

Alaska Division of Forestry and DNR Overview

ABOVE 2nd Science Team Meeting

Anchorage, Alaska

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John “Chris” Maisch

State Forester

Why Inventory Alaska?

- Changing Wildland Fire Regime- fire return interval and vegetative changes
- Climate Issues- permafrost changes and associated GHG releases
- Woody Biomass and Energy Projects – sustainability of fuel supplies in both urban and rural communities

Wildland Fire



Acres burned 1950-2015 with 11-year rolling average

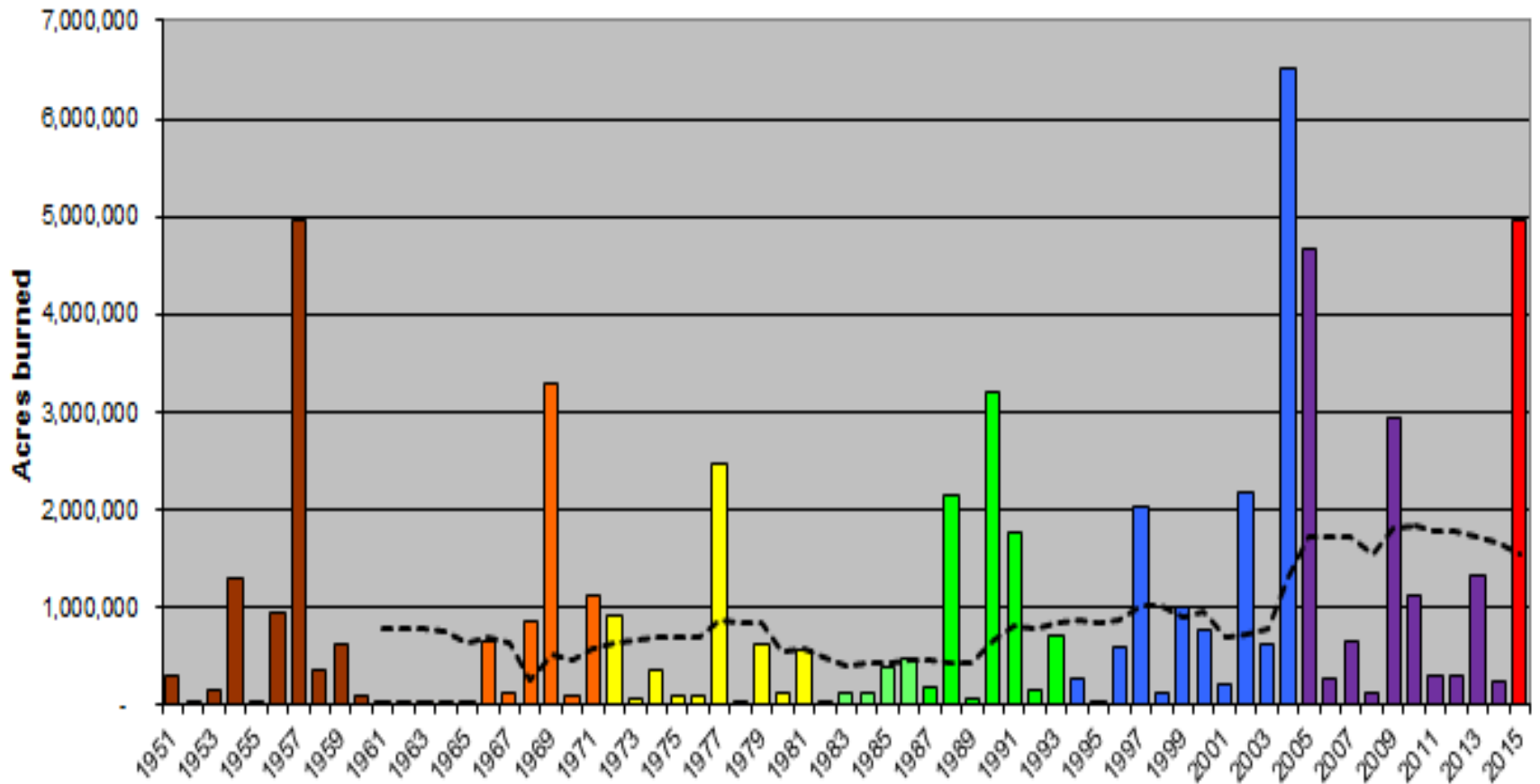


Figure 1.- History of acres burned by year in Alaska with rolling average by eleven year increments. Note the significant jump in the running average that began in 2004.

