

**2019**  
**Alaska Fire Weather Program**  
**Annual Operating Plan**  
**for**  
**National Weather Service, Alaska Region (NWS)**  
**Alaska Wildland Fire Coordinating Group (AWFCG)**

A. **Purpose.**

To describe the roles, responsibilities and operational procedures of the NWS, Alaska Fire Service (AFS), US Forest Service (USFS), State of Alaska Division of Forestry (DOF) and the AWFCG membership in support of the 2017 Alaska Fire Weather Program, to ensure effective use of NWS fire weather products, and establish responsibilities of the Alaska Interagency Coordination Center (AICC) fire weather meteorologist.

Authorities. This Plan is maintained and coordinated by the Fire Weather Committee of the Alaska Wildland Fire Coordinating Group (Appendix A).

B. **Operational Guidelines**

**The Principal operating period for the Alaska Fire Weather Program runs from** April 1 through September 1, however, the exact operating periods are subject to the fire weather threat. The roles described in the Operating Plan are intended to be flexible and allow for changing conditions of personnel, workload and weather hazards.

WFOs may request a delay or early end of routine fire weather forecasts if excessive snowpack, rain and/or continued winter weather is expected for the scheduled start date(s), or excessive cool and moist weather is imminent prior to the regular end of the fire weather forecast season. WFOs will contact the AICC meteorologist who will, in turn, canvas the appropriate Protection Agency Fire Management Officers (FMOs) to coordinate any changes to their regular season schedule.

Conversely, the Protection Agency FMOs may request an early issuance or extension of routine fire weather forecast if the seasonal threat for fire danger is likely to fall outside scheduled date(s). Protection Agency FMOs should coordinate any date changes requests with the AICC Meteorologist. The AICC Meteorologist will then coordinate the change in service with the WFO Management Teams. WFOs will notify the NWS Regional Fire Weather Program Manager of any changes.

Coordination of schedule changes may result in a transition of services such as additional information in the Area Forecast Discussion product in lieu of the daily fire weather forecast products. Such coordination should begin no later than five (5) days in advance of the regular season start or end dates listed in Appendix C.

Unless wildfire conditions exist or are anticipated, fire weather products will not be provided for Anchorage forecast zones 131, 135, 171, 181, 185, 187, 191, 195, and Fairbanks forecast zones 201-207, 211 and 213 (see Appendix E for zone listings and map).

C. **NWS Responsibilities**

1. The NWS will provide a Regional Fire Weather Program Manager through Alaska Region Headquarters, and fire weather focal points at the Anchorage, Fairbanks, and Juneau Weather Forecast Offices (WFO). The fire weather focal points and Lead Forecasters will be responsible for timely delivery and quality of fire weather products and services from their WFOs.

2. Consistent with the Interagency Agreement for Meteorological Services, the NWS also will provide the following:

a. **Red Flag Warnings and Fire Weather Watches.**

The notification and issuance of Red Flag Warnings and Fire Weather Watches will be the number one priority of the fire weather program. Red Flag Warnings and Fire Weather Watches will be issued in accordance to National Weather Service Instruction 10-401, Fire Weather Products Specification, with Red Flag Event criteria defined below.

A Fire Weather Watch should be issued 24 to 96 hours in advance of the expected onset of criteria. The intent of a Fire Weather Watch is to alert users to the potential for Red Flag Event conditions a day (or more) in advance.

A Red Flag Warning warns of an impending, or occurring, Red Flag Event. Its issuance denotes a high degree of confidence that weather and fuel conditions consistent with Red Flag Event criteria will occur in 48 hours or less.

**Red Flag Warning/Fire Weather Watch Criteria:**

There are two types of Red Flag Warning Criteria; convective and non-convective. Non-convective criteria must be met in all categories (temperature, RH, and wind) for at least three observations either at one station or a combination such as one hour at three stations or two hours at one station plus one hour at another. As always, fuel conditions must be coordinated with AICC Predictive Services.

**General non-convective Red Flag Warning criteria:**

Temp $\geq$ 75°F	RH $\leq$ 25%	Wind $\geq$ 15 mph (sustained)
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**Exceptions to the non-convective Red Flag Warning criteria:**

223 – Deltana and Tanana Flats 226 – Eastern Alaska Range	No temperature criteria	RH $\leq$ 25%	Wind $\geq$ 30 mph (sustained)
<b>Pre-green-up*</b> in zones: 101- Anchorage 111- Matanuska Valley 121- Western Kenai 125- Western PWS	Temp $\geq$ 65°F	RH $\leq$ 25%	Wind $\geq$ 15 mph (sustained)

\*Green-up will be discussed with local fire managers each spring to ensure an appropriate change date for South Central zones.

**Lightning Criteria**

Forecast LAL $\geq$ 4	Very dry fuels using adjective ratings with guidance from Predictive Services.
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Headlines:

Headlines for Red Flag Warnings or Fire Weather Watches will appear in the RFW product as well as the FWF for the appropriate zone(s). The headline will contain the phrase “FOR LIGHTNING” if convective criteria are forecast to be met. Headlines will also specify distinct areas of the fire weather zone if the entirety of the geographic area is not expected to be impacted.

Coordination with AICC Predictive Services:

WFOs will make every effort to consult the AICC Predictive Services (356-5691) when Red Flag Warnings or Fire Weather Watches are considered. The AICC or its designated Regional Area Contact is responsible for determining if fuel conditions are consistent with issuing the Warning/Watch. This determination is made based on recent precipitation and drying events, the type and amount of fuel

available, and a review of available current and forecast fire indices, among other factors. Fuel conditions are critical to the Warning/Watch issuance decision. **If fuel condition consultation with the AICC is not possible, forecasters will use the fuels conditions posted by AICC Predictive services as the basis for issuing a Warning or Watch when Red Flag Event conditions are anticipated.** AICC posts fuel conditions on a non-public webpage, the link to which should be included in WFO documentation as appropriate (example, Station Duty Manual).

AICC Predictive Services will be telephoned at 356-5691 upon initial issuance of or changes (including cancellation) to the Warning/Watch. If AICC Predictive Services cannot be reached, WFOs will call Initial Attack (IA) at 356-5670. If neither Predictive Services nor IA can be reached, a paper copy of the Warning/Watch will be faxed to 356-5678, but only when the warning is initiated or extended. The phone number for Initial Attack is not publicly published, but should be included in WFO documentation as appropriate (example, Station Duty Manual).

b. Spot forecasts.

WFO spot forecast issuance should take priority over routine fire weather forecasts.

Incidents will submit requests for spot forecasts via the NWS Spot website for wildland fires or for managed ignited fires planned within 24 hours. Spot forecast requests must include accurate and updated latitude and longitude coordinates for the site of concern during the period covered by the spot forecast. Spot requests will also include observations relevant to the area of concern. For ongoing fires or prescribed burns requiring multiple spot forecasts, Incidents will submit individual requests containing current/updated information and observations. Once a Spot forecast is requested, the Incident will phone the WFO to verify receipt of the request. WFO forecasters should not submit requests on behalf of the Incident requesting the spot forecast. Completed forecasts will be posted to the Alaska Region NWS Spot website. Other dissemination means may be provided, but only when a back-up method is necessary. The WFO forecaster will call the requesting agency's contact to verify receipt of the forecast. Incidents are encouraged to notify NWS forecasters in advance of prescribed spot requests and/or conduct preliminary coordination as needed to meet regulatory mandates. Such notification/coordination may be accomplished by contacting the appropriate NWS forecast office by phone. This does not preclude the use of the NWS Spot website within 24 hours of the planned ignition.

c. Routine daily fire weather forecasts, outlooks and discussions.

Production of routine fire weather forecasts should follow the schedule in Appendix C.

i. The Fire Weather Forecast (FWF).

