CHAPTER 60
PREDICTIVE SERVICES

Predictive Services is a decision support unit for federal, state and local land agencies for operational management of and strategic planning for wildland firefighting resources. Predictive Services accomplishes this through analysis of weather and climate, fuels, fire activity and behavior.

Intelligence gathering is a fundamental component of the national coordination system for federal, state and local land agencies. Intelligence coordination is accomplished through compiling reports from all levels of the firefighting organization as well as communicating with individual GACCs and local jurisdictions concerning their historic, current, and expected fire occurrence.

The products and services from both Predictive Services and the Intelligence section provide support for the proactive management of wildland fire with an eye toward safety, cost containment, efficiency and ecosystem health.

RMC will post daily reports and other useful information on the RMA Web Page under Predictive Services. The address is: http://gacc.nifc.gov/rmcc/

GPC is responsible for daily and weekly intelligence reporting to RMC, as well as for distribution of intelligence information to participating agencies within the Great Plains Coordinating Group. GPC maintains a web page at: https://gacc.nifc.gov/rmcc/dispatch_centers/r2gpc/

This page displays fire information and intelligence products. These products are updated regularly or daily during the fire season.

7-Day Significant Fire Potential Outlook

*Daily: Issued daily, except when the Geographic Area Predictive Services unit is not staffed; such as during weekends or holidays. The National 7-day Significant Fire Potential Outlook is a composite of outlooks produced by each of the Geographic Area Predictive Services units. The 7-day provides a week-long projection of fuel dryness, weather, and fire potential. The 7-day depicts a nationwide view of the significant fire potential for the next seven days with links to the individual Geographic Area 7-day outlooks. The system is database driven and is updated periodically as each Geographic Area Predictive Services unit posts its outlook. Each Geographic Area Predictive Services unit will determine whether to routinely produce a morning or afternoon product. Issuance times for each Area's outlook can be found in the Geographic Area Mobilization Guide and/or in its National Weather Service/Predictive Services Annual Operating Plan. Geographic Areas are required to provide 7-Day Outlooks daily, except when the Geographic Area Predictive Services unit is not staffed; such as during weekends or holidays. Forecasts will include the forecaster's name or other agreed upon identifier to facilitate coordination.

All Geographic Area outlooks will be viewable from https://psgeodata.fs.fed.us/7day/

The outlooks produced by the 10 Geographic Area Predictive Services units will be consolidated into a National 7-day Significant Fire Potential map located at: https://psgeodata.fs.fed.us/staticmap.html.

For further guidance on 7-day Significant Fire Potential Outlook refer to RMG chapter 60

National Wildland Significant Fire Potential Outlook

*Monthly: Issued the first day of the month.

The National Significant Wildland Fire Potential Outlook is prepared and distributed by NICC Predictive Services on the first day of each month. The Outlook is a composite of outlooks prepared by the individual Geographic Area Predictive Services units and national discussions prepared by NICC Predictive Services. It provides fire managers at all levels with the information needed to make long range decisions concerning resource staffing and allocation. The Outlook identifies areas where significant wildland fire activity is expected to be above or below normal levels.

The Outlook covers a four-month period, divided into four one-month sections. Maps for each period display areas of below normal, normal, and above normal significant wildland fire potential. A brief synopsis of the current and predicted national and GACC situation is included in the report. The Outlook begins with an Executive Summary which provides a brief synopsis of each of the outlook periods. The Past Weather and Drought section summarizes the weather of the past month and the evolution of any drought conditions to illustrate how fuels and fire conditions reached the current state. The Weather and Climate Outlooks section summarizes the broad climate patterns that will affect temperature and precipitation for the next four months. The Fuel Conditions and Fire Season Timing section describes the current state of the fuels and how they will transition during the outlook period as well as the expected progression of the current fire season relative to the typical, or average, fire season. The Geographic Area Forecasts section provides brief but more specific weather, fuels and fire potential information for each of the Geographic Areas.

GACC monthly outlooks are optional but strongly encouraged as they provide greater detail than the national outlook issued by NICC. GACC monthly outlooks will adhere to the following protocols:

- GACC and NICC outlooks must be geospatially equivalent.
- GACC websites are required to link to the national outlook.
- GACCs are required to provide draft forecast maps as well as narrative highlights for the outlook period to NICC no later than five business days before the end of each month.
- GACC monthly outlooks will be issued and posted to the web on the first business day of each month. Maps will show areas where above normal, normal and below normal significant fire potential are

expected. A discussion of fuel conditions, climate outlooks, and other pertinent information will be included in the outlooks.

