wildland urban interface through cooperative efforts.





Funny River Fire Incident Summary

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Fire Weather Summary

The Funny River fire began under a regime of winds from the north gusting to 45 mph and relative humidities in the low teens. Although not uncommon, the combination of red flag conditions and pre-green up low fuel moistures aligned to create truly extreme fire behavior. The greater synoptic pattern observed during periods of large fire growth were not outside climatological breakpoints at the 90th percentile over the preceding month. They were however consistently at the 90th percentile for the 20 day period before ignition.

The fire began Monday May 19 at approximately 7pm. Strong north winds the day of the start pushed the fire in a narrow strip from Funny River Road to near Tustumena Lake, burning overnight. Winds died down day 2 and the fire took on a more fuels and local wind influenced pattern. Spreading east (uphill) and west (with the prevailing wind) with a more predictable pattern. The fire made a few more evening and late night runs with diurnal flow and poor relative humidity recover in the late evening.

As flow aloft switched to a more southerly pattern on the 24th, Red Flag conditions again existed with winds increasing the fire size to 123,649 acres. The 25th brought high southerly winds, again increasing spread to the north and east with available Black Spruce stands in alignment with them.

The 28th greeted the fire with cooler, damper weather moderating fire activity. Southerly flow, with temperatures in the high 40's and raised relative humidity helped temper fire behavior. The next several days produced light rainfall (.02in) over most of the fire area. Denser stands failed to realize benefits from this on the forest floor. On May 31 despite light precipitation in the morning, wind gusts increased into the 40 mph range, large pockets of unburned fuels in the interior and on the fire edge ignited and several large columns developed.

June 1st, high winds crossed the fire area in conjunction with a cold front passage. Power was out throughout a wide swath of the Kenai and firefighters were held to camps for the day. Notable rain developed with this front, with up to .50 inches registering at several stations. This precipitation pattern continued through the next several days.

In summary, this fire exhibited large growth commensurate with above normal conditions combined with extremely dry fuels. Red Flag warning conditions aligned appropriately with actual fire behavior and could be relied on for expected large fire growth.

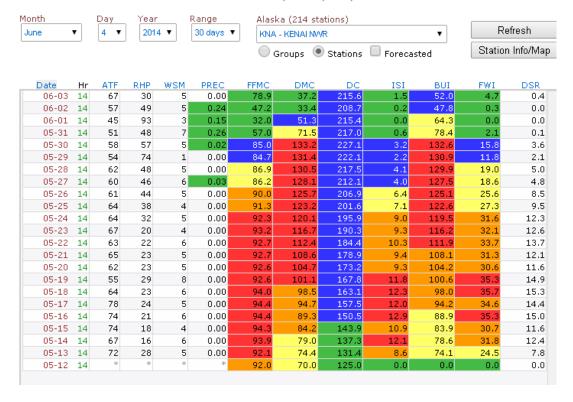
Fire Behavior

Fuels

- <u>Closed Black Spruce</u> (C-2, sh5) The primary carrier of the fire due to extremely dry surface fuels and low foliar moisture content. Early spring exposed these surface fuels early and very little precipitation during May produced fuel beds capable of carrying surface fire actively burning with and against the wind. Growth events were noted in the morning hours (May 22), during the peak period each day, and overnight (May 20/21 run toward Funny River Road).
- Spruce-Paper Birch-Aspen (M-1, tu5) Active burning, with surface fuels similarly dry on slopes and ridges.
- <u>Downed Beetle-killed Spruce</u> (O-1a, tu3), Found primarily on the south end of the fire area, and burning actively in grasses during the peak burn period.
- <u>Dwarf Black Spruce Scrub</u> (Limited Spread, very wet), more resistant to spread. Most lowland areas mapped on the DRGs suggest locations of these fuels.
- <u>2009 Shanta Creek</u> fire scar (limited spread, sh2)
- 2005 King County Creek fire scar (limited spread, sh2)
- <u>2004 Glacier Creek</u> fire scar (limited spread, sh2)

Fuel Moisture

Predictive Services - FWI Database (sorted by Date)

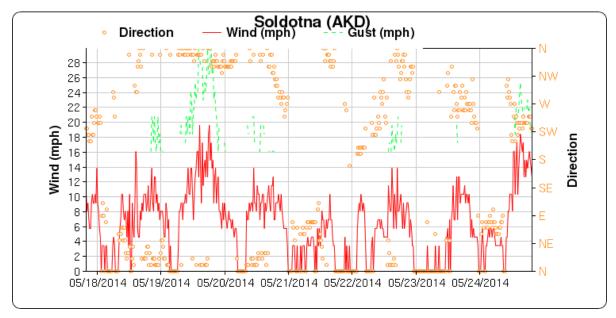


Spring started early in the western Kenai Peninsula. The last wetting rains came on May 6 and 7. Drying conditions persisted since, with relative humidity generally falling into the low 20s and a few days in the teens. As a result, live fuels remained largely dormant in wildland fuel beds expressing extremely low live fuel moisture, commonly referred to as the pre-season dip.

