2012

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 2012 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.

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

B. Operational Guidelines

April 1 through September 1 will be the principal operating period for the Alaska Fire Weather Program. Starting and ending dates are subject to the fire weather threat. The roles described in this Operating Plan are intended to be flexible and allow for changing conditions of personnel, workload, and weather hazards.

C. **NWS Responsibilities**

- 1. The NWS will provide a Regional Fire Weather Program Manager at 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. Routine daily fire weather forecasts, outlooks and discussions.

 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).

Production of routine fire weather forecasts should follow the schedule in Appendix C. WFOs may request a delay or early end of routine fire weather forecasts if excessive snow pack, rain and/or continued winter weather is expected for the scheduled start date(s), or excessive cool 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 the regular season schedule. Coordination may result in a transition of services such as additional information in the Area Forecast Discussion product in lieu of daily fire

weather forecast products. Such coordination should begin no later than five (5) days in advance of the regular season start dates in Appendix C. Conversely, the Protection Agency FMOs may request an extension of routine fire weather forecasts if the seasonal threat for fire danger is likely to exceed the scheduled end date(s). Protection Agency FMOs should coordinate any date changes with Jurisdictional Agency FMOs in the applicable zones. Protection Agency FMOs should notify the AICC Meteorologist. The AICC Meteorologist will then coordinate the change in service with the and WFOs. WFOs will notify the NWS Regional Fire Weather Program Manager of any changes.

The Fire Weather Forecast (FWF) 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 (0.10" or more 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.
- The fire weather forecast zones will be geographically the same as the public forecast zones. Fire weather zone names, descriptions and a map of the fire weather zones are given in Appendix E.

b. Web Services.

The NWS will maintain, and update daily, the Alaska Fire Weather section on the NWS Alaska Region Headquarters website (linked from http://www.arh.noaa.gov). The Fire Weather section will include daily fire weather forecasts and graphics. Any changes to the content or display of the website information should be coordinated with the AICC.

c. Weather observations.

Daily/hourly observations for ASOS/AWOS stations will be available from a file transfer protocol (FTP) location determined by local procedures.

d. 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.

<u>A Fire Weather Watch</u> should be issued 18 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.

<u>A Red Flag Warning</u> 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.

Headlines for Red Flag Warnings or Fire Weather Watches will include the appropriate weather element(s) meeting criteria as noted below.

Red Flag Event criteria (if combined with burnable fuels):

- 1) Strong Wind: Wind* > 25 mph and RH is < 30%
- 2) Low Humidity: RH < 15%
- 3) Strong Wind and Low Humidity: Wind* \geq 25 mph and RH \leq 15%
- 4) Dry Thunderstorms: Dry thunderstorms with a scattered coverage (25% areal) and < 0.10" rainfall

* "Wind" is defined as frequent gusts or sustained wind for one-hour duration or longer.

WFOs will make every effort to consult the AICC Predictive Services (356-5691/5671) 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. Suppression FMOs and jurisdictions are encouraged to provide input into whether fuels are burnable or not. 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).

In addition to headlining the Warning/Watch in the Fire Weather Forecast, the Warning/Watch information also will be issued as a separate product and posted to the NWS Alaska Region Headquarters website, Fire Weather Section, under Red Flag Warning/Fire Weather Watch.

AICC Predictive Services will be telephoned at 356-5691 (backup 356-5671) upon initial issuance of or changes (including cancellation) to, the Warning/Watch.. If AICC Predictive Services cannot be reached, WFOs will call and fax the Warning/Watch to Initial Attack. Fuels consultation and Warning/Watch notification may be achieved in the same phone call. The phone number for Initial Attack is not publicly published, but should be included in WFO documentation as appropriate (example, Station Duty Manual).

e. Spot forecasts.

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

Incidents will submit requests for spot forecasts via the Alaska Region NWS Spot website for wildland fires or for managed ignited fires planned within 24 hours. When requesting a Spot forecast, select the geographic area corresponding to the spot location. 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 hrs of the planned ignition.

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. 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.

i. 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.

j. 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 Fire Weather focal point or lead forecaster (see Appendix B).

- 3. In addition, the NWS will augment the above services by providing the following:
 - a. Automated graphic products available via the Internet.

b. FDI.

Forecasted maximum temperature, minimum relative humidity and wind speed for daily input into the Fire Weather Index Program. This WFO product is called the "FDI." The FDI is a snapshot of the above conditions as predicted at 2pm that afternoon (for morning issuances), or 2pm the following day (for evening issuances).

Morning FDI products will be produced by WFOs Anchorage, Fairbanks and Juneau. The Morning FDI will include official forecaster quality-controlled data for selected RAWS and aviation observations points. The official data will be followed by unofficial raw forecast data for the remaining observation points in respective AORs as listed in Appendix I. A space will clearly separate the official from the unofficial FDI forecast points.

Evening FDI products will be produced by WFOs Anchorage and Fairbanks only. The Evening FDI will contain the same data points as noted above, but all points will be unofficial and contain raw forecast data.

Transmission time of the FDI should coincide with the transmission of the FWF product.

Fire Weather Indices derived from raw FDI points should be noted as such when distributed by AICC.

Removal and addition of points from the FDI product will be coordinated through the NWS Regional Fire Weather Program manager.

c. End of Season Report.

The report should include an overview and evaluation of the program, a formal verification of the 2012 season forecast performance (based on guidelines provided in NWS Instruction 10-404), recommendations for future program development, and a synopsis of the season's weather patterns, highlighting significant weather events and their effect.

The report will be prepared by WFO Fire Weather focal points in Anchorage, Fairbanks and Juneau and forwarded to the NWS Regional Fire Weather Program Manager. The Regional Fire Weather Program Manager will prepare a cover letter and distribute the report to the NWS National Fire Weather Program Manager in Boise ID and members of the Alaska Wildland Fire Coordinating Group/Fire Weather Committee. The report should be available by January 15, 2013.

