

CHAPTER 60 PREDICTIVE SERVICES

Predictive Services provides decision support services to field units, area coordinators, and national level managers by providing briefings, reports, mapping products, outlooks and analysis related to fire weather, fire potential, fuel conditions, fire behavior, fire situation, resource status and availability. For the National Predictive Services Handbook (revised 2016), Refer to NMG 60.

PRODUCTS

The primary Predictive Services products are issued through the fire season and periods when activity and/or burning conditions warrant and include the following:

- NW 7-Day Significant Fire Potential Forecast: plots observed and forecasted fuel dryness, and projected risk of new large fires or significant growth on existing large fires for the 12 Predictive Service Areas (PSAs) in the Northwest.
- Monthly and Seasonal Significant Fire Potential Outlook (posted last week of each month, more frequently if conditions warrant).
- Fire Behavior Outlook: narrative assessment of short and medium-term critical fuels and fire behavior conditions (issued as needed).
- NW Morning Brief: provides fire situation summary info on NW IA and existing large fire narratives (issued daily).
- The Situation Report provides detailed local area statistics of reported daily and YTD wildfire and RX activity (issued daily).

Users may access Predictive Service products via the NWCC web site: gacc.nifc.gov/nwcc

Predictive Services menu choices are found near the top of the left-hand bar:

- Intelligence
- Weather
- Fuels/Fire Danger
- Outlooks
- GIS
- Fire Analysis

The 7-Day Significant Fire Potential Forecast, Monthly and Seasonal Significant Fire Potential Outlook and Fire Behavior Outlook are located on the OUTLOOKS page. The Morning Brief and Situation Report are on the INTELLIGENCE page. The National Incident Management Situation Report (IMSR) can be accessed from the INTELLIGENCE page or by clicking the NATIONAL button on the header bar of the NWCC home page. The FIRE ANALYSIS page is intended to provide support for short-and long-term fire behavior analyses performed on incidents around the geographic area. Other information on fuel dryness, fire weather, and fire mapping resources can be found by following the appropriate links in the Predictive Services menu.

INTELLIGENCE

GENERAL REPORTING REQUIREMENTS

In order to provide valid information for decision support, determination of preparedness levels, and to support effective prioritization, allocation, and re-allocation of resources, it is the responsibility of each participating Federal Agency Unit to submit accurate and timely Situation (SIT) Reports and Incident Status Summaries (ICS-209) and promptly communicate to the NWCC Center Manager situations and concerns needing special consideration.

IRWIN

Integrated Reporting of Wildland-Fire Information (IRWIN) is a service facilitating data exchange between existing applications used to manage data related to wildland fire incidents. Initial implementation was May 2014. IRWIN goals are reducing redundant data entry, identifying authoritative data sources, and improving the consistency, accuracy, and availability of operational data.

For general information on the IRWIN project:

<http://www.forestsandrangelands.gov/WFIT/applications/IRWIN>

IRWIN requires awareness from the dispatch and fire communities of the basic principles of the **data exchange environment**. **Data elements** (i.e. incident name, coordinates, size, etc.) are shared between **participating systems**.

Certain systems are the **authoritative data source** (i.e. "have control") of a given data element. Changes to that data element may only be made in that particular system (i.e. WildCAD, ICS209) before updates cascade through to the other participating systems.

Participating systems (used in the NW) currently include:

- Read/Write
 - WildCAD, FireCode, ICS209, Wildland Fire Decision Support Systems (WFDSS)
- Read Only
 - ROSS, e-Isuite, GeoMAC, Enterprise Geospatial Portal (EGP), Remote Sensing Applications Center (RSAC)

Additional participating systems are scheduled to be incorporated in subsequent releases.

NEW 2016: For updated guidance materials (including definitions, data flows, FAQ's, and items new to IRWIN in 2016), see these online communities on the Wildland Fire Lessons Learned Center

<http://www.wildfirelessons.net/communities> (login required):

1. Data Exchange Environment User Guide
2. IRWIN Project

NEW 2016: IRWIN Observer

IRWIN Observer is a tool for viewing data that is "exchanged" via IRWIN. IRWIN Observer has proven very valuable for intelligence and trouble-shooting incident management data. Access to an account is highly recommended for each dispatch center (login is required).

To request IRWIN Observer access, start here: <https://irwin-console.doi.gov/apps/home/#/> select *register* for account access.

