



Predictive Services Handbook

Updated 2009

Predictive Services Handbook – NWCG Signature Page

The Predictive Services Program provides information and decision support products to the wildland fire community according to the guidelines defined in this handbook. The development and implementation of this handbook has the full support and approval of the National Wildfire Coordinating Group (NWCG).



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10 Purpose

At the 2005 Annual Predictive Services Meeting, a recommendation was put forth to develop national guidelines for the Predictive Services program. This document is a result of that recommendation and it is designed to provide guidance and direction on the overall Predictive Services program at both the national and geographic levels. This handbook details:

- Program management and organization
- Roles and responsibilities
- Products and services
- Communication, training, and support requirements

This document is to be the standard by which the Predictive Services program operates.

10.1 Review and Update Process

The Predictive Services Handbook will be reviewed and updated annually. Any proposed changes will be submitted to the Meteorological and Intelligence Working Group Chairs two weeks before the annual Predictive Services meeting. Proposals will then be presented to all members of the Predictive Services program at the annual meeting for discussion and an acceptance or rejection decision. Decisions will be made according to the process outlined in the Predictive Services Handbook.

11 Background and History

Until recently, the wildland fire management community was recognized as being more reactive than proactive. Little large scale or long term logistical planning was done and fire management resources were often allocated as the need arose or became imminent. This approach was adequate as long as there were more than enough fire management resources to meet the demand. There was a distinct lack of integrated planning and decision tools that considered the interrelationship between weather, fuels, and incident resource requirements.

Through the 1990s, continued ad hoc attempts to blend weather, fuels and resource information into effective fire management planning were complicated by increasing hazardous fuel treatment targets, declining budgets, more complex and restrictive policies, and a restructuring of the National Weather Service (NWS) Fire Weather Program. The need for integrated planning and decision tools for fire management increased further as All Hazard Response incidents increased in number and began to compete for the available resources. The complicating factors multiplied and the consequences of under informed decisions became more far reaching. In recognition of this need, the concept of Predictive Services emerged in the late 1990's from discussions between staff at the Geographic Area Coordination Centers (GACCs). Initially, the Intelligence Coordinators at the GACCs produced monthly and seasonal outlooks which blended long-term weather outlooks with fuels and fire danger information. In the California GACCs, US Forest Service and NWS fire meteorologists worked collaboratively and interfaced with the Intelligence Coordinators and the remainder of the GACC staff. In 1999, the Northwest Coordination Center hired a fire meteorologist to bring interdisciplinary expertise to their emerging Predictive Services program. This approach of teaming fire meteorologists with GACC Intelligence Coordinators would later become the primary model for the National Predictive Services Program.

The severity and extent of the 2000 fire season further revealed the need for a more holistic approach to managing wildland fires, as national fire management resources were overwhelmed by a destructive season that raised public and political awareness at the national level. In the post analysis, it became apparent that there was no lack of information pertinent to the fire environment (weather, fuels, resources), but that no centers of expertise existed to integrate this information into effective planning and decision support tools. The update of the National Fire Plan following the 2000 season provided funding for 20 fire meteorologists to join with the existing Intelligence staff at the GACCs and the National Interagency Coordination Center (NICC), to form the National Predictive Services Program. Later, a Wildland Fire Analyst position was added to the Predictive Services staff at NICC and at some other GACCs. The intent was for Predictive Services units to act as centers of expertise to produce integrated planning and decision support tools that would enable more proactive, safe and cost-effective fire management.

12 Predictive Services Vision

Wildland fire management emphasizes safety, cost containment, efficiency, and ecosystem health through the proactive use of Predictive Services decision support products.

13 Predictive Services Mission

The Predictive Services program supports the wildland fire community and others with information and decision support products.

14 Predictive Services' Goals

Relevant decision support tools are available to support user needs.

The timeliness and effectiveness of fire management decisions are increased through the use of Predictive Services.

Predictive Services actively partners with cooperating agencies, internal programs, academia, research, and the private sector.

Organization, structure, staffing, technology, and resources are in place to ensure the success of the Predictive Services program.

15 Predictive Services Program Guiding Principles

SAFETY - We promote the protection of the health and safety of employees and the lives, property, and natural resources of the all the people in the United States.

COOPERATION – We define our business practices by listening to our cooperators. We address our needs and the needs of others through collaboration.

ADAPTIVE LEADERSHIP – We value initiative and flexibility in leadership throughout all levels of our organization. We target our efforts toward the work that matters most.

INNOVATION – We respond to the changing needs locally and nationally. We share information with each other and with our cooperators. We seek out, introduce, and evaluate new practices; both our successes and failures contribute to our professional expertise.

EMPOWERMENT – We support empowering individuals to achieve program goals.

INTEGRITY – We promote informed and credible decisions. We champion and strive to improve quality data, appropriate analysis, and well-supported decision making.

EFFICIENCY – We strive to use science-based and appropriate methods to accomplish our goals. We support validation of our products and the use of standard practices to streamline operations.

PRIDE IN SERVICE – We take pride in our mission, our program and the unique skills of each individual.

20 National Program Organization and Management

20.1 Program Organization

The Predictive Services Program is national in scope and serves the needs of local, tribal, geographic area, and national users.

User communities range from national agency administrators to regional fire managers to firefighters on the ground. Periodic user assessments, workshops and focus groups will help improve the understanding of user needs.

The National Predictive Services Program encompasses Meteorologists and Intelligence Coordinators at each GACC and NICC. Included in this program is the NICC Wildland Fire Analyst, other GACC Fire Analysts, and any Fire Behavior or Long-Term Analysts detailed to GACCs during the fire season. Personnel in these positions come from the different Federal and/or State Land Management Agencies.

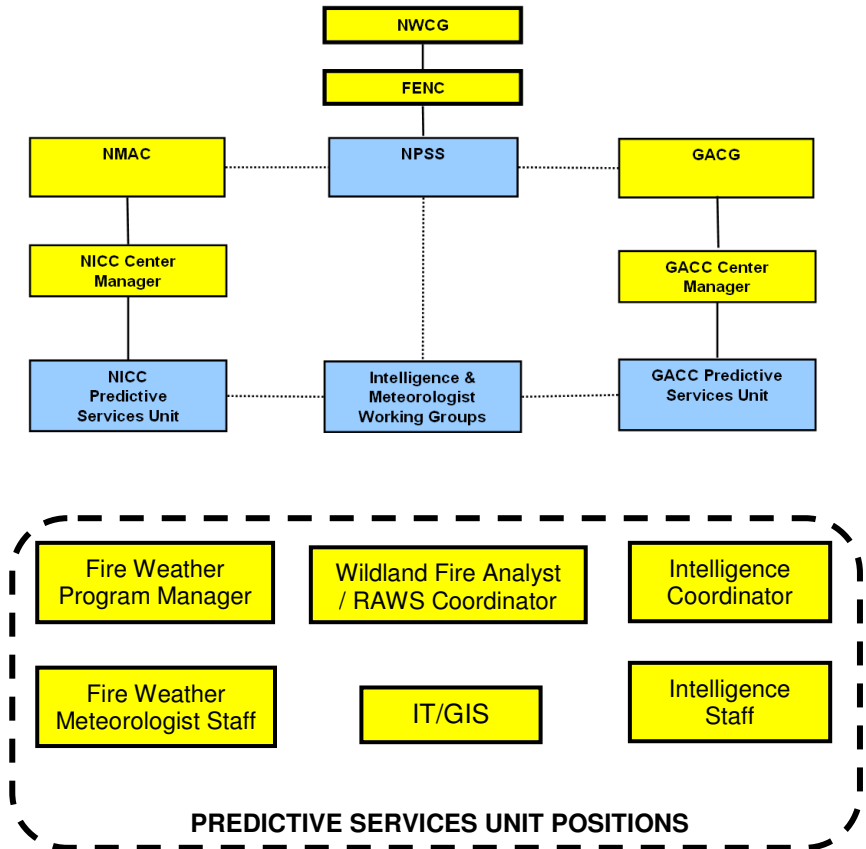
20.2 Program Management and Coordination

