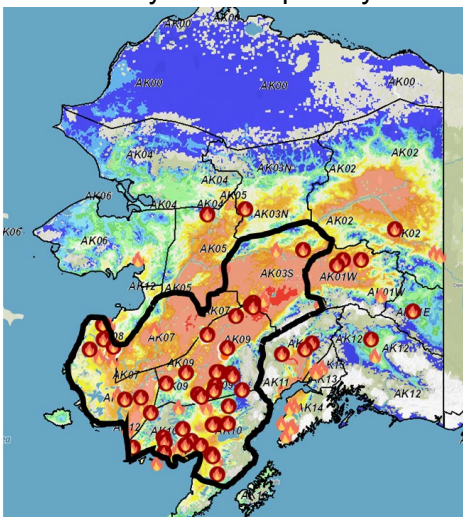
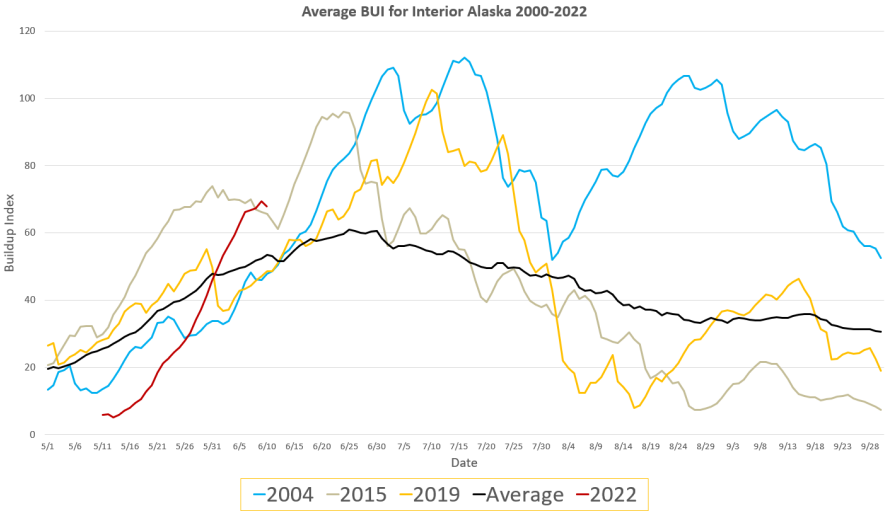
Fuels and Fire Behavior Advisory
Southwest and Central Interior Alaska
Valid: June 12 – June 25, 2022

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

Discussion: The Builidup 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 BUI levels. Southwest Alaska normally experiences shorter periods of high flammability as they are prone to intermittent rain due to marine influences. Beginning in the middle of May, southwest Alaska has experienced continued hot, dry, and windy conditions, drying out fuels, retarding green-up and producing significant large fire growth. Many fires in southwest Alaska have experienced exceptionally large fire growth over the last week, which is unusual for the area.

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 2015 levels since June 6. Southwest Alaska has already experienced abnormally large fire growth for this time of year. 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.
- Green fuels are stressed and encouraging spread into riparian areas and less flammable hardwood forests.

Mitigation Measures:

- Ensure that you can recognize hazardous fuel types including tundra that is exceptionally dry.
- Understand the triggers and thresholds for problem fire behavior.
- Monitor forecasts and indices to anticipate areas of increased flammability and extreme fire behavior.
- Maintain clear communications when working around active fires.

Area of Concern: Southwest Alaska, and the central Interior. Conditions over the next few weeks may spread to include a wider portion of Alaska.

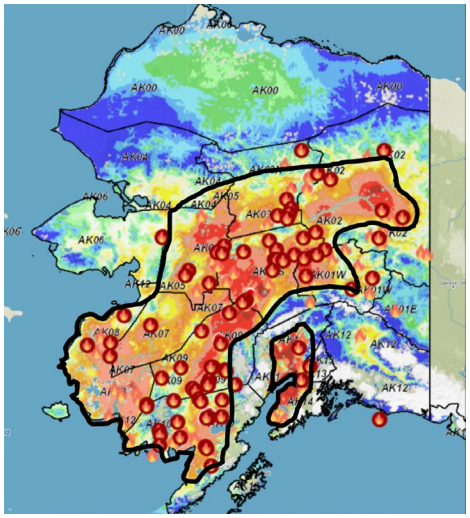
Issued By: Alaska Interagency Coordination Center Predictive Services

