

National Predictive Service Group (NPSG) Meeting

Meeting Notes

Location: Albuquerque, New Mexico
Meeting Dates: January 31-February 2, 2006

Members Present:

- Tom Wordell – JFSP – PS/Fire Analysts Representative
- Rick Ochoa – NICC – Fire Weather Program Representative
- Chip Collins – NPS – Field Level Fire Managers Representative
- Gerry Day – NWCC – GACC Managers Representative
- Roger Lamoni – NWS, Western Region – National Weather Service Representative
- Brad Smith – NASF Representative
- Neal Hitchcock – NMAC Representative
- Charlie Leonard – NICC – Intelligence Program Representative
- Chuck Maxwell – SWCC – GACC Meteorologists Representative
- Jay Ellington – SWCC – Intelligence Coordinators Representative (for Mike Lococo)

Members Absent:

- Kim Christensen – NICC Manager – NICC Representative
- Mike Lococo – ONCC – Intelligence Coordinators Representative

Guests:

- Shari Shetler – NIFC - Facilitator
- Robyn Heffernan – NICC Meteorologist
- Terry Marsha (via conference call)
- Rich Woolley (via conference call)
- Tim Swedberg – Joint Fire Science

Notetaker: Lani Williams

Meeting Agenda Topics:

1. Review/Revision of NPSG Strategic Plan and Development of Long-Term Action Plan
2. Joint Fire Science Program
3. NPSG Action Items and Budget Review
4. Spot Weather Forecasts
5. Central Processing System

6. GACC Survey Update
7. Monitoring Protocol for Predictive Services Products
8. Safety Alerts
9. NWS Survey and Predictive Services User Assessment Updates
10. Attend Wildland Fire Use Workshop
11. Future Meeting Topics and Logistics
12. NPSG, Intel Working Group and Met Working Group Charters
14. Monthly Outlooks – Teleconference
15. Role of Predictive Services in Prescribed Fire and Smoke Management
16. Virtual Team Building at the Fall 2006 Predictive Services Meeting
17. Predictive Services Handbook
18. Fire Weather Needs Assessment by OFCM
19. Bin Items

Exhibits Handed Out:

- A. Action Items, Decisions and Meeting Topics
- B. NPSG Project Funding
- C. NPSG Strategic Plan V3
- D. Action Plan – Performance Standards
- E. Action Plans
- F. Strategic Prioritization Results
- G. Action Plan “How To”
- H. Predictive Services Survey Summary
- I. NPSG Letter to SHWT – Safety Alerts
- J. NPSG Charter under NFAEB
- K. OFCM for NPSG
- L. Monthly Dryness
- M. Monthly Forecast Procedures
- N. Monthly MDI Template
- O. Thoughts Regarding the Monthly Outlook
- P. Monthly Outlook
- Q. NWS National Fire Weather CSI Results Briefing
- R. NWS National Fire Weather Final CSI Report
- S. Predictive Services Handbook Brief
- T. Optimal Pre-positioning – Bevers
- U. CJFR Seasonal Resource Allocations – Bevers

Tuesday – January 31, 2006**Welcome, Introductions & Meeting Logistics (Chuck Maxwell)**

Chuck Maxwell welcomed everyone and covered logistics of SWCC. Everyone introduced themselves, and the Agenda was briefly covered.

1. Review/Revision of NPSG Strategic Plan and Development of Long-Term Action Plan (Shari Shetler) (Exhibits C-G)

The NPSG Framework has been a useful instrument to guide some of the work and initiatives of the NPSG. However, it has been found to be deficient as actions and work efforts are further defined. Shari Shetler (NIFC) has been working with several other national groups structuring Strategic Plans that better equip groups to work effectively. The NPSG asked Shari to help in this area. To that end, Shari restructured much of what was in the NPSG Framework and then she led the group through the process of creating a Strategic Plan, including developing the Mission, Guiding Principles and Goals. Each Goal was further defined by Objectives, Critical Success Factors, and Barriers and then Strategies were developed. From these strategies, Action Plans will be developed. The group developed the Action Plan for the strategy “Establish and Implement Performance Standards for Products and Services” listed on Goal 1.