- Fine Fuel Moisture Code (FFMC) Indicated very receptive litter and moss fuels throughout the area.
- <u>Duff Moisture Code (DMC)</u> Indicated by the seasonal tracker graph for Kenai, reached historical maximum levels for the time of year, signifying availability of 100hr fuels, dead mosses, and stress to shrub/herbaceous fuel moistures.
- <u>Drought Code (DC)</u> Increased significantly, even without overwintering adjustments. Little evidence of deep burning was found, signifying that the levels were appropriate.
- Cooler temperatures, 1-hr fuel moistures (5 to 6% for unshaded fuels) and P(I) (50 to 60%) correlated well with FFMC levels, 93 corresponding to 10-hr fuel moisture of 7%.
- The Kenai RAWS (KNA) was used for FSPro ERC Classes for the fire area.

Winds

ASOS station at the Soldotna Airport was chosen as a reliable source of windspeed and direction for the predominate weather pattern for the fire area. Soldotna DOF RAWS (SDF) was used for FSPro winds.



Typical winds in the area are overnight drainage winds out of the East, turning to westerlys around midday for the remainder of the afternoon and evening. North winds on May 19 and 20 resulted from low pressure over the gulf.

Fire Behavior

Overall, modeled growth in black spruce (C-2) estimated spread rates of ½ to ¾ mph with active crown fire anticipated and realized when indices aligned. Mixed spruce and hardwood (M-1) suggests slower spread of up to ¼ mph with torching behavior expected.

Most of the burn scars and low black spruce scrub seem to be slowing spread of fire perimeter where it intercepts them.

Significant growth events:

- May 19 (7,131 ac): Initial run of approximately 8 miles over an 8 hour period of time with North winds 20 gusting to 30 mph.
- May 20 (27,870 ac): Winds significantly diminished at 8-12 mph supported a widening perimeter along Tustumena Lake on both east and west sides. Late at night, major runs to Northeast toward Funny Lake Road and the southeast toward the Bear Creek Subdivision between midnight and 0400.
- May 21 (44,213 ac): Little significant growth during the burn period, though late evening run under light winds noted in the north portion of Division A.
- May 22 (67,016 ac): During evening hours, large column developed in southwest corner, north of Tustumena Lake, signaling a significant run in black spruce.
- May 23 (95,080 ac): Evening runs on eastern flank in both Northeast and Southeast corners as well as the southwest flank.
- May 24 (109,083 ac): Growth on east flank in north half of Division A during peak burn period. Smoky conditions prevented evaluation of perimeter east of the Shanta Creek fire scar. Burnout conducted along NWS fuelbreak in NE corner of Division A during the evening hours contributed to total acreage.
- May 25 (154,719 ac): The east side of Division A continued to find stringers of Black Spruce and bumped the Kenai River in the Kenai Keys subdivision. Small slop overs continued in the fuel break area west of Browns Lake. Division D on the east side of the Shanta Creek fire continued to grow with slope and wind uphill.
- May 26 (160,339 ac): Internal stringers of Black Spruce continued to burn out with high intensity and smoke production.
- May 27-29 (193,243 ac): Higher humidities and light rain dampened fire behavior to isolated pockets of torching and smoldering.
- May 30-June 2 (193,597 ac): Light precipitation was followed by significant precipitation. Several days followed with no visible smokes in the fire area.
- June 3 (193,597 ac): Wind combined with drying resulted in sheltered pockets of fuel in Division C, which resulted in isolated torching in the interior of the fire.

Incident Commander

The direction given at the in briefing was clear, both the Division of Forestry and the Kenai Wildlife Refuge wanted the western and northern flanks of the Funny River Fire suppressed. Both agencies agreed that all reasonable efforts should be made to contain the fire with in the Refuge boundary and keep it from impacting the local communities. Fire spread to the east was of little concern. This allowed the Incident Management Team to implement an aggressive plan of action to control the fire on the north and western flanks. Both direct and indirect attack tactics were used and bolstered with burnout operations.

Several factors contributed to extreme fire behavior displayed on the Funny River Fire. This winter saw a lower than normal snow fall amounts and warmer temperatures than normal in the area. Spring break up came early with little or no rain fall. This left the available fuel, the grasses, leaf litter and black spruce in a pre-green up state. An extended hot, dry, windy period preceded the start of the fire and contributed to the dryness of these fuels. This was the main carrier of the fire. Conditions have changed in these fuel types dramatically in the last 14 days. Rainfall over several days has helped with the green up process. This should make the fine fuels slower to react to the effects of sun and wind.

