

# LIME COMPLEX

AK-SWS-204899

June 30 - July 13, 2022



## INCIDENT SUMMARY

Alaska Green Team, Type 2 Incident Management Team

Peter Butteri, Incident Commander



# INCIDENT NARRATIVE

## Overview

The Lime Complex fires were ignited by lightning storms that swept through the area in early June and were discovered from June 5th to June 12th. The complex consists of 18 fires spanning a 22.8 million acre planning area. The area lies in an inaccessible area in the southwest corner of Alaska. Within the area, fuel configuration and landscapes vary greatly, consisting of mostly black spruce, brush, and tundra from tundra flats to rolling hills to the foothills of the Alaska Range. Accessibility in and out of the area is limited to aircraft and boats, with the Kuskokwim River being the main artery to the villages of Lower Aniak, Chuathbaluk, Napaimute, Crooked Creek, Red Devil, Georgetown, Sleetmute, and Stony River. The communities and villages of Napaimute, Georgetown, Red Devil, Crooked Creek, Sleetmute, Lime Village, Port Alsworth, Nondalton, Iliamna, Newhalen, as well as 710 Alaska Native Allotments and over 821 identified values are within the planning area.



The Alaska Green Type 2 Incident Management Team (IMT) assumed command of the Lime Complex on June 30th, 2022. Even though it was known that there would be challenges with a large planning area, remote operations, and logistical concerns, there was a seamless

transition with the Alaska Black Type 2 IMT and minimal challenges were experienced. Several agencies have been involved in the complex including the State of Alaska Division of Forestry and Fire Protection, National Park Service, Bureau of Indian Affairs, Bureau of Land Management and several ANCSA Corporations.

### Lime Complex

**857,272 acres as of 7/12/22**

### Cause

Lightning

### Protecting Agency

Alaska Division of Forestry

Mat-Su/Southwest Area

### Jurisdictional Agencies

Alaska Division of Forestry

Bureau of Indian Affairs

Bureau of Land Management

National Park Service

ANCSA Corporations

## Fire Narrative

The fire season in Alaska has progressively increased into an above average season with potential to be in the extreme category if conditions persist. Indices have been well above average and into very high and extreme levels for the area and hitting record levels throughout the state. A fire and fuels advisory was issued on June 12th through June 25th and again on June 26th through July 8th for Interior, Southwest, and South-Central Alaska. Alaska has currently burned over 2,700,000 acres statewide and exceeded one million acres on June 18th, the earliest in 32 years since the statistic has been tracked. These conditions have provided for large fire growth and resistance to control. Alaska moved into Preparedness Level 4 on June 22nd and Preparedness Level 5 on June 30th.

The fires in the Lime Complex had several days of large fire growth throughout the incident with the largest growth on 6/29 just prior to transition with days of minimal growth following. The fire behavior has ranged from low to high during the Alaska Green IMT tenure on the incident. Several fire behavior spread probability analysis runs (FSPro) predicted large fire growth; however these predicted events did not transpire to the severity that was likely. Currently the fire area has received some precipitation and moderating fire activity. There is still potential for some of the fires edge to become active if fire conditions heighten. The incident is being managed with two main strategies: point zone protection and monitor. The Alaska Green IMT has completed 57% of the strategies of point zone protection and continues to

monitor fires in the Lime Complex. The IMT has successfully protected the communities of Napaimute, Georgetown, Red Devil, Crooked Creek, Sleetmute, Lime Village, Port Alsworth, Nondalton, Iliamna, Newhalen, 34 Native Allotments and 88 other sites that were threatened, while allowing fire to play a natural role in the ecosystem where feasible. The IMT had delegation to provide initial attack support to the area. The IMT updated the Known Sites Database with 2 additional sites entered.



# FIRE WEATHER AND BEHAVIOR

The two week period of this assignment—June 30th to July 13th— was framed by three periods of distinct weather and fire behavior:

## June 30—July 4: ACTIVE FIRE SPREAD

The continued impacts of long-term drought coupled with favorable burning conditions and strong winds on July 2-3. Tundra and black spruce fuels were at record levels (with Buildup Index setting records for 10-30 days prior). Strong continuous winds and dry fuels supported fire spread through a mix of tundra and black spruce fuels, with long-distance spotting, runs from 1-5 miles, and backing fires to the south. Significant smoke production across the fires moderated growth on fires to the north. Open rolling plains allowed fire to grow through continuous tundra with fires stopping at most rivers. Saddles and ridges funneled winds in the Lime Hills area, south of Lime Village. Conditions supported a key burnout over two days, directly to the southwest of Lime Village.