SIT-209 PROGRAM

The SIT-209 Program is an interagency incident reporting application that captures large wildland fire and all-hazard incident data from the Incident Status Summary (ICS-209) and fire activity reports from dispatch offices from the Interagency Situation Report (SIT Report). The SIT Report and the ICS-209 share certain incident information, summaries, and reports. The data reported into the SIT-209 Program is used to create the National Incident Management Situation Report (IMSR), NW Situation Reports, and the NW Morning Brief on a daily basis during the active fire season. Local GACCs, NIFC and Congress use the SIT-209 data to obtain incident and fire situation information. Archived SIT-209 data is used for year-to-date and historical reports.

To enter SIT-209 data and view reports, a National Fire and Aviation Management Web Applications (FAMWEB) login is required. To request an account, on the FAMWEB home page, select “FAMWEB Logon Request”, check “SIT-209 Access?”.

Users who already have a FAMWEB account for other programs (FIRESTAT, AMIS, etc.), but need SIT-209 access, or have a change of station, agency, etc. should contact their GACC Intelligence Section directly to request access. Reference: FAMWEB Logon Request Form. fam.nwcg.gov/fam-web/

SIT and 209 User’s Guides

Online SIT and 209 versions (**New 2016:** ICS-209 User’s Guide revised March 2016) available at:

- fam.nwcg.gov/fam-web/, left-hand menu “Sit-209” drop-down, or,
- http://gacc.nifc.gov/predictive_services/intelligence/niop/programs/sit_209/Help/index.htm

Print versions available at:

- <http://www.predictiveservices.nifc.gov/intelligence/intelligence.htm>

INCIDENT STATUS SUMMARY (ICS-209)

Submission of an ICS-209 provides specific incident information to local, regional and national levels on incidents that are, or may be, of significance. Continued reporting for the duration of significant activity is needed to provide updated information and to insure attention is given to reporting incidents. Finalized reports are used to define when the significance of incidents has been reduced and to capture a summary of the final incident data. Local, regional and national level decisions are based on information within ICS-209s. Portraying a timely and accurate picture of the incident is critical.

The ICS-209 is entered by the Area dispatch center or incident management team responsible for the incident. ICS-209s are submitted electronically via the FAMWEB page. Login required. Users gain access by clicking the “SIT-209” button in the left hand menu bar.

ICS-209 REPORTING REQUIREMENTS

- For the Northwest Geographic Area, ICS-209s will be electronically approved by 2100 hours (Pacific Time).
- Updated reports will cover the period from the last report to the end of the day shift on the reporting day (should be a 24 hour period for incidents reporting daily).

Criteria for when to report with an ICS-209 follows national guidelines. The flowchart for “When to Report Wildland Fire Incidents with an ICS-209” is available at:

<http://www.predictiveservices.nifc.gov/intelligence/intelligence.htm> under “Wildland Fire Reporting Guidelines for the ICS-209.”

New 2016: For guidance on **complexes**, see 2016 NMG Ch. 60, p 82.

Northwest Geographic Area reporting requirements are as follows for wildfire and all hazard incidents (these may be different than other Geographic Areas):

Initial reporting is required when:

- A Type 1 or 2 incident management is assigned or will be requested
- Fire is 100 acres or larger in timber (Class D) or 300 acres or larger in grass/brush (Class E)
- Fires will be complexed (regardless of incident size threshold above)
- Significant critical resources are or will be committed for more than 72 hours
- Significant events or change have occurred or are expected
- Containment will not be achieved within 72 hours from detection (regardless of incident size)
- NWCC requests ICS-209 reporting

Daily updates will continue when:

- A Type 1 or 2 incident management team is assigned
- Significant critical resources are assigned
- Significant events or change has occurred or is expected
- A full suppression strategy is selected AND the fire is 100 acres or larger in timber or 300 acres or larger in grass/brush AND the fire is less than 100% contained
- NWCC requests daily reporting

Weekly updates (submitted on Thursdays) may be allowed at the discretion of NWCC when:

- A full suppression fire achieves 100% containment (not yet controlled or out)
- Less than a significant number of critical resources are assigned
- Limited activity or change has occurred or is expected

Fires on a weekly update schedule should report more often if significant events or change have occurred or are expected.

Final updates will be submitted when:

- Fires have been controlled or are out
- Individual fires are being moved into a complex that is, or will be covered by, an ICS-209
- NWCC has concurred that ICS-209s can be finalized

Once 100% containment is achieved, updates will be submitted when significant activity occurs or is expected on the incident, until the fire is controlled or out.