This product will include information (as described below) for the first three 12-hour periods for morning forecasts and first four periods for afternoon forecasts. The forecast also will include information for days 3 through 5. [Note: the Fire Weather Program Time Line for Products and Services is listed in Appendix C, the Daily Schedule for Products and Services is listed in Appendix D, and an example of the Fire Weather Forecast is included as Appendix H]. Details about product format are provided below:

- Morning and afternoon Fire Weather Forecasts will include information on sky condition and weather, relative humidity, wind speed and direction, chance of wetting rain (defined as  $\geq 0.10$ " of liquid precipitation in 12-hours), and potential for wet and/or dry thunderstorms.
- Red Flag Warnings and Fire Weather Watches will be headlined at the top of the corresponding fire weather zone forecast. The headline will specify the time period, area and conditions covered by the watch/warning.

ii. Gridded Weather Forecast Elements via the National Digital Forecast Database (NDFD).

National Digital Forecast Database (NDFD) grids are used to produce a wide variety of products and services for fire weather support, including ingestion into Fire Weather Indices (FWI) calculations. Information regarding NDFD grids, including the operational status of NWS grid elements, is available through links from the following website:  
[https://www.weather.gov/mdl/ndfd\\_info](https://www.weather.gov/mdl/ndfd_info)

Contacts for customer support regarding NDFD data availability or data accessing can be found at the following website:  
[https://www.weather.gov/mdl/ndfd\\_customer](https://www.weather.gov/mdl/ndfd_customer). The NWS Alaska Region Fire Weather Manager should be copied on trouble-ticket correspondence.

d. Web Services.

The NWS will maintain, and update daily, the Alaska Fire Weather page at <https://www.weather.gov/arh/fire>. The Fire Weather page will include daily fire weather forecasts, graphic display of Red Flag Warnings and Fire Weather Watches, the public version of this Annual Operating Plan, and the Spot forecast interface access. Any changes to the content or display of the website information should be coordinated with the NWS Alaska Region Fire Weather Program Manager and AICC.

e. Weather observations.

Daily/hourly observations for ASOS/AWOS stations will be available from a file transfer protocol (FTP) location determined by local procedures. A listing of stations and agency ownership can be found at the following web address:  
[https://www.weather.gov/arh/ak\\_obs](https://www.weather.gov/arh/ak_obs)

f. Smoke management forecasts and information.

The transport wind and the mixing height, required information for smoke management, will be included in spot forecasts upon request.

- g. Consultation and technical advice.  
The WFO should provide requested information and advice as urgency of situation and operational time constraints dictate.
- h. Drought and Snowpack Consultation  
The NWS Alaska Region River Forecast Center will provide information and guidance on drought and snowpack conditions in the late winter through spring.
- i. Amendments/updates.  
Forecasts, Red Flag Warnings, and Fire Weather Watches will be updated according to the criteria listed in Appendix F. The spot forecast is a one-time site-specific product which is not routinely updated. Spot forecasts will be re-issued when representative observations or other weather information are available to the forecaster, and he/she is confident that an update could affect fire suppression or prescribed burning operations and/or the safety of personnel. Upon reissuance of a Spot forecast, the WFO will call the originator of the Spot request to inform them of the changes. Incident/Jurisdictional Agency personnel may contact the appropriate WFO for a spot update if forecast conditions appear unrepresentative of the actual weather conditions.
- j. Fire weather training.  
Upon the request of the AICC, NWS staff should assist in teaching sessions containing fire weather modules as staffing and office outreach funding (when applicable) allows.
- k. Special meteorological services.  
Any additional meteorological services not explicitly described in this Plan may be requested by the AICC through the Regional Fire Weather Program Manager. During emergency situations outside of administrative duty hours (7:30am to 4:00pm Monday through Friday), requests should be directed to the WFO Management team (see Appendix B).

D. **Alaska Interagency Coordination Center Meteorologist (AICC)**

The AICC Fire Weather Meteorologists are based at the AICC in Fairbanks. Their duties are to add value to the products and services furnished by the NWS. The AICC Meteorologists will be available to all federal and state agencies to consult regarding fire weather and fire potential and other long-range weather issues.

Their duties will include, but are not limited to:

- 1. Monthly Fire Potential Outlook.

- a. AICC will prepare fire potential outlooks and post them to the AICC website at the beginning of each month.
2. Daily 7-day Outlook
  - a. AICC will prepare a 7-day outlook including fire weather, fire potential, and resource allocation. This product will be issued Monday through Friday; weekend forecasts are issued based on severity of weather and/or fire activity.
3. Air Quality: The AICC meteorologist will coordinate with the Alaska Department of Environmental Conservation (ADEC) Air Quality Meteorologist regarding air quality hazards and information.
4. Research.

The AICC meteorologist will pursue and or participate in research on Fire Weather, Fuels Research, and Fire Potential in Alaska.
5. Statewide Briefings.
  - a. Statewide Briefings will be conducted by the AICC Meteorologist. These briefings will be held Monday through Friday. Interested agencies may join a webinar online. The briefing will discuss statewide conditions and refer to graphic products displayed on the AICC maintained website. Weekend briefings will be provided through the main fire season. Briefing content is listed in Appendix G.
  - b. Additional briefings will be conducted when significant weather changes warrant, or during severe fire conditions, as requested by user agencies.
  - c. The AICC Meteorologist will coordinate conference calls between the AICC and NWS WFO's when significant weather or fire conditions exist.
6. Pre-Season and Post-Seasonal Assessments.
  - a. Pre-season assessment will be prepared in the spring, and will be posted as a standard monthly Fire Potential Outlook product as identified in D.1.
  - b. Post-season assessment will be prepared for the Interagency Fall Fire Review Meeting.
  - c. Pre and post-season reviews will include historical climate and weather analysis.
7. Risk Assessments for fire behavior and fire danger potential.
  - a. AICC Meteorologist will gather current fuels condition information from local areas and suppression FMOs, and coordinate with NWS on Red Flag Warnings and Fire Weather Watches.
  - b. Fuel conditions for each forecast zone will be provided on the AICC website and updated, with a time/date stamp. Updates will be provided daily or as conditions warrant.
  - c. Fuel and Fire Behavior Advisories will be issued by Predictive Services when a significant area is indicating very dry fuels and has potential for exceptional or extreme fire behavior. These advisories will be updated every 14 days or as conditions change. There is a standard national format and protocol that will be followed, and the advisories will be posted on the AICC homepage and the

National Map. Additionally, the meteorologist on duty will contact the appropriate National Weather Service Office(s).

d. Drought information will be routinely assessed by the AICC meteorologist.

8. Liaison between federal and state agencies and the NWS.

9. Team member for collaborative planning efforts.

a. Develop Alaska Fire Danger Operating Plan.

10. Focal Point for RAWs coordination.

11. WIMS.

The AICC Predictive Services will ensure pertinent observations from their stations of interest are archived into WIMS in a timely fashion.

12. CFFDRS Indices

AICC Predictive Services will ensure continual functioning of the Alaska Fire and Fuels (AKFF) Website (<https://akff.mesowest.org/>) throughout the fire season to ensure ability of all users to access fire weather data and fire weather indices (FWI). AKFF is the result of a contract between the Alaska Fire Service and the University of Utah MesoWest and Synoptic Labs (MW/SL) with the goal to use data assets of MW/SL to increase the available information regarding wildland fire environments in the state of Alaska.