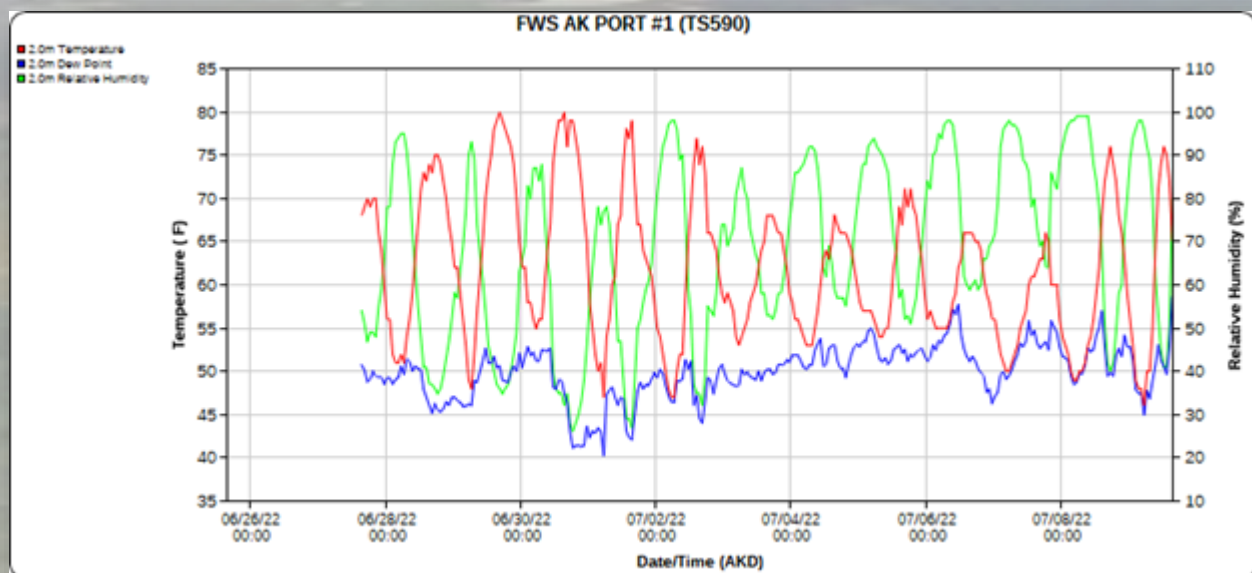


## July 7—9: PRECIPITATION

A mix of heavy and light rains reduced fire activity throughout the complex, with highest amounts to the south.

## July 10—13: MODERATING FIRE BEHAVIOR

Temperature, humidity, and fire indices moderated and a mix of cloud cover and smoke prevented solar drying of the fuels. Holdover fires smoldered and crept in heavy fuels and deep duff, particularly on northern and southern perimeters. The smoldering and creeping continued, with no perimeter growth.





# INCIDENT OBJECTIVES

- ◆ The communities of Napaimute, Sleetmute, Georgetown, Red Devil, Crooked Creek, Stony River, Lime Village, Port Alsworth, Nondalton, Iliamna, and Newhalen are protected without major injury or loss of life.
  - ⇒ Site protection placed in communities within the Kuskokwim and Stony River corridors by the Black Team remained in place through the Green Team's tenure.
  - ⇒ A 800 acre defensive burnout adjacent to the community of Lime Village was successfully conducted from July 3-5.
- ◆ Cabins, lodges, Alaska Native Allotments, cultural sites, mines, and other values that may be damaged or destroyed by wildfire or by suppression efforts are identified and protected.
  - ⇒ Site protection was provided for approximately 106 lodges/cabins and 34 Alaska Native Allotments within the Planning Area.
  - ⇒ Fire impacts to structures, Allotments and the Pebble Partnership mine site were identified and documented.
- ◆ Fuels reduction and habitat benefits associated with natural fire spread in fire-adapted systems are achieved where other values are not threatened. Any damage to natural or man-made systems caused by suppression efforts is repaired.
  - ⇒ Fires within the Complex that did not threaten values were monitored. Values were protected by implementing a Point/Zone strategy and direct action was only taken on relatively small portions of the fires' edges.
  - ⇒ Minimal suppression repair actions will be required on these fires beyond removal of pumps and hoses from protected sites and sawline.
- ◆ Relationships between the participating agencies, ANCSA Corporations, Tribes, and communities are strengthened.
  - ⇒ IC/Agency Administrator/FMO meetings were held daily and Cooperator Meetings were held Mondays, Wednesdays, and Fridays to share information and discuss concerns.
  - ⇒ Public information was distributed through local radio stations, social media, and podcasts. A pop-up community meeting was held in the community of Sleetmute.