D. <u>Alaska Interagency Coordination Center Meteorologist</u> (AICC)

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

Her/his duties will include, but are not limited to:

1. Monthly Fire Weather and Fire Danger Outlooks.

a. AICC will prepare weekly and monthly reports and post them to the AICC website.

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. <u>Air Quality and Drought Issues</u>: Drought information will be routinely assessed by the AICC meteorologist. 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 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 will dial in. The briefing will discuss statewide conditions and refer to graphic products displayed on the NWS and AICC maintained websites. Weekend briefings

- will be provided upon request, depending on the weather and severity of the 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 for 2012 will be prepared in the spring.
- b. Post-season assessment will be prepared for the Interagency Fall Fire Review Meeting.

7. Historical Climate and Weather Analysis.

- 8. 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, daily Monday-Friday, with weekend "outlook" conditions provided on Friday afternoon.
- 9. <u>Liaison between federal and state agencies and the NWS</u>.
- 10. Team member for collaborative planning efforts.
 - a. Develop Alaska Fire Danger Operating Plan.
- 11. Team leader for RAWS coordination.

12. WIMS.

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

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

- 1. In concurrence with the National Agreement, the agencies will provide:
 - a. Fire management computer systems. Access will be provided via FTP for transferring forecasts.
 - b. Fire weather observations. Observations from all RAWS are posted on the AFS website.
 - c. Provide pertinent weather information, and observations, in support of spot forecast requests.
 - d. On-site meteorological support. On an as needed bases (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.

- e. 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 S390 each year offered, as this is a required course for IMET Certification.
- f. Other special services. A multi-port teleconference line will be available for briefings and conferences. Agencies are encouraged to use local bridge lines or conference lines in order to minimize impact on the AFS telebridge.
- g. 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.
- h. The AFS will retrieve selected ASOS/AWOS observations and post them in the Weather section of the AICC website.
- i. The AFS will provide real-time lightning data to the NWS.
- j. 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.
- 2. In addition, the agencies have agreed to support the Fire Weather Program in the following manner: A resource order can be filed to request IMETs to augment the staffing at any of the Alaska WFOs, the AICC, or for on-site fire assignments.

F. Administration

1. Operating Period.

The principal operating period for the Alaska Fire Weather Program will be from April 1 through September 1, 2012. 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, 2012 and will be reviewed annually.

Date
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Date
Date
Date

Appendix A

Alaska Wildland Fire Coordination Group Fire Weather Committee 2012

Liaison to AWFCG

Sue Rodman Phone: 267-4959

Fax: 279-2106

Email: rodmansu@muni.org

Chair-AICC Meteorologist-NPS

Sharon Alden Phone: 356-5691

Fax: 356-5678 Email: salden@blm.gov

Heidi Strader Phone: 356-5691

Fax: 356-5678

Email: hstrader@blm.gov

State of Alaska - Division of Forestry

Tom Kurth Phone: 451-2675

Fax: 451-2690

Email: tom.kurth@alaska.gov

National Park Service

Larry Weddle Phone: 683-9548

Fax: 683-9624

Email: larry_weddle@nps.gov

Charlie Reynar (Back-up member) Phone: 683-9549

Fax: 683-9624

Email: charlie_reynar@nps.gov

Tanana Chiefs Conference

Clinton Northway Phone: 452-8521 x3379

Fax: 459-3852

Email: clinton.northway@tananachiefs.org

U.S. Fish and Wildlife

Kristi Bulock Phone: 524-2033

Cell: 360-1006 Fax: 524-3141

Email: kristi_bulock@fws.gov

Jan Passek Phone: 786-3654

Cell: 947-9556 Fax: 786-3905

Email: jan_passek@fws.gov

Bureau of Land Management - Alaska Fire Service

Tami DeFries Phone: 356-5875

Fax: 356-5556

Email: tdefries@blm.gov

Kato Howard (Back-up member) Phone: 356-5862

Fax: 356-5517

Email: khoward@blm.gov

U.S. Forest Service

Brian Sines Phone: 874-7556

Fax: 874-7586

Email: bsines@fs.fed.us

Troy Hagan Phone: 743-9435

Fax: 743-9481

Email: thagan@fs.fed.us

National Weather Service

Aimee Fish Phone: 271-3451

Fax: 271-3711

Email: aimee.fish@noaa.gov

Appendix B

Contact Points – 2012

Agency Contacts for Fire Related Questions:

State of Alaska:

Mat-Su District (includes Anchorage)

Norm McDonald Phone: 761-6302

Fax: 761-6319

Email: norman.mcdonald@alaska.gov

Southwest District

Tom Dean (acting) Phone: 524-3010

Fax: 524-3932

Email: thomas.dean@alaska.gov

Fairbanks Area

Robert Schmoll Phone: 451-2636

Fax: 451-2690

Email: robert.schmoll@alaska.gov

Kenai-Kodiak Area

Howard Kent Phone: 260-4220

Fax: 260-4263

Email: howard.kent@alaska.gov

Valdez Copper River Area

Gary Mullen Phone: 822-5534

Fax: 822-8600

Email: gary.mullen@alaska.gov

Tok Area

Jeff Hermanns Phone: 883-5134

Fax: 883-5135

Email: jeffrey.hermanns@alaska.gov

Delta Area

Al Edgren Phone: 895-4225

Fax: 895-2125

Email: al.edgren@alaska.gov

Haines Area

Roy Josepheson Phone: 766-2120

Fax: 766-2292

Email: roy.josepheson@alaska.gov

Air Quality (ADEC)

Mike Gravier Phone: 269-7676

Fax: 269-7508

Email: michael.gravier@alaska.gov

Bureau of Land Management:

AICC Coordinator

Ray Crowe (acting) Phone: 356-5677

Fax: 356-5678

Email: r5crowe@blm.gov

Military/Southern Zone FMO

Tami DeFries Phone: 356-5875

Fax: 356--5556

Email: tdefries@blm.gov

Upper Yukon Zone FMO

Steve Theisen Phone: 356-5558

Fax: 356-5556

Email: satheisen@blm.gov

Tanana Zone FMO

Mike Butteri Phone: 356-5574

Fax: 356-5556

Email: mbutteri@blm.gov

Galena Zone FMO

Tom St. Clair Phone: 356-5623/656-1222

Fax: 356-5556/656-1702 Email: tstsclair@blm.gov

National Park Service

AICC Meteorologists

Sharon Alden Phone: 356-5691

Fax: 356-5678

Email: sharon_alden@blm.gov

Heidi Strader Phone: 356-5691

Fax: 356-5678

Email: heidi_strader@blm.gov

Regional Fire Manager

Dan Warthin Phone: 644-3409

Fax: 644-3809

Email: dan_warthin@nps.gov

Western Parks FMO

Larry Weddle Phone: 683-9548

Fax: 683-9624

Email: larry_weddle@nps.gov

Eastern Parks RMO

James Savage Phone: 455-0651

Fax: 455-0601

Email: james_savage@nps.gov

U.S. Forest Service:

Tongass & Chugach National Forests

Troy Hagan Phone: 743-9435

Fax: 743-9479 Email: thagan@fs.fed.us

U.S. Fish & Wildlife Service:

Regional Fire Management Coordinator

Doug Alexander Phone: 786-3497

Fax: 786-3905

Email: doug_alexander@fws.gov

Jan Passek (planner) Phone: 786-3654

Fax: 786-3905

Email: jan_passek@fws.gov

Koyukuk/Nowitna/Selawik NWR

Ben Pratt Phone: 656-1231

Fax: 656-1708

Email:

Kenai/Kodiak NWR

Doug Newbould Phone: 260-2844

Fax: 260-4735

Email: doug_newbould@fws.gov

Yukon Flats, Kanuti, Tetlin, Arctic NWR

Peter Butteri Phone: 456-0361

Fax: 456-0428

Email: peter_butteri@fws.gov

SW Area Refuges

Kristi Bulock Phone: 524-3251

Fax: 524-3141

Email: kristi_bulock@fws.gov

NOAA National Weather Service:

NWS Regional Fire Weather Program Manager

Aimee Fish Phone: 271-3451

Fax: 271-3711

Email: aimee.fish@noaa.gov

Incident Meteorologists Aimee Fish (T)

Phone: 271-3451 Fax: 271-3711

Email: aimee.fish@noaa.gov

Fairbanks Weather Forecast Office

Focal Point Scotty Berg

Phone: 458-3705 Fax: 458-3703

Email: scotty.berg@noaa.gov

Lead Forecaster Phone: 458-3708

Meteorologist-in- Charge Tony Hall

Phone: 458-3704

Email: tony.hall@noaa.gov

Incident Meteorologists Scotty Berg (T)

Phone: 458-3705 Fax: 458-3703

Email: scotty.berg@noaa.gov

Anchorage Weather Forecast Office

Focal Point Christian Cassell

Phone: 266-5105 Fax: 266-5188

Email: christian.cassell@noaa.gov

Forecast Office Phone: 266-5115

Phone: 229-8658 (not for public distribution)

Meteorologist-in-Charge Bob Hopkins

Phone: 266-5120

Email: bob.hopkins@noaa.gov

Incident Meteorologists Mary Beth Schreck (T)

Phone: 266-5115

Email: <u>marybeth.schreck@noaa.gov</u>

Anchorage Center Weather Service Unit

Incident Meteorologist Mike Richmond

Phone: 338-1010 Fax: 338-1510

Email: michael.richmond@noaa.gov

Juneau Weather Forecast Office

Focal Point Peter Boyd

Phone: 790-6824 Fax: 790-6827

Email: peter.boyd@noaa.gov

Lead Forecaster Phone: 790-6824

Meteorologist-in-Charge Tom Ainsworth

Phone: 790-6804

Email: tom.ainsworth@noaa.gov

Incident Meteorologist Joel Curtis

Phone: 790-6803

Email: joel.curtis@noaa.gov

Fire Weather Indices and WIMS:

AICC Meteorologists

Sharon Alden Phone: 356-5691

Fax: 356-5678 Email: salden@blm.gov

Heidi Strader Phone: 356-5691

Fax: 356-5678

Email: hstrader@blm.gov

Fuels/Fire Danger Spec.

Vacant Phone: 356-5854

Fax: 356-5678

Email:

Appendix C PRODUCT AND SERVICE TIME LINE

Dates may be appropriately altered based on weather and fire danger

March 26 through April 2

<u>All NWS WFO's</u>: 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.

<u>NWS Alaska Region Headquarters</u>: Ensures NWS Alaska Region Fire Weather Internet Home Page is operating and providing current products.

April 2

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

AICC: Begin Monday through Friday written statewide weather summary

April 16

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.

May 1

<u>Fairbanks WFO</u>: 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)

<u>AICC</u>: Begin Monday through Friday statewide stand-up/teleconference briefing at the Alaska Interagency Coordination Center. Weekend briefings will be provided as needed.

May 7

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

August 3

Juneau WFO: End production daily written forecasts

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

August 17

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

August 31

Fairbanks WFO: End production of daily written forecasts

End of Principal Operating Period

September 1 - March 31

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

LOCAL TIME	<u>ITEM</u>
0800	Forecasted Fire Weather Indices available on the AFS website.
0800	Juneau WFO: Morning Fire Weather Forecasts and FDI disseminated and published to the Internet. Anchorage WFO: Fire Weather Forecasts and FDI disseminated and published to the Internet. Fairbanks WFO: FDI and also 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.
0900	Internet briefing available on the NWS regional web page
0945	Statewide AICC Meteorologist Briefing.
1200	7-day Outlook published on AICC Website.
1500	Fuel Conditions and actual Fire Weather Indices are posted on the AICC Website. Indices are automatically calculated and posted when the 1400 hr observation for each station is received by the AFS server.
1500	State manual weather stations transmit their weather observations into NWS Anchorage and Fairbanks Forecast Offices and AICC via Google Documents.
1600	Afternoon Fire Weather Forecast and FDI 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 ADMIRALITY 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