9. NWS Survey and Predictive Services User Assessment Updates**Predictive Services User Assessment Update – Tom Wordell**

Last week the survey was sent out to approximately 3000 federal employees. The survey has not yet received OMP approval for distribution outside of federal employees. Respondents are required to enter their email; however the survey has been forwarded to individuals beyond the original respondent list. The additional respondents can be analyzed and may be included if their results are not significantly different than the original target audience. If the results are statistically different than they will be reported as such. Nonfederal respondents will need to be withheld pending OMB approval. The survey was intended to be open for six weeks. Depending on OMB approval the timeline may need to be adjusted for state respondents. Originally the report was due in July and will be a topic for the fall meeting.

Decision: Survey results will be open to all respondents.

Wednesday – February 1, 2006**2. Joint Fire Science Program – Tim Swedberg**

Tim attended part of the meeting representing the Joint Fire Science Program (JFSP) to discuss how the JFSP works and might be able to help in the area of Predictive Services. He solicited questions reflecting research areas that might help direct future research. There is approximately eight million dollars available for research projects. Tim is interested in helping to format the questions and developing task statements. The questions/task statements should be prioritized, since historically there has been 50 percent funding at best. **Tim needs ideas by March 28, 2006.**

Topics that were suggested include:

- Future system(s) to support fire weather
- Resource capability component, particularly in prescribed fire
- What would it take to reduce the potential for large fires, where would the resources come from - workload
- How gridded data feeds into fire potential products
- Live fuel moisture

3. NPSG Action Items and Budget Review – Tom Wordell (Exhibits A and B)

Budget Review:

NPSG has received approximately \$125,000 in funding for FY06. Of that \$25,000 is tied to personnel costs. Projects that have been funded for FY06:

\$ 8,000	Eastern Area Assessment Workshop
38,200	User Assessment
21,000	MOS Equations for Eastern Area and Alaska, includes travel
6,000	Cheetah
3,500	Facility for National Predictive Services Meeting
2,500	Meeting Travel
2,000	Performance Awards

There is a balance of \$9,000 that is not budgeted and \$30,000 that has not been spent.

Funding decisions need to be finalized by the April meeting.

Gridded FX Net – Emphasis is to provide more than one system for each GACC. Further research is needed for the program to run in a Windows operating system.

Cheetah – There would be more of a commitment to use Cheetah if it had a more robust data set. The improvements scheduled would be for data import and would include a new pull to include latitude and longitude data; which would allow GIS capabilities.

Action Items Table:

Action Item #7: The issue paper was developed addressing the responsibilities of the Assistant Fire Weather Manager at each GACC are with respect to RAWs data quality.

- ➔ **Action Item No. 111:** Submit letter through FENWT explaining the role of GACC meteorologists with regards to RAWs program oversight and management.

Lead: Tom Wordell

Target Completion Date: 10/30/2006

Action Item #20: NMAC agreed with the decision to report fires by ownership. Specific direction will be included in the MOB Guide. Changes are being made to FAMWeb to reflect the direction.

Action Item #32: Links have been provided to auto-forwarded GACC Webpages. The revised GACC web page format is operational in all Geographic Area except the Eastern Area and Alaska which are not yet operational at this date.

1. Review/Revision of NPSG Strategic Plan and Development of Long-Term Action Plan (Shari Shetler) con't

The Group continued with the process from yesterday by prioritizing the strategies. From these prioritizes, assignments were made to develop Action Plans. Members were broken into four groups and each group was assigned a goal and tasked to develop an Action Plan for the strategies that ranked as the top two for that Goal.

Action Plan

- 1) Brainstorm – List of what you need to do to satisfy the strategy
- 2) Go back and “validate” that each task must be accomplished to satisfy the strategy
- 3) Order the tasks
- 4) Assign who, when, investment

Follow-Up

- 1) Review goals and objectives
- 2) Prioritize strategies
- 3) Assign development of Action Plan
- 4) Develop Strategic Plan Document

Decision: Divide into four groups, each group will be assigned a goal.

Goal 1:

Gerry Day
Robyn Heffernan
Tom Wordell

Goal 2:

Chuck Maxwell
Chip Collins
Mike Lococo

Goal 3:

Charlie Leonard
Rick Ochoa
Neal Hitchcock

Goal 4:

Brad Smith
Roger Lamoni
Kim Christensen

➔ **Action Item No. 112:** Develop an Action Plan for the highest ranking strategies for the assigned goal.