For further guidance on the National Wildland Significant Fire Potential Outlook consult the RMG chapter 60

GACC Monthly Fire Potential Outlooks (Refer to RMG 60)

Fuel and Fire Behavior Advisories

*As needed.

Fuels and Fire Behavior Advisories are alerts issued as needed to address an exceptional or extreme circumstance that could threaten firefighter safety. Conditions that could be reasonably expected normally do not warrant a Fuels and Fire Behavior Advisory. Advisories will focus on fuel conditions and fire behavior that have long term impacts, not atmospheric conditions that can change significantly over short periods of time and can be found in other products. Advisories will highlight conditions that are currently on-going and give specific examples that have been experienced in the field. Advisories should be tailored so that firefighters at all experience levels can recognize the situation and act accordingly. Advisories should be coordinated with neighboring administrative units to ensure that all areas with similar conditions are being addressed. All Advisories that extend beyond a single local administrative unit or that will be posted on the national Advisory map must be coordinated with the National Interagency Coordination Center and Geographic Area Coordination Center Predictive Service Units. Each Advisory must include a map of the affected area. Only one Advisory may be active at any time over any area. If multiple Advisory conditions are present incorporate them into one Advisory. Advisories will remain in effect for 14 days from issuance. If the Advisory conditions continue 2017 National Interagency Mobilization Guide 81 beyond the 14 days a new Advisory will need to be issued to update conditions and circumstances with more timely information. Advisory templates can be found at:
https://www.predictiveservices.nifc.gov/fuels_fire-danger/fuels_advisories.htm and in Chapter 80 of the National Interagency Mobilization Guide.

For further guidance on Fuel and Fire Behavior Advisories refer to RMG chapter 60

Incident Status Summary (ICS-209)

*As described below to report significant wildland fires

The Incident Status Summary (ICS-209) conforms to National Incident Management System (NIMS) policy. The ICS-209 is used to report large wildland fires and other significant events on lands under federal protection or federal ownership, and is submitted to the GACC. Lands administered by states and other federal cooperators may also report in this manner.

The ICS-209 program is a Fire and Aviation Management Web (FAMWEB) application referred to as the "209 Program." The ICS-209 is submitted by the agency that has protection responsibility for the incident, regardless of who administers the land. If the protection agency is non-federal and chooses not to meet federal reporting standards, then the federal agency which has administrative jurisdiction will submit the incident ICS-209. Geographic Area Intelligence Coordination staff will ensure that their local dispatch centers submit complete and accurate ICS- 209 reports for any wildland fire meeting the requirements specified in the When to Report Wildland Fire Incidents ICS-209 flowchart shown below (available at: https://www.predictiveservices.nifc.gov/intelligence/intelligence.htm), or as set in their Geographic Area Mobilization Guide, if more frequent.

Specific instructions for entering ICS-209 information can be found in the SIT-209 User's Guide at: https://gacc.nifc.gov/predictive_services/intelligence/niop/programs/sit_209/Help/index.htm. The ICS-209 Program and electronic ICS-209 form is located at: https://fam.nwcg.gov/fam-web/