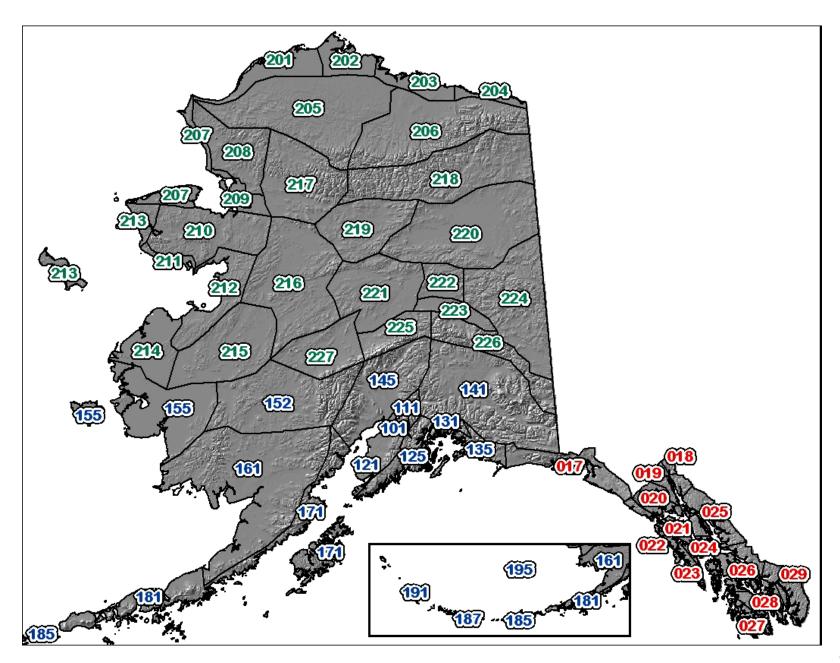
WFO Anchorage

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
152	LOWER KUSKOKWIM VALLEY
155	KUSKOKWIM DELTA
161	BRISTOL BAY
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 FORTYMILE COUNTRY
225	DENALI
226	EASTERN ALASKA RANGE
227	UPPER KUSKOKWIM VALLEY

NWS Zone Map



24

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%,

- 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.

FNAK51 PAFC 081446 FWFAER

FIRE WEATHER PLANNING FORECAST FOR ALASKA NATIONAL WEATHER SERVICE ANCHORAGE AK 645 AM AKDT FRI AUG 8 2011

.DISCUSSION...A COLD UPPER LEVEL LOW WILL REMAIN OVER SOUTH CENTRAL ALASKA THROUGH SATURDAY. SHOWERS AND ISOLATED WET THUNDERSTORMS ARE POSSIBLE DUE TO THE INSTABILITY THIS LOW BRINGS.

AKZ101-090200-

ANCHORAGE-

INCLUDING...ANCHORAGE...EAGLE RIVER...INDIAN...EKLUTNA
645 AM AKDT FRI AUG 8 2008

.ABOVE 1500 FT...

	TODAY	TONIGHT	SAT
CLOUD COVER PRECIP TYPE	MCLDY TSTMS	MCLDY TSTMS	MCLDY SHOWERS
CHANCE PRECIP	40	40	40
TEMP (24H TREND)	51-58 (-4)	44 (-2)	50-56
RH % (24H TREND)	50-65 (+1)	90 (+5)	63-72
20FTWND(MPH)	LGT/VAR	LGT/VAR	SW 6-6
CWR	20	20	20
LAL	2	2	1

REMARKS...ISOLATED WET THUNDERSTORMS POSSIBLE IN THE LATE AFTERNOON AND EARLY EVENING. WINDS GUSTING TO 30 MPH NEAR STORMS.

.BELOW 1500 FT...

	TODAY	TONIGHT	SAT
CLOUD COVER PRECIP TYPE	PCLDY TSTMS	MCLDY TSTMS	MCLDY SHOWERS
CHANCE PRECIP	20	40	40
TEMP (24H TREND)	65 (-1)	46 (-2)	63
RH % (24H TREND)	45-55 (+1)	93 (0)	52-64
20FTWND(MPH)	LGT/VAR	LGT/VAR	SW 6-7
CWR	10	20	10
LAL	2	2	1

REMARKS...ISOLATED WET THUNDERSTORMS POSSIBLE IN THE LATE AFTERNOON AND EARLY EVENING. WINDS GUSTING TO 30 MPH NEAR STORMS.

- .FORECAST FOR DAYS 3 THROUGH 5...
- .SUNDAY...MOSTLY CLOUDY. SCATTERED SHOWERS. LOWS IN THE MID 40S. HIGHS IN THE UPPER 50S. SOUTH WINDS AROUND 5 MPH.
- .MONDAY...MOSTLY CLOUDY. LOWS IN THE MID $40\,\mathrm{S}$. HIGHS IN THE UPPER $50\,\mathrm{S}$. SOUTHWEST WINDS AROUND 5 MPH.
- .TUESDAY...MOSTLY CLOUDY. CHANCE OF RAIN. LOWS IN THE UPPER 40S. HIGHS IN THE UPPER 50S. SOUTHEAST WINDS AROUND 5 MPH.

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2. Red Flag Warning

WWAK61 PAFC 232355 RFWAER

URGENT - FIRE WEATHER MESSAGE NATIONAL WEATHER SERVICE ANCHORAGE AK 355 PM AKDT SAT JUL 23 2011

A SURFACE RIDGE WILL BUILD OVER SOUTHCENTRAL AHEAD OF A FRONT MOVING OUT OF THE BERING SEA. THE TIGHTER PRESSURE GRADIENT IS GENERATING STRONG WINDS ALONG THE COPPER RIVER AND IS COMBINING WITH RELATIVE HUMIDITIES LESS THAN 30 PERCENT TO PRODUCE RED FLAG CONDITIONS.