Several things contributed to the success of the Incident Management Team. On the northern flank, the shaded fuel break along Funny River Road helped firefighters stop the fire on the road and buy some time to get crews and hose in place on the mechanical fuel break south of the community of Funny River. This fuel break had been established in the past year with cooperation between State Forestry, U.S. Fish and Wildlife Service, and CIRI Corporation. Without these two fuels treatments it is highly likely homes would have been lost on the northern flank. On the western flank, the use of direct line with dozers was key in stopping the fires spread toward Soldotna. A large wetlands and the Homer Power Intertie helped to slow the fire's spread toward the Sterling Highway. This allowed time for the Team to get resources in place to construct dozer and hand line from the intertie to Tustumena Lake. Point protection was used on the eastern flank to protect the few values at risk inside the Refuge boundary. Here the fire has been allowed to burn to natural barriers.

Twice the Team felt the need to evacuate local residents. Both events were well coordinated and handled efficiently. Early planning by the Borough and Alaska State Troopers paid off when it was time to put the plan into action. The Team developed a good working relationship with both groups and Central Emergency Services. They attended all team briefings and planning meetings, and were active partners in the success of the Team.

A total of five public meetings were held. All were well attended and went a long way to help the public understand what the fire was doing and what efforts the IMT was putting forth. At the end of each meeting many residents wanted more information on how to Firewise their homes and their communities. Because of this interest the IMT was asked to support a national prevention team. This Team was ordered with two goals in mind. One to provide the local communities affected by the fire, the information they were asking for. Second, to build the capacity for Alaska to field their own prevention team in the future.

Safety

Staffing

Safety arrived at the incident on May 21 at 1000 while the ICP was at the River Center. After being briefed by the IC and Ops on the size and complexity of the incident, Safety ordered an additional SOF2 and four SOFRs to cover the anticipated four divisions and to cover Incident Camp needs. All orders were UTF in the Alaska GACC and were sent south. ICP was moved to the Skyview High School later in the day. An additional three SOFRs were ordered later in the incident to fill the needs of the expanding fire. Again, all these orders were sent south.

Hazards

The major hazards that were identified for this incident were extreme fire behavior, congested roads, boat travel, snags, and a large and complex air operations. The safety team used the 215A, as well as a risk assessment matrix, to identify and mitigate identified hazards. The Team complied with the Dutch Creek and 30 Mile Abatement Plans. Ordering and manning a FAA tower with qualified personnel mitigated the complex air operations and control of air space.

Medical

There was an excellent safety record on this incident. There were 863 visits to the Medical Unit. There were nine people transported to the Emergency Room. Only two of those people were medically demobed for two reportable accidents on this incident, which were both minor injuries. There were no Safenets generated from this fire at the time of this report.

Information

This fire had a high level of local, state and national public interest due to the fisheries, recreation and community values at risk. The PIO Lead arrived ahead of the team at 12:00 on May 20, 2014. The PIO answered calls at the Division of Forestry Office from residents about the need to evacuate from 13:00 until the team in-briefing at 18:00. The first media interviews were given to KTUU and KTVA on May 20, 2014.

The first ICP was established at the River Center on Funny River Road, although phones and computers were not available until the ICP moved to Skyview High School. After the transition

to a Type 3 IMT, the information section was moved on Friday, June 6, 2014 to the ICP at the Sportcenter.

Community Information

Community information outreach focused on the communities of Kasilof and Funny River and expanded to Sterling after the May 25, 2014 spot fires at Kenai Keys.

ICP Skyview Information Office

The Information Section was provided three phone lines (which could not dial long distance) and three laptops. The phone number established was 907-714-2484. One laserjet black and white printer was provided. Wifi was available. Many members of the public stopped in at the ICP Information Office and attended the media briefings held outside the ICP at the front entrance.

Staffing

Ten PIOs worked on the incident, however, staffing levels varied widely. There were two core team PIO2s on the incident at all times. 3 USFWS PIOs and 1 CES PIO were available intermittently to assist in information outreach. Once the KPB PIO position was staffed, communication on key messages and issues were relayed to the KPB PIO.

A daily 07:30 conference call was initiated by the Funny River Fire with the AICC PIO and the DOF local area initial attack PIO.

Once the KPB PIO position was staffed, a KPB Call Center was established.

Internal Communication

An internal update was provided at the morning briefing and newspapers were sent to the spike camps, along with the AICC and NICC updates.

Traplines

The trapine locations included: Safeway, Fred Meyer, Sterling Community Center, Funny River Community Center, MP106 Sterling Highway, Rocky's in Kasilof, the Tesoro gas station in Kasilof, Soldotna Post Office, ICP at Skyview School, Tustumena boat launch and the Kenai National Wildlife Refuge. Information was also posted at the Sports Center and Hooligan's during the evacuation of Funny River residents. Some of the busier trapline locations were staffed as staffing allowed.

The Information Section has received feedback that the expectation of the Kenai Peninsula Borough was that the trapline locations should have been staffed by fire information officers.



Community Meetings

Five Community Meetings were held by the Team. Four of these meetings were broadcast over the radio.

Two meetings were held on May 22, 2014—for Kasilof residents at 18:00 at Tustumena School and for Funny River Road residents at 20:00 at Funny River Community Center. Approximately 350 residents attended the 18:00 meeting and 150 residents attended the 20:00 meeting.