Lead: all

Target Completion Date: 04/25/2006

4. Spot Weather Forecasts – Chuck Maxwell/Robyn Heffernan

In viewing Spot Weather Forecast, some of the information is unavailable, except to the submitter. This becomes a problem when multiple individuals need to view the forecast. These restricts center around security concerns. It is believed that the benefits outweigh the risks in this case and that anyone should be able to view the fields on the Spot Weather Forecast with the exception of the contact information.

- ➔ **Action Item No. 113:** Submit letter through NPSG to Heath Hockenberry with the NWS to request limitations on Spot Weather Forecasts are removed (keep contact information restricted), with copy to FENWT
Lead: Robyn Heffernan and Tom Wordell
Target Completion Date: 02/28/2006

5. Central Processing System – Chuck Maxwell/Robyn Heffernan

There is interest in developing a centralized storage warehouse for Predictive Services data and scripts, perhaps at NICC. Robyn has met with IT and they believe that it is doable. They still have some questions and will be getting back to her.

- ➔ **Action Item No. 114:** Develop a proposal to develop a limited central processing “system” to archive programs, scripts, and data for Predictive Services.
Lead: Robyn Heffernan and Chuck Maxwell
Target Completion Date: 04/30/2006

7. Monitoring Protocol for Predictive Services Products – Rick Ochoa and Robyn Heffernan

The meteorologists have been tracking performance standards for national products and Intel is willing to track performance as well. Questions remain concerning the reporting period as the timing of the products varies from daily to monthly. There is also sensitivity concerning the reporting methods, posting to a website versus distribution through another means.

- ➔ **Action Item No. 115:** Develop a tracking mechanism (report card) to post a performance measure for submission of National Predictive Services products and services (IMSR Weather, SIT/209, Seven-Day and monthly products). Gerry will provide a copy of the Northwest model.
Lead: Robyn Heffernan, Charlie Leonard and Rick Ochoa
Target Completion Date: 04/30/2006

6. GACC Survey Update – Robyn Heffernan (Exhibit H)

After receiving feedback at the National Predictive Services Meeting the survey was conducted again. The survey was designed to collect information regarding the amount of time spent on national products. The survey did not ask specific questions which allowed for interpretation. There was also variety among the Geographic Areas due to the size of their staffs. In summary:

	Mets	Intel
Daily Time	9 (1) hrs/day	11 (1) hrs/day
Weekly Time	8 (3) hrs/week	5 hrs/week
Monthly Time	7 (5) hrs/month	5 (5) hrs/month
Annual Time	18 (6) days/year	20 (6) days/year

*Up to 34 weeks per year are spent on as needed products, services, meetings/workshops, and training.
 () = National products

8. Safety Alerts – Chip Collins (Exhibit I)

A letter was presented to the NWCG Safety and Health Working Team (SHWT) from NPSG concerning the issuance and dissemination of GACC Safety Alerts pertaining to fuels/fire danger conditions that are determined to be out of the ordinary and a threat to firefighter safety. There was concern that the content, formatting and dissemination of the alerts did not appear to correspond to NWCG direction as described by the (SHWT). The letter recommended that protocols, templates formats and standards for issuing, distributing and posting of Safety Alerts be developed. The letter was routed through John Gould to the (SHWT). The SHWT is not comfortable developing criteria impacting local geographic area business practices. NPSG still believes that there should be leadership and direction provided for standardization and archiving of Safety Alerts.

➔ **Action Item No. 116:** Take NPSG recommendations on Safety Alerts and SHWT response to Neal to forward to NWCG; possibly forwarding letter to NMAC.

Lead: Tom Wordell

Target Completion Date: 02/28/2006

10. Attend Wildland Fire Use Workshop

Break to attend the Wildland Fire Use Workshop Breakout Sessions. The purpose is to open dialog with Fire Use Managers and solicit feedback concerning needs and expectations of Predictive Services.

Thursday – February 2, 2006

11. Future Meeting Topics and Logistics

Spring Meeting

Location: Southern Area Coordination Center

Dates: April 25-27, 2006, (0800 on the 25th – noon on the 27th)

Logistics: Lodging at the Staybridge, utilize the light rail for transportation

Extend invitations to local Predictive Services, J.P. Green (Southern Area Coordination Center Coordinator), Southern Geographic Area Board Members and any Predictive Services Advisory Group members.