AKZ141-240600-/X.CON.PAFC.FW.W.0015.000000T0000Z-110724T0600Z/ COPPER RIVER BASIN-355 PM AKDT SAT JUL 23 2011

...RED FLAG WARNING REMAINS IN EFFECT UNTIL 10 PM AKDT THIS EVENING FOR STRONG WINDS FOR THE COPPER RIVER...

A RED FLAG WARNING REMAINS IN EFFECT UNTIL 10 PM AKDT THIS EVENING.

- * LOCATION... ALONG THE COPPER RIVER
- * 20 FT WINDS...SOUTH 10 TO 20 MPH WITH GUSTS UP TO 30 MPH.
- * RELATIVE HUMIDITY...25 TO 35 PERCENT.
- * TIMING... WIND WILL BE STRONGEST THIS EVENING.

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

WWAK61 PAFC 222341 RFWAER

URGENT - FIRE WEATHER MESSAGE NATIONAL WEATHER SERVICE ANCHORAGE AK 341 PM AKDT FRI JUL 22 2011

.AN UPPER LEVEL RIDGE WILL MOVE OVERHEAD OF THE COPPER RIVER BASIN SATURDAY PROVIDING FOR WARM AND DRY CONDITIONS. AT THE SAME TIME A SURFACE RIDGE WILL BUILD OVER SOUTHCENTRAL AHEAD OF A FRONT MOVING OUT OF THE BERING SEA. THE TIGHTER PRESSURE GRADIENT WILL LIKELY GENERATE STRONG WINDS IN THE COPPER RIVER BASIN AND COMBINE WITH RELATIVE HUMIDITIES LESS THAN 30 PERCENT TO PRODUCE RED FLAG CONDITIONS.

AKZ141-231545-/X.CON.PAFC.FW.A.0004.110723T2200Z-110724T0400Z/ COPPER RIVER BASIN-341 PM AKDT FRI JUL 22 2011

...FIRE WEATHER WATCH REMAINS IN EFFECT FROM SATURDAY AFTERNOON THROUGH SATURDAY EVENING FOR STRONG WIND IN THE COPPER RIVER BASIN...

A FIRE WEATHER WATCH REMAINS IN EFFECT FROM SATURDAY AFTERNOON THROUGH SATURDAY EVENING.

- * LOCATION...ALONG THE COPPER RIVER
- * 20 FT WINDS...SOUTH 10 TO 20 MPH WITH GUSTS UP TO 30 MPH.
- * RELATIVE HUMIDITY...AS LOW AS 30 PERCENT.
- * TEMPERATURES...IN THE UPPER 50S.
- * TIMING...EARLY AFTERNOON THROUGH EARLY EVENING.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A FIRE WEATHER WATCH MEANS THAT CRITICAL FIRE WEATHER CONDITIONS ARE FORECAST TO OCCUR. IT IS DIRECTED TOWARD FIRE AGENCIES...AND THROUGH THEM TO THE PUBLIC.

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

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FWSAER
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SPOT FORECAST FOR EMERALD...KKAO NATIONAL WEATHER SERVICE ANCHORAGE AK 618 PM ADT TUE MAY 27 2008

FORECAST IS BASED ON REQUEST TIME OF 1754 ADT ON MAY 27. IF CONDITIONS BECOME UNREPRESENTATIVE...CONTACT THE NATIONAL WEATHER SERVICE.

.DISCUSSION...

FNAK71 PAFC 280218

HIGH PRESSURE OVER WESTERN ALASKA WILL KEEP THE KENAI PENINSULA UNDER A DRY NORTHERN FLOW FOR THE NEXT FEW DAYS. WEST WINDS NEAR THE COAST WILL INCREASE TO 10 TO 15 MPH DURING THE LATE AFTERNOON AND EVENING HOURS.

.TONIGHT...

SKY/WEATHER.......MOSTLY CLEAR.
MIN TEMPERATURE....AROUND 38.

MAX HUMIDITY......75 PERCENT.
WIND (20 FT).....WEST WIND 5 TO 15 MPH BECOMING LIGHT BY MIDNIGHT.

CWR..........0 PERCENT.

LAL..........1.

.WEDNESDAY...

SKY/WEATHER.....MOSTLY SUNNY.

MAX TEMPERATURE....AROUND 61.

MIN HUMIDITY.....30 PERCENT.

WIND (20 FT).....LIGHT WINDS BECOMING WEST 5 TO 15 MPH IN THE AFTERNOON.

CWR.......0 PERCENT.

LAL......1.

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FORECASTER...MURAKAMI REQUESTED BY...CAROL PRIOR TYPE OF REQUEST...WILDFIRE .TAG 20080527.EMERA.01/AER

*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

5. Fire Danger Indices (FDI)

FNAK49 PAFG 011544 FDIAFG

IAN QRZ HAY PAUN RDR INK KAI PAGA PAFM HOG KAN PABT BIR FYR CIK WBQ CHT LIV PATA WNL PAFA PAEI PABI EAG TOK PAOR PAHV PAMC FAR FLT TEL	5452130978322545754452916410091	6677771835779146804115055593458855190	6 13 15 10 10 6 5 5 3 5 5 6 2 5 6 5 5 3 5 7 6 2 6 7 7 6 8 2	200 140 190 210 230 250 250 260 210 250 270 240 350 000 010 000 330 000 290 270 280 300 000 330 320 290 290 290 270
KEL SRK PASK HDO COT KOY PMN KAV KTZ AWR NRU GRF HOZ LBK LST PCK SMI SMT VNK LMH MKL RND	555463786641326455556641326645621	64 66 72 89 60 54 57 58 56 50 42 36 51 33 54 54 43 54 44 48	7 6 7 15 5 6 7 5 5 7 3 3 5 5 1 5 3 3 5 5 5	180 200 210 160 250 260 270 190 200 070 250 040 170 310 020 320 330 080 110 260 270