A National Predictive Services Group (NPSG) was formed and originally chartered under the Geographic Area and National Interagency Coordination Center Managers in 2002 to provide the Predictive Services program with oversight, leadership, and direction. To ensure strong national leadership and advocacy for the Predictive Services Program, the National Fire and Aviation Executive Board (NFAEB) agreed to re-charter NPSG in the fall of 2005. After NFAEB and NWCG were combined during the NWCG restructuring process, NPSG was again re-chartered in 2009 and renamed as the National Predictive Services Subcommittee (NPSS). The NPSS Charter is found in Appendix A.

National Predictive Services program direction will flow from NWCG and the Fire Environment Committee through NPSS to the National and Geographic Area Coordinating Groups, Center Managers, Intelligence and Meteorological Working Groups, and in turn, to the respective Predictive Services staff at each of the Coordination Centers. Information flow will be two-way, which means information requests and program concerns can be submitted from the field upwards to the NWCG if needed.

The GACC Center Managers will provide daily supervision of their respective Predictive Services program, including developing GACC specific operational plans. These plans will encompass the daily activities of the GACC Predictive Services program, including supervision, the flow of information within the GACC and geographic area, and the products produced for intra-geographic area and national purposes.

The National Predictive Services Organizational Chart is shown below. **Each individual GACC may have a separate organizational chart that details the organization and any supervisory roles.**



30 Roles and Responsibilities

The role of the Predictive Services Program is to provide a focal point for gathering, analyzing, producing and disseminating situation, meteorological, fuels, fire danger, fire potential, and resource status products. Predictive Services is a decision support organization, providing products and services to wildland fire decision makers in order for those decision-makers to place resources where they are most needed.

More specifically, Predictive Services is designed to enhance proactive wildland fire management that emphasizes safety, cost containment, efficiency and ecosystem health by successfully anticipating critical fire events through the integration of climate, weather, fuels, fire danger, situation and resource status information. Additionally, Predictive Services will advance the state of science through collaborations with cooperating agencies, academic and research partners and the private sector.

30.1 National Wildfire Coordinating Group (NWCG)

The National Wildfire Coordinating Group (NWCG) was formed in January 1974, to expand operational cooperation and coordination between various public agencies having jurisdictional responsibility for wildland fire management.

In 2007, NWCG was re-chartered, expanding its responsibility and adding new partners. The NPSS was chartered as one of a number of subcommittees established to provide stewardship for specific business segment areas in fire management.

30.2 Fire Environment Committee

The Fire Environment Committee (FENC) was established to provide interagency oversight, strategic direction, and vision related to measuring and predicting the wildland fire environment. The FENC is the parent committee under which the NPSS operates, requests annual budgets, and responds to NWCG taskings. The chair of NPSS is a member of the FENC committee.

30.3 National Predictive Services Subcommittee (NPSS)

The NPSS is chartered and operates under the direction of the FENC. NPSS is composed of members representing specialized groups and administrative personnel consisting of ten members plus two advisors (NWCG liaison and NICC Manager).

The NPSS is chartered to provide a forum for the discussion, coordination, and resolution of Predictive Services issues at the national level. It was established to help identify user requirements and develop opportunities for improving current processes for gathering, using, and disseminating climate, weather, fuels, situation, and resource status information, as well as advance intelligence and predictive capability for safe, efficient resource prioritization and utilization.

NPSS also strives to standardize products where possible, and develop action items as needed. More specifically, the NPSS is responsible for:

- A. Linking key users of Predictive Services products and the research community.
- B. Being an interagency partner in managing, developing, addressing, and making recommendations for Predictive Services products and services.
- C. Serving as advocate for initiatives coming forward from the field.
- D. Providing coordinated program-wide leadership on issues such as research, information flow and access, product guidelines and standardization, problem identification, and issue resolution.
- E. Developing a framework for using climate, weather, situation, resource status, and fuels information to provide decision support tools.

30.4 Geographic Area Coordinating Groups (GACG)

The GACGs are comprised of Geographic Area (State and/or Region) lead administrators or fire managers from agencies that have jurisdictional or support responsibilities, or that may be significantly impacted by resource commitments. During elevated fire potential or activity, GACGs function as Geographic Area Multi-Agency Coordinating (GMAC) Groups. GMAC responsibilities include

- Establishing incident priorities for the geographic area
- Acquiring, allocating, and reallocating resources
- Issuing coordinated and collective situation status reports

GACGs are responsible to provide advice and recommendations on products, services, or capabilities to NPSS and to Geographic Area Coordination Center Managers. To facilitate this, one of the members on NPSS has been reserved for a GACG representative.

30.5 GACC Center Managers

There are 11 GACCs, each of which serves a specific geographic portion of the United States. Each GACC interacts with local dispatch centers as well as with NICC and neighboring GACCs. The principle mission of each GACC is to provide the cost-effective and timely coordination of emergency response for all incidents within their specified area. GACCs are also responsible for determining needs, coordinating priorities, and facilitating the mobilization of resources from their areas to other geographic areas.

The role of the GACC Center Manager is to serve as the point of contact between the GACG and to provide management, oversight, and daily supervision of the entire GACC, including the Predictive Services staff. The GACC Center Managers meet twice a year to discuss and resolve issues. They are responsible for providing feedback, advice, and recommendations on products, services or capabilities within the Predictive Services program. In order to facilitate this, they are represented on the NPSS with both a member and NICC manager advisor.

30.6 NICC and GACC Predictive Services Units

The NPSS has defined the Predictive Services Unit mission as “support [to] the wildland fire community and others with information and decision-support products.”

With this in mind, it is the role of the National and GACC Predictive Services Unit to provide timely products and services to meet the needs of their local, tribal, geographic and national users.