On May 26, the team held meetings at Tustumena School at 18:00 and at Soldotna High School at 20:00. The Governor Sean Parnell was in attendance at these meetings, along with Representative Miccicchi and Mayor Navarre of Kenai Peninsula Borough. On May 27, the team held a 19:00 meeting at Funny River Community Center. Approximately 150 residents came to the Kasilof meeting, 75 residents at the Soldotna meeting, and 125 to the Funny River meeting.

Fire Updates

A fire update news release and containment map was issued before noon on each day. This update went to an email list of 222 stakeholders. This update was then reposted on akfireinfo.com. The Kenai Peninsula Borough OEM update was received daily and shared on social media. Additional maps were released to the public when available.

Inciweb was updated daily.

The Alaska Interagency Coordination Center Joint Information Center (JIC) in Fairbanks was staffed with two PIOs during the fire. The JIC handled additional phone calls about the fire and reposted updates on the DOF facebook page and akfireinfo.com site

Social Media

The team facebook page, Alaska Interagency Incident Management Team, was updated frequently throughout the event. These posts were then boosted by Kris Erikson and by Alaska Division of Forestry. During the peak week of the fire, the posts reached 266k views.

ESRI interactive storymap and realtime map products were uploaded to the team facebook page. The realtime map proved popular with the public.

Media

The fire was well covered by local, national and international media. Given the high amount of media interest, a three-times-a-day media briefing schedule was established during the high activity portion of the fire. Media briefings occurred at 10:00, 13:30 and 21:00.

Alaska media: KTUU, FOX, KTVA, Clarion, Seward City News, NPR, KPEN

National media: CNN (interviewed and the fire was running on the tickertape), Reuters, Associated Press, the Today Show (twice), the Weather Channel

Significant "Public Interest" Media Stories related to the fire:

- Fire Size compared to international cities
- Use of University of Alaska Fairbanks Drones for IR heat images
- Fire Crews saving five wolf pups
- Human Remains found on the fire

As well as traditional media, NASA and Discovery were posting news articles related to the fire, and the UAF Unmanned Aerial System story received significant attention in the science/aeronautical research community.

NASA:

http://www.nasa.gov/content/goddard/updated-on-funny-river-fire-southern-alaska/#.U5AQwPm-2m5

http://earthobservatory.nasa.gov/IOTD/view.php?id=83732&eocn=home&eoci=iotd_tit_le

The wolf pup story was featured on national and international media and was on the Today Show (the second time the fire was featured on the show).

Donations and Volunteers

Many community members dropped off cookies, water, drinks and food for the firefighters at the ICP and at the main road being used by fire crews to access the fire. There were many signs around town in support of the firefighters. Signs of support, sports equipment, music equipment, shampoo, soap and toothbrushes were dropped off for the firefighters at the ICP.





The Red Cross deployed a canteen and supplies for the evacuees of Funny River.

On June 1, Senator Micciche sponsored a Community BBQ for the firefighters with donations. This BBQ was attended by 1500-1800 people and state of Alaska politicians. The community applauded every time a fire crew entered the arena. The Lieutenant Governor was in attendance and state legislators were staffing the BBQ grill.

Information Outreach

The Information team assisted the public in answering not only fire activity questions, but also evacuation preparedness, road advisories, campground closures, burn restrictions and evacuation advisories, evacuation orders, smoke and temporary flight restriction information.

Dignitary Visits



State Forester Chris Maisch, IC Rob Allen, and Governor Sean Parnell

Local House and State Representatives attended the daily Cooperator meetings and public meetings. These representatives included: Olson, Chenault, Wichicki and Simmons.



On May 25, 2014, Governor Sean Parnell visited the Incident Command Post. The Governor participated in the May 25, 2014 13:30 media press conference and flew the fire with Rob Allen, the Incident Commander, the State Forester Chris Maisch and Chief of Fire and Aviation, Tom Kurth.

On May 26, 2014, Senator Mark Begich visited the Incident Command Post. On May 27, the Senator toured the Funny River fire containment line and USFWS refuge fuel break. The Senator participated in the May 27, 2014 13:30 media press conference.

On May 27, 2014, Governor Sean Parnell attended both community meetings in Kasilof and Soldotna.

On May 31, 2014, the Lieutenant Governor Mead Treadwell visited the ICP and drove to the Funny River Fuel Break.

On June 1, 2014, the Lieutenant Governor attended the Community BBQ.