# COMMAND

A smooth transition with the Black Team preceding us set the Alaska Green Team up for success on the Lime Complex. Our ICP in Palmer was 475 air miles from the nearest of the 18 fires we were delegated authority to manage within a nearly 23 million acre planning area.

Initially, active fire behavior on numerous fires, poor visibility due to smoke and clouds, logistical challenges, and limited firefighting resources kept us in a reactive mode but moderating conditions helped firefighters in their efforts to protect communities, Alaska Native Allotments and other values spread throughout the Koyukuk, Stony, and Swift River drainages and near Lake Iliamna.

Established bases in Aniak, Sleetmute, Lime Village, and Iliamna allowed us to supply our resources and a complex radio repeater system provided communications across the fireground. Tactical and logistical air support were critical to our success and despite challenges, we were able to work with the State of Alaska, the local Area, and AICC to assemble an air force capable of meeting the demands of the incident.

The Team recognized that medevacs were air-dependent and placed medics in key locations to help mitigate long transport times. They compiled an excellent safety record with no reportable injuries. Early identification and isolation of several individuals infected with COVID-19 helped to prevent spread to communities and firefighters.

Cooperators and communities were provided information through multiple means including radio broadcasts and meetings. Onsite and virtual Finance Section staff provided services for personnel across the incident. Maps and data were shared electronically between ICP and remote bases. Electronic documentation and virtual check-in and demob simplified processes that can often be challenging on incidents with distributed operations.

Over 14 days we worked as a Team to overcome obstacles and accomplish objectives on the Lime Complex.



## Transfer of Command

- June 30, 2022 @ 0700 hours from Alaska Black Team to Alaska Green Team
- July 14, 2022 @ 0700 hours from Alaska Green Team to Northwest Team #9

# OPERATIONS & AIR OPERATIONS

## **Key Decisions**

7/3 @ 1600—Fire 244 burned to Hungry Creek south of Lime Village. The decision was made to go ahead and fire indirect line. Galice WFM and Malheur rappellers had been delivered to Lime Village earlier in the day to augment Gannett Glacier. Resources were adequate, and recent FSPro 14-Day modeling showed 100% probability the fire would reach Lime Village which lead to burnout

operations to protect the village



## **Notable Successes**

Established a repeater network that allowed for communications link from Iliamna to fires 239, 240, and 205, as well as the rest of the complex, and increased ability to share information to all resources. Decisions regarding burning around Lime Village were made with multiple inputs from the team. Task was completed safely and also protected other nearby values. Operational briefing improvements continued throughout the duration of the incident with continual feedback from field resources.





# OPERATIONS & AIR OPERATIONS (Continued)

## Operational Strategy

14 fires in monitor status (78%)

4 fires in point zone protection (22%)