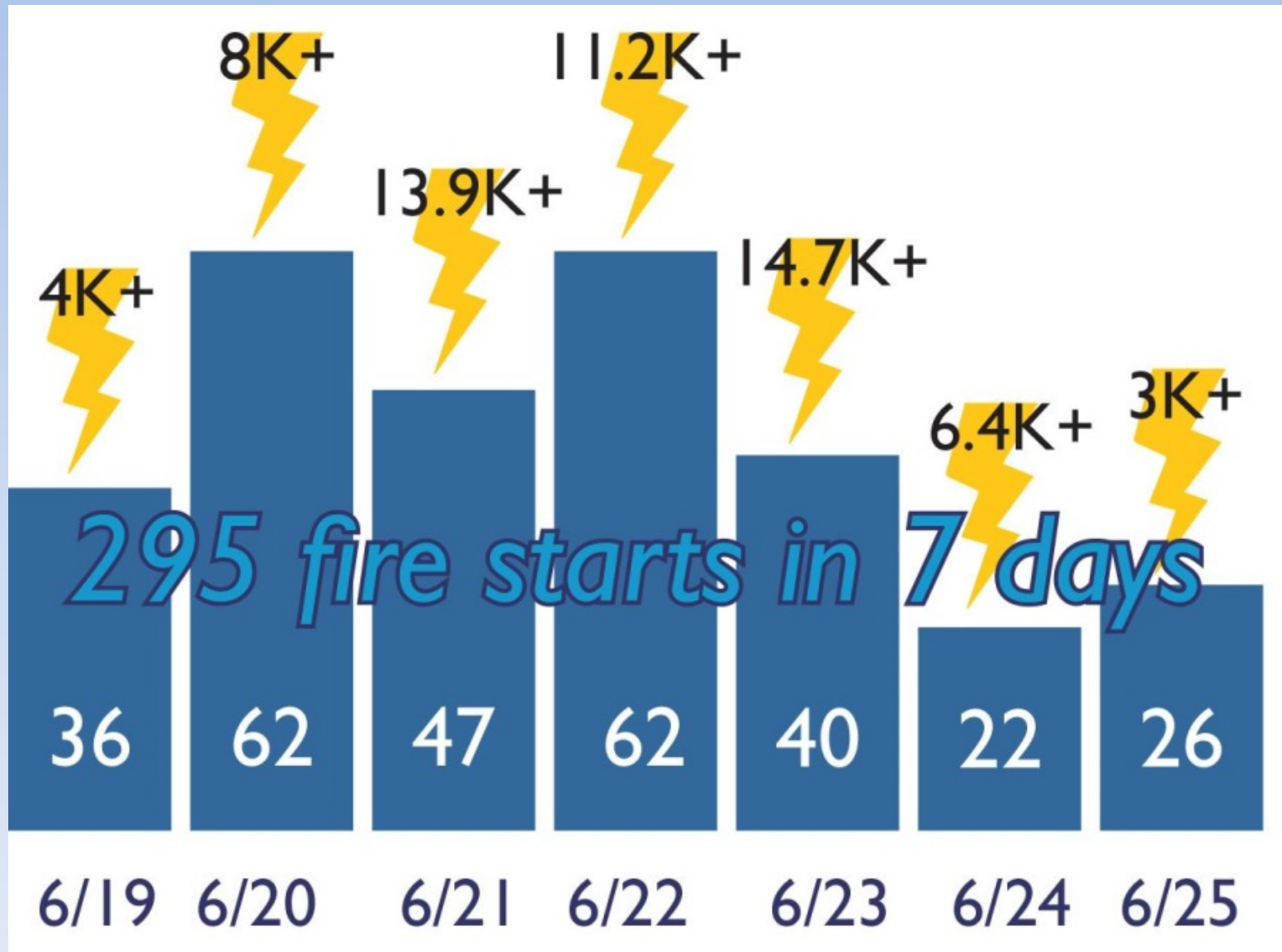
