Today

No Areas of Elevated Concern

Tomorrow

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Source: NWS; Storm Prediction Center
Fuels and Fire Behavior Advisories

Interior, Southwest, and South-Central Alaska
Valid: June 25 – July 8, 2022

Subject: Exceptional landscape flammability and widespread ongoing large fire growth.

Discussion: The Buildup Index (BUI) is the best indicator of seasonal severity and overall flammability of fuels in Alaska. It represents deeper drying in the duff layers and greater fuel availability. Large fire growth occurs from mid-June to mid-July surrounding the summer solstice when long days and rapid drying can produce elevated BUIs. Southwest Alaska normally experiences shorter periods of high flammability but has had numerous fires burning since the end of May. By mid-June fire activity began to spread eastward in the Interior. Numerous fires are now burning in the central Interior. The area of activity is expected to expand eastward into the Yukon Flats. South Central has been drying rapidly and BUIs are now at record levels.

Difference from normal conditions: The attached graph shows the current 2022 BUI trend for the Interior of Alaska compared to other busy fire seasons. 2022 has been above average BUI since May 31, and higher than 2019 levels for the same period. Convective precipitation has moderated values in some areas but forecast high pressure will rapidly increase values. Much of the landscape has experienced large fire growth earlier than usual. Multiple days of wetting rain adding up to more than one inch will be needed for lasting relief.

Concerns to Firefighters and the Public:
- Spruce stands are extremely flammable, will ignite readily, exhibit rates of spread more than one mile per hour, torch, and spot prolifically up to ¾ mile or more, and exhibit intense crown fire behavior.
- Temperatures above 80 degrees and RH below 30% are important thresholds for rapid spread and crown fire behavior. Strong winds are not required for large fire growth.
- Long-term drying has stressed green fuels and is encouraging spread into riparian areas and less flammable hardwood forests. These fuel types may no longer be barriers to fire spread.

Mitigation Measures:

1 Active Advisory
Southwest/Central Interior AK (updated 6/25)
- Expanded to include South-Central AK
- BUI trend similar (earlier!) vs other significant years
- Spruce very flammable; green fuels stressed
- Dry subsurface fuels = difficult to extinguish
- Multiple wet days and at least 1 inch of rain needed to revert to “normal” fire potential

Source: NICC, GACCs
Monsoon moisture has penetrated further into AZ, S GB, & OSC, allowing temporary (CA) to substantial (NM, AZ) recovery in fuel moisture in those areas. Ample early June precip in NW & ONC is “wearing off”, as it has been hot and dry for the past several days. Most of the Southeast US remains dryer than normal.

06-29-2022

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06-29-2022
Hot & dry conditions persist in E AK, and winds are a concern in SW AK. Indices suggest high probability of ignition, rapid/large growth, & long duration fires. Activity is likely to escalate even further – perhaps significantly – with widespread thunderstorms throughout the Interior. Initial storm activity may be mostly dry, and fuels are receptive to lightning ignitions. Due to dry ground fuels, fires will not be extinguished even with some rain.
Rapidly Rising ERCs In Western CONUS

06-30-2022

Hot/dry weather causing ERC to increase rapidly, approaching levels similar to late June 2021.

Fire potential is back to above normal for much of the Pacific West.

Sources: NOAA/NWS; FireFamilyPlus
NFDRS Products
Status & Confidence

Use with Reasonable Confidence
- WIMS outputs based on NFDRSv4 fuel models (5 FMs: V-Z)
  - WIMS is the authoritative source for NFDRS outputs
  - All stations in WIMS should now use NFDRSv4
  - Many units still evaluating/tweaking v4 parameters
- GACC PSA charts, 7-day Significant Fire Potential
  - Short-term plan succeeded in updating most GACC products to NFDRSv4
  - AK doesn’t use NFDRS; SA PS products in transition
  - Evaluation ongoing; some tweaking expected

Use with Caution
- WIMS outputs based on legacy NFDRS fuel models (20 FMs: A-U)
  - Past 6/1 deadline; legacy FMs will be purged soon
  - Many stations still using legacy FMs (must transition)
- WFDSS ERC charts (calc’d by WFDSS; uses FM-G)
  - Uses WIMS wx obs, but not WIMS NFDRS outputs
  - WFDSS & WIMS ERCs won’t be comparable as Field switches to (only) v4

Discontinue or Use Extra Caution
- WFAS products (maps & spatial data) tied to WIMS outputs based on legacy NFDRS FMs
  - Seeking clarification/list of affected WFAS products
  - Timeline for conversion to v4 is uncertain
  - Many are reliant on (old) FM-G
  - Climatology data for (new v4) FM-Y in development
- These national-scope products include:
  - SFDI, BI, & ERC percentile maps
  - Fire Danger Class map (Adjective Rating)
  - Dead fuel moisture maps (10-hr, 100-hr, 1000-hr)
  - KBDI map
  - Some features of WildfireSAFE app (e.g. SFDI)

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Main threat: Significant further escalation of fire activity in Alaska possible due to lightning & wind on very dry fuels. New ignitions and large fires could arise in SC AK, where resource demands would be higher than for remote fires in Interior. Expect long duration & continued growth for existing fires.

GB/RM: Dry & breezy conditions in the Intermountain West, where fire danger for most sites is near normal for this time of year in drier areas (outside monsoon path). Entering into traditional peak season period.

RM/NR: Fuels in the N Great Plains are curing; already available at some lower elevation/drier sites. Should see uptick in initial attack.

NW & CA: Very rapid drying over past several days has pushed fire danger to normal or even above normal potential. Some sites’ ERC matching levels seen in late June 2021, boosting confidence in predictions for busy season.
9 GEOGRAPHIC AREAS & 10 COORDINATION CENTERS

Alaska Area (AK)
California Area (CA)
North Ops (NOps, ONC)
South Ops (SOps, OSC)
Eastern Area (EA)
Great Basin Area (GB)
Northern Rockies Area (NR)
Northwest Area (NW)
Rocky Mountain Area (RM)
Southern Area (SA)
Southwest Area (SW)
PARTNERING AGENCIES
Comments or questions?

Please contact:

Steve Larrabee
(steven.larrabee@bia.gov)

or your local servicing Predictive Services Staff