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To: State Directors and State Fire Management Officers
From: Assistant Director, Fire and Aviation
Subject: Management Actions for Noncompliant Remote Automatic Weather Stations (RAWS)

Program Area: Remote Sensing/Fire Weather Support.

Purpose: To ensure appropriate use of Remote Automatic Weather Station (RAWS) data and to ensure that appropriate management actions are taken when Bureau of Land Management (BLM) RAWS are noncompliant with standards established in the National Wildfire Coordinating Group (NWCG) Product Management System (PMS) publication *Interagency Wildland Fire Weather Station Standards & Guidelines* (NWCG PMS 426-3).

Policy/Action:

1. Fire managers must be cognizant that all RAWS will not be 100% compliant with standards established in the *Interagency Wildland Fire Weather Station Standards & Guidelines* (NWCG PMS 426-3) at all times. Furthermore, even when RAWS are fully compliant and operational, RAWS data should be used only in conjunction with other predictive services and fireline data sources in fire management decision making, particularly at the tactical level.
2. Fire managers must monitor RAWS status and recognize when a station is noncompliant. Noncompliant stations are broadly categorized as follows:
 - Inoperative station. This station is noncompliant but poses no danger of providing inaccurate weather data because it is not transmitting data.
 - Operating station that has exceeded the required maintenance cycle. These stations are identified in the weekly "Wildland Fire Management Information (WFMI) weather Noncompliance Report", which is widely distributed by email and available at <http://raws.fam.nwcg.gov/nfdrs.html>. Although transmitted data may be accurate, noncompliance means the data should not be trusted.

- Operating station that transmits data outside of NWCG PMS 426-3 standards due to faulty sensors or components. These stations are most easily identified by local users who are familiar with environmental trends and conditions and can recognize data that seems abnormal or clearly unrepresentative of current conditions. This usually indicates faulty sensors or components.
3. When noncompliant RAWS are identified or suspected, fire managers should implement the following hazard mitigation actions to expedite RAWS repair and to reduce risk to fire personnel:
 - Contact the RAWS Help Desk (208-387-5475 or rawshelp@blm.gov). Identify the station and discuss troubleshooting steps or schedule the necessary repairs. If there are trained personnel in the local area, the Help Desk may be able to ship the required parts and coordinate the repairs via phone. If a professional technician needs to make a site visit, provide a local individual to assist, and use this opportunity to provide training for local personnel.
 - Ensure that appropriate personnel and organizations know which stations are out of compliance, and which sensors are affected, if possible. Direct them to alternative weather data sources if possible.
 - Use nearby compliant RAWS if available.
 - Based on local knowledge of specific RAWS problems (e.g. which sensor is out of compliance), separate reliable data from unreliable data.
 - Consider using data from belt weather kit readings, other portable device observations, Predictive Services or National Weather Service offices, or non-fire weather sources such as airports.
 4. Fire managers should ensure that locally held portable RAWS are compliant prior to use; noncompliant portable RAWS will not be activated for data processing via WFMI-weather.

Timeframe: Effective immediately.

Budget Impact: None.

Background: The interagency RAWS network consists of approximately 2,500 RAWS distributed throughout the United States, predominantly in the west. Approximately 2,000 of these are managed to NWCG PMS 426-3 standards, including all BLM stations. The BLM owns 346 permanent stations and 145 portable stations. Stations managed to NWCG PMS 426-3 standards are maintained either independently by the owner (directly or by contract) or by agreement with the National Interagency Fire Center (NIFC) based Remote Sensing/Fire Weather Support Unit (RSFWSU).

Individual RAWS stations measure wind speed and direction, air temperature, humidity, precipitation, and solar radiation. The purpose of the RAWS network is to support fire program analysis, fire danger rating, fire behavior prediction, fire weather forecasting, and smoke management. Ensuring awareness of RAWS data status, taking effective hazard mitigation

actions when stations are noncompliant, and expediting repair services through established processes are important to effective use of the RAWS network.

Manual/Handbook Sections Affected: This direction will be incorporated into the *Interagency Standards for Fire and Fire Aviation Operations* in 2014.

Coordination: This Instruction Memorandum was coordinated with the Fire and Aviation (FA) Division of Support Services, the FA Division of Fire Operations, FA Predictive Services, and the Fire Weather branch of the National Weather Service.

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