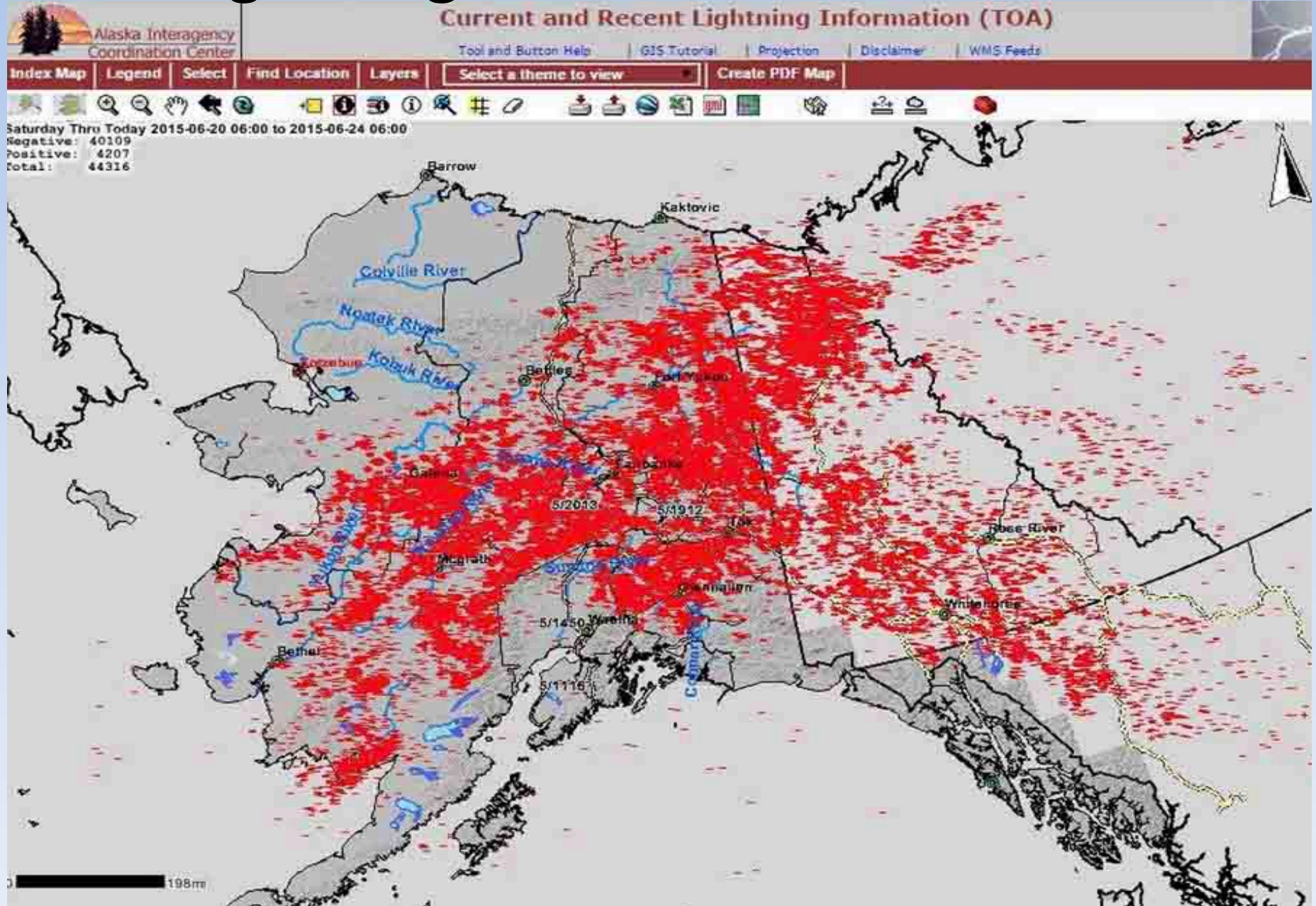