Rocky Mountain Area Incident Status Summary (ICS-209) Guidance

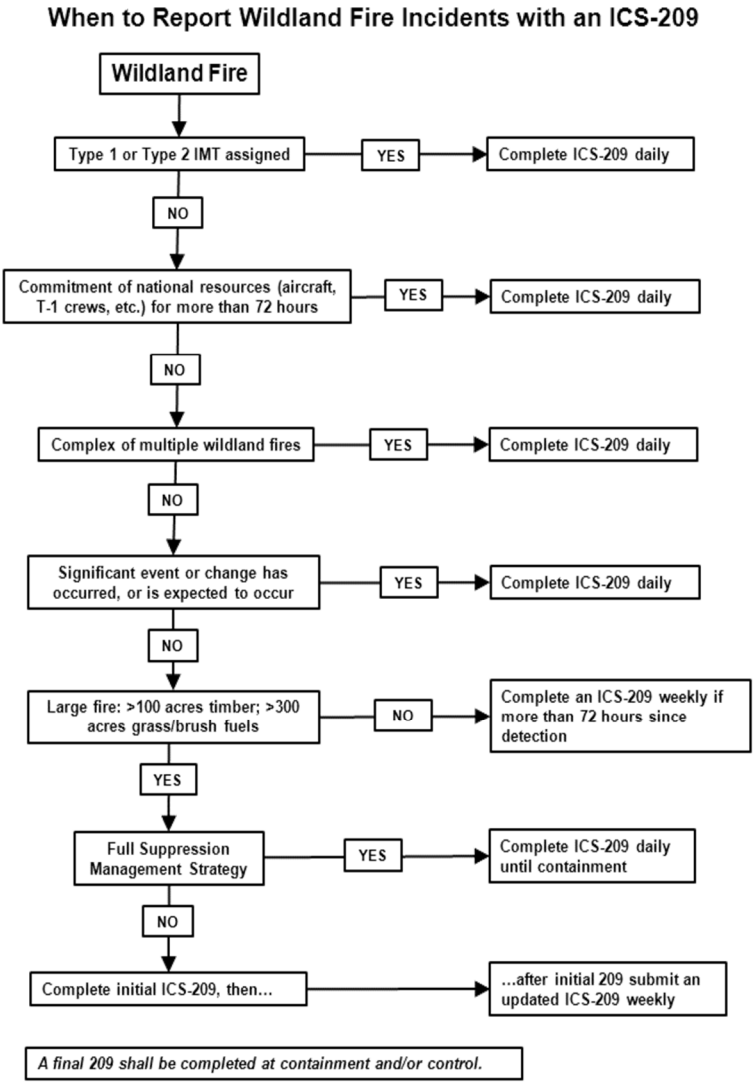
For Rocky Mountain Area ICS 209 guidance Refer to RMG Chapter 60

Required Reporting of Wildland Fires

Wildland fires managed for complete perimeter control (full suppression) will submit an ICS-209 daily when that fire meets large fire criteria. For fires being managed under full suppression strategy an ICS-209 will be submitted daily before 0200 Mountain Time to report the previous day's activity, until the incident is contained. Refer to the GACC Mobilization Guide, or agency policy for reporting requirements once containment is achieved.

The National Interagency Coordination Center classifies large fires as 100 acres or larger in timber and slash fuel types, 300 acres or larger in grass or brush fuel types, or when a Type 1 or 2 IMT is assigned.

Wildland fires managed under a Monitor, Confine, or Point Zone Protection management strategy will submit an ICS-209 following the guidelines outlined in the When to Report Wildland Fire Incidents with an ICS-209 flowchart shown below. For incidents that require daily reporting, ICS-209's should be submitted daily before 0200 Mountain Time. For incidents that require weekly reporting, ICS-209's should be submitted weekly before Friday at 0200 Mountain Time.



Wildland fires within a complex should be aggregated and included on one ICS-209. A complex is two or more individual incidents located in the same general proximity, which are assigned to a single incident commander or unified command. In order to maintain data management, reporting integrity, resource management and cost accountability for individual wildland fire incidents within a parent complex and to facilitate the necessary data sharing between fire application systems through IRWIN, the following complex reporting business practices for ICS- 209 and IRWIN must be followed.

- The complex parent is a unique record and is not a converted wildland fire incident record.

- The complex parent record should be created in an IRWIN recognized CAD system, or as an individual ICS-209. The parent incident shall include the word "Complex" and not be named from an existing fire.

- Individual child incidents can be added to a complex within the 209 program as either preexisting ICS-209 incidents or as individual IRWIN incidents created from another IRWIN recognized application using the 'Complex by Incident' button in block 7 of the 209 data entry screen. Finalize an existing ICS-209 child incident prior to associating the incident to the parent Complex.

- Incidents that do not have a unique IRWIN record cannot be added to the complex using the 'Complex by Incident' button.

- If an incident is removed from the complex, it may resume ICS-209 reporting as an individual incident if appropriate, using normal ICS-209 reporting guidelines.

- Prescribed fires will be reported following the requirements outlined in the When to Report Wildland Fire Incidents document.

For non-fire incidents, an ICS-209 will be submitted for other events in which a significant commitment of wildland fire resources has occurred, or when a Type 1 or 2 Interagency Incident Management Team has been assigned.

For more information refer to When to Report Wildland Fire Incidents document on the National Intelligence website at: https://www.predictiveservices.nifc.gov/intelligence/intelligence.htm.

For additional guidance on required reporting of wildland fires refer to RMG Chapter 60

Interagency Situation Report

*Daily: Issued daily, except when the unit is not staffed; such as during weekends or holidays.