In AKFF, Surface Weather Observations are obtained from a variety of station networks through Mesowest. *RAWs stations* are maintained by fire and resource management agencies. *NWS stations* are found primarily at airports, and are maintained by the Federal Aviation Administration (FAA). *US Array* provides a new network of seismic and weather stations, maintained by the Incorporated Research Institutions for Seismology ([iris.edu](http://iris.edu)). Data associated with weather observing locations is stored with a latitude and longitude which allows it to be located in time and space. Weather observations for these point locations are captured by sensors at each location. Weather forecasts are obtained from the *National Weather Service (NWS) National Digital Forecast Database (NDFD)* for that particular location. Gridded, or modeled, weather data is related to and calibrated from data associated with weather observing locations mentioned above, but is not directly derived from that data here. Observational (analysis) grids are obtained from the *Real-Time Mesoscale Analysis (RTMA)* and *NWS River Forecast Center (RFC) Quantitative Precipitation Estimate (QPE)*, while the gridded weather forecasts are obtained from the same NWS NDFD forecast mentioned above. FWI codes and indices are produced for both surface location and gridded data types, though their calculations are completely independent of each other.

E. Alaska Fire Service (AFS), U.S. Forest Service (USFS), Division of Forestry (DOF), and the Alaska Wildland Fire Coordinating Group (AWFCG).

1. In concurrence with the National Agreement, the agencies will provide:



- a. Fire weather observations. Observations from all RAWs are uplinked by satellite and posted on the Alaska Fire and Fuels (AKFF) ([akff.mesowest.org](http://akff.mesowest.org)) website, as well as MesoWest (<http://mesowest.utah.edu/>)
- b. Provide pertinent weather information, and observations, in support of spot forecast requests.
- c. On-site meteorological support. On an as-needed basis (typically, but not limited to support of Type I or Type II Incident Management Teams), a request for an Incident Meteorologist (IMET) for on-site support will be initiated by the Incident using an overhead resource order and follow established dispatch procedures. For IMETs based in the Alaska Region, the sending office will provide travel arrangements upon request, driving directions, incident contact numbers and other relevant reporting instructions for IMETs and IMET trainees. Logistical support for all NWS personnel assigned to wildland fires will be supplied by the Incident to which he/she is assigned. On an as needed basis, an AICC resource order can be filed to request an IMET to augment the staffing at Alaska WFOs, the AICC, or for on-site fire assignments. WFO staff supplementation must be coordinated and in agreement with the local office management team.
- d. Air Resources Advisors. On an as needed basis, AICC will order Air Resource Advisors (ARAs) to assist with smoke monitoring and air quality forecasting when air quality becomes a health hazard for a significant portion of the state or a large population. In addition, local air quality assistance may be hired to assist with smoke monitoring and sensor deployment.
- e. NFMD (National Fuel Moisture Database) is the warehouse for fuel moisture sampling data. It is encouraged that all agencies post fuel moisture data at this website. The AICC meteorologist can provide contact information regarding the Geographic Area Administrator, so new users can setup an account. The national NFMD website is located at <http://www.wfas.net/nfmd/public/>.
- f. Training. NWS is welcome to nominate personnel to attend fire training sessions offered in Alaska. Acceptance is based on completion of prerequisite training requirements and space availability. Upon request, the NWS Alaska Region will be guaranteed training for \$390 each year offered, as this is a required course for IMET Certification.
- g. Other special services. A multi-port teleconference line will be available for briefings and conferences, though use of web-based meeting platforms is also encouraged for visual aid
- h. The AICC (<http://fire.ak.blm.gov>) and DOF (<http://www.dnr.state.ak.us/forestry>) also will maintain websites with links to NWS fire weather information.
- i. AKFF will be the data source for fire weather observations and fire weather indices, 0 as well as fire behavior calculations.
- j. The AFS will provide real-time lightning data to the NWS.
- k. Spot forecast requests will include a voice contact phone number of the requesting agency. Spot forecast requests sent through the web spot program will be followed up by a phone call to the appropriate NWS forecast office to verify receipt.

F. **Administration**

1. **Operating Period.**

The principal operating period for the Alaska Fire Weather Program will be from April 1, through August 31, 2019. During other times, the National Weather Service will provide Fire Weather Forecast and Warning product(s), as requested by the agencies, based on the severity of fire conditions. Agencies may request earlier or later dates for weather forecasting as outlined in Section C.2.a. above.

2. Annual Meetings.

During the fall of each year, the chair of the Fire Weather Committee will coordinate a joint meeting of the Fire Weather Committee for the purpose of reviewing the previous season's weather operations and preparing for the next fire weather season. If requested by one of the agencies, additional meetings may be arranged.

3. Annual Operating Plan.

This document fulfills the National Agreement for Meteorological Services in Support of Agencies with Land Management and Fire Protection Responsibilities, which establishes requirements for an Annual Operating Plan.

4. Modification of Fire Weather Operating Procedures.

Terms of this Operating Plan may be modified at any time. Agencies participating in this Operating Plan will provide reasonable advance notification of any operationally significant changes to other Alaska state fire weather stakeholder agencies, as listed in Section F.2 above.

5. Effective Date.

This Operating Plan is effective beginning April 1, 2019 and will be reviewed annually.

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Michael Mercer  
Chief, Environmental and Scientific Services  
NOAA/NWS Alaska Region

Date

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Kent Slaughter  
Chair, Alaska Wildland Fire Coordinating Group

Date

## Appendix A

### Alaska Wildland Fire Coordination Group Fire Weather Committee 2019

#### Liaison to AWFCG

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#### Chair-AICC Meteorologist-NPS

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Eric Stevens  
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#### State of Alaska - Division of Forestry

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#### National Park Service

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#### Tanana Chiefs Conference

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#### U.S. Fish and Wildlife

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#### Bureau of Land Management - Alaska Fire Service

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#### U.S. Forest Service

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**National Weather Service**

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## Appendix B

### Contact Points – 2019

#### Agency Contacts for Fire Related Questions:

##### State of Alaska:

##### Mat-Su District (includes Anchorage)

Norm McDonald

Phone: 761-6302

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##### Southwest District

Seth Ross (AFMO)

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##### Fairbanks Area

Ed Sanford

Phone: 451-2634

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Email: edward.sanford@alaska.gov

##### Kenai-Kodiak Area

Howard Kent

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##### Valdez Copper River Area

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##### Tok Area

Peter Talus

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##### Delta Area

Mike Goyette

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##### Haines Area

Greg Palmieri

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##### Air Quality (ADEC)

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##### Bureau of Land Management:

##### AICC Coordinator

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Upper Yukon Zone FMO

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Tanana Zone FMO

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Galena Zone FMO

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**National Park Service:**

AICC Meteorologists

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Eric Stevens  
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Regional Fire Officer and

Coastal Parks FMO (Kenai Fjords, Glacier Bay, Katmai, Klondike Gold Rush, Aniakchak, Sitka)

Chuck Russell  
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Western Parks FMO (Denali/Lake Clark/Bering Land Bridge/Cape Krusenstern/Noatak/Kobuk Valley)

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Eastern Parks FMO (Yukon-Charley, Gates of the Arctic, Wrangell-St. Elias)

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**U.S. Forest Service:**

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**U.S. Fish & Wildlife Service:**

Regional Fire Management Coordinator

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Kenai/Kodiak/Togiak/Yukon Delta NWR  
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Yukon Flats, Kanuti, Tetlin, Arctic NWR  
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NWS Alaska Region Headquarters

Regional Fire Weather Program Manager

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Fairbanks Weather Forecast Office

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Meteorologist-in- Charge     Melissa Kreller  
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Anchorage Weather Forecast Office

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Data and Acquisition Branch  
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AICC Meteorologists

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**Appendix C**  
**TENTATIVE PRODUCT AND SERVICE TIMELINE**  
*Dates may be appropriately altered based on weather and fire danger*

**April 1 through April 9**

All NWS WFO's: Spin-up operations and training for daily forecast issuance. During this period, forecasts, watches and warnings will be issued if weather and fuel conditions warrant, as requested by Protection and Jurisdictional Agencies.

NWS Alaska Region Headquarters: Ensures NWS Alaska Region Fire Weather Internet Pages are operating and providing current products.