Fall Meeting

Location: National Interagency Coordination Center

Dates: October 10-12, 2006, (1300 on the 10th – 1700 on the 12th)

12. NPSG, Intelligence Working Group and Meteorologists Working Group Charters – Tom Wordell (Exhibit J)

Intel Charter:

The Intelligence Working Group has requested that their Charter be modified to allow them to elect a NPSG Representative. Currently the Chair serves as the Representative. This change includes outlining the roles and responsibilities of the Representative.

Decision: The changes were approved, Tom will sign the Charter.

Meteorologists Charter:

No changes were requested.

NPSG Charter under NFAEB:

During the review process responses were received from several Geographic Areas. Detailed responses were received from the Northern Rockies and the Southern Area Coordinating Groups. Tom has responded to the comments from the Northern Rockies Coordinating Group. The Southern Area Coordinating Group requested an additional representative on NPSG from the Geographic Area Coordinating Groups. The Charter was changed to reflect that request. Additional changes to the Charter are:

Page 2, line 65: replace “to” with “and jointly” develop

Page 4, line 133: replace “provide advice” with “collaborate to jointly design and implement process”

Page 2, line 61: replace “and” with “program”

Page 4, line 155: Amend Intelligence Representative to reflect changes adopted to their Charter.

Term Limits for Field Level Representative: The Field Representative will serve a two year term, which may be extended for an additional two years. Chip will send language to Tom.

The Charter was to be presented to NFAEB on Friday, due to scheduling errors the Charter will not be reviewed by NFAEB until February 22, 2006.

Additional suggestions to involve the Geographic Area Coordination Groups include:

Extend an invitation to attend NPSG meetings – include a copy of the agenda

Include in the development of the Strategic Plan

Manage the business process so they feel they have a part of it

18. Fire Weather Needs Assessment by OFCM – Rick Ochoa (Exhibit K)

- The Office of Federal Coordinator for Meteorology (OFCM) coordinates meteorological issues among all federal agencies.
- Western Governors Association Policy Resolution on Fire Weather requires that a National Needs Assessment Report, by OFCM be completed, of federal, state, and local fire managers for weather information in their wildfire and prescribed fire decision making processes and a framework to meet those needs by the NWS and Predictive Services.
- This Assessment encompasses all products, not just those provided by the National Weather Service
- The Assessment will include:
 - Data Collection
 - Modeling/Prediction
 - Products/Services (includes standards, requirements, verification)
 - Training/Education/Outreach
 - Information Dissemination
 - User Response/Decision Support
 - Research and Development
 - Resource Considerations
 - Partnering/Collaboration
 - Socioeconomic Impacts
- As part of the process the OFCM will be looking at the current surveys being conducted as well as holding mini-workshops and assessment surveys.
- The final report is expected to be released in July 2007 to the Western Governors Association

14. Monthly Outlooks – Teleconference with Terry Marsha and Rich Woolley (Exhibits L-P)

- Monthly Dryness Index
 - Fuel Dryness Term (Current ERC)
 - Expected Precipitation Term
 - Done for each PSA
 - Done for each month
 - Lowest Tercile = Below Normal
 - Middle Tercile = Normal
 - Highest Tercile = Above Normal
 - Easily Verified
- Fire Potential is determined based on terms of fuel dryness relative to normal.
- Want to know above, normal and below in terms of fuel dryness; which does not translate to low, moderate or high Fire Potential.
- Need to define low, moderate and high Fire Potential
- Linear regression, reflects the probability of having large fire activity by PSA
- Can be broken into two week intervals
 - Valuable for Severity Requests

Decision: Finalize the process before the 2006 fire season. Test in the Northwest, Western Great Basin and Texas.

➔ **Action Item No. 117:** Conference call February 9th or 10th. Include Meteorologist and Intel Representative.

Lead:

Target Completion Date:

Decision: Change Fire Potential to Significant Fire Potential

➔ **Action Item No. 118:** Change the legend in the Monthly Outlook to read Significant Fire Potential.