AGL	63	43	5	000
CPK	63	39	5	350
FRB	65	36	3	300
MAN	62	39	5	280
SRG	65	36	3	290
STU	62	42	6	300
GEC	59	50	8	310
OKL	59	43	7	310
BEN	55	64	5	330
CKN	56	64	6	000
EGY	58	50	5	010
GDP	59	48	5	280
TEE	56	54	8	320
TET	55	67	6	330
DVC	61	46	9	330
WON	58	50	5	320
BTA	59	43	8	320
CSN	48	60	5	260
DOY	57	45	6	320
TKR	55	60	7	340
TTL	60	44	7	300
FWT.	60	61	6	290

Appendix I
Weather Data Collection Sites in Alaska Sorted by Weather Forecast Zone (WXZONE)

FULL NAME	TYPE*	WIMS ID	<u>LAT</u>	<u>LON</u>	ELEV	ZONE**	WXZONE
SKAGWAY	MAN		59.46	-135.3		HNS	AKZ018
HAINES	MAN		59.24389	-135.5169		HNS	AKZ019
HOONAH	RAWS	501013	57.81333	-135.1356	450	TNF	AKZ021
SITKA	MAN		57.05	-135.3667		TNF	AKZ023
JUNEAU	MAN	501005	58.355	-134.5764		TNF	AKZ025
KAKE	RAWS	501026	56.98278	-133.6608	400	TNF	AKZ026
ZAREMBO	RAWS	501028	56.305	-132.8472	900	TNF	AKZ026
HAIDA	RAWS	501044	55.32195	-132.6778	671	TNF	AKZ027
KETCHIKAN	MAN	501007	55.35556	-131.7136		TNF	AKZ028
SHELTER COVE	RAWS	501042	55.52528	-131.3558	492	TNF	AKZ028
THORNE RIVER	RAWS	501040	55.74556	-132.7625	600	TNF	AKZ028
ANCHORAGE	MAN	500961	61.17445	-149.99609		MMS	AKZ101
CAMPBELL CREEK	RAWS	500972	61.1525	-149.7964	157	MMS	AKZ101
EAGLE RIVER	RAWS	500970	61.27111	-149.3558	372	MMS	AKZ101
GIRDWOOD	RAWS	500969	60.98278	-149.11861	175	MMS	AKZ101
GRAZELKA RANGE	RAWS	500968	61.28806	-149.62691	453	MID	AKZ101
RABBIT CREEK	RAWS	500942	61.08472	-149.72861	1480	MMS	AKZ101
BIG LAKE	RAWS	500939	61.52528	-149.91499	100	MMS	AKZ111
PALMER	MAN	500952	61.59389	-149.09109		MMS	AKZ111
PT MAC	RAWS	500973	61.42361	-150.0847	200	MMS	AKZ111
HOMER	RAWS	500965	59.74556	-151.20329	715	KKS	AKZ121
HOMER MAN	MAN	500951	59.645	-151.4781		KKS	AKZ121
KENAI	MAN	500941	60.57139	-151.2478		KKS	AKZ121
KENAI NWR	RAWS	500963	60.59306	-150.3219	400	CGF	AKZ121
NINILCHIK SKILAK GUARD	RAWS	500962	60.03389	-151.6608	130	KKS	AKZ121
STATION	RAWS	500967	60.49139	-150.4575	590	KKS	AKZ121
SOLDOTNA	MAN	500929	60.475	-151.1667		KKS	AKZ121
SWANSON RIVER	RAWS	500924	60.72861	-150.8811	280	KKS	AKZ121
BROADVIEW	RAWS	500902	60.49139	-149.7794	625	CGF	AKZ125
GRANITE	RAWS	500964	60.72861	-149.2881	512	CGF	AKZ125
KENAI LAKE	RAWS	500908	60.37278	-149.40669	475	CGF	AKZ125
CHISTOCHINA	RAWS	500949	62.55917	-144.6608	2300	CRS	AKZ141
CHITNA	RAWS	500945	61.52528	-144.4406	581	CRS	AKZ141
GULKANA	MAN	500905	62.15472	-145.4567		CRS	AKZ141
KENNY LAKE	MAN	500925	61.73333	-145		CRS	AKZ141
KLAWASI	RAWS	500958	62.13556	-144.9319	3100	CRS	AKZ141