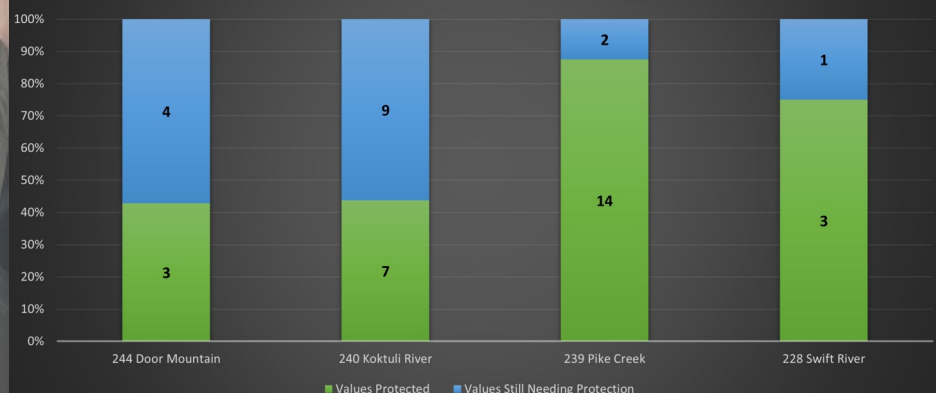
## Fires in Monitor Status

188 Hook Creek, 189 Nushagak River, 190 South Lime Lake, 193 Cabin Creek, 197 Gagaryah River, 198 Stony River, 205 Upper Talarik, 206 Aghaluk Mountain, 207 Maka Creek, 216 Telaquana River, 245 Kiknik, 246 Titnuk Creek, 247 Dummy Creek, 273 Door Creek

## Challenges

Time and space— the ability to move around the fire and gather intelligence was challenging. Limited connectivity across the fire area resulted in limited or poor communications. Resources remained flexible and found workarounds including keeping Iliamna DIVS positioned in Iliamna to be able to receive calls and communicate needs from field. There was a sense of an expedited transition, some of the intelligence was lost or misplaced. Information coming in from the field was delayed getting into products. Several resources did not initially understand the importance of Native Allotment protection; it was difficult to weigh the risk vs. reward. Lots of moving parts in Operations and Aviation that required an increased level of communication. Implemented a daily Operations/Air Operations calls to enhance information sharing. Significant interface required between IMT and Dispatch to schedule and organize flight requests; an IMT ASGS was dedicated as a result. This reduced demand on local Dispatch. Arranging travel for resources out of the field resulted in last work day (LWD) issues such as staffing coverage and inadequate shadow times. The decision was made to keep resources in the field through LWD and start travel from the incident once returned to Palmer on their demob date.

Completion Status of Fires with Point Zone Protection Strategy



# SAFETY



## Safety Statistics

- Over 45,000 work hours with no significant injuries
- Multiple boats assigned with ~100 hours of use
- Significant aviation travel with no reported injuries or accidents

## Key Decisions

Ordered four additional SOF2 to right size safety personnel to meet the needs of geographically dispersed field resources.

## Notable Successes

Medical Advanced Life Support (ALS) was prioritized and provided to remote locations as available. Developed and approved Evacuation Plan for Iliamna Group. Reviewed and implemented Evacuation Plan for Aniak. Conducted Strategic Risk Assessment for the Lime Complex with Agency Administrators.



## Challenges and Resolutions

The large remote geographic area posed a challenge to medivac responders in the event of severe injury. This was overcome by coordinating with Planning Operations to mitigate inability to medivac by adjusting work activity of responders. Scaled back high risk activity such as chainsaw operations during inclement weather and heavy smoke conditions. Ordered shooters to mitigate bear concerns but was unable to fill. Reduced risk of injury from potential aggressive animals by providing bear spray to the line.





# LIAISON

## **Key Decisions**

Maintaining existing schedule of cooperator's meetings provided consistency for the participating cooperators. Meeting links did not change after team transition. Approximately 10% of 176 cooperators attended each of the meetings.

## **Significant Events**

Removed structure protection at Alaska Trophy Fishing Safari (Fire 239/240) along the Mulchatna River per their request. Loss of infrastructure at the Pebble Partnership on Upper Talarik Fire (205). Coordination with Pebble Partnership for access to assess damage.

## **Notable Successes**

Coordination with Operations and Information on damage to Pebble Partnership infrastructure.

## **Challenges and Resolutions**

Rushed transition and some information was not in MS Teams to access. Previous LOFR remained available for questions following transition. Determining contacts associated with specific fires was difficult. LOFR developed document to build a common operating picture of entities involved (villages, communities, village corporations, and regional corporations).

# PUBLIC INFORMATION

## **Key Decisions**

Produced 2-4 minute morning 'radio cast' daily for established radio stations to play across the listening areas serving the remote populations in Southwest Alaska. Emailed radio cast file, daily update, link to daily operations video, smoke report information and link to photographs on Inciweb daily by 0745 per radio station direction to ensure catching the 8am morning news cycle. Daily updates, operations videos and radio cast served to inform the public of fire growth and conditions, protection priorities and locations, weather and smoke impacts, Temporary Flight Restrictions, COVID precautions taken, and the planned actions for each operational period. Outlined the low tech/high tech information strategy to cooperators and stakeholders at the Liaison meetings. All information personnel used Teams to ensure all materials were documented and archived.