**April 10**

Anchorage WFO: Begin production of daily written forecasts (morning and afternoon) for zones: 101, 111, 121, and 125

AICC: Begin 7-day forecast product as needed and start CFFDRS calculations in AKFF site three days after snow-free.

**April 17**

Anchorage WFO: Begin production of daily written forecasts (morning and afternoon) for zones: 141, 145, 152, 155, and 161

Fairbanks WFO: Begin production of daily written forecasts (morning and afternoon) for zones 221-227.

**Apr 24**

Fairbanks WFO: Begin production of daily written forecasts (morning and afternoon) for zones 212, 214-216, 219 and 220.

Juneau WFO: Begin production of daily written forecasts (morning)

AICC: Begin as needed statewide stand-up/teleconference briefing at the Alaska Interagency Coordination Center.

**May 1**

Fairbanks WFO: Begin production of daily written forecasts (morning and afternoon) for zones 208-210, 217 and 218.

AICC: Begin Monday through Friday stand-up/teleconference briefing at the Alaska Interagency Coordination Center. Weekend briefings will begin when needed.

**August 7**

Juneau WFO: End production daily written forecasts

Anchorage WFO: End production of daily written forecasts for zones: 125, 155, and 161

**August 15**

Anchorage WFO: End production of daily written forecasts for zones: 101, 111, 121, 141, 145, and 152

**August 29**

Fairbanks WFO: End production of daily written forecasts

End of Principal Operating Period

**Beyond August 29:**

Services of NWS and AICC meteorologist provided upon request. During this period, forecasts, watches and warnings will be issued if weather and fuel conditions warrant, as requested Protection and Jurisdictional Agencies.

## Appendix D

### PRODUCT AND SERVICE DAILY SCHEDULE

<u>LOCAL TIME</u>	<u>ITEM</u>
0800	Forecasted Fire Weather Indices available on the AFS website.
0800	Juneau WFO: Morning Fire Weather Forecasts disseminated and published to the Internet. Anchorage WFO: Fire Weather Forecasts disseminated and published to the Internet . Fairbanks WFO: Fire Weather Forecasts for zones 218-227 disseminated and published to Internet.
0830	Fairbanks WFO: Morning Fire Weather Forecast for zones 208-210, 212 and 214-217 disseminated and published to Internet.
0945	Statewide AICC Meteorologist Briefing.
1100	7-day Outlook published on AICC Website.
1200	Podcast of AICC Meteorologist Briefing will be posted to the AICC Website
1500	Fuel Conditions and actual Fire Weather Indices are posted on the AKFF Website. Indices are automatically calculated and posted when the 1400 hr observation for each station is reported.
1500	State manual weather stations transmit their weather observations into NWS Anchorage and Fairbanks Forecast Offices and AICC via Google Documents.
1500-1600	Afternoon Fire Weather Forecast from Anchorage and Fairbanks disseminated and published to the Internet.
Anytime	Spot forecast as needed. Contact as early as possible.

## Appendix E

### Tables of Fire Weather Zone Titles and WFO Responsibility

WFO Juneau

Zone Number	Zone Name
017	CAPE FAIRWEATHER TO CAPE SUCKLING COASTAL AREA
018	TAIYA INLET AND KLONDIKE HIGHWAY
019	HAINES BOROUGH AND LYNN CANAL
020	GLACIER BAY
021	EASTERN CHICHAGOF ISLAND
022	SALISBURY SOUND TO CAPE FAIRWEATHER COASTAL AREA
023	CAPE DECISION TO SALISBURY SOUND COASTAL AREA
024	EASTERN BARANOF ISLAND AND SOUTHERN ADMIRALTY ISLAND
025	JUNEAU BOROUGH AND NORTHERN ADMIRALTY ISLAND
026	INNER CHANNELS FROM KUPREANOF ISLAND TO ETOLIN ISLAND
027	DIXON ENTRANCE TO CAPE DECISION COASTAL AREA
028	SOUTHERN INNER CHANNELS
029	MISTY FJORDS

WFO Anchorage

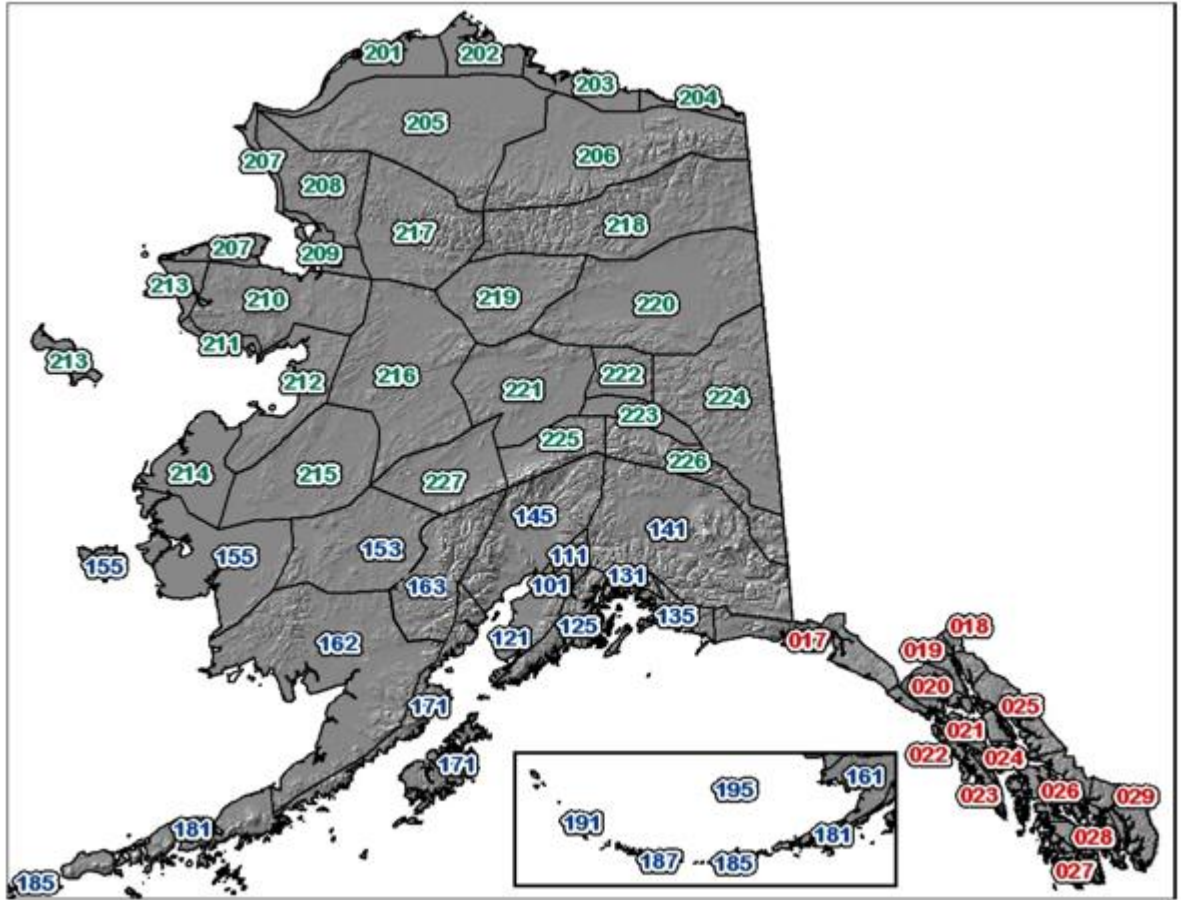
Zone Number	Zone Name
101	ANCHORAGE
111	MATANUSKA VALLEY
121	WESTERN KENAI PENINSULA
125	WESTERN PRINCE WILLIAM SOUND
131	NORTHEAST PRINCE WILLIAM SOUND
135	SOUTHEAST PRINCE WILLIAM SOUND
141	COPPER RIVER BASIN
145	SUSITNA VALLEY
153	MIDDLE KUSKOKWIM VALLEY
155	KUSKOKWIM DELTA
162	GREATER BRISTOL BAY
163	WESTERN ALASKA RANGE
171	KODIAK ISLAND
181	ALASKA PENINSULA
185	EASTERN ALEUTIANS
187	CENTRAL ALEUTIANS
191	WESTERN ALEUTIANS
195	PRIBILOF ISLANDS

