

Welcome to the 3rd International Fire Ecology and Management Congress (IFEMC). While you are here, the U.S. Office of the Federal Coordinator for Meteorology and Supporting Research (OFCM) would greatly appreciate your participation in completing a questionnaire regarding wildland fire weather needs, which is part of our longer-term effort to complete a comprehensive, National Wildland Fire Weather Needs Assessment report. This assessment has national implications for fire weather programs within the National Weather Service (NWS), the National Wildfire Coordinating Group, and the federal wildland fire agencies' Predictive Services. Your thoughtful and honest input will contribute to this effort and will help shape future program directions.

Background:

The Western Governors' Association (WGA) recently requested the National Oceanic and Atmospheric Administration's OFCM complete a national needs assessment report of federal, state, and local fire managers' needs for weather information in their wildfire and prescribed-fire decision-making processes, to include a framework to meet those needs by the NWS and the federal wildland fire agencies' Predictive Services.

As part of this assessment, we are conducting a special session November 14th, from 1:30 PM to 5:30 PM, to discuss the assessment and to elicit IFEMC participant involvement. Additionally, we have developed a Wildland Fire Weather Needs Questionnaire, which is being made available to the federal sector of the wildland fire community for the collection and synthesis of wildland fire weather needs. The questionnaire also includes important smoke management information. The results will be shared with the National Wildfire Coordinating Group to facilitate operational improvements. In summary, we are fully committed to providing the WGA a comprehensive assessment of wildland fire weather needs and seek your input to make this assessment as complete as possible.

Instructions:

The attached Wildland Fire Weather Needs Questionnaire was carefully designed to capture your vital information into our needs assessment. We encourage you to take time this week to provide substantive input to all questions in all functional areas. If you are unfamiliar with a particular functional area, please skip ahead to the next functional area and complete those questions. We sincerely welcome any and all input you have to offer. **Once completed, please remove and keep this cover letter for your future reference before placing the questionnaire in the OFCM Wildland Fire Weather Questionnaire collection box near the IFEMC registration desk.**

If you have any questions, please contact my project lead, U.S. Air Force Lieutenant Colonel David Andrus. He will be at IFEMC most of the week and he can also be reached at 301-427-2002 or david.andrus@noaa.gov.

I sincerely thank you for expending your time and energy on this vital questionnaire.

Best regards,



Samuel P. Williamson

Federal Coordinator for Meteorology

OFCM Wildland Fire Weather Needs Questionnaire

****This is a survey of Federal employees only. If you have received this survey in error please excuse us and return the copy to the registration desk. Thank you!*

The Office of the Federal Coordinator for Meteorological Services and Supporting Research (OFCM) values your opinion and appreciates your assistance in understanding your wildland fire weather information needs. Participation is voluntary and any items that you are uncomfortable answering may be skipped. However, complete surveys are most helpful to us. Your responses are anonymous and will be analyzed in group form. Any questions about this survey may be directed to David Andrus, who is present at the Fire Ecology Congress. OFCM would like to sincerely thank Dr. Patricia Winter, Research Social Scientist for the USDA Forest Service Pacific Southwest Research Station, for her contributions to this effort.

For the purposes of this survey, please interpret “fire weather” to be inclusive of all weather, climate, and smoke information as they pertain to the pre-fire, fire, and post-fire environment.

1. RESPONDENT CHARACTERISTICS

a. Which federal agency are you employed by?

b. Which state do you work in? (*This is the state where your primary office is located, we'll ask about the geographic scope of your work later*)

c. Review the table below and place an ‘x’ in the box that best represents your primary duties related to fire weather. Place an ‘o’ in any boxes that represent any additional duties. Please note: If you do not have any primary or ancillary job duties related to fire weather please place an ‘x’ here _____. Your ‘x’ indicates that you do not have job duties related to fire weather. You may opt out now, or continue with the survey. If you are ‘opting out’ now, please return your survey with the answers marked for items 1a through 1c to the survey collection point. Thank you!

	Local	Tribal	State	Federal	Private	Academic	NGO	Other
Firefighter								
Land Manager								
Emergency Worker (non-fire)								
Researcher								
Weather Provider								
Fuels Management								
Planner								
Air Quality Manager								
Other (specify _____)								

d. Please place an 'x' in the box that best represents the situational and/or geographic focus and time span for your primary duties related to fire weather, and any additional duties with 'o' s in the applicable boxes.

	Time Span of Interest					
	Planning	Operations				Evaluation Post-Fire
		Pre-Season	Season	Fire	Post-Fire	
Incident						
Communities						
Tribal						
Local						
Regional						
State						
Multi-state						
National						
Global						

2. FIRE WEATHER OBSERVATIONAL DATA

a. If you could readily obtain one or two types of observational data (such as RAWs surface observations; NWS surface observations; upper air observations; satellite data; lightning data; radar data) which would you choose?

b. How would these additional observational data allow you to better support your mission or your customers?

c. Briefly describe your observational data integrity and quality requirements. Are they currently being met?

d. Please explain whether or not NFDRS fire weather observing station standards meet your needs.

e. What are your requirements for the spatial distribution, or density, of observation data?

f. What are your requirements for archived observation data?