## **Significant Events**

Prepared a holding statement and coordinated with LOFR to secure approved talking points following the discovery of the impacts from Upper Talarik Fire #205 to Pebble Mine.

## **Notable Successes**

Established a process for handling and tracking media inquiries into the Upper Talarik fire impacts in coordination with and following DOF leadership guidance. Requested an information line beginning with "907" area code from FireNet to maintain trust with rural Alaskans. Uploaded fireline videos and aerial observation videos to DOF's YouTube channel to provide media, cooperators, and Agency Administrators (AAs), and the impacted public with visual insights into the suppression actions and fire activity. Collaborated with stakeholders and AAs to ensure maximum reach incorporating suggestions immediately including adding an additional AM radio station in Homer.

## **Challenges and Resolutions**

Did not place PIOs on the ground in Aniak, Sleetmute, or Lime Village due to flight capacity limitations and the need to prioritize logistical and operations personnel. It was difficult to rely on a steady stream of pictures and videos from the field. The solution was to produce radio daily cast update and request field photo and video support from both Air Attack, Field Operations Chief, local trusted crews who were able to document fire activity and suppression tactics.

# PLANS

## **Key Decisions**

Utilized virtual personnel to support the IMT and shared resources already in state from other incidents. Ordered rental plotter in event team plotter needed to be returned. Placed SITL in Aniak for overall plans support.

## **Notable Successes**

Participated and facilitate a Strategic Risk Assessment process. Plans section had several trainees (PSC2, GISS, SITL, ITSS, FOBS, FBAN, IMET). The section had a seamless transition with Alaska Black Team, and shared plans kits and equipment.



## **Challenges and Resolutions**

Continued struggle to fill and roster two IMTs in Alaska. Utilized other individuals already in state from other incidents and their contacts to fill holes in the section. Receiving accurate and timely fire perimeter intel due to large planning area and reliance on infrared and satellite heat detections. Inadequate radar coverage near the main areas of concern hampered ability to diagnose storms and ultimately wind and intensity of storms. Limited communications with field made getting weather observations challenging but this was partially mitigated by IMET participating in the morning pre-ops brief and post brief at night to be able to communicate directly with operations. Experienced technical issues with morning briefing hybrid broadcast that were resolved through troubleshooting.

## **Training**

- 30 trainees
- 11 priority trainees
- 3 PTB completed

# LOGISTICS

## **Key Decisions**

Mobilization of logistical personnel during transition directly to Aniak and Iliamna. Added a SPUL to focus on Supply Chain, and coordination with Ordering, Expanded, Buying Team, Warehouse, Transportation, and Area Logistics Coordinator.

## **Significant Events**

Weather and smoke delayed food box delivery. Multiple remote locations created difficulties in addressing concerns, securing, and completing Land Use Authorization (LUA) documentation.

## **Notable Successes**

Utilization of 5 pool vehicles reduced need for each IMT member to have a rental. Agency Area Logistics Coordinator reduced supply chain issues. Contract medics hired from the Lower 48.

## **Challenges and Resolutions**

Communications with remote Logistics personnel in Aniak and Iliamna. Providing GCI and satellite phones, VOIP and internet to remote locations. Understanding clear Logistics picture, challenges, issues and solutions. Protecting villages from COVID-19 exposure was mitigated by providing optional pre-flight testing and required mask usage on flights. There were limited logistics flights and cancellations due to weather. Stocking 3-5 days of food and water and projected operations support was a challenge.





# FINANCE

## Key Decisions

The State of Alaska requested Finance records to be all electronic. A decision was made to have a designated person responsible to manage the inbox to facilitate this request. One employee desired to learn the processes, so there were two individuals managing the inbox.