WFO Fairbanks

Zone Number	Zone Name
201	WESTERN ARCTIC COAST
202	NORTHERN ARCTIC COAST
203	CENTRAL BEAUFORT SEA COAST
204	EASTERN BEAUFORT SEA COAST
205	NORTHWESTERN BROOKS RANGE
206	NORTHEASTERN BROOKS RANGE
207	CHUKCHI SEA COAST
208	LOWER KOBUK AND NOATAK VALLEYS
209	BALDWIN PENINSULA AND SELAWIK VALLEY
210	NORTHERN AND INTERIOR SEWARD PENINSULA
211	SOUTHERN SEWARD PENINSULA COAST
212	EASTERN NORTON SOUND AND NULATO HILLS
213	ST LAWRENCE ISLAND AND BERING STRAIT COAST
214	YUKON DELTA
215	LOWER YUKON VALLEY
216	LOWER KOYUKUK AND MIDDLE YUKON VALLEYS
217	UPPER KOBUK AND NOATAK VALLEYS
218	SOUTHEASTERN BROOKS RANGE
219	UPPER KOYUKUK VALLEY
220	YUKON FLATS AND SURROUNDING UPLANDS
221	CENTRAL INTERIOR
222	MIDDLE TANANA VALLEY
223	DELTANA AND TANANA FLATS
224	UPPER TANANA VALLEY AND THE FORTY MILE COUNTRY
225	DENALI

226	EASTERN ALASKA RANGE
227	UPPER KUSKOKWIM VALLEY

# NWS Zone Map





## Appendix F

### Amendment Criteria for Red Flag Warnings Fire Weather Watches Fire Weather Forecasts

Update when:

- A. Forecasted wind direction differs from observed wind direction by 90 degrees or greater when the observed sustained wind speed is greater than 10 mph.
- B. Observed sustained wind speed differs from forecasted wind speed by 10 mph or more.
- C. The observed relative humidity ( $RH_{\text{observed}}$ ) is less than 50% and the forecast relative humidity ( $RH_{\text{forecast}}$ ) minus the observed relative humidity is greater than 10%,

$$RH_{\text{observed}} < 50\% \text{ and } RH_{\text{forecast}} - RH_{\text{observed}} > 10\%$$

$$\text{where: } RH_{\text{forecast}} - RH_{\text{observed}} = RH \text{ forecast error}$$

- D. No thunderstorms are forecast but thunderstorms develop.
- E. The timing of the Red Flag Warning or Fire Weather Watch valid time changes.
- F. The areal extent or “location” of the Red Flag Warning or Fire Weather Watch changes.
- G. A Red Flag Warning or Fire Weather Watch is issued or cancelled.

## Appendix G

### Briefing Content

Briefings shall provide general statewide fire weather information for all cooperating agencies. Discussion items will include:

Previous Day's:

- Maximum Temperature/Minimum Relative Humidity
- Precipitation
- Significant weather events

Today's, tomorrow's:

- Red Flag Warnings/Fire Weather Watches
- Maximum Temperature/Minimum Relative Humidity
- Precipitation
- Significant weather events

A longer range (7 day) forecast with an emphasis on wet or dry thunderstorm potential and discussion on temperature, humidity, winds and precipitation.

The graphics display will consist of the following charts: (Charts used in the briefings may be flexible and up to the discretion of the AICC meteorologist.)

- Previous 24 hour maximum temperature
- Previous 24 hour minimum relative humidity
- Previous 24 hour precipitation
- Previous 24 hour lightning
- 500 mb
- Most recent satellite imagery
- Today's forecasted maximum temperature
- Today's forecasted minimum RH
- Today's forecasted Wind speed and direction
- Today's forecasted Fire Weather Indices
- 500 mb and surface forecast charts for days 1-3.
- Gridded forecast maps of precipitation and convection potential for days 1-3.
- 500 mb forecast charts for days 4-7.

## **Appendix H**

### **NWS Fire Weather Product Examples**

The following are examples of fire weather products produced by the NWS Alaska Region. Remember that there may be slight variations in products due to each WFO's own procedures and policies. For national fire weather product specifications please see the fire weather section of the NWS Directives, located at <http://www.nws.noaa.gov/directives> under the Fire Weather section (10-4 series).

1. Routine Daily Fire Weather Forecast for One Fire Weather Zone.

FNAK52 PAFG 021256  
FWFWCZ

Fire Weather Planning Forecast for Western Alaska  
National Weather Service Fairbanks AK  
456 AM AKDT Mon Jul 2 2018

.DISCUSSION...High pressure building across the Interior will bring warmer and drier conditions through midweek. Minimum RH values will fall into the upper 30s to lower 40s today across the western Interior and into the lower to mid 30s Tuesday and Wednesday but are expected to remain above Red Flag criteria. Temperatures will climb from the upper 60s to lower 70s today into the lower to mid 70s on Tuesday and into the middle 70s on Wednesday. Pressure gradient tightens today and Tuesday with increasing west to southwesterly winds. Winds are expected to remain below Red Flag criteria into Wednesday.

AKZ208-030700-  
Lower Kobuk and Noatak Valleys-  
Including the cities of Noatak, Kiana, and Red Dog Mine  
456 AM AKDT Mon Jul 2 2018

	Today	Tonight	Tue
Cloud cover	MClDY	PClDY	PClDY
Precip type	Showers	Showers	None
Chance precip (%)	50	30	0
Temp (24h trend)	57-67 (0)	41-51 (-3)	58-68
RH % (24h trend)	ABV 40 (+3)	83-98 (-8)	40-55
20ftWnd(mph)	S 8-12 G24	SW 9-13 G24	SW 10-14 G26
CWR	20	0	0
LAL	1	1	1

Remarks...None.

.FORECAST FOR DAYS 3 THROUGH 5...

.WEDNESDAY...Partly cloudy. Scattered showers. Lows 42 to 52. Highs 59 to 69. Southwest winds around 10 mph.

.THURSDAY...Partly cloudy. Lows 40 to 50. Highs 59 to 69. North winds around 5 mph.

.FRIDAY...Partly cloudy. Lows 42 to 52. Highs 64 to 74. North winds around 10 mph.

\$\$

AKZ209-030700-

Baldwin Peninsula and Selawik Valley-  
Including the cities of Kotzebue, Selawik, and Noorvik  
456 AM AKDT Mon Jul 2 2018

	Today	Tonight	Tue
Cloud cover	MCI	PCldy	MClear
Precip type	None	None	None
Chance precip (%)	0	0	0
Temp (24h trend)	58-68 (+3)	49 (-1)	59-69
RH % (24h trend)	ABV 40 (-6)	76-91 (-6)	37-52
20ftWnd(mph)	SW 6-10 G20	SW 7-11 G21	SW 7-11 G22
CWR	0	0	0
LAL	1	1	1

Remarks...None.

.FORECAST FOR DAYS 3 THROUGH 5...

.WEDNESDAY...Mostly clear. Lows in the lower 50s. Highs 59 to 69.

West winds around 10 mph.

.THURSDAY...Partly cloudy. Lows around 50. Highs 58 to 68. West winds around 10 mph.

.FRIDAY...Partly cloudy. Lows in the lower 50s. Highs 64 to 74.

Northwest winds around 10 mph.