Operations

Initial Assessment

Upon taking over the fire, the IA resources protected the Nurses Cabin along Tustumena Lake. The fire was wind driven, burning to the south from Funny River Road to Tustumena Lake. The IA forces were able to keep the fire south of Funny River Road, establishing an anchor point near the Woodcutter Road. The initial assessments of immediate values at risk were the communities of Soldotna, Funny River and the Sterling Highway. The fire was divided into two divisions, A and X. DIV-A objectives were to keep the fire south of Funny River Road and DIV-X objectives were to use dozer-line along the right flank of the fire and go direct to Funny River. The fire burned actively during the peak burning periods and continued through the early morning. The following day, the Bear Creek subdivision became immediately threatened and the decision was to deploy smoke jumpers and a Type 2 IA hand crew to prep and burn around the structures. More divisions and two structure groups were added to the fire as resources became available. DIV-H on the southwest side of the fire prepped the power line and old logging roads for burnout operations to keep the fire from burning into the Pollard Subdivision. A night division was established due to the extreme fire growth and late burning periods.

West Side of the Fire:

On the west side of the fire there was a large riparian area adjacent to the Sterling Highway that was identified as a natural barrier. The objective for the west side was to construct direct line from the DIV-X break to Coal Creek Lake, then hold the fire using the CL-215s in the natural

riparian area in DIV-M. At the intersection of the riparian area and a high tension power line, fire crews burned off the power line and logging roads and picked up the fire's edge and went direct to tie into Tustumena Lake. Crews and smoke jumpers prepped cabins along the Kasilof River for burnout if it became necessary to back off the burn off the contingency line (Kasilof River). There was a late night run that started in DIV-H, burning north to Coal Creek Lake along the natural riparian area; it did not cross the riparian area into DIV-M. The plan on DIV-H worked, going direct from the power line to Tustumena Lake.

Southeast Side of the Fire:

The initial concern with the extreme fire growth toward Bear Creek was getting highly qualified personnel to prep and burn during a time-compressed situation. When the fire was about one mile from the compound, with 100% active flanking fire, burn operations were initiated and the fire spread about a mile past the compound. The burnout went well around the Bear Creek compound, needing no additional support. Prior to ignition, the Pipe Creek Cabin was identified as the next priority and was prepped as the fire was within three miles and burning rapidly. The plan was to burn around Pipe Creek Cabin the day following the Bear Creek burn, but this was delayed because the northeast side of the fire was burning rapidly toward structures and personnel did not want to impact the critical operations with additional smoke from the Pipe Creek burn out. The fire made a run toward Pipe Creek the following day, forcing a burn out, and made a significant run toward Moose Creek Cabin to the southeast. Resources were redeployed to the Moose Creek Cabin that night and burned around it when the fire was approximately one mile to the north. The cabins on Indian Creek and Emma Lake were prepped in the event the fire continued to burn to the south.

East Side of the Fire:

Concerning the fire growth to the east, there were four areas identified as protection sites: cabins on the Harvey Lake allotment, the Fish Weir, the Sherman site and the Alaska Wilderness Lodge. Because of the resource commitment on the north end of the fire, smoke jumpers were ordered to Harvey Lake and they prepped and burned around the cabins when the fire hit the north side of the lake. We prepped the Fish Weir, Sherman site and the Alaska Wilderness Lodge sites, but did not have to take any other action.

North Side of the Fire:

After the initial few days the fire was primarily backing and flanking along the Funny River Road. The objective of keeping the fire south of Funny River Road stayed the same. The crews, with support of engines, burned along the road to keep up with the main fire until favorable winds allowed crews to go direct. The direct tactic was working well, with the intent to tie into Funny River, until unfavorable red flag conditions occurred for multiple days. The contingency line was a pre-existing, very large fuel break just south of the Funny River and Brown Lake communities.

It was necessary to redeploy to the contingency line when the fire crossed Funny River in an area that had potential to burn toward the fuel break. During the red flag conditions, the fire burned rapidly toward the fuel break and the crews prepped the line with a hose lay and retardant prior to burning. The burnout went well until the fire made multiple runs and spotted over the line. The crews and dozers were able to catch it with aerial support. Both structure groups were deployed in the areas and were in place if the spots were not catchable. Evacuations were being conducted when the fire started making runs, and the local agency assisted with evacuations and structure protection. Where the fuel break stopped to the east, the fire made a run toward the Kenai River and spotted over the river and into the Kenai Keys community. The spots in the Kenai Keys community were suppressed with minimal damage to structures because of road access. The slop-over east of the Kenai River and south of Kenai Keyes was suppressed using direct attack with hand crews. There were four cabins and one outbuilding lost in the area west of Kenai Keys in an unroaded area south of Killey Road. While mopping up after the fire behavior moderated, one crew found some old human remains near a few bear dens. The Alaska State Troopers were notified and retrieved the remains and the case is under investigation at this time.

Air Operations

The Helibase was established at the Soldotna Airport in Soldotna. One Type I CWN helicopter and three Type II helicopters from Delta Forestry, Tok Forestry and AFS were used. Three Type III CWN helicopters were also used. Heavy air tankers, scoopers and the Alaska National Guard Black Hawk helicopters were also utilized. Air Attack platforms were ordered through normal ordering channels, and when none were available, a Beaver was borrowed from Palmer Forestry, as well as AFS pool A/A. Ultimately, a state contract A/A platform was assigned to the fire. A Type III helicopter was designated for PSD burning, but was never used for that purpose. It was used for IR, mapping and recon flights throughout the incident. A TFR was placed over the fire to control airspace and adjusted as the fire grew. No Safecoms were generated on the fire. Air Operations participated in statewide conference calls discussing locations and needs of aviation resources.