The Predictive Services Unit responsibilities include:

- A. Management of the NICC and GACC Predictive Services units.
 1. Units shall be organized and staffed to prepare and distribute briefings, products, tools, instructional memorandums, and information bulletins in order to meet the Predictive Service mission.
 - a. Schedules, detailers, and other staffing needs will be identified so that each unit is capable of staffing seven days per week (as needed) during their active fire season.
- B. Collaboratively working together in a team concept to produce products and services essential to the wildland fire community.
- C. Ensuring that the proper fire, fuels and weather data are collected, analyzed, and forecasts passed on to firefighting personnel.
- D. Collection, analysis and dissemination of incident-specific and decision support information.
 1. Predictive Services is the gateway to ensuring accuracy and efficiency in the information flow process.
 2. Information is passed to units, zones, areas, Multi-Agency Coordinating (MAC) Groups, NICC, and independent agencies, as well as unspecified non-government agencies that may require incident information on an infrequent basis.
 3. Information that may be useful to the fire community must flow efficiently to the individuals who will utilize the information required.
 4. Coordination with zones, areas, units and dispatch offices to collect daily information.
 - a. Resources committed and available
 - b. Situation assessment
 - c. Incident critical needs
 - d. Maintain accurate accounts of current incident size and complexity
 5. Analyze and forecast fire danger, weather and resource capabilities to determine current and forecasted estimates of wildland fire potential.
 - a. Under the direction of NPSS, the NICC Predictive Services Unit will implement a quality assurance program to ensure NICC and GACC products meet the standards set forth in Appendix A. Periodic reports will be forwarded to NICC and GACC Center Managers.

6. Institute and maintain a system to status and analyze resources, make predictions regarding possible needs, and suggest incident priorities as needed.
 7. Compute daily preparedness levels and recommend appropriate responses to the Center Manager.
 8. Establish and maintain area-wide incident history data for all agencies.
 9. Prepare and conduct written and verbal intelligence briefings for agency administrators, fire managers, MAC groups, political representatives, special briefings for the media, VIPs.
 10. Provide a daily written brief for area-wide distribution to agencies detailing current fire activity.
 11. Provide reports and briefings as necessary.
- E. Providing Agency Fire Managers with products to aid in their decision-making process.
- F. Monitoring new technology to provide better and more accurate information to fire managers. It is the responsibility of the Predictive Services unit to ensure the best representation of valid information.
- G. Using Geographic Information Systems (GIS) capabilities to produce up-to-date mapping products, or aerial photos from infrared flights.
- H. Utilizing weather products and information from the National Weather Service and the states as needed.
- I. Providing the Public Affairs office with the most current information available for dissemination to the media and the general public.
- J. Utilizing Computer Application Programs such as:
1. National Sit Report Program
 2. National 209 Program
 3. Weather Information Management System –WIMS
 4. FireFamily Plus
 5. National Fire Danger Rating System – NFDRS
 6. Canadian Forest Fire Danger Rating System
 7. BehavePlus
 8. FARSITE
 9. CHEETAH
 10. RERAP
 11. ROMAN
 12. WFDSS
 13. Specific Area/ District Programs
 14. FX-Net
 15. ROSS
 16. ACCESS
 17. DDS for Query Building
 18. Miscellaneous Weather Programs
- K. Responding to inquiries and resolving Intelligence and Meteorological related problems as they arise.
- L. Supervision of assigned personnel.
1. Detailers
 2. Fire Behavior Analyst (GACC)
- M. Training field personnel.
1. Training will be provided to the degree that it does not interfere with regular Predictive Services operations, development and research.

30.7 Predictive Services Intelligence Coordinators

Predictive Services Intelligence Coordinators, both at the NICC and GACC level, collect, collate, analyze, produce, prioritize, and disseminate specific situation and resource information. Duties and responsibilities for Predictive Services Intelligence Coordinators may vary among the 11 Geographic Areas and at NICC.

Specific responsibilities of Intelligence Coordinators include:

- A. Coordination with zones, areas, units and dispatch offices to collect daily information on:
 - 1. Resources committed and available
 - 2. Situation assessment
 - a. Numbers, sizes, and locations of incidents
 - b. Threats to natural resources, improvements, infrastructure and communities/structures
 - c. Incident critical needs
 - 3. Wildland fire potential
 - 4. Maintain accurate accounts of current incident size and complexity.
- B. Analysis and interpretation fire danger indices and current and forecasted weather patterns, as well as historical fire occurrence levels in order to develop estimates of wildland fire potential.
- C. Working closely with dispatchers and fire management officers to track and monitor the commitment and availability of resources, including maintaining and instituting a system to status and analyze resources, make predictions regarding possible needs, and suggest incident priorities as needed.
- D. Computing daily preparedness levels and recommending appropriate responses to the Center Manager.
- E. Establishing and maintaining area-wide incident history data for all agencies.
- F. Preparing and conducting written and verbal intelligence briefings for agency administrators, Fire Management Officers, MAC groups, political representatives, special briefings for the media, VIPs, and others, as necessary.
- G. Providing a daily written brief for area-wide distribution to agencies detailing current fire activity.
- H. Working with Predictive Services Meteorologists and Wildland Fire Analysts (FBAN or LTAN) on collaborative products produced for the area or for NICC Predictive Services.
- I. Providing user training and oversight for the ICS-209 and Situation Reporting Programs to ensure that information is submitted in a timely, accurate manner.

30.8 Predictive Services Meteorologists

Predictive Services Meteorologists collect, analyze, predict and disseminate specific data and information on weather and its impact on fuels and fire potential. Duties and responsibilities for Predictive Services Meteorologists vary among the 11 Geographic Areas and at NICC.

Specific responsibilities of Predictive Services Meteorologists include:

- A. Evaluating the impact of current and predicted weather on fuel dryness and condition.
- B. Analyzing and evaluating weather and climate patterns to predict critical fire events and determining significant fire potential including:
 - 1. Location
 - 2. Time frame of occurrence
 - 3. Severity / impacts
- C. Identifying and forecasting weather events that initiate fires or significantly impact the behavior of existing fires.
- D. Implementing wildland fire management decision support tools to assist with:
 - 1. Safety of public and firefighting personnel and equipment
 - 2. Safety of public and private property
 - 3. Mobilization of firefighting resources
 - 4. Protection of natural resources
- E. Research and development
 - 1. Advancing state of the science through research of fire weather and fire potential.
 - 2. Development of new tools and methodologies to predict wildland fire and its impacts.
 - 3. Contribute to firefighting knowledge base.
- F. Technology and data transfer
 - 1. Improve methods for dissemination of critical weather, fuels and fire information.
 - 2. Improve data quality.
- G. Education
 - 1. Facilitate the instruction of firefighting personnel and the general public.

30.9 NICC Wildland Fire Analyst

The role of the NICC Wildland Fire Analyst is to provide analysis of weather, climate, vegetation, fuels, fire danger and/or fire behavior conditions in order to identify potential safety concerns, problem areas, and opportunities for allocating or repositioning resources, and to develop reports for the NICC Center Manager, National Multi-Agency Coordination Group (NMAC) members, and other entities as requested. This position can also provide assistance to GACCs with fire danger/behavior skills prior to, or during, increased fire activity to help develop short- and long-term outlook products.