\$\$

AKZ210-030700-  
Northern and Interior Seward Peninsula-  
Including the cities of Buckland, Deering, Candle, Council,  
Haycock, Pilgrim Springs, Serpentine Hot Springs, and Taylor  
456 AM AKDT Mon Jul 2 2018

	Today	Tonight	Tue
Cloud cover	PCldy	MClear	MClear
Precip type	Showers	None	None
Chance precip (%)	10	0	0
Temp (24h trend)	58-68 (+6)	40-50 (-1)	60-70
RH % (24h trend)	ABV 40 (-9)	83-98 (-7)	36-51
20ftWnd(mph)	SW 9-13 G26	SW 10-14 G26	SW 7-11 G22
CWR	0	0	0
LAL	1	1	1

Remarks...None.

.FORECAST FOR DAYS 3 THROUGH 5...

.WEDNESDAY...Mostly clear. Lows 40 to 50. Highs 61 to 71.

Southwest winds around 5 mph.

.THURSDAY...Partly cloudy. Lows 40 to 50. Highs 56 to 66.

Northwest winds around 10 mph.

.FRIDAY...Partly cloudy. Lows 39 to 49. Highs 63 to 73. Northwest

winds around 10 mph.

\$\$

AKZ211-030700-  
Southern Seward Peninsula Coast-  
Including the cities of Nome, White Mountain, and Golovin  
456 AM AKDT Mon Jul 2 2018

	Today	Tonight	Tue
Cloud cover	PCldy	PCldy	PCldy
Precip type	Showers	None	None
Chance precip (%)	30	0	0
Temp (24h trend)	49-57 (0)	45 (-1)	52-62
RH % (24h trend)	ABV 40 (-7)	88-98 (-2)	ABV 40
20ftWnd(mph)	SW 8-12 G21	SW 6-10 G20	SW 4-8 G17
CWR	0	0	0
LAL	1	1	1

Remarks...None.

.FORECAST FOR DAYS 3 THROUGH 5...

.WEDNESDAY...Partly cloudy. Lows 47 to 52. Highs 58 to 68. West winds around 5 mph.

.THURSDAY...Partly cloudy. Lows in the lower 50s. Highs 55 to 65. Northwest winds around 10 mph.

.FRIDAY...Partly cloudy. Lows 49 to 54. Highs 61 to 70. Northwest winds around 10 mph.

\$\$

AKZ212-030700-  
Eastern Norton Sound and Nulato Hills-  
Including the cities of Unalakleet, Stebbins, St Michael, Elim,  
Koyuk, and Shaktoolik  
456 AM AKDT Mon Jul 2 2018

	Today	Tonight	Tue
Cloud cover	PCldy	PCldy	PCldy
Precip type	Showers	None	None
Chance precip (%)	30	0	0
Temp (24h trend)	53-63 (0)	44-51 (-3)	59-69
RH % (24h trend)	ABV 40 (0)	86-99 (-4)	ABV 40
20ftWnd(mph)	SW 6-10 G22	W 5-9 G22	W 3-7 G18
CWR	0	0	0
LAL	1	1	1

Remarks...None.

.FORECAST FOR DAYS 3 THROUGH 5...

.WEDNESDAY...Partly cloudy. Isolated showers. Lows 45 to 53.  
 Highs 60 to 70. West winds around 5 mph.  
 .THURSDAY...Mostly cloudy with scattered showers. Lows 47 to 54.  
 Highs 57 to 67. West winds around 10 mph.  
 .FRIDAY...Partly cloudy. A 20 percent chance of showers. Lows  
 47 to 54. Highs 62 to 72. Northwest winds around 10 mph.

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AKZ214-030700-  
 Yukon Delta-  
 Including the cities of Mountain Village, Emmonak, Alakanuk,  
 Kotlik, Pilot Station, St Marys, Scammon Bay, Marshall,  
 Nunam Iqua, and Pitkas Point  
 456 AM AKDT Mon Jul 2 2018

	Today	Tonight	Tue
Cloud cover	PCldy	PCldy	MClear
Precip type	None	None	None
Chance precip (%)	0	0	0
Temp (24h trend)	55-65 (+3)	46 (0)	63-73
RH % (24h trend)	ABV 40 (-4)	85-96 (-2)	ABV 40
20ftWnd(mph)	SW 4-8 G18	W 3-7	Lgt/Var
CWR	0	0	0
LAL	1	1	1

Remarks...None.

.FORECAST FOR DAYS 3 THROUGH 5...

.WEDNESDAY...Mostly cloudy. Scattered showers. Lows in the lower  
 50s. Highs 56 to 66. Northeast winds around 5 mph.  
 .THURSDAY...Mostly cloudy with scattered showers. Lows around 50.  
 Highs 54 to 64. Northwest winds around 10 mph.  
 .FRIDAY...Partly cloudy. A 20 percent chance of showers. Lows  
 47 to 52. Highs 59 to 69. Northwest winds around 10 mph.

\$\$

AKZ215-030700-  
 Lower Yukon Valley-  
 Including the cities of Russian Mission, Grayling, Holy Cross,  
 Shageluk, Anvik, and Flat  
 456 AM AKDT Mon Jul 2 2018

	Today	Tonight	Tue
Cloud cover	PCldy	MClear	MClear
Precip type	None	None	None
Chance precip (%)	0	0	0
Temp (24h trend)	59-69 (+1)	45-52 (-3)	65-75
RH % (24h trend)	ABV 40 (-1)	81-96 (-3)	35-50
20ftWnd(mph)	Lgt/Var	Lgt/Var	Lgt/Var

CWR	0	0	0
LAL	1	1	1

Remarks...None.

.FORECAST FOR DAYS 3 THROUGH 5...

.WEDNESDAY...Partly cloudy. Scattered showers. Lows 47 to 55. Highs 61 to 71. Northwest winds around 5 mph.  
 .THURSDAY...Mostly cloudy with scattered showers. Lows 47 to 54. Highs 57 to 67. West winds around 5 mph.  
 .FRIDAY...Mostly cloudy with a 50 percent chance of showers. Lows 46 to 54. Highs 64 to 74. Northwest winds around 5 mph.

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AKZ216-030700-  
 Lower Koyukuk and Middle Yukon Valleys-  
 Including the cities of Galena, Nulato, Huslia, Kaltag, Ruby,  
 and Koyukuk  
 456 AM AKDT Mon Jul 2 2018

	Today	Tonight	Tue
Cloud cover	PCldy	MClear	MClear
Precip type	None	None	None
Chance precip (%)	0	0	0
Temp (24h trend)	62-72 (-1)	44-52 (-3)	64-74
RH % (24h trend)	39-54 (0)	83-98 (-5)	30-45
20ftWnd(mph)	W 4-8 G18	W 5-9 G20	W 3-7 G17
CWR	0	0	0
LAL	1	1	1

Remarks...None.

.FORECAST FOR DAYS 3 THROUGH 5...

.WEDNESDAY...Mostly clear. Isolated showers. Lows 45 to 55. Highs 67 to 77. West winds around 5 mph.  
 .THURSDAY...Mostly cloudy with a 50 percent chance of showers. Lows 46 to 55. Highs 61 to 71. Northwest winds around 10 mph.  
 .FRIDAY...Partly cloudy. A 50 percent chance of showers. Lows 46 to 54. Highs 66 to 76. Northwest winds around 5 mph.

\$\$

AKZ217-030700-  
 Upper Kobuk and Noatak Valleys-  
 Including the cities of Ambler, Shungnak, and Kobuk  
 456 AM AKDT Mon Jul 2 2018

	Today	Tonight	Tue
Cloud cover	MCldy	PCldy	PCldy



Precip type	Showers	Showers	None
Chance precip (%)	30	10	0
Temp (24h trend)	59-69 (-2)	39-49 (-2)	61-71
RH % (24h trend)	ABV 40 (+7)	82-97 (-7)	37-52
20ftWnd(mph)	SW 6-10 G22	SW 7-11 G23	SW 9-13 G25
CWR	10	0	0
LAL	1	1	1

Remarks...None.