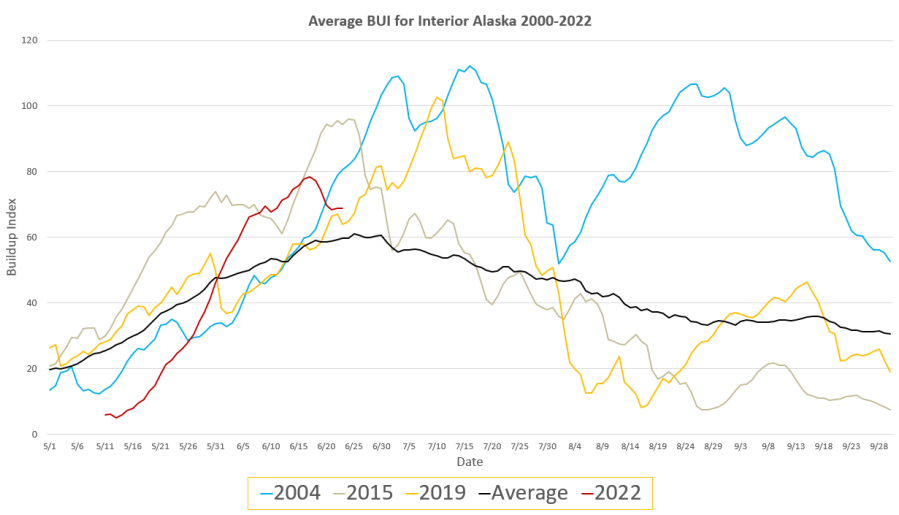
Fuels and Fire Behavior Advisory
Interior, Southwest, and South-Central Alaska
Valid: June 25 – July 8, 2022

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:

- Ensure that you can recognize hazardous fuel types including tundra that is exceptionally dry.
- Understand the triggers and thresholds for problem fire behavior.
- Monitor forecasts and indices to anticipate areas of increased flammability and extreme fire behavior.
- Maintain clear communications when working around active fires.

Area of Concern: Interior, Southwest and South Central Alaska

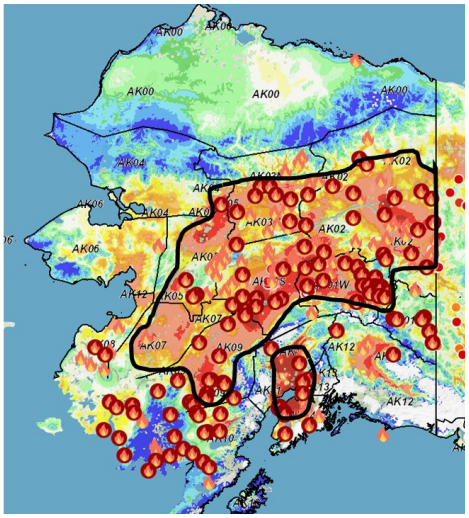
Issued By: Alaska Interagency Coordination Center Predictive Services

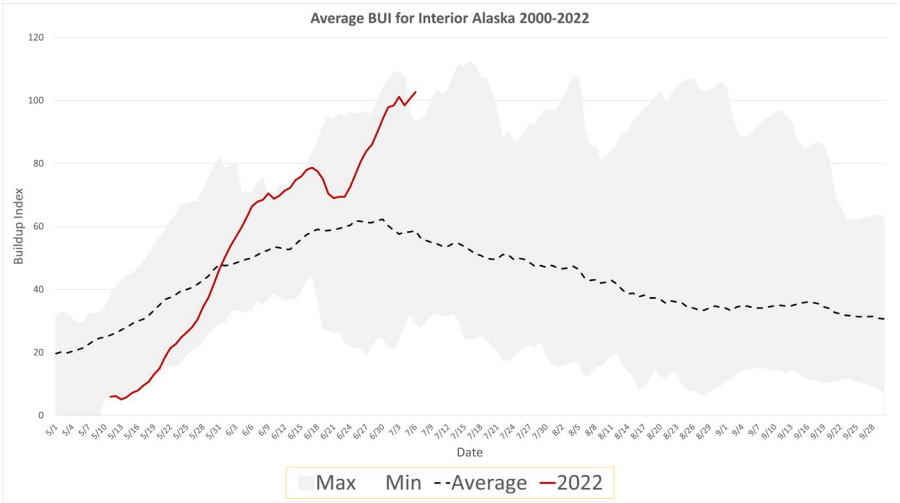
Fuels and Fire Behavior Advisory
Interior and South Central Alaska
Valid: July 8 – July 22, 2022

Subject: **Exceptional landscape flammability and widespread 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 experienced an exceptionally busy June with over one million acres burned. By mid-June fire activity began to spread eastward across the Interior. Numerous fires are now burning in the central and eastern Interior. 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 climatological norms since 2000. 2022 has been above average BUI since May 31 and is currently at record-setting values. Convective precipitation has moderated BUI values in some areas, but mid and deeper sub-surface fuels remain extremely dry. Much of the landscape has experienced continuous large fire growth. Fuels that are normally barriers to fire spread, such as old fire scars and hardwood stands, have been experiencing increased fire behavior. Multiple days of wetting rain adding up to more than one inch will be needed.