Lead: Chuck Maxwell, Robyn Heffernan and Rick Ochoa

Target Completion Date: 02/28/2006

9. NWS Survey and Predictive Services User Assessment Updates

NWS Survey – Roger Lamoni (Exhibits Q and R)

The National Weather Service conducted a customer satisfaction survey at the end of 2005. They received approximately 1500 responses. Only those that were more than 40 percent completed were counted. The Survey assessed the effectiveness of current

products, including the Red Flag Warning Program and identified areas where the greatest improvements can be achieved.

Key Findings:

- NWS National Fire Weather Program currently scoring well
- Core strengths at this point in time
 - Staff Interaction -- local and national/regional (score = 83)
 - Red Flag Warning Program (score = 81)
 - Site-Specific (spot) Forecasts (score = 80)
- Where standards are in place, accuracy is higher

Decision: Post NOAA National Weather Survey Customer Satisfaction Survey, National Fire Weather Program Final Report to the website.

17. Predictive Services Handbook – Chuck Maxwell and Robyn Heffernan
(Exhibit S)

The idea for a Predictive Services Handbook came from the National Predictive Services Meeting. It is a joint effort of the Meteorologists and Intel groups and is modeled after the Hotshot Handbook. There will be opportunities to provide feedback. An enhanced outline is expected to be available in March. The Handbook will be circulated in various stages to constituency groups. Information received from the User Assessment Survey will be used to produce the Handbook.

Decision: Have Committee continue working on the Handbook. How the Handbook will be package will be decided later, in conjunction with the Strategic Plan.

16. Virtual Team Building at the Fall 2006 Predictive Services Meeting – Robyn Heffernan

Predictive Services faces many challenges, including:

- Everyone is “not at the same place” – infrequent meetings
- Work as a Team only part of the time

There is a need to develop strategies to keep the synergy going. Robyn has talked to Rockherst University and they are willing to tailor a session to meet the needs/challenges of the group. In order to accommodate a session the meeting would need to be restructured, adding an extra day. The cost would be approximately \$3500. Pat Kelly is another contact for possible Team Building Workshops.

The National Predictive Services Meeting is scheduled for the week of November 13, 2006 in Orlando, FL.

Decision: It is important for NPSG Members to attend if possible, the National Predictive Services Meeting, held each fall. Travel funding may be available through NPSG.

Decision: It would be of value to restructure the National Predictive Services Meeting, scheduled for Fall 2006 to include a Team Building session.

➔ **Action Item No. 119:** Develop a proposal for a Team Building session; include options for a collocated meeting with NPSG.

Lead: Robyn Heffernan

Target Completion Date: 04/25/2006

Mike Bevers Reports – Tom Wordell (Exhibits T and U)

Tom distributed the final reports from Mike Bevers. At Neal's request, he submitted a feasibility study to develop a model for the propositioning of resources. He visited the Southwest and Northwest Coordination Centers and the National Interagency Coordination Center. He concluded that there was not enough information to be conclusive and would need further investigation. In the Report to the National Predictive Services Group he recommends the Rocky Mountain Research Station to use FY07 funding to investigate a model.

Decision: Recommendation suggests possibilities with the Joint Fire Science Program, with Mike Bevers as the Principle Investigator (PI).

➔ **Action Item No. 120:** Feed proposal to Tim Swedberg

Lead:

Target Completion Date:

15. Role of Predictive Services in Prescribed Fire and Smoke Management – Tom Wordell

- Some GACCs are more involved than others
- Managers are not aware of the capabilities of Predictive Services
- Predictive Services needs to know what is needed
- Geographic Area Center Managers and possibly Geographic Area Boards or Steering Committees need to be involved in any decisions to place new or additional smoke management workloads on the Geographic Area Coordination Centers.
- Look at opportunities with the current products
- User Assessment may be helpful in defining role

Miscellaneous

Severity Request Requirements – Now listed in the Red Book

Seven Day Product – The table lacks PSA Large Fire Threshold, needs to be added.

National Monthly Product –

- Product Development
- Link to Geographic Area Products versus the current text boxes
- Utilization of two color schemes
 - Moisture
 - Potential

Fire Spread Probability (FSPro)

- Combine aspects of FlamMap and ReRAP to generate spatial burn
- Looks at minimum travel routes
- Uses climatology and NFDRS to calculate trends
- Includes wind analysis
- Depicts map of probabilities
- Builds season ending events probabilities
- WFSA alternative development
 - Now have probabilities
 - Allows cost/benefit probabilities to be calculated