.FORECAST FOR DAYS 3 THROUGH 5...

.WEDNESDAY...Partly cloudy. Scattered showers. Lows 40 to 50. Highs 63 to 73. Southwest winds around 10 mph.

.THURSDAY...Partly cloudy. Isolated showers. Lows 38 to 48. Highs 59 to 69. Northwest winds around 10 mph.

.FRIDAY...Partly cloudy. Lows 39 to 49. Highs 65 to 75. North winds around 10 mph.

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AKZ227-030700-  
 Upper Kuskokwim Valley-  
 Including the cities of McGrath, Nikolai, Takotna,  
 and Farewell Lake  
 456 AM AKDT Mon Jul 2 2018

	Today	Tonight	Tue
Cloud cover	PCldy	MClear	MClear
Precip type	None	None	None
Chance precip (%)	0	0	0
Temp (24h trend)	63-73 (0)	40-50 (-1)	66-76
RH % (24h trend)	35-50 (-8)	82-97 (-8)	32-47
20ftWnd(mph)	W 3-7	Lgt/Var	Lgt/Var
CWR	0	0	0
LAL	1	1	1

Remarks...None.

.FORECAST FOR DAYS 3 THROUGH 5...

.WEDNESDAY...Partly cloudy. Isolated showers. Lows 40 to 50. Highs 68 to 78. Southwest winds around 5 mph.

.THURSDAY...Mostly cloudy with scattered showers. Lows 42 to 52. Highs 60 to 70. West winds around 5 mph.

.FRIDAY...Mostly cloudy. A 20 percent chance of showers. Lows 41 to 51. Highs 67 to 77. Northwest winds around 5 mph.

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## 2. Red Flag Warning

WWAK61 PAFC 232301  
RFAER

URGENT - FIRE WEATHER MESSAGE  
National Weather Service Anchorage AK  
301 PM AKDT Mon Jul 23 2018

AKZ141-241600-  
/O.EXT.PAFC.FW.W.0001.000000T0000Z-180725T0400Z/  
301 PM AKDT Mon Jul 23 2018

...RED FLAG WARNING NOW IN EFFECT UNTIL 8 PM AKDT TUESDAY FOR HOT  
DRY AND WINDY CONDITIONS FOR THE COPPER RIVER BASIN...

- \* Winds...South to southeast 15 mph with gusts to 25 mph.
- \* Relative Humidity...As low as 18 percent.
- \* Temperatures...In the upper 70s to mid 80s.
- \* Timing...Red flag conditions will abate by 8 PM this evening  
then develop again Tuesday during the late afternoon through  
early evening hours. Humidities will then gradually recover as  
temperatures cool and winds die down through the evening and  
overnight hours.
- \* Impacts...Rapid ignition, growth and spread of fires will be  
possible.

### PRECAUTIONARY/PREPAREDNESS ACTIONS...

A red flag warning means that critical fire weather conditions  
are imminent or occurring now, or will shortly. It is directed  
toward fire agencies, and through them to the public.

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### 3. Fire Weather Watch

WWAK63 PAFG 101304  
RWFAGF

URGENT - FIRE WEATHER MESSAGE  
National Weather Service Fairbanks AK  
504 AM AKDT Thu May 10 2018

AKZ223-110200-  
/O.CON.PAFG.FW.A.0001.180510T2000Z-180512T0200Z/  
Deltana and Tanana Flats-  
504 AM AKDT Thu May 10 2018

...FIRE WEATHER WATCH REMAINS IN EFFECT FROM NOON AKDT TODAY  
THROUGH FRIDAY AFTERNOON FOR DELTANA AND TANANA FLATS...

\* AFFECTED AREA...Near Alaska Range passes and Delta Junction.

\* TIMING...Winds continue to increase today and will diminish  
overnight. Winds will increase again Friday diminishing late in  
the evening. The strongest winds will be Friday during the day.

\* WINDS...Southeast 25 to 35 mph with gusts up to 50 mph.

\* HUMIDITY...As low as 19 percent.

\* TEMPERATURES...55 to 71.

\* IMPACTS...Rapid ignition, growth and spread of fires will be  
possible.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Fire Weather Watch means that weather conditions could lead to  
the potential for a Red Flag event in the near future. This watch  
will remain in effect until it is upgraded to a Red Flag Warning  
or that it is determined that the Red Flag event will not  
develop.

Please advise the appropriate officials or fire crews in the  
field of this Fire Weather Watch.

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4. Spot Forecast Request for Wildfire/Managed Ignited Fires\*

FNAK77 PAJK 270020  
FWSAJK

Spot Forecast for Moser Fire...Forest Service  
National Weather Service Juneau AK  
420 PM AKDT Sun Aug 26 2018

Forecast is based on forecast start time of 1700 AKDT on August 26.  
If conditions become unrepresentative...contact the National Weather Service.

Please contact our office at (907) 790-6824, if you have questions or concerns with this forecast.

.DISCUSSION...Sky cover increases this evening and overnight with a chance of rain increasing Monday. Precipitation likely by early Tuesday over the burn area. Wetting rain will occur through Tuesday afternoon, then become intermittent showers. Trending dryer through Wednesday morning.

See below for marine forecast.

.TONIGHT...

Sky/weather.....Partly cloudy (35-45 percent) then becoming mostly cloudy (60-70 percent).

CWR.....3 percent.

LAL.....No Tstms.

Min temperature.....Around 54.

Max humidity.....82 percent.

Wind (20 ft).....

Slope/valley.....West winds around 7 mph shifting to the southwest 6 to 8 mph in the evening, then shifting to the northwest around 7 mph after midnight.

Mixing height.....2400 ft AGL decreasing to 300-1500 ft AGL in the late evening and overnight.

Transport winds.....Northwest 2 to 7 mph.

Haines Index.....2 to 4 OR or very low potential for large plume dominated fire growth to or low potential for large plume dominated fire growth.

Rainfall amount.....0.00 inches.

TIME (AKDT)	6 PM	9 PM	MIDNGT	3 AM
Sky (%).....	29	48	50	55
Weather cov.....				
Weather type....	NONE	NONE	NONE	NONE
Tstm cov.....				
CWR.....	0	0	0	0
LAL.....	1	1	1	1
Temp.....	61	58	56	54
RH.....	63	72	80	82

20 FT wind.....W 6G13 SW 7G14 SW 6G11 W 6G13  
 Mix hgt (ft)....2400 2400 300 300  
 Transport wind..NW 7 NW 5 NW 3 NW 2  
 Haines index....4 4 4 4

.MONDAY...

Sky/weather.....Mostly cloudy (70-80 percent). Slight chance of rain early in the morning. Chance of rain in the late morning and afternoon.

CWR.....3 percent increasing to 18 percent late in the afternoon.

LAL.....No Tstms.

Max temperature.....Around 60.

Min humidity.....81 percent.

Wind (20 ft).....

Slope/valley.....Northwest winds around 7 mph shifting to the southwest 5 to 9 mph with gusts to around 17 mph.

Mixing height.....1500-2100 ft AGL.

Transport winds.....Northwest 2 to 3 mph shifting to the west 1 to 2 mph in the afternoon.

Haines Index.....2 or very low potential for large plume dominated fire growth.

Rainfall amount.....0.06 inches.

TIME (AKDT)	6 AM	9 AM	NOON	3 PM
Sky (%).....	71	78	79	80
Weather cov....		S CHC	CHANCE	CHANCE
Weather type....	NONE	RAIN	RAIN	RAIN

Tstm cov.....

