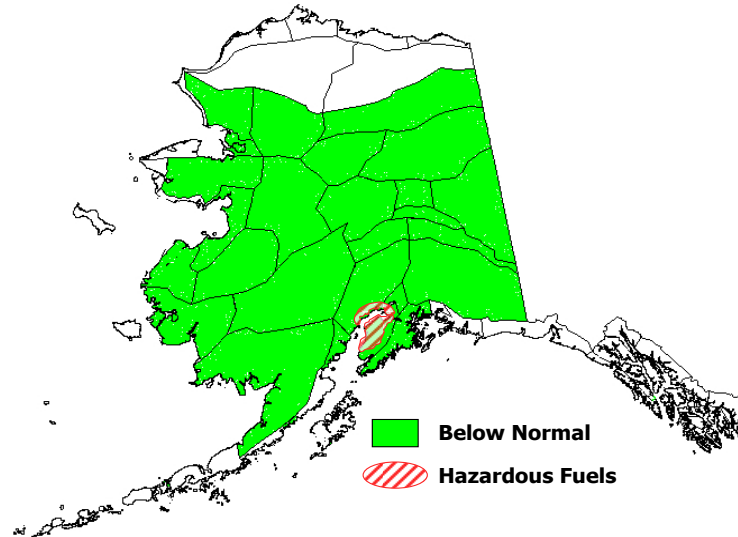




Alaska Seasonal Fire Weather/Fire Danger Outlook 2009

AICC Predictive Services



Fire Potential in Alaska for the 2009 season is expected to be predominantly below normal based on fuel conditions, human activity and expected climate and weather trends. There are areas in South-Central with hazardous fuels.

- Below average forecast temperatures
- Above average forecast precipitation
- Normal to above normal snow pack
- There are areas in South-Central Alaska with Hazardous Fuels.
 - The Matanuska and Susitna Valleys, and Anchorage Hillside
 - Population boom and land clearing/burning
 - Spruce bark beetle-killed timber stands
 - Southwestern Kenai Peninsula and a portion of western Cook Inlet
 - Spruce bark beetle-killed timber stands
 - Below normal snowpack
- Confidence level moderate

Executive Summary

Initial Conditions

A weak La Nina (the cool phase of ENSO the El Nino/Southern Oscillation) this spring and other climatological indicators, including cooler temperatures and predominately above average snow pack suggest a below average number of acres may burn in Alaska in 2009.

Alaska's snow pack for the 2008-2009 season is generally above normal. A wet 2008 summer left us with moderate to low ending drought codes for 2008. The national drought monitor shows no drought or abnormally dry areas across Alaska for the first time in several years. And, as

opposed to the past few years, there have been no reports of fires overwintering under the snowpack.

The only area with lower than normal snow pack is the southern Kenai Peninsula. This factor, in combination with known beetle kill areas, presents a significant area of concern.

Additional Factors

The Matanuska-Susitna Valley and Anchorage Hillside have undergone a population boom and a dramatic increase in construction and land clearing. This has created an extensive wildland-urban interface (WUI) which has brought an increase in fire potential based on human activity and the potential for human caused ignitions in the interface areas.

Spruce bark beetle (SBB) continues to spread into these areas, particularly along the notoriously windy Anchorage hillside. SBB has also spread to Turnagain Arm and up Indian Creek. Forest stands in those areas are in a "red needle" phase; a much more volatile stand composition than after needle-fall.

Spruce bark beetle on the Kenai Peninsula and along Cook Inlet has caused nearly 2 million acres of beetle-killed timber. Regardless of snow pack, these fuels will continue to be a problem on the Kenai Peninsula as they have evolved into a fuel type of slash and grass mixed with snags. Though similar beetle kill areas exist in the Copper River Basin, lack of grasses make it a less combustible fuelbed.

This hazardous fuel type can quickly dry under seemingly mild weather conditions creating a dangerous and complex environment for fire-fighters and land managers. These areas will persist, and under the right weather and ignition conditions will cause large fire problems as we have seen in the past few years. (Tracy Avenue Fire 2005-5,400 acres, Caribou Hills Fire 2007-56,254 acres)

Weather and Climate Forecasts

Outlooks from the Climate Prediction Center indicate cooler than normal temperatures across southern Alaska and wetter than normal precipitation focused on western Alaska. The equatorial Pacific is under a weak La Nina, with a pattern similar to, but weaker than, last summer. This implies a cooler and slightly wetter season.

Additionally, recent research by Dr. Paul Duffy of UAF into the size of area burned seasonally in Alaska based on global weather patterns suggests a below normal number of acres burned statewide. (<http://zeus.neptuneinc.org/xRISA>) This does not eliminate the chance of large or problem fires in those specific areas outlined above or o/her areas of the state should higher temperatures or dry periods occur.

Resources Issues

Large areas of land have been proposed to be converted from Limited to Full protection option. These lands are in a scattered pattern so that Limited protection lands may necessitate action above the management option due to proximity to Full protection areas. This has the potential to require large amounts of resources.

Confidence Level

The confidence level of this assessment is moderate. The timing and duration of precipitation and length of dry periods can make a big difference in developing conditions that are conducive to significant fire growth or an active fire season. The lightning season in Alaska does not normally begin until late May, and the prognosis for lightning occurrence accompanied by dry weather is not clear at this time.

Acres Burned 1955-2008

10 year average

