



Fire Management Board

Wildland Fire Predictive Services Program Review – Report Summary and Conclusions



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Introduction

The review of the Wildland Fire Predictive Services program report provides the background and program status of predictive services. It clarifies the state of the program, what are the identified needs and expectations and how well it is working to meet those needs and expectations. It also presents the Review Team’s summation of all information collected and identifies areas needing continued evaluation and action. This provides a foundation for the FMB to evaluate the program, make decisions on what the next steps are, develop recommendations on corrective and/or improvement actions, and develop an action plan. It provides the basis for determining how the program can/will be improved.

Issue Summary

This review obtained considerable input from predictive service staff, users of predictive services products, other interested wildland fire management stakeholders, researchers, and partners. A common thread among all responses is that the Predictive Services program was established to meet a specific need and has worked very hard to meet that need. While it provides important and widely used services and products, users feel that many aspects of the program are failing to function at the most efficient level and in some cases, hinder its capability and performance.

The following topics have been identified from the survey responses and individual interviews as areas in need of additional attention and clarity to improve efficiency in the Predictive Services program. They are organized into broad subject areas. This report concludes by offering scope and direction for additional evaluation to facilitate programmatic decisions and management direction in Phase 2. The Review Team strongly encourages subsequent reviews and recommended actions be completed through a process that brings together all partners, including fire planners, fuels managers, operations, and research.

Topics identified through the information gathering process as those warranting further evaluation to improve the service and function of the Predictive Services program have been grouped under broad categories. Individuals contacted provided a very wide range of topics that is too large to list as individual responses. Primary concerns raised relate to program status, governance, staffing funding, agency support, roles and responsibilities, and include:

- **National Program Status. Even though survey responses indicated that predictive services products and services are most important to Geographic Areas, responses from each organizational level varied considerably. National responses indicate that this level is a major customer and is not receiving adequate products and services. GA responses indicate that this level is the primary customer and the program should be primarily tailored to support this. Local level responses indicate that the program is an area program supporting the local levels. The disparity in view and expectation among the program levels is clear and needs attention and clarification.**
 - Determine precise status – national, area, local program, or some coordinated combination and what this means and how it works.
 - Define all customers – national, area, local.
 - Determine customer needs and expectations, evaluate how those have changed since program establishment, and how they can best be met.
- **Governance – higher level governance and oversight has diminished over the years, due to a variety of reasons, but is seriously affecting operational effectiveness and program consistency:**
 - Oversight is needed - determine how it will be provided to Predictive Services.
 - Technical governance that includes fire analyst support and research support along with programmatic level support is needed. This may be the same group or two separate entities.
 - Re-evaluate the current oversight, engagement of the group in NWCG. The current structure in FENC is sound, however, there are gaps with functional support as listed in the previous bullet.
 - Define levels of oversight, support, and supervision.
- **Program Guidance and Management – program guidance is either lacking, inconsistent, delicate, with mixed levels of organizational discipline and acceptance:**
 - Define a current and applicable vision, mission, strategic plan, and programmatic guidance (standards and procedures) that reflect the business requirement of wildland fire management and customer needs and expectations.
 - Identify roles and responsibilities for all predictive services staff and clarify an organizational hierarchy.