CL-215s were brought up from Canada. A request was made to have them park at the Kenai Airport. Their support was based in Palmer and they were not able to communicate appropriately (flight follow) with the incident, so they were returned to Palmer each night.

A high degree of complexity with aircraft necessitated the ordering of a portable FAA control tower. It was located adjacent to the Helibase Communications trailer in a portable weather port. The cooperation and coordination were of great value when considering the increased fixed wing operations of crew and cargo operations.

Due to the large number of aircraft at the helibase—both fixed wing and rotor wing—a crash rescue truck was provided by the Kenai Fire Department and staffed during operational hours.

Air Attack platforms were at a premium and virtually unavailable for the first part of the incident. A Beaver from Palmer Forestry was used initially, but was much too slow to be of great use due to the distance needed to travel over the fire. Bird dog platforms with the retardant ships were used at times and proved very useful. It is of significant concern that the lack of A/A platforms hampers aerial supervision and slows necessary action. This lack of recourse needs to be addressed at higher levels to prevent this from happening again.

Туре	Flight Hours	Gallons	Cargo (lbs)	PAX	Cost
Air Attack	58.6				\$52,038.58
Air Tanker	58.8	220,000-retardant			\$334,756.17
Bird Dog	52.8				\$84,720.71
CL-215s	98.9	600,000-water			\$470,340.50
Jumpers	26.7				\$27,481.82
Lead	55.6				\$56,391.39
Type 1	32.3	198,740-water	99,280		\$268,563.40
Type 2	29.94	78,940-water	67,900	510	\$115,563.61
Type 3	130.9	17,326-water	65438	305	\$280,518.45

Planning

Situation Unit

The Initial mobilization of the Situation Unit was composed of a SITL, FBAN, IMET, FOBS and two GISS.

Due to the rapid growth of the fire, an additional GISS, GISS (t) and SITL (t) were ordered and filled. Despite the heavy workload, the Unit was able to provide quality mapping products to meet the demand.

The IMET and FBAN provided predictive service forecasting on weather and fire behavior. The SITL also was responsible for processing the ICS-209, IFM (Integrated Fire Management) reports, NIROPS (National Infrared Operations) IR ordering, providing data to local FWS FMO for WFDSS analysis, supervision of FOBS and collection of data for a variety of projects (i.e. structure lost and damaged assessments, structure protection assessments, repair/rehab plans). The SITL/GIS shop worked directly with the Alaska Center for Unmanned Aircraft

Systems to process infrared data from four UAS flights over the fire. SITL personnel worked directly with The Funny River Fire PIO section and provided products for a "Fire Prevention Team."

Local geospatial data was obtained from the Kenai Peninsula Borough and from the Kenai-Kodiak Area - Alaska Division of Forestry. Power line and transmission line data was also received from Homer Electric. CIRI Native Corporation also provided ownership data.

ArcGIS Version 10.2.1 was used to produce all map products. All GIS data was stored in a folder titled "2014 Funny River" and was passed off to the Type 3 organization on an external hard drive. Shapefiles were uploaded to the NIFC FTP site and the AICC website on a daily basis. A Quick Response Code (QR) was attached to maps and IAPs to provide a link to geo-referenced PDF maps to personnel with mobile devices. The technology was very useful for making digital products available to a wider audience, especially when incident data was being updated throughout the day and printed maps were not always easy to disseminate.

Fire perimeters were derived and updated from a variety of sources. Most early perimeters were drawn based on MODIS information, and later in the incident perimeters were drawn based on ground and aerial GPS missions and NIROPS IR data. Helibase personnel assisted in perimeter mapping missions.

The field observer and operations personnel provided track logs and waypoints of various fire lines and locations, which were incorporated into suppression, planning and repair maps.

Resources Unit

The Resource Unit was mobilized on May 20, 2014 and was fully assembled by May 21, 2014. The Unit was staffed with one fully qualified RESL, one Alaska trainee RESL and a SCKN. The team checked in over 770 personnel into the I-Suite database and provided daily IAPs and resource tracking reports.

Demobilization Unit

The Demobilization Plan for the Alaska IMT was prepared on May 27 and signed by the team on June 1, 2014. All releases of resources and equipment were processed through the State Logistics Center. All demob forms created in I-Suite were emailed regularly to expanded dispatch in batches. 221s were kept for the documentation box. Flight requests were emailed to Expanded Dispatch and flight itineraries were then emailed back to the Demob Unit Leader at the ICP. Expanded Dispatch was very helpful and cooperative in making this an easily handled incident. Expanded Dispatch was very helpful and cooperative in making this an easily handled incident. There was excellent communication between the two groups.