MAY CREEK	RAWS	500957	61.33889	-142.593	1600	CRS	AKZ141
FULL NAME	TYPE*	WIMS ID	<u>LAT</u>	LON	ELEV	ZONE**	WXZONE
PAXSON	RAWS	500931	62.94889	-145.5083	2670	CRS	AKZ141
RENEE	RAWS		62.71167	-146.62691	3050	CRS	AKZ141
SLANA	MAN	500954	62.71667	-143.9667		CRS	AKZ141
TAZLINA LODGE	MAN	500955	62.05	-146.5333		CRS	AKZ141
TAZLINA VILLAGE	MAN	500947	62.04167	-145.4333		CRS	AKZ141
BENTALIT	RAWS	500966	61.94889	-150.99969	150	MMS	AKZ145
TALKEETNA	MAN	500915	62.32167	-150.0939		MID	AKZ145
WILLOW	RAWS	500971	61.7625	-150.0508	210	MMS	AKZ145
ANIAK	MAN	500601	61.58167	-159.54311		SWS	AKZ152
STONEY	RAWS	500956	61.00	-153.8981	1250	SWS	AKZ152
STONEY RIVER	RAWS	500621	61.64389	-156.4406	265	SWS	AKZ152
BETHEL	MAN	500501	60.77972	-161.8381		SWS	AKZ155
DILLINGHAM	MAN	500809	59.04556	-158.5033		SWS	AKZ161
ILIAMNA	MAN	500805	59.75278	-154.91721		SWS	AKZ161
KILBUCK	RAWS	500735	60.32195	-160.20329	1910	SWS	AKZ161
PORT ALSWORTH	RAWS	500810	60.18639	-154.3219	321	SWS	AKZ161
BOOTH LAKE	RAWS	500811	57.27111	-154.5592	171	KKS	AKZ171
CAPE KIAVAK	RAWS		56.99972	-153.54221	100	KKS	AKZ171
KODIAK	MAN	500959	57.75	-152.4939		KKS	AKZ171
BARROW	MAN	500103	71.28555	-156.7661		GAD	AKZ202
UMIAT AIRFIELD	RAWS		69.37278	-152.1356	289	TAD	AKZ206
KELLY	RAWS	500934	67.93195	-162.2881	382	GAD	AKZ208
KIANA	RAWS	500206	66.98278	-160.4406	150	GAD	AKZ208
KOTZEBUE	MAN	500212	66.88445	-162.5989		GAD	AKZ209
HAYCOCK	RAWS	500214	65.20333	-161.1525	177	GAD	AKZ210
HOODOO HILL	RAWS	500730	65.59306	-163.40669	1495	GAD	AKZ210
QUARTZ CREEK	RAWS	500215	65.40667	-164.6608	427	GAD	AKZ210
NOME	MAN	500211	64.51222	-165.4453		GAD	AKZ211
UNALAKLEET	MAN	500203	63.88806	-160.7986		GAD	AKZ212
REINDEER RIVER	RAWS	500505	61.71167	-162.6608	140	GAD	AKZ214
INNOKO FLATS	RAWS	500615	63.38972	-158.83031	930	GAD	AKZ215
COTTONWOOD	RAWS	500733	65.33889	-155.9489	1310	GAD	AKZ216
GALENA AWOS	MAN	500302	64.73611	-156.9372		GAD	AKZ216
HOGATZA RIVER	RAWS	500309	66.22028	-155.6778	685	GAD	AKZ216
KAIYUH	RAWS	500322	64.42361	-158.1017	110	GAD	AKZ216
KOYUKUK NWR	RAWS	500319	66.00	-157.5761	100	GAD	AKZ216
POORMAN	RAWS	500618	64.10167	-155.5592	935	TAD	AKZ216
AMBLER	MAN	500205	67.10611	-157.8536		GAD	AKZ217
KAVET CREEK	RAWS	500217	67.13556	-159.03391	235	GAD	AKZ217

NOATAK RAWS 500102 68.06778 -158.7117 985 GAD AKZ217

FULL NAME	TYPE*	WIMS ID	<u>LAT</u>	<u>LON</u>	ELEV	ZONE**	WXZONE
SELAWIK	RAWS	500734	66.61	-159.1017	105	GAD	AKZ217
HELMUT MTN.	RAWS	500731	67.74555	-144.11861	2800	UYD	AKZ218
BETTLES	MAN	500301	66.91528	-151.528		TAD	AKZ219
KANUTI NWR	RAWS	500321	66.08472	-152.1694	825	TAD	AKZ219
NORUTAK LAKE	RAWS	500317	66.84722	-154.3389	800	TAD	AKZ219
BEAVER (WBQ)	RAWS	500418	66.27111	-146.5253	483	UYD	AKZ220
BIRCH CREEK	RAWS	500423	65.59306	-144.3558	850	UYD	AKZ220
CHALKYITSIK	RAWS	500421	66.59306	-144.3389	450	UYD	AKZ220
FORT YUKON	MAN	500404	66.57139	-145.2505		UYD	AKZ220
FT. YUKON	RAWS	500426	66.57611	-145.2542	465	UYD	AKZ220
GRAPHITE LAKE	RAWS	500416	67.03389	-143.2881	850	UYD	AKZ220
HODZANA	RAWS	500417	66.74555	-148.6778	1075	UYD	AKZ220
LITTLE BLACK	RAWS	500424	66.08472	-143.3728	1300	UYD	AKZ220
LOST CREEK	RAWS	500425	66.03389	-147.9828	700	UYD	AKZ220
PREACHER CREEK	RAWS	500738	65.93195	-145.01691	1038	UYD	AKZ220
SALMON TROUT	RAWS	500412	66.81333	-141.62691	2210	UYD	AKZ220
SEVEN MILE	RAWS	500405	65.94889	-149.8642	823	TAD	AKZ220
VUNZIK LAKE	RAWS	500420	66.79639	-146.7117	525	UYD	AKZ220
CHATANIKA	RAWS	500721	65.01694	-148.593	1450	FAS	AKZ221
LAKE MINCHUMINA	RAWS	500623	63.89806	-152.30499	740	TAD	AKZ221
LIVENGOOD	RAWS	500745	65.42361	-148.72861	450	TAD	AKZ221
MCKINLEY RIVER	RAWS	500724	63.64389	-151.64391	863	TAD	AKZ221
ROUND LAKE	RAWS	500736	64.69473	-153.9489	570	TAD	AKZ221
TANANA	MAN	500305	65.17444	-152.1095		TAD	AKZ221
WEIN LAKE	RAWS	500715	64.305	-151.0847	1050	TAD	AKZ221
ANGEL CREEK	RAWS	500742	65.01694	-146.22031	1100	FAS	AKZ222
CARIBOU PEAK	RAWS	500740	65.18639	-147.5083	2517	FAS	AKZ222
FAIRBANKS	RAWS	500741	64.84722	-147.61	454	FAS	AKZ222
FAIRBANKS AIRPORT	MAN	500702	64.81583	-147.85809		FAS	AKZ222
MANCHU	RAWS	500753	64.71167	-147.01691	671	NRS	AKZ222
NENANA ASOS	MAN	500703	64.5475	-148.92641		FAS	AKZ222
SALCHA	RAWS	500744	64.59306	-146.1356	1000	FAS	AKZ222
SMALL ARMS RANGE	RAWS	500754	64.81333	-147.62691	490	MID	AKZ222
STUART CREEK	RAWS	500756	64.72861	-146.5083	1543	MID	AKZ222
FORT GREELY	MAN	500701	63.99472	-145.72031		MID	AKZ223
GEORGE CREEK RAWS	RAWS	500748	63.84722	-144.3558	1525	DAS	AKZ223
GOLD KING	RAWS	500746	64.18639	-147.9319	1700	FAS	AKZ223
OKLAHOMA	RAWS	500755	64.01694	-146.2542	1587	MID	AKZ223
BLAIR LAKES	RAWS	500758	64.38972	-147.6947	790	MID	AKZ223
JARVIS CREEK	RAWS	500759	63.94889	-145.62691	1426	MID	AKZ223