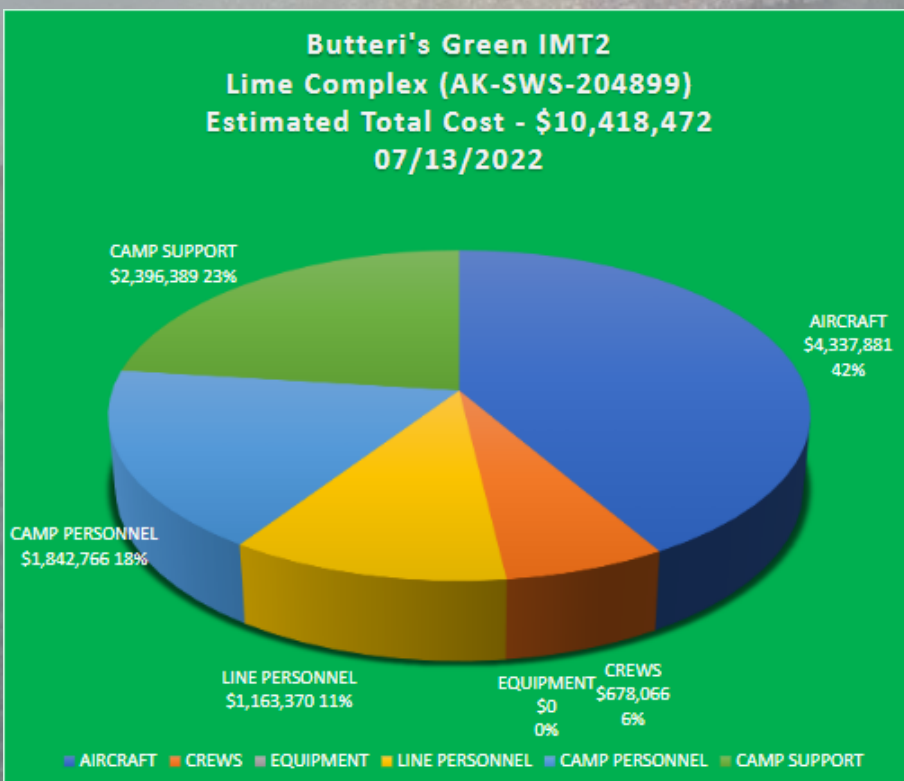
## Notable Successes

Land Use Agreements (LUA) and Emergency Equipment Rental Agreements (EERA) were routinely monitored by Finance and Logistics. The packages were complete, with the exception of shift tickets. Logistics is submitting shift tickets for beginning dates and will follow-up with the final shift ticket when resources demob.

## Challenges and Resolutions

The electronic filing system continued to create challenges. The naming convention has changed and takes extra time to name documents that adhere to the accepted standards. Finance team members had enough time on this incident to rename documents and all necessary changes have been made.

The electronic processes for the records and maintenance of LUA and EERA also proved challenging. The Finance section worked closely with Logistics to ensure all records for these resources were captured and filed.