Training Specialist

A total of 30 trainees went through the formal training process. Thirteen additional trainees are identified in the I-Suite database, for a total of 43.

INCIDENT TRAINING SUMMARY

Incident Name & Number Funny River Fire, AK-KKS-403140

Incident Location Soldotna, AK

TNSP Jack K. Johnson TNSP Phone 719-580-5199

INSE	<u> </u>														
	Comm	and	Opera	dions	Plan	ns .	Logi	stics	Fina	nce	Air ()ps	Tota	1	Grand Total
	M	F	М	F	М	F	М	F	М	F	М	F	М	F	Trainees
USFS	0	0	1	0	2	0	1	0	0	3	1	0	5	3	8
NPS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BLM	0	0	3	0	0	0	1	0	0	0	1	0	5	0	5
BIA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FWS	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
State	0	0	6	0	1	3	1	1	0	2	2	0	10	6	16
Local Govt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DOD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NWS					0	0							0	0	0
Total	0	0	10	0	3	3	3	2	0	5	4	0	20	10	30

FS FPM Trainees	0	Incident Personnel Ordered as Trainees	3
IFPM Trainees	0	Trainees Assigned on the Incident	
Priority Trainees	0	Example: Engine, Helicopter, Handcrew Modules or Individual resources reassigned on incident for training opportunity	0

Summary of Trainees With The Following Ratings

4	The individual has successfully performed all tasks for the position and should be considere for certification
<u>0</u>	2. The individual was not able to complete certain tasks or additional guidance is required.
<u>24</u>	 Not all tasks were evaluated on this assignment and an additional assignment or review of previous assignments is needed to complete the evaluation.
<u>0</u>	4. The individual is severely deficient in the performance of tasks for the position and should be evaluated to determine additional training (both mandatory and suggested) prior to further assignment as a trainee.
1	5. Trainee/Trainer did not complete the training package with the Training Specialist.
1	6. Other:

Logistics

Mobilization of the team logistics section was a little confusing as there were personnel rostered on both the Type 2 Team and the Type 1 Team. Some positions on the team were filled with someone other than the rostered individual. All in all the team received some excellent personnel and worked through the initial mobilization issues.

The ICP was temporarily set up at the Kenai River Center on Funny River Road. This temporary ICP, while waiting to move into the school, hampered the ability to get fully operational quickly. However, the logistics section was able to maintain the necessary support required for the field operations.

The Kenai Peninsula Borough provided the Skyview High School that was used as the ICP until the team transitioned to the Type 3 organization. This facility is excellent as an ICP as it has plenty of office space and ample room for camping and parking.

The state contract caterer, Chocolate Gypsy, was utilized to provide meals at the school. The caterer was quick to respond and quickly started providing meals and sack lunches for over 500 persons at the height of the incident. Additional meals and lunches were provided by PJ's Diner, Caribou Family Diner, and Jersey Subs.

Supply from the warehouse was problematic initially. As the incident quickly expanded, the warehouse had difficulties transporting supplies in a timely manner. When supplies reached a critically low level, the decision was made to fly supplies into the Soldotna airport and this helped alleviate some of the shortages. There were also problems with receiving the "local purchase" orders. The orders seemed to have been "stuck" in the system and one week into the incident many of the orders still had not arrived. A buying team eventually was ordered, and once in place, they were quick to take care of most of the purchasing needs.

The Kenai Kodiak Area office continued to provide support after the team was in place, which was instrumental in the team's success. The local office continued to provide inspection services for all equipment. This aided in streamlining the hiring and tracking of the 140+ pieces of equipment assigned to this incident.

Kenai Peninsula College graciously provided dorm rooms that were used for day sleepers, FAA control tower employees, AFD strike team personnel and a conference room for the buying team. This is an excellent facility with exceptional employees.

On May 27 Janet Ladd, LSC2, left the incident and transitioned with Joe Faulise, LSC2.

Many of the incident issues and concerns were resolved by this time.

The daily conference call with State Logistics Center, the Warehouse, and other fire support entities was extremely useful and helped reduce frustration associated with Logistics.

There were no significant issues with communication on the incident.

Identified Problems

- SLC initially wanted all S#s to go through them. This became a problem because it created a delay items could only be ordered after they entered them into ROSS.
- There appeared to be an interruption in communication and information flow between Buying Team, SLC, Funny River Supply, and the State Fire Warehouse (emails, Resource Orders, Fill information, etc.).
- General lack of Alaska and Fire knowledge seemed to be a hindrance in both buying team and dispatch. Confusion about items, quantities required, etc. seemed prominent on both sides and created delays in supply acquisition.

Solutions

- Submit cache supply orders directly to the warehouse.
- Dispatch was open to alternate methods.
- Email worked well in absence of a fax.
- Buying team was willing to sit down and compare books, which helped resolve a lot of questions.