30.10 National Fire Danger Rating (NFDRS) Specialist (when working under Predictive Services)

1. WIMS Station catalog review and advice
2. Fuel Model Managing advice
3. Provide technical assistance to Units
4. Coordinate problems/questions
5. Boise Help Desk contact
6. Assist Intel - WIMS, FireFamily Plus
7. Assist GACC Meteorologists and Intelligence personnel to establish quality control monitoring of WIMS inputs.
8. Make recommendations to NPSS or Agency Fire Directors for actions needed to resolve issues with the Remote Automated Weather Stations (RAWS).
9. Special request sessions on forests to deal with Fire Danger and WIMS issues
10. Program Reviews

30.11 GACC Wildland Fire Analysis/RAWS Coordinators who work under Predictive Services.

The role of the GACC Wildland Fire Analyst/RAWS Coordinator is to provide analysis of weather, climate, vegetation, fuels, fire danger and/or fire behavior conditions in order to identify potential safety concerns, problem areas, and opportunities for allocating or repositioning resources, and to develop reports for Center Managers and Geographic Area MAC groups. They provide assistance to GACCs with fire danger/behavior skills prior to, or during, increased fire activity to help develop short- and long-term outlook products. In addition, they are responsible to:

- A. Assure that the Automated Sorting, Conversion and Distribution System (ASCADS) database for the region is complete and current.
- B. Process requests for IDs and transmit times for new RAWS stations and/or moved stations.
- C. Monitor the network to make sure that the assigned transmit times meet the needs of the users. Coordinate with National RAWS Coordinator to obtain better times as necessary.
- D. Notify the National RAWS Coordinator when new stations are purchased, or old stations are taken down or moved.
- E. Assure that maintenance information is tracked in ASCADS for each station.
- F. Prepare the Regional Annual Operating Plan (AOP) for the RAWS weather station network. This needs to be done by the reply due date established in annual letter requesting the AOP (usually September of each year).
- G. Facilitate information sharing throughout the Region on new technology, changes in procedures, overall network design and operation.
- H. Represent Region at weather/RAWS meetings (FS and interagency).
- I. Call upon the National RAWS Coordinator, manufacturer's representatives, and/or the BLM RAWS Depot for the latest technology information.
- J. Recognize maintenance deficiencies and take steps to correct problems. Those steps can include, but are not limited to:
 1. Monitor RAWS Watchdog and notify forests when problems have not been responded to in a timely manner.
 2. Monitor the quality of data coming out of the RAWS network through WIMS.

3. Work one-on-one with the local units to train and assure proper maintenance methods are understood and followed.
 4. Assist Forests with station maintenance needs
 5. Special request sessions on forests to deal with RAWS and WIMS issues.
 6. Share training opportunity information that becomes available.
- K. Establish quality control monitoring of WIMS inputs in cooperation with GACC meteorologists and intelligence personnel.
- L. Make recommendations to regional fire managers for actions needed to resolve issues with the RAWS program.
- M. Contact the National RAWS Coordinator, manufacturer representatives, or the BLM RAWS Depot for support as necessary.

40 Products and Services

Predictive Services provides national and geographic area specific products designed to meet local, regional and national interagency needs. National products are standardized to ensure consistency and comprehension by all users.

Geographic area products vary widely across the country and are designed to meet the specific, and sometimes unique, needs of the GACC and local users. All products provided by meteorologists, intelligence staff, and wildland fire analysts are considered Predictive Services products.

40.1 National Predictive Services Products

The NICC produces a number of national products for dissemination to decision makers throughout the country. Their target group is wide and varied to include National Fire Directors, Congressional staffs, other Federal, State, and local partners. NICC products and services are produced as a collaborative effort between the meteorologists, wildland fire analysts, and intelligence staff in coordination with geographic area Predictive Service units at: <http://www.predictiveservices.nifc.gov/outlooks/outlooks.htm>

A. Incident Management Situation Report (IMSR)

Issued daily: At 0530 MT at National PL 2 – PL 5 and as activity warrants (0800 on weekends and holidays).

Issued weekly: At 1000 MT on Fridays, at National PL 1, unless incident or resource activity levels warrant daily reporting.

The Incident Management Situation Report provides a synopsis of significant incidents nationally. The IMSR provides key incident information to many agencies and offices within government, as well as many groups and entities outside of government with an interest in wildland fire activity. The IMSR includes large fire activity, Predictive Services Discussion, Six Minutes for Safety topic, fire statistics and resource commitments in a synopsis format. The Report is prepared by NICC Intelligence staff from information and data derived from Interagency Situation Reports and ICS-209 reports submitted through the National Fire and Aviation Management Web Applications (FAMWEB) reporting system.

The criteria for including large wildfires and other incidents in the IMSR are described in the National Interagency Mobilization Guide, Chapter 20.

The IMSR contains a national “Predictive Services Discussion” section written by the NICC Predictive Services Unit. This discussion focuses on significant weather and fire potential over the next few days.

B. National Wildland Significant Fire Potential Outlook

The National Wildland Significant Fire Potential Outlook is prepared and distributed by NICC on the first business day of each month. This report consists of a national monthly map (delineating areas of below-normal, normal, and above-normal significant fire potential), as well as a seasonal map covering months 2-4. The seasonal map is a trend forecast from the monthly map (delineating areas of persisting, increasing to, or decreasing from above normal significant fire potential). A brief synopsis of the current and predicted national situation is included in the report. National Wildland Significant Fire Potential Outlooks will utilize information from individual GACC Predictive Services units, as well as other sources of climate, weather, and fire danger data. This product is updated and produced each month of the year as a collaborative effort by the NICC Predictive Service unit.

Monthly conference calls are hosted by NICC with various climate and fuels partners, and GACC meteorologists on the fourth Wednesday of the month to discuss factors that may influence fire potential for the following month and season. Another conference call is held approximately two business days before the end of the month to coordinate the national outlook maps among the various Predictive Services units. All GACC Predictive Service units are strongly encouraged to provide written input to the National Wildland Significant Fire Potential Outlooks.

Seasonal Assessment Workshops are held annually to provide a coordinated in-depth analysis of climate and fuels factors among Predictive Services and various partners. Workshop reports are generated annually summarizing the findings of the workshops.

C. Fuels and Fire Behavior Advisories National Map

NICC will post a national map to display areas with current Fuels and Fire Behavior Advisories, including links to advisory messages posted by the GACCs.

Once a situation elevates to become a national concern (multiple Geographic Areas involved, likelihood of resources from around the country being engaged, or elevated safety concerns), the Predictive Services staff at NICC will coordinate with Safety and Health Working Team (SHWT) representatives to issue a “Safety Advisory” through the SHWT Safety Alert Program.

D. Other national products and services include:

1. Briefings
2. Requested reports and summaries
3. Program management
4. Verification and quality assurance
5. Web site, database, and systems management
6. Training
7. Participation on national teams
8. Product development, support and implementation

40.2 GACC Predictive Services Products

The GACC Predictive Services units are responsible for producing and posting the following products outlined below on their respective web pages. They also need to prepare and submit data and reports to NICC regarding current and projected information on wildland fire, weather, fuels, fire danger, and resource status. This information is used by NICC to prepare and distribute national reports, outlooks and other products.

Other Geographic Area products vary widely across the country and are designed to meet the specific, and sometimes unique, needs of the GACC, Multi-Agency Coordination Groups and local users. The following link can be used to view GACC web pages and individual products: <http://gacc.nifc.gov/>

A. GACC 7-Day Significant Fire Potential

1. The 7-Day Significant Fire Potential product shall be produced under the direction of a qualified fire weather meteorologist.
2. The 7-Day Significant Fire Potential product contains projected fire weather, fuel dryness, fire danger, fire potential and resource status information. See Appendix B for sample.
3. Posted daily, by 1000 Local Time, to the GACC web site. Product posting will begin at least one month before and extend to one month after each Geographic Area’s primary fire season** or at anytime during the year when at Preparedness Level is 2 or higher (not including support-only periods). Product may be posted only during the regular work week outside of the primary fire season due to limited staffing capability.
4. Data from this product is also to be posted to the Predictive Services FTP website (ftp://ftp.nifc.gov/Predictive_Services/Fire_Potential/RSAC_7-Day/) by 11:30 MST and is used to generate a 7-Day Significant Fire Potential national map on the Predictive Services Geospatial Portal web site.