3. FIRE WEATHER RESEARCH AND DEVELOPMENT (R&D) NEEDS

a. Consider the top three R&D areas you find most useful in your daily operations and/or planning functions and complete the following table. For each data element we would like you to rate its importance to successful completion of your job duties. We would also like to know whether or not your needs are being met in that area and how improvements could be made. Furthermore, we would like to know your source of these data.

R&D needs	Importance (High, Medium, or Low)	Primary R&D source (e.g. NOAA, USDA FS, EPA, JFSP)	Quantity of R&D information sufficient? (Yes or No)	Quantity of R&D information sufficient? (Yes or No)	How could this R&D information be improved? (e.g. research, development, improved applications)

b. What do you see as the most urgent fire weather research need?

c. How would you like to receive fire weather research information?

4. FIRE WEATHER FORECAST PRODUCTS AND SERVICE NEEDS

a. Consider the top three forecast (or analyzed) products you find most useful in your daily operations and/or planning functions and complete the following table. For each data element we would like you to rate its importance to successful completion of your job duties, needed frequency of updates, needed forecast timeframe, needed spatial resolution, and primary data source. We would also like to know if the quantity and quality of data are sufficient to meet your needs.

Data element (from forecasts and/or analyses, not from measurements)	Importance (High, Medium, or Low)	Needed product update frequency (e.g. Hourly, Daily)	Needed future forecast timeframe (e.g. 10 hours, 3 days)	Needed spatial resolution (e.g. 4 Km, 1 Km)	Primary data source (e.g. NWS, NCEP, GACCS, FS FCAMMS)	Quantity of data element type sufficient? (Yes or No)	Quality of data element type sufficient? (Yes or No)

b. If you could choose three ideal weather products that best meet your recurring needs what would they be? (You can consider products already in existence or new products.)

c. Please provide details regarding the desired timeliness, mode or format of access, spatial resolution, and desired accuracy of these ideal products.

d. How would these ideal products allow you to better support your mission or to better serve your customers?

e. Please list any current operational fire weather products which you believe could be improved to better meet your needs and indicate what improvements are most needed.

5. FIRE MODELING AND PREDICTION

a. What modeling improvements are most necessary to your routine operations?

Examples include higher-resolution output, longer-time scales, more frequent updates, inclusion of uncertainty information, etc.

b. Consider the top three data elements or modeling outputs from models, not measurements, you find most useful in your daily operations and/or planning functions and complete the following table. For each element or output please rate its importance to successful completion of your job duties, needed frequency of updates, needed forecast timeframe, needed spatial resolution, and primary data source. We would also like to know if the quantity and quality of data are sufficient to meet your needs.

Data element or modeling output (From models, not from measurements)	Importance (High, Medium, or Low)	Needed model update frequency (e.g. Hourly, Daily)	Needed forecast timeframe (e.g. 10 hours, 3 days)	Needed spatial resolution (e.g. 4 Km, 1 Km)	Primary model data source (e.g. NWS, NCEP, GACCS, FS FCAMMS)	Quantity of model data sufficient? (Yes or No)	Quality of model data sufficient? (Yes or No)

6. INFORMATION DISSEMINATION AND TECHNOLOGIES

a. What recommendations do you have for improving the availability and access of fire weather data, both for routine use and when it is most urgently needed?

b. If a single fire weather web site were developed to assist your daily operations, which products should it contain?

c. Would this single fire weather web site be of use to you? Please explain why or why not.

7. EDUCATION, TRAINING, OUTREACH, PARTNERING AND COLLABORATION

a. Please describe any education, training, outreach, partnering, or collaboration efforts your office is involved in pertaining to fire weather.

b. What challenges or barriers hinder your education and training efforts?

c. What challenges or barriers hinder your partnering or collaboration efforts?

d. What training, education, or other types of information regarding fire weather or fire weather products do you need but have not been able to locate?

8. DECISION SUPPORT AND FIRE COMMUNITY ASSISTANCE

a. Decision support tools such as fire weather planner and seven day significant fire potential products are currently being used in some offices. What fire weather-related decision-support tools would you most like to see developed and employed within your office?

b. How do you think the fire weather community could best help develop and/or support these tools?

9. FUNDING CONSIDERATIONS

a. Over the past year, what fire weather, fire climatology, and smoke support areas were you not able to accomplish due to inadequate funding?

b. Considering benefits to users and stakeholders, what fire weather, fire climatology, and smoke support areas need additional funding?

10. SOCIOECONOMIC IMPACTS

a. Public awareness of wildland fire risk is essential to encourage responsible land development and to protect lives and property. What suggestions do you have for improving this awareness?

Thank you for your participation in this survey. If you have any comments or concerns about fire weather that were not addressed in this survey, or any additional insights on topics covered above, please write in your comments in the space below.