# LIME COMPLEX

AK-SWS-204899

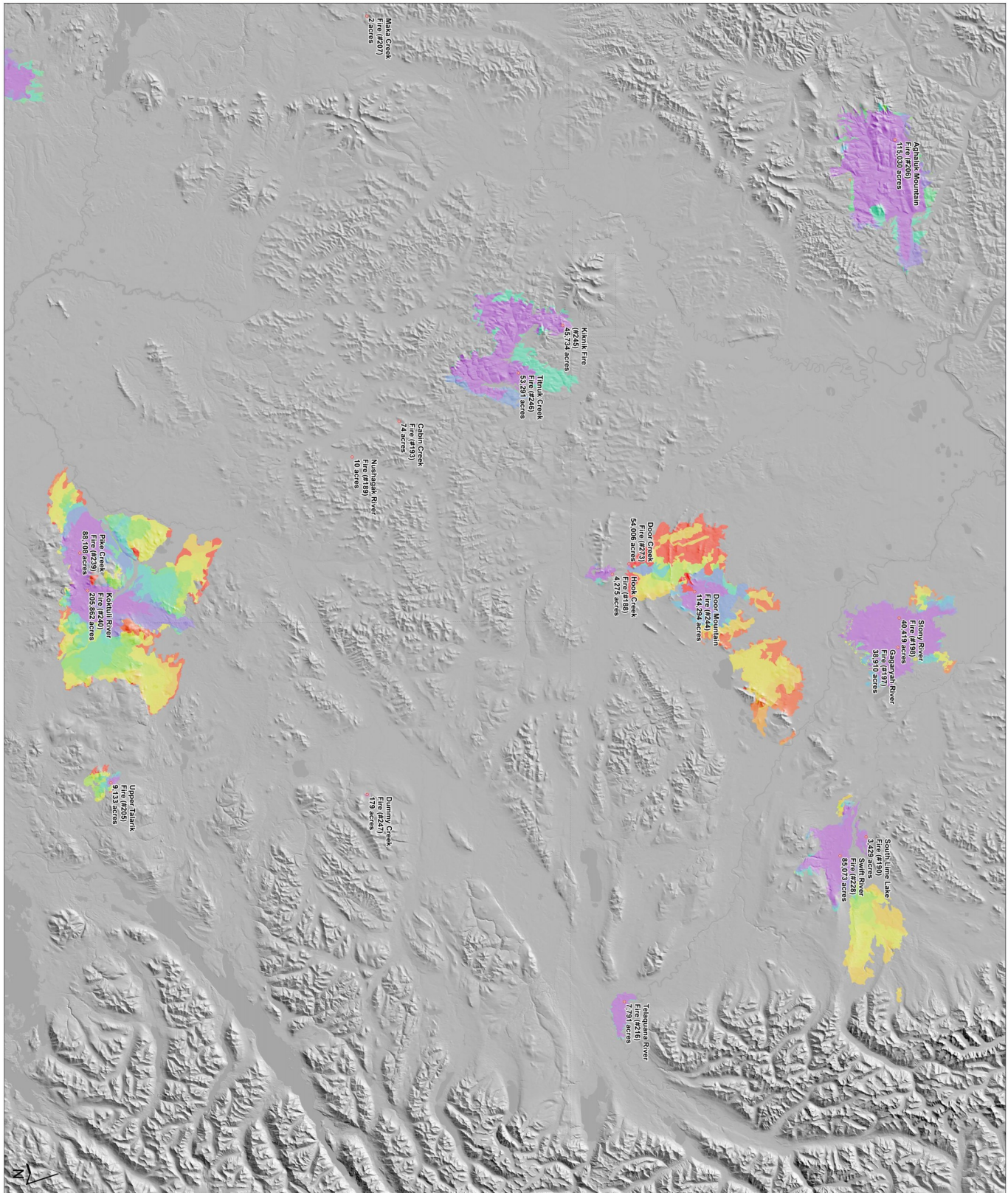
13 JULY 2022

## PROGRESSION

Approximately  
865,620 acres burned  
as of 12 July 2022

- Fire Origin
- Perimeter Date
- June 15, 2022
- June 17, 2022
- June 18, 2022
- June 19, 2022
- June 20, 2022
- June 21, 2022
- June 22, 2022
- June 23, 2022
- June 24, 2022
- June 25, 2022
- June 26, 2022
- June 27, 2022
- June 28, 2022
- June 30, 2022
- July 01, 2022
- July 02, 2022
- July 05, 2022
- July 06, 2022
- July 09, 2022
- July 10, 2022
- July 11, 2022
- July 12, 2022

REPORT NUMBER	NAME	DISCOVER/DATE/TIME
188	Hick Creek	6/6/2022 12:03:25 AM
189	Nashagak River	6/9/2022 11:06:15 PM
190	South Pine Lake	6/6/2022 12:12:49 AM
191	Stony River	6/6/2022 5:33:08 AM
198	Gageyah River	6/6/2022 5:29:48 AM
197	Upper Tanuk	6/7/2022 12:39:14 AM
200	Ala	6/7/2022 12:39:14 AM
207	Maha Creek	6/7/2022 2:23:44 AM
210	Tahupana River	6/7/2022 6:38:08 AM
216	South River	6/8/2022 7:22:11 AM
228	Kohulu Creek	6/8/2022 1:53:24 AM
240	Kohulu Creek	6/8/2022 1:53:24 AM
244	Door Mountain	6/9/2022 6:00:14 AM
245	Kinkik	6/9/2022 6:00:14 AM
246	Thinik Creek	6/9/2022 6:00:37 AM
247	Thinik Creek	6/9/2022 6:00:37 AM
272	Door Creek	6/13/2022 6:05:55 AM



AK AIF Green Team  
Map Created: 7/12/2022 @ 10:58 AM  
Map File Name: Lime3.mxd