The Interagency Situation Report is a (FAMWEB) application known as the Sit Report Program. GACC Intelligence staff will ensure that all of their dispatch centers have submitted completed Situation Reports. The reporting period for this report is 0001 to 2400. At national Preparedness Level 2 the NICC Intelligence Coordination staff will retrieve situation reports from FAMWEB by 0200 Mountain Time following this reporting period. Fires and acres shall be reported by protection responsibility. Reporting is required for all prescribed fire activity along the same schedule as wildfires. The Interagency Situation Report application is divided into five sections:

- Daily Fire Statistics
- Planned Prescribed Fires

- Remarks
- Year-to-Date Statistics
- Incident Priority

The Sit Report Program shares certain incident information with the 209 Program for summaries and reports. Specific reporting requirements and program instructions are located in the Sit Report User's Guide located at: https://gacc.nifc.gov/predictive_services/intelligence/niop/programs/sit_209/Help/index.htm.

The Sit Report Program is located at https://fam.nwcg.gov/fam-web/.

Rocky Mountain Area Interagency Situation Report Guidance (Refer to RMG Chap 60)

In the Remarks Section of the SIT Report, please include the following:

- A brief write-up about any IA activity occurring and resources being used
- A weather synopsis for your general vicinity
- A brief analysis / prognosis
- Any other information you would like to add.

Prescribed fire information must be detailed and include the names of the specific contingent resources. Dispatch Centers should ensure Year-To-Date numbers are accurate and updated as necessary.

Daily reports found on the RMA Web Page and to be distributed by the Dispatch Centers are:

Report Name	**Typical Time Available during Fire Season**
National SIT Report	0800 hours
RMA Resource Status Summary Reports	0800 hours
RMA Daily Fire Weather Outlook	0800 and 1600 hours
Multi-Media Fire Potential Briefing	0930 hours
7-Day Fire Potential Outlook	1030 hours
RMA Prescribed Fire Report	1100 hours
RMA SIT Report	1800 hours
Fire Behavior Information	As Updated

When competition for resources exists, NIC and the RMA MAC will request an Incident Priority List for each Dispatch Center with significant activity. The Priority List shall be submitted to RMC upon request. (Refer to NMG 10).

Incident Management Situation Report

The National Incident Management Situation Report (IMSR) shall be issued daily at National Preparedness Level 2 and above, or whenever significant wildland fire activity or resource mobilization occurs. Whenever daily reporting is not required, the IMSR will be issued weekly on Fridays. (Refer to NMG 60)

The IMSR is prepared by the NICC Intelligence Coordination staff from information and data derived from the Interagency Situation Report and 209 Program through the FAMWEB reporting system. A brief national weather/fire potential outlook will be prepared by NICC Predictive Services for inclusion in the Predictive Services Discussion section of the IMSR.

Large full suppression wildland fires are typically reported in the IMSR until the incident is contained; no longer has a commitment of at least 100 personnel; is no longer demonstrating significant activity; or is failing to provide new reports submitted as required. Wildland fires managed under a Monitor, Confine, or Point Zone strategy will initially be reported in the IMSR when the event exceeds 100 acres in timber and slash fuel types, 300 acres in grass or brush fuel types, or has a Type 1 or 2 IMT assigned. Such large, long duration fires will be reported in the IMSR until activity diminishes, and thereafter when significant activity occurs (such as an acreage increase of 1,000 acres or more since last reported, significant resource commitment or a significant event occurs).

The Active Incident Resource Summary is updated daily in the IMSR. It includes the total count of fires and acres with resources assigned that have been reported in the SIT-209 program within the last seven days.

For additional guidance on IMSR refer to RMG Chapter 60

Resource Status Reports: (Refer to RMG 20, and 60)

RMC will gather resource status information from ROSS daily, and will post Resource Status Reports on the RMA web page during fire season. Dispatch Centers should ensure resource status is accurate in ROSS.

Resource Availability Tracking

Resources shall ensure they are statused appropriately in ROSS for out of zone assignments. GPC's default is "Local" and all resources will be set to available Local each Thursday morning. Resource shall re-status themselves in ROSS after 1300 to be considered for out of zone assignments.

RMC will notify Dispatch Centers in the event that necessary information is not available through ROSS. Dispatch Centers will then be required to provide resource status information for the critical resources listed below by 1000.

Area Resources	National Resources
TEAMS	
Type 2 IMTs	Type 1 IMT
Geographic Area Buying Teams	National Buying Teams
	Area Command
OVERHEAD	
WFM – Type 1,2	
CREWS	
Type 2 & 2 IA Crews	Type 1 Crews
	Smokejumpers
AIRCRAFT	
Type 3 Helicopters	Airtankers
SEATs	Type 1 & 2 Helicopters
	Lead Planes/ASM
	Smokejumper Aircraft
SUPPLIES	
Cache Van	NFES 4390 Starter Systems

Daily Resource Status

Resources will status with GPC no later than 0900 by using the web based resource status link on the GPC web site. Resources will be required to go into service with GPC via radio to ensure that GPC knows units are in service and available and that the radios are functioning. Resources that do not call GPC via radio will not be put on the board and status as available. Resources who are in service but are in PT status should indicate so to dispatch when calling in-service. If for some reason the internet site is down or cannot be accessed GPC can status available resources.