Medical Unit

The Funny River Fire Medical Unit consisted of a medical unit office at the ICP staffed by one MEDL and, after ten days, one MEDL(t). Spike camp was staffed with EMTs as needed. A trauma kit and spinal immobilization equipment were staged at the helibase with helibase EMTs. For several days the helibase was staffed with medical unit EMTs depending on fire behavior and needs on the line. The ICP medical unit was staffed daily from 0630-2330 and available for urgent medical needs 24/7. There were a total of two reportable injuries. 863 visits to the medical unit were documented.

During high fire behavior, the Medical Unit consisted of one MEDL, one MEDL(t), one EMPF, five AEMFs, three EMTFs and one AEMT.

Central Emergency Services was available with ALS ambulance service from three different stations near the fire area and could access helibase and different drop points within 10-15 minutes. LifeMed had a staffed medevac helicopter on the helipad at Central Peninsula General Hospital.

Challenges

• Sufficient numbers of experienced Line EMTs are not available this early in the season in Alaska.

- There were problems getting supplies from the AFS Medical Warehouse to the fire in a timely manner. One large order left the warehouse and was returned to them several days later without arriving at the fire.
- Medical unit needs their own computer with intranet access.
- A fire this large would benefit from having a Deputy MEDL to address span of control.

Notable Successes

- Full Fire Medic Kit with Lead Fire Medic was ordered before MEDL left Fairbanks
- 4 Fire Medic trainees (2 from Fairbanks area and 2 from Palmer Forestry)
- 1 MEDL trainee
- Medical Unit spearheaded successful fire-wide Medical Drill. Write up included in Fire Documentation.
- LOGs Unit drafted and implemented an in-camp Emergency Response Protocol.

There are no unresolved issues at this time.

Facilities

The Skyview High School was used for the Funny River ICP. The school was an excellent choice for the ICP; the only issue we had was that a roofing contractor was redoing the existing roof on the school and used over one-half of the parking lot for staging his materials and equipment. The reduced usable size of the parking lot available for fire use caused confusion and issues early on, but the Facilities Unit eventually developed a plan to deal with the issues. During the early stages of setting up ICP, it took a long time for supplies to arrive at supply, which slowed down progress in getting ICP set up and totally functional.

Security personnel for the fire were ordered upon the team's arrival. This allowed the Facilities Unit to focus on tasks at hand and not have to deal with security-related issues.

Three Base Camp Managers and one Base Camp Manager Trainee were ordered early in the incident, which provided the Facilities Unit more help around ICP and also allowed them to support two separate spike camps in the field.

Ground Support

Ground Support operated effectively and efficiently under the Alaska Team. Transportation operated exceptionally well and Dispatch out of the State Logistics Center was crucial in the success of getting equipment timely. Ground Support rented vehicles from Kenia, Soldotna, Anchorage and Fairbanks to meet the requests from Operations. Initially getting rental vehicles for Operations was a challenge due to location of the fire and time of year, (right before Memorial Day); this problem was resolved by reaching out to the public and issuing Emergency

Equipment Rental Agreements specific to the fire. Overall, Ground Support was able to meet the fire's needs and have no unresolved issues.

Finance

The Finance Section managed the Funny River Fire and all of its resources within one functional database. All known resources were accurately tracked and their cost information reported daily to the Incident Agency.

Interaction with the local unit was facilitated by the presence of the Incident Business Advisor who arrived within a couple days of the Alaska IMT being assigned to the fire. The initial interaction was between the Finance Chief and Deputy and the Area Administrator, Mary Gaiser.

Mary Gaiser worked with the team to gather needed resource information.

The Finance section worked closely with Operations to locate land use agreement information and passed that information onto the Southern Buying Team and BUYT Leader Jackie Robinson to complete the Land Use Agreements used by the Incident. The LUAs included:

- Skyview High School Used as ICP for T2 team (LUA completed by T2 team)
- Patty Wright Division B Helibase
- Clarence & Arlene Williams Divison A Staging and ATV access
- Soldotna Municipal Airport Soldotna Helibase
- Soldotna Sports Center Used as ICP for T3 team

These five LUAs are still in use and remain open. Three other areas were identified as potential land uses but there were no agreements completed and no damage to property. An envelope was created and placed with the other LUAs for documentation purposes.

The BUYT processed Service and Supply orders for the IMT. All documentation for these types of payments should be available within the Buying Team's documentation package.

The University of Alaska provided an Unmanned Aerial System (UAS). An MOU is located in the Cost documentation as the University has not requested any payment of this resource.

The Federal Aviation Administration (FAA) provided air traffic control services and a temporary mobile airport traffic control tower at the Soldotna Airport. The FAA will charge their estimated expenses of \$36,483.18 to the incident and is documented in the Cost documentation.

There were a total of 16 Claims and 12 Injury/Illness Claims with a total of 117,215 personnel hours as of June 4, 2014. There are four unresolved claims; three claims were turned in to the State DOF area office for adjudication and one is a potential third party claim due to damage to a vehicle from the Mob Center.

The total cost of the incident as of June 4, 2014 is \$9,830,360.

Funny River Fire Total Cost