FULLNAME	TYPE*	WIMS ID	LAT	LON	ELEV	ZONE**	WXZONE
ALCAN HWY MI-1244	RAWS	500726	62.83028	-141.4744	1800	TAS	AKZ224
BEN CREEK	RAWS	500414	65.28806	-143.0508	1850	UYD	AKZ224
CHICKEN	RAWS	500747	64.05083	-141.9319	2860	UYD	AKZ224
EAGLE	RAWS	500725	64.77944	-141.1525	880	UYD	AKZ224
GOODPASTURE	RAWS	500743	64.23722	-145.2711	1520	FAS	AKZ224
JATAHMUND LAKE	RAWS	500936	62.61	-142.0847	2300	TAS	AKZ224
NORTHWAY	MAN	500704	62.96139	-141.9292		TAS	AKZ224
T LAKE	RAWS	500723	63.7625	-143.83031	2073	TAS	AKZ224
TOK	MAN	500720	63.32833	-142.9944		TAS	AKZ224
DENALI VISITOR	D 1 1110		50 50 0 51	1.10.01.100	1000	m., p	
CENTER	RAWS		63.72861	-148.91499	1800	TAD	AKZ225
HEALY	MAN	500727	63.88334	-149.01669		FAS	AKZ225
WONDER LAKE	RAWS	500710	63.49139	-150.8811	2120	TAD	AKZ225
BOLIO	RAWS	500751	63.88111	-145.8811	1631	MID	AKZ226
CHISANA	RAWS	500933	62.06778	-142.0508	3284	CRS	AKZ226
DONNELLY	RAWS	500752	63.84722	-145.72861	1360	MID	AKZ226
DRY CREEK	MAN	500737	63.66667	-144.53329		TAS	AKZ226
TOK RIVER VALLEY	RAWS	500749	62.96583	-143.3389	2300	TAS	AKZ226
FAREWELL	RAWS	500624	62.72861	-154.06779	775	SWS	AKZ227
FLAT	RAWS	500625	62.83028	-156.61	1480	SWS	AKZ227
MCGRATH	MAN	500606	62.95278	-155.6058		SWS	AKZ227
TELIDA	RAWS	500620	63.44056	-153.3558	650	SWS	AKZ227

^{*}RAWS are Remote Automated Weather Stations, owned by the Jurisdictional or fProtection Agencies. Communications are through a GOES satellite. MAN are a combination of aviation observation (usually automated and owned by NWS or FAA) and manual observations taken by Alaska State Forestry. Communications are through an FTP site with the NWS or by FAX from Alaska State Forestry.

**Fire Management	Zones	(2	Z(Ol	NE))	
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CGF	USFS	Chugach National Forest	MMS	AK Forestry	Anchorage/Mat-Su
DAS	AK Forestry	Delta Area	SWS	AK Forestry	Southwest Area
FAS	AK Forestry	Fairbanks Area	TAS	AK Forestry	Tok Area
GAD	AFS	Galena Zone	TAD	AFS	Tanana Zone
HNS	AK Forestry	Haines Area	TNF	USFS	Tongass National Forest
KKS	AK Forestry	Kenai-Kodiak Area	UYD	AFS Upper	Upper Yukon Zone
MID	AFS	Military Zone	CRS	AK Forestry	Copper River Area

Appendix J

Preparedness Level Description

Levels of preparedness will be determined daily throughout the Alaska fire season in the Coastal Region. Criteria used to determine daily level of preparedness include:

- 1. The current and forecasted weather.
- 2. Wildland fire activity statewide.
- 3. Resources committed, demand for resources, and predicted demand. Types include:

Tactical resources include smokejumpers, air tankers, air attack, and lead planes.

Non-tactical resources include helicopters, engines, overhead, and crews.

Critical resources include radio systems, equipment and supply.

- 4. Historical high-risk periods.
- 5. All risk incident support.
- 6. Planned and ongoing prescribed fire operations.

These levels are based on the existing wildland fire activity, probability of new wildland fire starts, burning conditions, prescribed fire activities and the commitment of resources. The Coastal Regional Fire Management Officer will be responsible for daily monitoring of preparedness criteria in each of the Coastal Region Areas to determine the appropriate level of preparedness for the Region.

PREPAREDNESS LEVELS

- I. Preparedness Level I No significant fire activity, most units having low to moderate probability of ignition and low burning condition in all fuel types. Resistance to extinguishment by initial attack forces is low.
- II. Preparedness level II 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. Minimal mobilization of local unit resources with no shortages of tactical resources.
- III. Preparedness level III Multiple units experiencing fire starts and/or one (1) 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% of non-tactical resources being mobilized, up to 75% of tactical resources committed to new ignitions. Existing weather pattern supporting fire activity is forecasted to remain for the next 48 hours.
- IV. Preparedness level IV Multiple units experiencing fire starts and/or two (2) 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. Over 50% of non-tactical resources are committed, over 75% of tactical resources are committed to new ignitions. Existing weather pattern supporting fire activity is forecasted to remain for the next 3 to 5 days.
- V. Preparedness level V Multiple units experiencing fire starts and/or three (3) 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. Over 75% of non-tactical resources are committed, over 75% of tactical resources are committed to new ignitions. Existing weather pattern supporting fire activity is forecasted to remain for the next 3 to 5 days.

Appendix K

Interagency Agreement is attached in a separate PDF file.