Prescribed Fire Notification

FMOs should submit to their dispatch center, prescribed fire information one (1) day prior to the day of planned ignition. The information is to be input into the Daily Situation Report, Prescribed Fire Information. (Input the information off the Prescribed Fire Plan).

RMC Intelligence Unit will pull a Planned Prescribed Fire Report daily at 1100, post it to the RMA website and fax it to the FAA. If a center enters a report after 1100 for the same day, the center will notify RMC to allow for updating of the report.

Planned prescribed fire project information is included in data input to the Interagency Situation Report. This information provides notification of planned ignitions to cooperator agencies, and adjacent dispatch centers.

The Agency responsible for the Burn activity will submit the Burn Form to GPC in advance preferably at least one day prior to project ignition. GPC will input planned prescribed fire data into the SIT Report, using information reported by GPC agencies. Prescribed fire information will be updated on the SIT Report by 1000 daily.

RMA Annual Fire Report (Refer to RMG 60)

Resource Record Keeping

Dispatch centers will be responsible for accurately tracking resources on incidents not in ROSS, i.e. Initial Attack. Resource information will be requested from each dispatch center by RMC on January 15 annually and should include resources tracked in ROSS and on non-ROSS incidents within their area. Contact RMC Intelligence Section for the specific information requirements.

Annual Fire Report Refer to RMG

A GPC Annual Report will be submitted to RMA by January 15th annually. The report will include the following: Narrative, zone fire statistics including prescribed fire and resource order statistics.

Reports, Due Dates and Times Refer to RMG page133

Below is a list of reports due, usually during fire season, and their due dates and times. Fire season is considered May through October. Dates will vary according to fire activity and potential.

Wildland Fire Decision Support System (WFDSS)

The Wildland Fire Decision Support System (WFDSS) is a web-based decision support system that provides a single dynamic documentation system. The WFDSS incorporates fire behavior modeling, economic principles, and information technology to support effective wildland fire decisions consistent with Land Use and Fire Management Plans. The WFDSS aids agency administrators in making informed decisions for all fires that escape initial attack or exceed initial response.

Use of the WFDSS is required for all federal agencies. Specific direction regarding the use of the WFDSS will be issued by each agency.

Requests for WFDSS Decision Support

For WFDSS support needs on emerging incidents (e.g., Fire Behavior Modeling, Risk/Values Assessments, and/or technical assistance) that cannot be met at the local unit level, the unit's first point of contact is their Agency's identified Point of Contact (POC). See POC table below. For on-going incidents or incidents with assigned incident management organizations, WFDSS support needs (e.g. Fire Behavior Analyst, Long Term Analyst, Geospatial Analyst, or Strategic Operations Planner), should be coordinated with the in-place organization and an order for the needed additional support should be placed in ROSS. Consult with your Agency POC for assistance in identifying personnel with the needed WFDSS experience and skills.

If the Agency POC is not available, refer to the RMA Agency WFDSS POC table below and call another Agency's POC to request WFDSS support. If no contact can be made in a reasonable amount of time with any RMA Agency WFDSS POC, a request can be made to the National Fire Decision Support Center (NFDSC) at 208-473-8107.

The NFDSC has been established to support analysis used in wildland fire decision making and WFDSS. The support provided by NFDSC consists of developing, improving, and increasing production and operational use of decision support products.

WFDSS Decision Approval and Publication

Decisions in WFDSS are approved and published by the appropriate agency administrator as defined in the current version of the "Interagency Standards for Fire and Fire Aviation Operations".

Additional decision support can be obtained through each agency's WFDSS POC.

Agency	Name	Number
USFS	Mark Nelson	970-295-6685
BLM CO/BLM WY	Gwenan Poirier	303-239-3689
NPS	Nate Williamson Cody Wienk	970-227-7708 402-661-1770
FWS	Rich Sterry	303-236-8124
FWS		605-352-5894 x116
BIA	Reeve Armstrong	303-921-2196
BIA	Rich Gustafson	970-749-3558

Additional contact information such as emails and cell phone numbers can be found in Chapter 70 of this mobilization guide.