

CHAPTER 60 PREDICTIVE SERVICES

Predictive Services is a decision support unit for federal, state, and local land management agencies for operational management of and strategic planning for wildland fire management 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.

7-Day Significant Fire Potential Outlook

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. Forecasts will include the forecaster's name or other agreed upon identifier to facilitate coordination.

All Geographic Area outlooks are available at:

<https://fsapps.nwcg.gov/psp/npsg/forecast#/outlooks?state=map>

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://fsapps.nwcg.gov/psp/npsg/forecast#/outlooks?state=map>

National Wildland Significant Fire Potential Outlook

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 the past month's weather and a national overview 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 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 mandatory. 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.

Fuel and Fire Behavior Advisories

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 ongoing 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 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.

Incident Status Summary (ICS-209)

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 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.

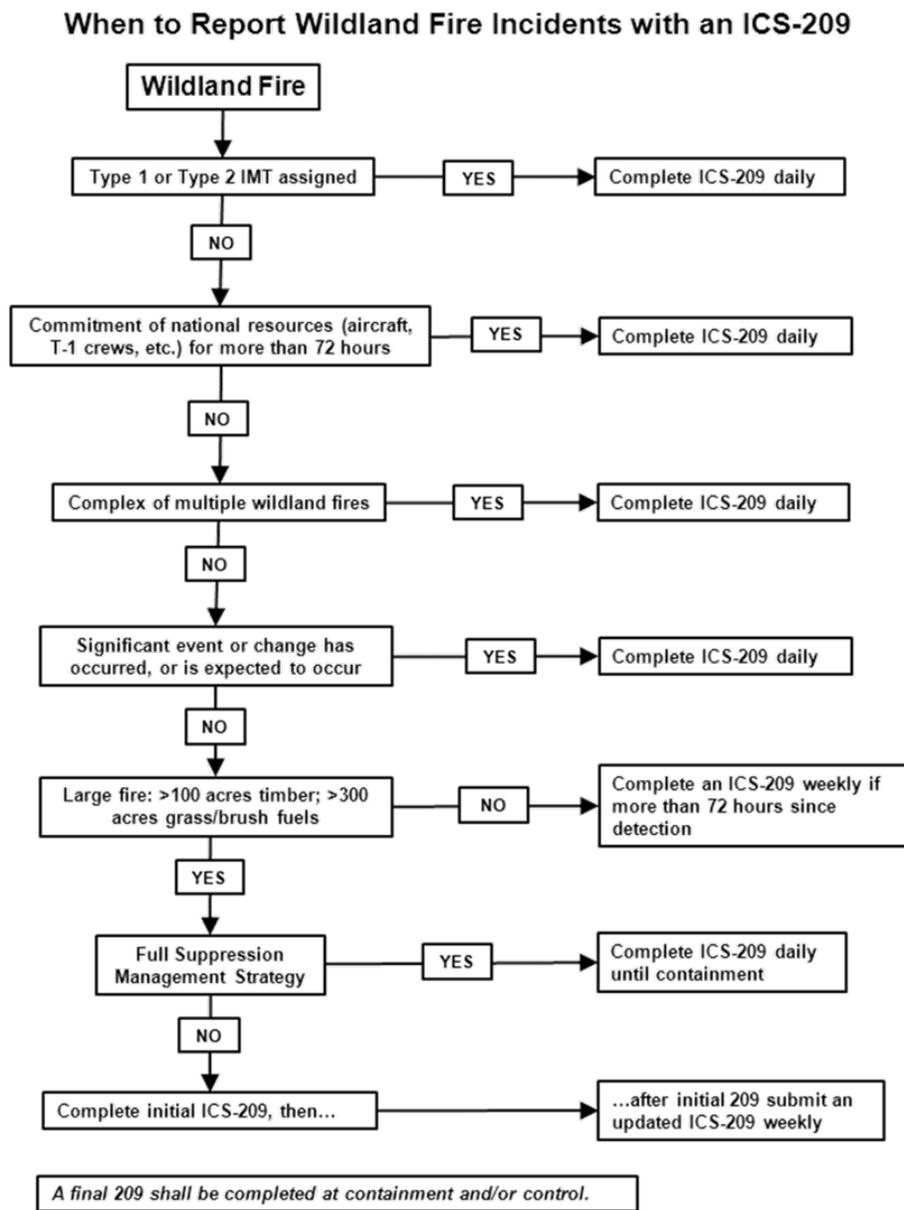
Specific instructions for entering ICS-209 information can be found in the SIT-209 User's Guide at: https://gacc.nifc.gov/predictive_services/intelligence/niop/programs/sit_209/Help/index.htm.

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 NICC 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>

Interagency Situation Report

- **Completed daily, except when the unit is not staffed.**

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 the SIT Report program 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 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

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.

The IMSR is prepared by the NICC Intelligence Coordination staff from information and data derived from the Situation Report and 209 Program. 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.