** Primary fire season defined as period when GACC is staffed 7 days per week to support within-area wildfire incidents.

B. GACC Monthly and Seasonal Wildland Significant Fire Potential Outlooks

GACC monthly and seasonal outlooks are optional, but strongly encouraged as they provide greater depth of detail than the national outlook issued by NICC. GACC monthly or seasonal outlook products will adhere to the following protocols:

- a. GACC and NICC outlooks are required to align
- b. GACC websites are required to link to either Geographic Area or national outlooks
- c. GACCs are strongly encouraged to provide draft forecast maps as well as narrative highlights of monthly and seasonal significant fire potential on a monthly basis to NICC.
- d. GACC monthly and seasonal outlooks will be issued and posted to their websites on the first business day of each month. The monthly maps will delineate areas of below-normal, normal, and above-normal significant fire potential. Seasonal map covering months 2-4 will trend off the monthly

map and delineate areas of persisting, increasing to, or decreasing from above normal significant fire potential. A discussion of fuel conditions, climate outlooks and other pertinent information will be included in the outlooks.

C. Fuel and Fire Behavior Advisories

Predictive Services and Coordination staff at all levels should be involved with the issuance of any fuels/fire behavior advisories covering a large percentage of their Geographic Area(s) so they can carefully consider both the content and intended audience of the messages.

When a situation arises that warrants an advisory message:

1. Determine area of extent
 - a. If local area only (single agency unit or county) – Local area should issue advisory or safety message (Use of Standard Template strongly recommended). No other GACC action needed.
 - b. If geographic in scope (multiple units, counties, or significant portion of geographic area):
 - i. Involve and coordinate with Predictive Services unit staff to get their input/feedback
 - ii. Discuss message on 09:30 Coordinators call to determine if other GACCs are facing same issue
 - iii. Review & tailor message for content, accuracy, suitability and distribution (Predictive Services staffs at Geographic and/or National levels, as appropriate, will coordinate to ensure message is appropriate for entire area of concern)
2. Post advisory according to protocols listed below.

Posting Protocols

1. Use Standard Template (available from NICC)
2. Post Fuels/Fire Behavior Advisories on the Fuels/Fire Danger Web page
3. Once advisories are finalized, send a copy and the URL link to NICC. Include detailed description of area affected
4. NICC will post to a national map and archive messages
5. It is recommended that URLs and email messages posted or sent out by the GACCs informing users about the advisory contain a link to the NICC Fuels/Fire Behavior web page and national map (this will inform users about other fuels/fire behavior advisories that are posted across the country)
 - a. GACC web pages may include “thumbnails” of national map
6. GACCs will determine when the advisory message is no longer valid and contact NICC to remove the advisory link off the webpage and map

D. Other GACC Products and Services

1. GACC Predictive Services units produce and provide a wide variety of weather/intelligence briefings, situation reports, resource summaries, data calls and other ad hoc reports. These products and services are tailored to meet user needs and serve local, regional or national users.

40.3 Incident Status and Other Upward Reported Information

A. Incident Status Summary (ICS-209)

The Incident Status Summary (ICS-209) is the primary method used to report large wildfire events and other significant incidents on lands under federal protection or federal ownership. States and other federal cooperators may also report incidents using FAMWEB. The ICS-209 form (or simply the 209) details specific incident information on a daily basis (reporting requirements may vary depending on the type and nature of the incident), and is submitted via the Fire and Aviation Management Web (FAMWEB) application known as the 209 Program. The ICS-209 is a key source for incident information beyond the local unit, and provides valuable information at the geographic and national levels.

The federal agency that has primary protection responsibility for the incident is responsible for completing the ICS-209. If the protecting agency is non-federal and chooses not to meet federal reporting standards, then the federal agency which has administrative jurisdiction shall submit the ICS-209. GACCs should ensure that

incidents and dispatch centers submit complete and accurate ICS-209 reports into the FAMWEB system by the specified time.

For national reporting purposes (agency, geographic area and local requirements may vary) an ICS-209 shall be submitted according to the following guidelines:

1. Wildfires 100 acres or larger where the primary fuel type is timber, 300 acres where the primary fuel type is grass or brush, or when a Type 1 or 2 Incident Management Team (IMT) is assigned. An ICS-209 should be submitted daily until the incident is contained, unless special circumstances allow otherwise.
2. Non-fire events where a significant commitment of wildland resources has occurred, or when a Type 1 or Type 2 IMT has been assigned.
3. Incidents within complexes should be combined and reported on one ICS-209 as defined in the National Interagency Mobilization Guide.

Specific instructions for completing the ICS-209 form and using the 209 Program are located in the User's Guide at <http://www.fs.fed.us/fire/planning/nist/sit.htm>. The 209 Program is located at <http://famweb.nwccg.gov/>. See Appendix B for a sample 209 form.

B. Interagency Situation Report

The Interagency Situation Report is a FAMWEB application known as the Sit Report Program. Dispatch centers are required to submit Situation Reports daily from May through October regardless of the level of fire activity. Situation Reports shall be submitted weekly from November through April whenever there is wildfire activity (including prescribed fires), an increase in wildland fire resource commitments, or whenever a unit's fire danger is very high or extreme. Reporting is required for all prescribed fire activity year-round according to the schedule listed above. The reporting period for the Situation Report is 0001 to 2400. GACCs shall ensure that all of their dispatch centers have submitted complete and accurate Situation Reports as outlined in each GACC Mobilization Guide. The NICC will retrieve Situation Reports from FAMWEB by 0200 MDT.

The Sit Report Program shares incident information with the 209 Program for certain summaries and reports. Specific reporting requirements and program instructions are located in the Sit Report User's Guide located at: <http://www.fs.fed.us/fire/planning/nist/sit.htm>.

40.4 Continuity of Operation Plan (COOP)

The GACCs and NICC will develop and maintain Predictive Service backup plans for transferring or assuming operational responsibility during failures, emergencies or staffing shortages. Backup plans will become part of NICC and GACC Continuity of Operations Plans (COOP).

50 Coordination and Communication

Coordination and communication are integral parts of Predictive Services. Coordinating details concerning data gathering, analysis and final product ensures smooth transitions between GACCs and provides a consistent message to the users of Predictive Services products. Proper transfer of information to a multitude of users through established communication methods is necessary to ensure programmatic goals are met. These are not mutually exclusive terms. Failure in one area will result in less than satisfactory results in the other. Therefore, it is appropriate to refer to the pair as a single process for clarity.

There are three kinds of coordination and communication: lateral (horizontal) and vertical within the organization, and external.