- Evaluate the need for fire analyst services and products to meet increasing information availability and customer needs – feedback indicates that this role and capacity must be strengthened.
 - Evaluate and realign supervisory roles within predictive services staffs - review role of Meteorologists in supervising other staff members.
 - Supervision - define the most efficient system of supervision of predictive services personnel across GA's.
 - Determine a suite of services and products that reflect the business requirement of wildland fire management and customer needs and expectations..
 - Identify how to establish greater consistency across GA's in service, products, staffing, websites, operating principles and procedures, and communication without compromising the need for and value of locally-specific products and procedures.
 - Define standardized services and products that will enable improved support to wildland fire decision-making.
 - Define the roles and responsibilities of all participating agencies in providing positions; funding; hardware software, and support as needed.
 - Describe all IT barriers (hardware, agency networks, software) and develop a plan to address and mitigate these barriers.
 - Assess the need for and value for formalized relationships, service level agreements, and/or contracts with research, information technology (IT), and GIS entities to ensure that proper skills and capability are available to develop new products and services.
- **Funding – serious funding issues exist:**
 - Determine a funding process that provides equitable support through all levels of Predictive Services and across all GACC's.
 - **Staffing – staffing issues limit program effectiveness:**
 - Develop standardized staffing requirements for the program.
 - Review numbers of positions by function and recommend staffing configurations.
 - **Agency Position Sponsorship – current agency sponsorship is not fulfilling the original intent or agreement and seriously affecting effectiveness:**
 - Determine how positions will be hosted – multiple agencies, single agencies, or some new configuration.
 - Develop current, up-to-date positions descriptions that are common to all GACC's.
 - Define and standardize necessary support levels for all predictive services positions in GACC's.
 - Determine how to establish career ladders for predictive services positions.
 - **Research – research is vital to expanding capabilities, should be supported and pursued, but must represent a support activity and not compromise operational activities:**
 - More research is needed and the role for more research should be endorsed and promoted. Research can be viewed as an objective outsider that provides unbiased program support and facilitates capability expansion.
 - Include process for supporting, obtaining, and implementing research in operating plans.
 - Research activities should be very closely connected to the Fire, Fuels and Smoke research program from the USFS, the Wildland Fire Management RD&A program, and the Joint Fire Science Program.
 - Predictive Services personnel are not scientists – clearly define their role and responsibility in supporting research, interpreting research, and applying new information as appropriate. Strengthen and maintain the role of predictive services staff as operational support staff that can provide support to research.
 - **Investigate Capability-Enhancing Opportunities – opportunities to expand partnerships or agreements to strengthen predictive services capability should be explored. NWS, academic institutions, and private organizations may or may not have potential to support predictive services.**

- Evaluate if partner opportunities with NWS are possible, viable, sustainable, and/or desirable? Numerous benefits were proposed and these should be evaluated for real value versus tradeoffs.
 - Review NWS situational areas that include but are not limited to:
 - NWS hosting Meteorologist positions – this was suggested both by wildland fire agencies and NWS as an opportunity. It is believed that NWS now has greater capabilities to do this , which could provide better logistical, funding, hardware, training, and back-up support. It was also suggested that NWS position hosting could solve different agency position needs, allow MET’s to get to the field, create more upward mobility and career ladder opportunities, provide stronger scientific relationship with agencies,
 - Have NWS personnel physically assigned at GACC’s.
 - Evaluate other partner opportunities that could develop new products, provide services, or contract personnel support. Determine if any options with cooperating agencies, academia, research and other entities are possible, viable, sustainable, and desirable.
- **Program Naming or Labeling – although of seemingly lesser importance, the issue of the name of Predictive Services came up repeatedly and a change may strengthen support of and perceptions of the program.**
 - After the program vision and mission have been rewritten, roles and responsibilities have been clarified, the name of the program should be evaluated to assess that it accurately represents the program or if a change may better reflect current and future service and product objectives.
 - The name should not be changed simply to change it but if a change could have appositive effect and if it might better reflect the vision and objective, then it should be considered. Any name change should reflect a commitment to accomplish the defined mission.

Conclusions

Wildland fire decisions are framed by multiple variables and multiple factors. Wildland fire management takes place within a multi-tier organizational structure with each tier having its own needs, objectives, and priorities.

Wildland Fire Predictive Services was created to serve customers at all levels of wildland fire management – local, area, national managers, and firefighters. The mission of the program can basically be described as supporting the wildland fire community with decision support information that integrates climate, weather, fuels, fire danger, situational and resource information into short- and long-term products and services to anticipate critical fire events and provide for safe, cost-effective, and efficient fire management activities.

In order to effectively provide decision support information, frame decision space, and meet needs and expectations of all organizational tiers, predictive services must be effective in how it works. It must, as a single unit, integrate all its functions equally under a single purpose. Determining how predictive services overlays this need and provides necessary support for this organization is a critical management decision.

Information collected during this review suggests, that as a program, predictive services is not cohesive, integrated, and working at its most efficient level. While it has accomplished much and provided a valuable service, the majority of elements of this program have emerged as issues needing evaluation and recalibration to improve operational efficiency. Due to numerous limitations, the program is unable to match increasing situational complexity, scope, and information needs.

Next steps should involve decisions regarding prioritization of identified issues, further evaluation of those issues, assignment of review responsibilities, development of specific actions to resolve issues, and assignment of implementation responsibilities and timeframes for completion.