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 75 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 in old burn scars and less flammable hardwood forests. These fuel types are no longer barriers to fire spread.

Mitigation Measures:

- Ensure that you can recognize hazardous fuel types.
- Understand the triggers and thresholds for problem fire behavior.
- Monitor forecasts and indices to anticipate areas of increased flammability and extreme fire behavior.
- Maintain clear communications when working around active fires.

Area of Concern: Southwest, Central and Eastern Interior, and South Central Alaska

Issued By: Alaska Interagency Coordination Center Predictive Services

Fuels and Fire Behavior Advisory

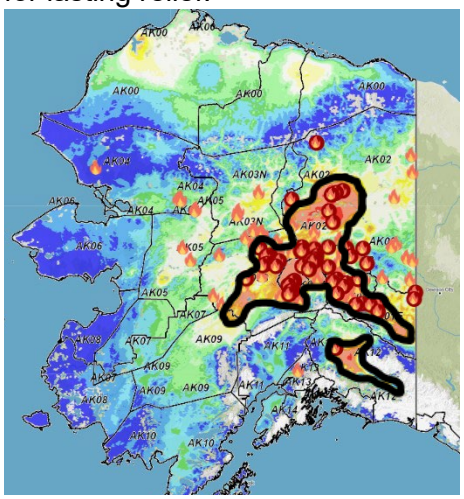
Central Interior, Eastern Interior and Copper River Basin

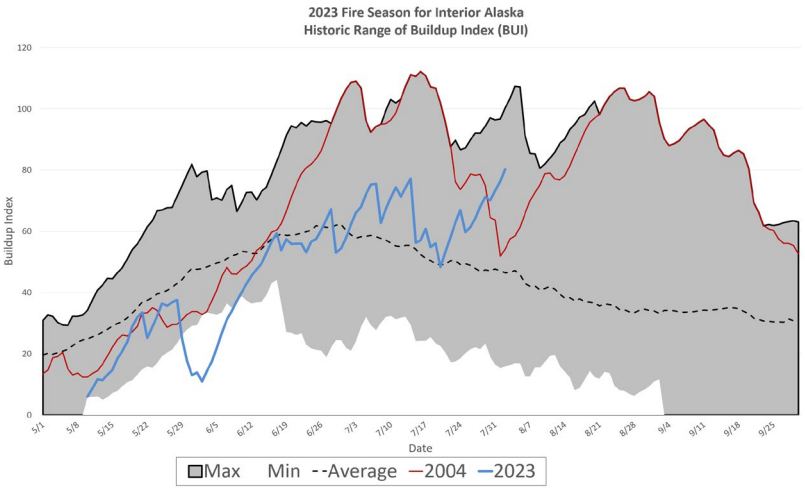
Valid: August 4 – August 18, 2023

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 typically occurs from mid-June to mid-July when long days and rapid drying can produce elevated BUIs. The delayed onset of season-ending rains has resulted in BUI far above average for this time of year. There are already numerous fires near core population areas. New starts continue to be discovered in these areas and are resistant to containment.

Difference from normal conditions: The attached graph shows the current 2023 BUI trend for the Interior of Alaska compared to other busy fire seasons. This fire season started below average, but July was abnormally dry and the last week of July saw high temperatures with numerous lightning ignitions. While most seasons have seen wetting rains by this time, BUI remains elevated with no significant precipitation expected for this area in the forecast period. 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, may exhibit rates of spread more than one mile per hour, spot prolifically up to ¼ mile or more, and exhibit intense crown fire behavior.
- Temperatures above 80 degrees and RH at or below 30% are important thresholds for rapid spread and crown fire behavior. Strong winds are not required for large fire growth in these conditions but forecast for the area includes sustained strong winds.
- Long-term drying has stressed green fuels may allow spread into riparian areas and less flammable hardwood forests. With continued drying, these fuel types may no longer be barriers to fire spread.

Mitigation Measures:

- Understand the triggers and thresholds for problem fire behavior.
- Monitor forecasts and indices to anticipate areas of increased flammability and extreme fire behavior.
- Maintain clear communications when working around active fires.

Area of Concern: Central and Eastern Interior to include the Yukon Flats, Tanana Valley and Copper River Basin.

Issued By: Alaska Interagency Coordination Center Predictive Services