50.1 Lateral - coordination and communication at the same organizational level.

- A. Within GACC
- B. Between GACCs.
 - 1. Monthly Intel and Meteorologists conference calls
 - a. Mets: 1200 MT, 2nd Wednesday of each month
 - b. Intel: 1200 MT, 2nd Thursday of each month
 - 2. Coordination call for monthly outlook product: On or about the 20th of each month, time TBA
 - 3. Daily meteorologist coordination call with NICC (fire season only): 1300 MT or as announced

50.2 Vertical - coordination and communications with different organizational levels.

- A. Between GACCs and lower organizational levels.
 - 1. Dispatch Centers
 - 2. District Offices, Forest Units, Parks, Monuments, etc.
 - 3. Firefighting units (i.e., incident teams, crews, etc.)
- B. Between GACCs and higher organizational levels.
 - 1. State Offices, Regional Offices
 - 2. National Office/Washington Office
 - 3. Agency Directors
 - 4. Cabinet members or Congressional members
- C. Between GACCs and NICC
 - 1. Primary communication is through NPSS via Intel and Met Working Group Chairs
 - 2. Secondary communication is through NPSS via Center Managers and Coordinating/MAC Groups

50.3 External – coordination and communications with parties outside the organizational structure.

- A. State and local governments
- B. Special interest groups (i.e., environmental groups, community groups, etc.)
- C. News media
- D. Other federal agencies (i.e., National Weather Service, Federal Emergency Management Administration, military, etc.)

50.4 Means of coordination and communication

- A. Phone
- B. Email
- C. Meetings, conference calls, workshops, etc.
- D. Products

50.5 Conflict Resolution

Should a conflict arise between the Predictive Services units (NICC or GACCs) or between them and the NPSS that cannot be resolved directly, the chair for the appropriate NPSS Working Group (i.e. Intel or Met) will perform as the intermediary towards an agreeable solution. *Disputes will only be elevated to the Center Manager/Coordinating Group level if a mutually agreeable solution is not attained and the appropriate Intel or Met Working Group chair concurs.*

60 Decision-Making Process

Predictive Services practitioners will utilize the following decision process for making program-wide group decisions.

60.1 Predictive Services Decision-Making Process

- A. Proposals will be presented to the affected members (task group, Met Working Group, Intel Working Group) with a clear statement expressing the decision to be made and the time frame during which the decision is to apply (i.e. A proposal to produce daily weather graphics, to be considered by the Met Working Group, to stand for one year).
- B. Proposals will be followed by a period of time for comments and questions.
- C. Votes will be either “yea” or “nay”, with no abstentions. One vote is allowed per Predictive Services Unit (PSU). If a PSU cannot be represented (due to illness, emergency, etc.) the proposal can be voted upon and adopted temporarily, but only until the missing vote can be counted.
- D. PSUs voting “nay” will be asked to explain their opposition and offer a recommendation for resolution.
- E. If (a) dissenting PSU(s) cannot be accommodated, the proposal is rejected.
- F. If all PSUs vote “yea”, the proposal is adopted, and the decision will be binding on all.
- G. The proceedings will be recorded by the appropriate group chair or task group leader and distributed to all PSUs with meeting notes or task groups updates.

60.2 Additional Guidelines

- A. Votes may be presented to the members during annual meetings, monthly conference calls or in any other venue which guarantees complete representation and an opportunity for comment and question.
- B. In most cases, decisions will be in force through the following fire season, to be reviewed during the post-season Predictive Services Annual Meeting. In special cases, a different review period may be proposed, approved and adopted. If unforeseen adverse impacts arise, the matter may be reviewed before the originally scheduled review time.
- C. Requests for additional data or products from any Predictive Services unit must be accompanied by the necessary resources to complete the proposed task.
- D. Local GACC requirements will typically be given a high priority, but a minimum national product workload will be agreed upon prior to the commencement of each fire season.
- E. Consensus is our goal, and recognizing our commitment to local needs, all members will attempt to support the needs of the group. We can expect any approved proposal to be supported fully, even if it is not the first choice of any individual member.

70 Training and Development

The following table outlines the training courses and skills for Predictive Services positions.

*(C)OURSE or (S)KILL	Intel Coord.	Intel Officer	Met	Met (Prog. Mgr)	Wildland Fire Analyst
Agency Requirements	X	X	X	X	X
I-100 OR I-200 (C)	X	R	R	R	X
S-130 (C)	R	R	R	R	X
S-190 (C)	R	R	R	R	X
I-203 (C)	R				
I-400/401 (C)	S				S
S-290 (C)	R	R	R	R	X
S-390 (C)	R	R	R	R	X
S-490 (C)	R	R	R	R	X
S-491 (C)	R	R	R	R	X
S-495 (C)			R	R	X
S-590 (C)			S	R	X
D-110 (C)	R	R			
D-310 (C)	R	R			
M-410 (C)	R	R	R	R	R
M-480 (C)	R	R			
ICS-209 (S)	X	X	S	S	R
SIT Report (S)	X	X			R
Rx-410 (C)	S	S	R	R	R
Advanced NFDERS (C)	S	S	R	R	R
INTS (C)	X	X			
INTL (C)	X	R			
FFPLUS (S)	R	R	X	X	X
BEHAVE PLUS (S)	R	R	R	R	X
ArcGIS (S)	R	R	R	R	R
WIMS/KCFAST (S)	X	X	X	X	X
ASCADS (S)	S	S	R	R	S
FX-NET (S)			X	X	S
BASIC STATISTICS (S)	R	R	X	X	X
EXCEL & ACCESS (S)	X	X	X	X	X
BASIC UNIX/LINUX (S)			R	X	
WFSA WORKSHOP (S)	R	S			R
CHEETAH (S)	R	S	R	R	R
COGNOS (Query St.) (S)	X	R			
COGNOS (Reports) (S)	X	X			
FAMWEB User Manager	X	R			
WFDSS	R	R	R	R	X

X – Required
 S – Suggested additional training and/or skills
 * (C) = Successful Course Completion
 * (S) = Skill Acquired Through OJT or Formal Training
 * Where a position requires ICS qualifications, course and skill requirements listed here may be in addition to those required by the ICS position.

Except where ICS qualifications are required, the skill and training elements in the Training and Development table do not constitute hiring criteria. Individual employee training plans should reflect those courses or skills needed.

Recommended Training, Experience or Skills for Intel:

- A. Fire experience

Recommended Training, Experience or Skills for Mets:

- A. Recommended reading:
 1. Mountain Meteorology: Fundamentals and Applications, Author: C. David Whiteman
 2. Fire Weather – NFES Publication 1174
 3. NFDERS Weather Station Standards – PMS 426-3
 4. ASCADS, WIMS, and KCFAST users guides

80 Support Requirements

The Predictive Services program requires the following staffing, funding and infrastructure to be capable of successfully meeting program objectives. Actual program support varies from and will be iterated in local Operational Handbooks.

