Significant Fire Potential Outlooks

- July 2022
- August 2022
- September 2022
- October 2022

Drought Outlooks

- U.S. Monthly Drought Outlook
- U.S. Seasonal Drought Outlook

Significant Wildland Fire Potential Outlook

- Above Normal
- Near Normal
- Below Normal
- Normal

Geographic Area Boundary
- State Boundary

Drought Tendency During the Valid Period

- Drought persists
- Drought remains but improves
- Drought removal likely
- Drought development unlikely

Valid for July 2022 Released June 30, 2022

http://go.usa.gov/3eZ6d

U.S. Seasonal Drought Outlook

- Drought persists
- Drought remains but improves
- Drought removal likely
- Drought development unlikely

Valid for July 1 - September 30, 2022 Released June 30, 2022

http://go.usa.gov/3eZ73

Significance levels are based on vegetation, fuel, and weather conditions, and are updated monthly. Significant fire potential regions are based on the potential for wildland fire to burn with intensity, extent, and distribution that can have a significant impact on natural and human systems and infrastructure.

Drought levels are based on the Drought Monitor and are updated monthly. Drought levels are based on the Drought Monitor and are updated monthly. Drought levels are based on the Drought Monitor and are updated monthly. Drought levels are based on the Drought Monitor and are updated monthly.
Fuels and Fire Behavior Advisory

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 ¼ 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:
• 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
Rain showers, cooler temps, & cloud/smoke cover allowed some recovery in fuel moistures and other fire danger measures, especially in SW AK. Highest risk for new ignitions focused on E Interior & South-Central AK, incl. Copper River Basin. High BUIs correlates to very dry ground fuels; long-duration fires. Ignitions in Mat-Su & Kenai could be especially problematic (record BUIs; populated areas).

Ongoing RFWs for hot/dry/windy conditions (Copper River Basin) & lightning over dry fuels (Interior). Smoke/air quality impacts in many areas.
With rainfall deficit & high temps, ERCs in TX, OK, & AR continue to rise. Many sites above 90th percentile & trending up.

Increasing IA & large fires emerging in these areas.
**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 used NFDRS; SA PS products in transition
  - Evaluation ongoing; some tweaking expected

**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)

**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

Note: Better information & guidance will become available on 7/14.

GB: Dry & windy conditions; annual grasses cured at many sites.

TX/OK/AR: ERCs exceed 90th percentile & still trending up. Very dry heavy dead woody fuels, contributing to rekindles. Live fuels drier than normal & stressed. IA continues to increase; more frequent large fires emerging.

NFDRSv4 transition: USFS selected temporary NFDRS Program Manager (Shelby Law, NTE 120 days). Degraded WFAS products still a concern – better info expected after 7/14 meeting.

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?

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