Figure 2.- Number of lightning strikes (61K) across Alaska during a critical seven day period in the 2015 fire season and the number of new fire starts each day.

Lightning Strikes 6-20 to 6-24-15



MODIS 6-Days Previous with Smoke Model

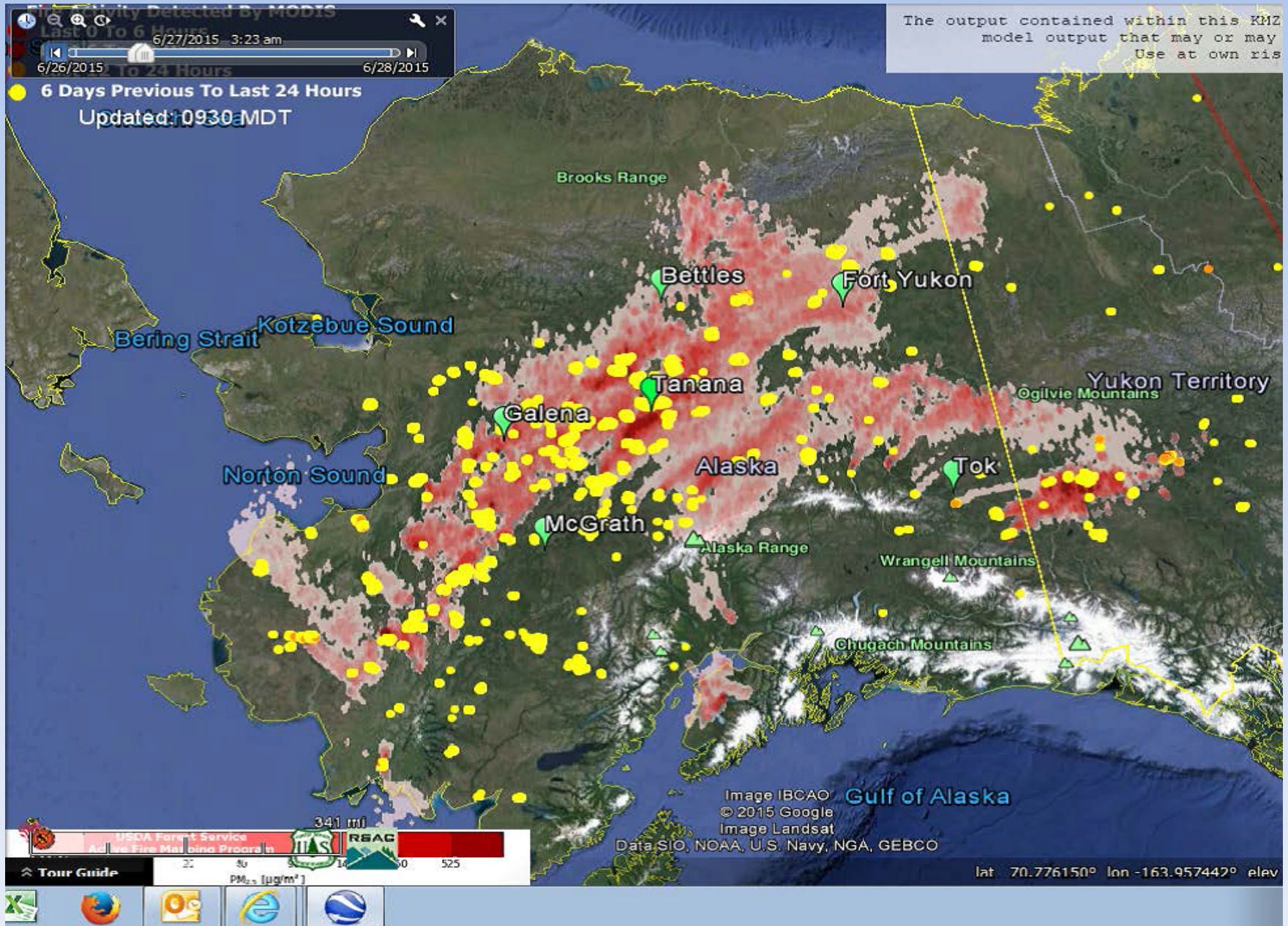


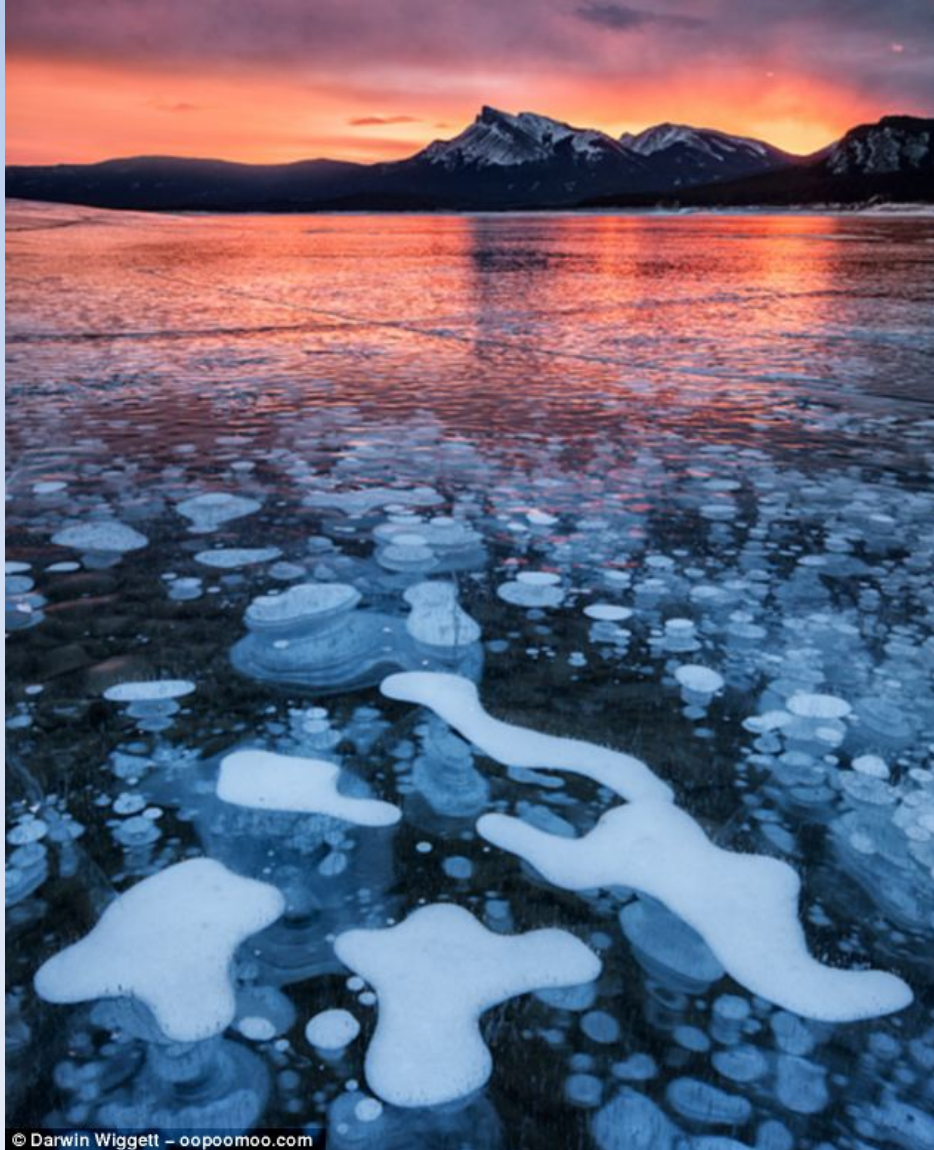


Figure 3.- Extreme late season fire activity on the Twin Creeks fire on Kodiak Island. Image was taken from the community of Kodiak looking across the ocean on the evening the fire started. The settlement of Chiniak is between the fire and the ocean shoreline.

Climate Issues



Methane Capture in Frozen Lakes



Methane Flare



Biomass and Energy



WOODY BIOMASS


o Alive with jobs.

Biomass harvesting can help generate sustainable renewable energy, improve forest health, & revitalize rural communities.