80.1 Staffing

- A. NICC Level
 - 1 National Fire Weather Program Manager
 - 1 Assistant National Fire Weather Program Manager
 - 1 Fire Analyst
 - 1 Intelligence Coordinator
 - 1 dedicated Intelligence Officer
 - 1 seasonal Intelligence Officer

- B. GACC Level
 - 1 Geographic Area Fire Weather Program Manager
 - 1 Fire Weather Meteorologist
 - 1 Intelligence Coordinator (dedicated to PS)
 - 1 Intelligence Officer (dedicated to PS)
 - Additional seasonal staffing or detail assignments as needed

80.2 Funding

In addition to funding related directly to staffing, funding sufficient for each employee to attend a minimum of two 3-5 day national meetings or workshops annually and to replace or upgrade vital supplies is required. Individuals assigned to chair or participate on regional and national committees and working groups will require twice the support funding commitment. Ten percent of employee’s total salary (including benefits) is recommended. *In general, the table below assumes full staffing at step 5 of full performance levels, FERS, benefits at 40% of salary, and support funding at 10% of salary and benefits combined.*

	Funding Agency							
	BLM	USFS	NPS	FWS	BIA	State	Unstaffed	Total
Mets	36%	15%	18%	14%	3%	7%	7%	\$3,424,544
Intel	9%	48%	5%	0%	5%	5%	28%	\$1,942,588
Fire Analyst	0%	27%	24%	0%	0%	0%	49%	\$487,455
GIS/IT	0%	0%	0%	0%	0%	0%	100%	\$110,686
Total	24%	26%	15%	8%	3%	5%	19%	\$5,965,273

80.3 Infrastructure

- A. Information Technology - Computer hardware and software sufficient for rapid computation of advanced statistical models, display and printing of complex color graphics, and storage of large volumes of data . Immediate capability to install standard programmatic and necessary off-the-shelf software, and modify system settings to optimize performance. LAN and Internet access at T1 or higher rate, with backup redundant Internet access.

- B. Data and Reporting - A complete and accurate data set of weather (RAWS) and fire occurrence (federal and state) information from 1985 to present, with formats and specifications according to agency standards. This includes up-to-date daily situation reporting (i.e. SIT/209) and NFDRS observations.

- C. Geographic Information Systems - ArcGIS (current version) installed on the computers of all personnel, and access to on-site GIS expertise and map plotters.

90 Personnel Management

90.1 Recruiting and Retention

Recruiting is accomplished through open recruitment as well as circulating announcements through fire weather operations at all partnering and coordinating agencies. National and Geographic Areas are responsible for circulating notifications of employment opportunities through their appropriate channels. Personal phone calls may be provided as a courtesy to specific potential candidates that have previously made their interest in Predictive Services known.

Retention is encouraged through training, career development opportunities, and new product creation and implementation with all positions within Predictive Services. Annual reviews should be conducted by Program Managers, Intelligence Coordinators, or other supervisors to discuss career goals and formulate appropriate plans of action.

90.2 Details and Assignments

Details and assignments will periodically be necessary to serve the wildland fire community as well as the national Predictive Services program. Within the wildland fire community, details and assignments are necessary to become familiar with different aspects of fire management, to interact with coordinating user groups, and to transfer technology. Within Predictive Services, details and assignments are necessary to assist different Areas in accomplishing objectives as well as a means to share ideas and expertise. Details and assignments will be performed on an as-needed basis.

100 Predictive Services Strategic Plan

Predictive Services Vision

Wildland fire management emphasizes safety, cost containment, efficiency, and ecosystem health through the proactive use of Predictive Services decision support products.

Predictive Services Mission

The Predictive Services Program supports the wildland fire community and others with information and decision support products.

Predictive Services Goals

Goal 1 – Products and Services – Relevant Decision Support tools are available to support user needs

Goal 2 – Use of Products and Services – The timeliness and effectiveness of fire management decisions are increased through the use of Predictive Services

Goal 3 – Partnerships – Predictive Services actively partners with cooperating agencies, internal programs, academia, research, and the private sector

Goal 4 – Infrastructure – Organization structure, staffing, technology and resources are in place to ensure the success of the Predictive Services program

Predictive Services Objectives and Strategies

Goal 1 – Products and Services

Objectives

- Improve the data infrastructure that supports the integration of Predictive Services and the Wildland Fire Program
- Product Development and Evaluation Team is in place
- Specific tools are developed to support user needs
- Maintain accurate data
- Provide standardized fire potential, observations and predictions
- Local products are in alignment with national standards
- Products and services meet the need of the users
- Remain knowledgeable in emerging technology and use appropriately

Strategies

- Establish and implement performance standards for products and services
- Develop and implement a user assessment process
- Establish and implement data quality standards
- Develop and implement a periodic review process
- Develop and implement a product validation process
- Establish and implement a well-defined process for technology transfer
- Establish priorities and initiate/support tool development efforts
- Develop products that utilize best business practices
- Develop a plan/process to influence the data quality of data we do not control
- Establish a continuous improvement process to assess and make modifications to the products and services provided by Predictive Services

Goal 2 –Use of Products and Services

Objectives

- Fire management is trained in the use of Predictive Services products and services
- Workload spikes are anticipated and the opportunities for mitigation are identified
- Proactive resource allocation are commonly implemented
- Firefighter situation awareness is improved
- Risk analysis is used to guide tactical decisions
- Cost benefits of the Predictive Services program are quantified and understood

Strategies

- Integrate Predictive Services into wildland fire management training and operational policy and procedures
- Assess current product and service capability of Predictive Services
- Develop and implement process for technology transfer
- Develop and implement a communication plan
- Incorporate decision science in fire management processes
- Perform a cost-benefit analysis
- Enterprise architecture
- Develop and implement a marketing plan
- Develop requests for resources to augment staffing requirements as needed
- Engage training as a strategic partner

Goal 3 – Partnerships

Objectives

- Leverage relationships with other entities to accomplish objectives and goals
- Nurturing partnerships
- Accomplish objectives and goal with the help of other entities

Strategies

- Foster relationships with increased outreach
- Develop and implement partnership plan

Goal 4 – Infrastructure

Objectives

- Organization structure and governance is in place
- All resource requirements for the Predictive services program are satisfied
- Technology needs are satisfied for Predictive Services staff
- Information Technology support for Predictive Services is met
- Geographic Information Systems (GIS) support for Predictive Services is met
- Adequate capability and structure is in place to meet the expectation and requirements of the community

- Fuels, fire danger, fire analysis skills and talent are available to meet program needs

Strategies

- Develop, implement and codify a Predictive Services Handbook
 - Standard Operating Procedures or Operating Procedures
 - Structure – lines of authority
- Provide proficiency for Predictive Services personnel
- Develop staffing and funding requirements for the program based on workload analysis
 - Staffing
 - Funding
 - Support (technology)
- Develop and implement annual operating plans
- Develop and implement a training plan for Predictive Services

APPENDIX A – NPSS CHARTER

NATIONAL WILDFIRE COORDINATING GROUP

National Predictive Services Subcommittee

Charter

1. Background

The National Wildfire Coordinating Group (NWCG) was formed in January 1974, to expand operational cooperation and coordination between various public agencies having jurisdictional responsibility for wildland fire management.

In 2007, NWCG was re-chartered, expanding its responsibility and adding new partners. The subcommittee chartered herein is one of a number of support groups established by the NWCG to provide stewardship for specific business segment areas in fire management.

Historically, most of the functional business areas to be addressed by this subcommittee were the responsibility of the former National Predictive Services Group (NPSG).

2. Name

The name of this subcommittee, hereinafter referred to as the Subcommittee, is the National Predictive Services Subcommittee (NPSS) of the Fire Environment Committee.

3. Authority

The Subcommittee is established pursuant to the authorities granted in the Fire Environment Committee Charter.