All incidents with an initiated ICS-209 must be finalized when appropriate.

If a wildland fire meets the reporting requirements above, but is controlled/out within one operational period, a single "Final" ICS-209 can be submitted in lieu of an "Initial, then a Final."

NORTHWEST AREA INTERAGENCY SITUATION REPORT (SIT REPORT)

The Interagency Situation Report known as the SIT Report is a FAMWEB application entered by Area dispatch centers.

SIT Reports are submitted electronically via the FAMWEB page. Login required. Users gain access by clicking the “SIT-209” button in the left hand menu bar. User’s Guide link (previous pages).

SIT REPORTING REQUIREMENTS

- Reporting frequency is submitted daily during fire season – typically April through October - and weekly throughout the remainder of the year. NWCC will notify users of changes in reporting frequency as activity warrants (i.e. weekly to daily, daily to weekly).
- The reporting time is by 0100 hours (Pacific Time) on the following day. NICC retrieves reports from FAMWEB by 0100 hours (0200 MT).
- When daily reporting is in effect, the activity period is 0001 to 2400. If reporting weekly, year-to-date (YTD) acres may be solely updated (encompassing activity for the entire week).
- Reporting is required for all prescribed fire activity along the same schedule as wildfires.

SIT REPORT DATA ENTRY

The SIT Report includes these elements:

1. Daily Fire Statistics
2. Planned RX
3. Remarks
4. Year-to-Date Statistics
5. Incident Priority

Daily Fire Statistics is separated into two sections: “Protection” and “Ownership.” Units listed in the top portion of the tab have “Protection” responsibility for the fires/acres to be entered.

- a) Select the appropriate “Protection” unit in the top table, assigned “Ownership” units are then available as drop-down items in the lower table.
- b) Enter daily wildfire and RX activity in the lower “Ownership” table, dividing all fires/acres burned by cause (human/lightning) and by respective ownership of the land.

Note: Reports in Sit-209 can be run to view fire statistics either by protection or ownership. Make sure to properly assign ownership and protection for your area of responsibility.

- c) Enter fire danger level, preparedness level, and total number of uncontrolled A-B-C class-size fires for the submission period.

When data is “Saved” via the “Daily Stats” page, it automatically updates the “YTD Statistics” tab.

Sit Report Data Entry Notes:

- **A fire (i.e. an “ignition”) should only be counted once (based on ownership at origin and discovery date).** Since acres burned from an ignition may cross multiple ownership/protection boundaries or be reported in successive reporting periods, however, it should then be tallied in those cases as “0 fires, for XX acres” (XX being “growth since yesterday”, or “the portion burned on adjacent ownership/protection”) as appropriate.
- **Figures entered in the Daily Fire Statistics tab must only represent activity that occurred in the recent 24 hour period.** Any corrections or updates to reported activity that did not occur in the recent 24 hour period should be entered as adjustments in the YTD Statistics tab, NOT in the Daily Fire Statistics tab. Note reasons for any significant YTD adjustments in the *Remarks* tab.
- **Acreage from incidents reported on ICS-209s is not automatically included in the SIT Report program (in either Daily Fire Statistics or YTD Statistics).** It must be incorporated manually each day. Communicate with the assigned IC/IMT, and/or wait for completion of the ICS-209 to incorporate its daily acreage change.

Remarks. Briefly summarize any/all of the following, when applicable:

Significant new IA, extended attack or large fire events, significant ongoing operations (escalations, mobilizations, releases), changes in fire weather/potential, significant resource mobilizations/shortages

- Clarifications of statistics (i.e. distinguish between reported IA, extended attack and existing large fire activity, ignitions from lightning event/human activity, etc.)
- Corrections, notes on “catch-up” YTD statistics, etc.

GEOGRAPHIC DECISION SUPPORT CENTER

The Geographic Decision Support Center (GDSC) is activated when additional personnel are needed to provide technical analysis and support to the Geographic Area Resource Managers. The Pacific Northwest GDSC can be activated as necessary with consent of the NWCC Center Manager and is coordinated with the National Fire Decision Support Center (NFDSC)

The purpose of the GDSC is to provide high-level analysis for critical decision support in relatively short time frames. The GDSC with guidance from the NWCC Fire Analyst helps prioritize incidents, inform initial incident and IMT strategies, and support fire analysts assigned to specific incidents.