Figure 4.- Example of shaded fuel break and natural barriers working together to reduce wildland fire risk for the community of Nikolai. (Bureau of Indian Affairs and Tanana Chiefs Conference, Inc. project)

Alaska Energy Authority Biomass Projects

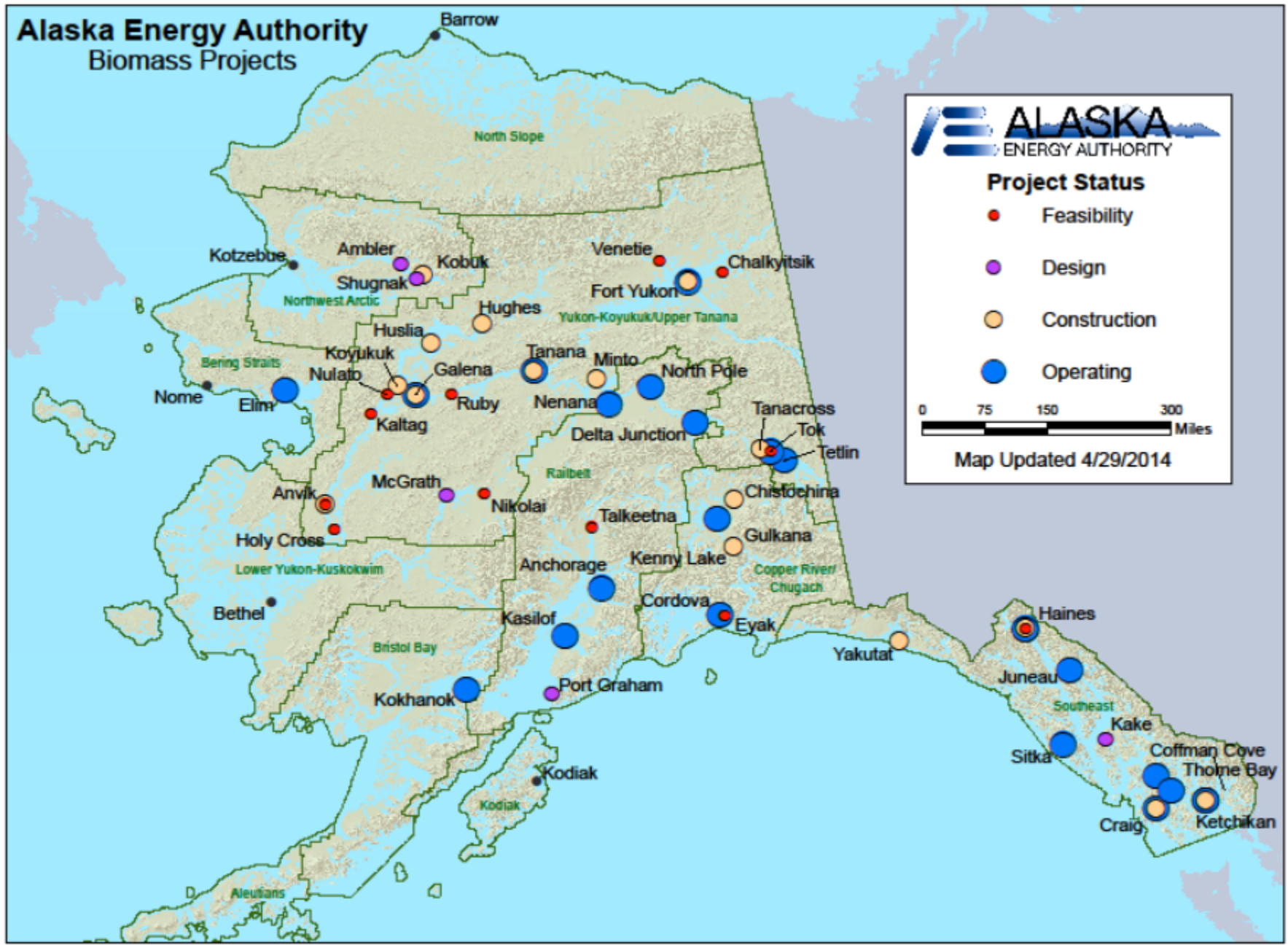


Project Status

- Feasibility
- Design
- Construction
- Operating

0 75 150 300 Miles

Map Updated 4/29/2014



Biomass and Energy

Superior Pellet Mill Fairbanks



Wood Chips Space Heating

Tok and Delta Schools
Craig Public Buildings