The deliberations of this Subcommittee are exempt from the Federal Advisory Committee Act under section 204 of the Unfunded Mandates Reform Act of 1995.

The Subcommittee Chair is authorized to convene meetings and schedule agenda items. The Chair is also authorized to make contacts, negotiate work assignments, and make commitments on behalf of the Subcommittee. The Chair may also commit such resources as are available within the Subcommittee or as authorized by the Fire Environment Committee.

4. Purpose

The Subcommittee is established to provide interagency oversight, leadership, strategic direction, and vision to improve the quality, accuracy, and relevance of decision support products and information provided by the Predictive Services program through the multi-agency coordination system to fire managers and users nationwide.

5. Membership

Subcommittee membership will reflect a mix of people who are knowledgeable in the subject area of the Subcommittee and who are from NWCG member agencies and organizations. With NWCG Executive Board approval, agencies or organizations that are not NWCG members may be selected for Subcommittee membership.

The Fire Environment Committee will appoint a Subcommittee Chair. The term of the Chair appointment will be 2 years and may be extended at the discretion of the Fire Environment Committee.

Primary Subcommittee members will be selected by the Chair. The terms of each primary member will be 2 years and may be extended at the discretion of the Chair. Technical advisors may be added as associate members with Chair approval.

6. Organization

The Subcommittee is under the direction of the Fire Environment Committee.

The Subcommittee may create units and task teams with concurrence of the Fire Environment Committee Chair and the Equipment and Technology Branch Coordinator.

7. Cooperation and Coordination

The Subcommittee will work through the Fire Environment Committee to ensure appropriate coordination, collaboration, and information sharing with other groups and organizations for the subject matter and specific tasks of the Subcommittee.

8. Responsibility

The Subcommittee is primarily responsible for providing stewardship and oversight for the Predictive Services Program.

9. Deliverables

Standards and guidelines for Predictive Services products and services, and roles and responsibilities for program management and operations. Reviews, assessments and recommendations pertaining to program development, communications, and support requirements. Training course content development and delivery.

10. Meetings

The Subcommittee shall document in a standard operating procedure the specific protocols and procedures for conducting subcommittee business.


11. Charter Amendments

Changes to, or revocation of, this charter must follow the process outlined in the *NWCG Operating Principles and Guidelines*.

12. Charter Approval

This charter is effective as of the date of approval by the Chair of the Fire Environment Committee and shall remain in effect until revised or revoked.

Approved:


Chair, Fire Environment Committee 5/6/09
Date

Concur:


Branch Coordinator 5/14/09
Date

APPENDIX B – FORMS AND STANDARD PRODUCTS

ICS-209 Form

Incident Status Summary (ICS-209)

1: Date	2: Time	3: Initial	Update	Final	4: Incident Number	5: Incident Name
6: Incident Kind/Strategy	7: Start Date Time	8: Cause	9: Incident Commander	10: Incident Command Organization	11: State-Unit	
12: County	13: Latitude and Longitude Lat: Long: Ownership at Origin:		14: Short Location Description (in reference to nearest town):			
15: Size/Area Involved	16: % Contained or MMA	17: Expected Containment Date:	18: Line to Build	19: Estimated Costs to Date	20: Declared Controlled Date: Time:	
21: Injuries this Reporting Period:	22: Injuries to Date:	23: Fatalities	24: Structure Information			
			Type of Structure	# Threatened	# Damaged	# Destroyed
25: Threat to Human Life/Safety: Evacuation(s) in progress ---- No evacuation(s) imminent -- Potential future threat ----- No likely threat -----			Residence			
			Commercial Property			
			Outbuilding/Other			
26: Projected incident movement/spread in 12, 24, 48 and 72 hour time frames:						
12 hours:						
24 hours:						
48 hours:						
72 hours:						
27: Values at Risk: include communities, critical infrastructure, natural and cultural resources in 12, 24, 48 and 72 hour time frames:						
12 hours:						
24 hours:						
48 hours:						
72 hours:						

28: Critical Resource Needs (amount, type, kind, and number of operational periods in priority order in 12, 24, 48 and 72 hour time frames): **ex. 3 CRW1 (4); 1 HEL1 (5);**

12 hours

24 hours:

48 hours:

72 hours:

29: Major problems and concerns (control problems, social/political/economic concerns or impacts, etc.)
Relate critical resources needs identified above to the Incident Action Plan.

30: Observed Weather for current operational period:

Wind Direction:	Wind Speed (mph):	Peak Gusts:
Max. Temperature:	Min. Relative Humidity:	

31: Fuels/Materials Involved: A drop down box with the 13 Fire Behavior Fuel Models has been added. The incident would select the predominant fuel model with the option to include additional fuels information in the text box.

32: Today's observed fire behavior (leave blank for non-fire events):

33: Significant events today (closures, evacuations, significant progress made, etc.):

34: Forecasted Weather for next operational period:

Wind Speed (mph):	Temperature:
Wind Direction:	Relative Humidity:

35: Estimated Control Date and Time:	36: Projected Final Size:	37: Estimated Final Cost:
--------------------------------------	---------------------------	---------------------------

38: Actions planned for next operational period:

39: For fire incidents, describe resistance to control in terms of:

1. Growth Potential -
2. Difficulty of Terrain -

40: Given the current constraints, when will the chosen management strategy succeed?

41: Projected demobilization start date:

42: Remarks:

43: Committed Resources

Agency	CRW1		CRW2		HEL1	HEL2	HEL3	ENGS		DOZR		WTDR	OVHD	Camp Crews	Total Personnel
	SR	ST	SR	ST	SR	SR	SR	SR	ST	SR	SR	SR			
Total															

44: Cooperating and Assisting Agencies Not Listed Above:

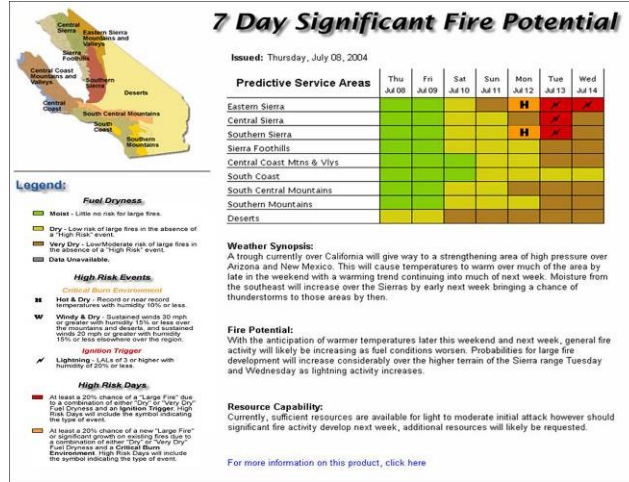
Approval Information

45: Prepared by:	46: Approved by:	47: Sent to: Date:	By: Time:
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IMSR Predictive Services Discussion (example)

Predictive Services Discussion: A strong cold front will continue to move east today and extend from the Northeast to the Gulf Coast. Much cooler temperatures are on tap for the central U.S. with higher relative humidity over the southern Great Plains.

7 Day Significant Fire Potential (example)



7-Day Significant Fire Potential National Map (example)



National Monthly Significant Wildland Fire Potential Outlook Map (example)



Seasonal Significant Wildland Fire Potential Outlook Map (example)