CWR.....0 0 0 0

LAL.....1 1 1 1

Temp.....54 55 58 60

RH.....82 82 82 82

20 FT wind.....NW 6G13 S 5G10 SW 8G16 SW 9G17

Mix hgt (ft)....1500 1500 2000 2000

Transport wind..NW 3 N 3 W 2 SW 1

Haines index....2 2 2 2

.MONDAY NIGHT...

Sky/weather.....Cloudy (85-95 percent). Chance of rain then rain late.

CWR.....18 percent increasing to 84 percent early in the morning.

LAL.....No Tstms.

Min temperature.....Around 55.

Max humidity.....99 percent.

Wind (20 ft).....

Slope/valley.....Southwest winds 6 to 12 mph. Gusts up to 20 mph early in the evening then 23 mph after midnight.

Mixing height.....300-2100 ft AGL.

Transport winds.....Southwest 2 to 3 mph.  
 Haines Index.....2 to 3 OR or very low potential for large plume  
 dominated fire growth.  
 Rainfall amount.....0.15 inches.

TIME (AKDT)	6 PM	9 PM	MIDNGT	3 AM
Sky (%).....	83	84	85	86
Weather cov.....	CHANCE	CHANCE	CHANCE	CHANCE
Weather type....	RAIN	RAIN	RAIN	RAIN
Tstm cov.....				
CWR.....	20	20	20	20
LAL.....	1	1	1	1
Temp.....	60	59	57	56
RH.....	82	84	87	88
20 FT wind.....	W 8G16	W 6G12	W 7G14	SW 8G16
Mix hgt (ft)....	2100	2100	300	300
Transport wind..	W 2	W 2	SW 3	SW 3
Haines index....	2	2	2	2

.TUESDAY...

Sky/weather.....Cloudy (95-100 percent). Rain in the morning,  
 then widespread rain showers in the afternoon.  
 CWR.....84 percent.  
 Max temperature.....Around 59.  
 Min humidity.....93 percent.  
 Wind (20 ft).....  
 Slope/valley.....South winds 12 to 14 mph with gusts to around  
 22 mph.  
 Rainfall amount.....0.62 inches.

TIME (AKDT)	6 AM	9 AM	NOON	3 PM
Sky (%).....	100	100	100	100
Weather cov.....	DEFNTE	DEFNTE	DEFNTE	WIDSPD
Weather type....	RAIN	RAIN	RAIN	RNSHWR
Tstm cov.....				
CWR.....	80	80	80	80
Temp.....	55	56	58	59
RH.....	95	99	96	95
20 FT wind.....	SW 11G18	SW 14G22	S 12G19	S 14G22

Clarence Strait Marine Forecast

.TONIGHT...NW wind 15 kt diminishing late. Seas 3 ft in the  
 evening then 2 ft or less. Near Behm Canal, SW wind 10 kt  
 becoming light.  
 .MON...NW wind 10 kt. Seas 2 ft or less. Near Behm Canal, light  
 winds becoming SW 10 kt.  
 .MON NIGHT...NW wind 15 kt becoming S 20 kt late. Seas 4 ft.  
 Near Behm Canal, SW wind 10 kt increasing to 15 kt late  
 .TUE...SE wind 25 kt. Seas 5 ft. Rain.  
 .TUE NIGHT...SE wind 15 kt. Seas 3 ft. Showers.  
 .WED...NW wind 15 kt. Seas 3 ft.  
 .THU...W wind 10 kt. Seas 2 ft or less.

.FRI...NW wind increasing to 15 kt. Seas building to 3 ft.

\$\$

Forecaster...Ferrin

Requested by...Marcy Ugstad

Type of request...WILDFIRE

.TAG 1814820.12/AJK

.DELDT 08/26/18

.EMAIL mugstad@fs.fed.us

*\*Note: Incidents should use the Alaska Region NWS Spot website to request spot forecasts for wildland fires or for managed ignited fires planned within 24 hours. Incidents are encouraged to contact the appropriate NWS Weather Forecast Office*

**Appendix I**

**Weather Data Collection Sites in Alaska**

**Station metadata is available from the following AKFF website:**

**<https://akff.mesowest.org/tabular/metadata/>**



## Appendix J

### Alaska Preparedness Plan - Preparedness Level Description

The purpose of the Alaska Preparedness Plan is to identify specific management actions to be considered within each level of statewide preparedness. These levels are based on existing wildland fire activity, probability of new wildland fire starts, burning conditions, prescribed fire activities, and the commitment of resources. Levels of preparedness will be determined daily throughout the Alaska fire season. Criteria used to determine daily level of preparedness include:

- Current and forecasted weather
- Wildland fire activity statewide
- Resources committed, demand for resources, and predicted demand. Types of resources include:
  - Tactical resources include smokejumpers, air tankers, air attack, and lead planes
  - Non-tactical resources include helicopters, engines, overhead, and Type 2hand crews
- Historical high-risk periods
- All hazard incident support
- Planned and ongoing prescribed fire operations

#### Preparedness Level Descriptions

The preparedness level will be identified daily on the Alaska Situation Report. Contained within each preparedness level are management actions to be considered as well as the responsible position designated to ensure the management action is initiated. Additional details, including management actions, can be found in the [Alaska Mobilization Guide](#).

#### Preparedness Level 1

No significant fire activity, most units (Zones, Areas and Forests) having low to moderate probability of ignition and low burning conditions in all fuel types. Resistance to extinguishment by initial attack forces is low.

#### Preparedness Level 2

Multiple units experiencing fire starts or one unit experiencing multiple starts. Probability of ignition is low to moderate and burning conditions generally low to moderate in all fuel types. Resistance to extinguishment by initial attack forces is low to moderate. Mobilization of local unit resources is minimal with no shortages of tactical resources.

#### Preparedness Level 3

Multiple units experiencing fire starts and/or one project fire. Probability of ignition is high, burning conditions of moderate to high in all fuel types. Resistance to control is moderate to high, resistance to extinguishment is moderate. Up to 50 percent of non-tactical resources being mobilized, up to 75 percent of tactical resources committed to new ignitions. Existing weather pattern supporting fire activity is forecasted to remain for the next 48 hours.

#### Preparedness Level 4

Multiple units experiencing fire starts and/or two project fires. Probability of ignition is high and burning conditions of high to extreme in all fuel types. Resistance to control is high to extreme

and resistance to extinguishment is high. More than 50 percent of non-tactical resources are committed; more than 75 percent of tactical resources are committed to new ignitions. Existing weather pattern supporting fire activity is forecasted to remain for the next three to five days.

**Preparedness Level 5**

Multiple units are experiencing fire starts and/or three or more project fires. Probability of ignition is high and burning conditions of extreme in all fuel types. Resistance to control is high to extreme and resistance to extinguishment is high. More than 75 percent of non-tactical resources are committed; more than 75 percent of tactical resources are committed to new ignitions. Existing weather pattern supporting fire activity is forecasted to remain for the next three to five days.

**Preparedness Level 5 to 4**

Burning conditions have moderated. Fifty percent of tactical resources are available. Favorable weather pattern for next three to five days is forecasted.

**Preparedness Level 4 to 3**

Burning conditions are moderate. Significant demobilization of resources is occurring from project fires. 50% of non-tactical resources are available. Higher relative humidity and lower temperatures are forecasted in major fire areas. Favorable weather pattern for next three to five days is forecasted.

**Preparedness Level 3 to 2**

Burning conditions are low to moderate. Project fires are contained and/or interagency management teams released. Mobilization is contained to local unit with no shortages of resources. Existing weather pattern supporting current fire activity is forecast to continue for the next 48 hours.

**Preparedness Level 2 to 1**

Burning conditions are low with no significant fire activity occurring. Existing weather pattern supporting current fire activity is forecast to continue for the next 48 hours.

## **Appendix K**

Interagency Agreement is attached in a separate PDF file.