National Predictive Service Subcommittee (NPSS) Meeting

Meeting Notes

Location: Briefing Room, Rocky Mountain Coordination Center
Meeting Dates: October 20-22, 2009

Members Present:

- Tom Wordell **–** FS/NICC – Fire Analysts Representative – NPSS Chair
- Robyn Heffernan, for Rick Ochoa **–** BLM/NICC – Fire Weather Program Representative – NPSS Vice Chair
- Jennifer Zeltwanger –NWS, National Weather Service Representative (Incoming)
- Daniel Chan – Georgia Forestry Commission, NASF Representative
- Shelby Sharples – for Tim Mathewson BLM/RMCC – GACC Meteorologist Representative
- Charlie Leonard – FS/NICC – Intelligence Program Representative
- Kim Christensen – FS/NICC Manager – NICC Representative
- Susie Stingley-Russell – FS/ONCC – GACC Center Managers Representative
- Marva Willey – FS/ONCC, Intelligence Coordinators Representative
- Len Dems – NPS/Rocky Mountain Regional Office, for Rex McKnight – BLM/NV State Office, Geographic Operations Group Liaison
- Reeve Armstrong, for John Barborinas – BIA – Field Level Fire Managers Representative

Members Absent:

- Neal Hitchcock – FS/NIFC – NMAC Representative
- Dan Smith – NASF, NWCG Liaison

Guests:

- Fred Svetz – Meteorologist, Western Great Basin
- Dan O'Brien – Fire Analyst, Northwest Coordination Center
- Kim Kelly – GIS Specialist, Northwest Coordination Center
- Matt Jolly – Ecologist, Missoula Technology and Development Center
- Chuck McHugh – Fire Spatial Analysis, Rocky Mountain Research Station Fire Sciences Lab
- Brad Quayle – GIS Specialist, Remote Sensing and Application Center
- Pete Lahm – Fire Air Coordination Team

Notetaker: Lani Williams – Boise Dispatch Center

Meeting Agenda Topics:

1. Welcome and Introductions

2. Update from Meteorologist and Intelligence Working Groups
3. Update on ROMAN Migration to WIMS
4. Update from NPSS Chair on Charter and Status of FY2009 Budget and Projects
5. Update from FRSC, FORS, FWSC, etc
6. Review of NPSS Strategic Plan – Need to update and refocus efforts and action items to help target future funding and project priorities
7. November Annual Meeting
    - Finalize and Approve Agenda
    - Preparation/Planning/Coordination between Intel and Mets
    - Logistical Support
8. Fire Behavior Service Center – NWCC Update for 2009
9. NPSS Action Item Progress (Spreadsheet)
10. NPSS Funding Allocation Decisions from NWCG for FY10
    - Funded Project Discussions
11. Subgroup Concept for Managing Predictive Service Projects and Efforts
12. Standard PD Update and Discussion
13. 209 Updates Needed to Support New Fire Policy
14. Project Status Reports and Updates
    - Online 7-Day
    - NFMD and Lightning/Dryness Products
    - RAWS Location Discrepancy Issues (WIMS vs. ASCADS)
    - Missoula Lab Updates/7-Day Dryness Levels
    - BLM Lightning Data Display Redesign
    - RSAC and Predictive Services Portal
    - Geospatial Database Development Concepts
    - Proposed Changes to Monthly and Seasonal Products
    - NWS Chat and Other Ways to Disseminate Information
15. Future NPSG Chair, Vice Chair and Member Positions
16. Developing an Incident Management Organization IMO) Intelligence Unit
17. Brainstorm on how to insure a better 7-Day coverage and accountability for Predictive Services products during peak fire season (as outlined in the PS Handbook)
18. Next Meeting Logistics and Agenda Topics

Exhibits:

A. Action Items, Decisions and Meeting Topics
B. NPSG Project Funding
C. Weather Information Management System (WIMS) Program Timeline
D. WIMS and ROMAN Integration Plan
E. A Brief Review of the Pacific Northwest Fire Behavior Service Center 2009 Operations
F. What You Need to Know When Requesting Fire Behavior Analysis In Support of Emerging Incident Decision Support (Pacific Northwest)
G. National Predictive Services; Proposal for Establishing Functional Areas
H. Analysis of Remote Automated Weather Station Metadata Information
I. Predictive Services Group (PSG) Geospatial Portal Status Report
J. NICC Corporate Database and Geodatabase Concept

K. Seasonal Significant Wildland Fire Potential Outlook Prototype
L. Common Operating Picture; Converting Information to Intel
M. National Incident Management Organization Concept Paper

Tuesday – October 20, 2009

Agenda Item: Welcome and Introductions and Meeting Logistics – Tom Wordell and Russ Mann

Russ covered building logistics. Tom covered the agenda and the history of National Predictive Services Group (NPSG)/National Predictive Services Subcommittee (NPSS).

The reorganization of NWCG has placed NPSS under the Fire Environment Committee (FENC), Kelly Martin, Chair; which is under the Equipment and Technology Branch (Paul Schlobohm, Branch Director).

- The NPSS Charter has been signed and provides the authority to for the subcommittee to conduct business.
- The Chair of NPSS also sits on FENC, which must approve the appointment.

Agenda Item: Update from Meteorologist and Intelligence Working Groups

- Intelligence Working Group (IWG) – Marva Willey
  - Sue Christensen (AICC) is the new Chair of the Intelligence Working Group.
  - Dan O'Brien is the new Representative to NPSS.
  - Open positions are slowly being filled. There is still one vacant Intelligence Coordinator at Western Great Basin as well as several Assistant Logistics Assistant Positions that are yet to be filled.
  - They have been working on the tasks assigned from last year's Annual Meeting.
  - The 209 Subgroup continues to meet – more information will be discussed tomorrow.
  - They are working with Bob Roth and a Google Earth Enterprise Client
  - They worked together with the Meteorologist Working Group on a Marketing Team.
    - The brochure has been finalized and is being circulated.
    - There will be a prototype of the video/webcast available at the Annual Meeting
    - The Predictive Services logo is available at Shadows in Boise for use on items (shirts, bags).
  - Jay Ellington continues to work on Anticipated Resource Demand Project.
  - The Intelligence Support Training was hosted by the Rocky Mountain Geographic Area in March. There were 36 students in attendance from multiple agencies. Alaska and the Northwest Geographic Areas are scheduled to host the course in 2010.
  - They completed work on the Webpage Consistency Review.

➔ **Action Item 218:** Receive consensus from Center Managers on how to achieve the minimum standards identified for the GACC Webpages.
Responsible: Kim Christensen and Susie Stingley-Russell
Due Date: December 2009

- Meteorologist Working Group – Shelby Sharples
  - New Meteorologists:
    - Rob Krohn – Southern California Coordination Center
    - Gina McGuire – Western Great Basin Coordination Center
  - The Meteorologists are looking toward the future and are looking for guidance and leadership to help coordinate their efforts and anticipate the needs of the fire community.
  - Projects to be reviewed this fall:
    - Results from the Lightning Level Workshop
    - 7-Day Projects – Test with National Digital Forecast Database (NDFD) data versus Desert Research Institute (DRI) data
    - Recording Briefings – Tests using Camtasia
  - Cloud Chart poster – a combined effort with the National Weather Service is expected to be released soon.

➔ **Action Item 219:** Pursue posting the Cloud Chart to the web
Responsible: Robyn Heffernan and Jennifer Zeltwanger
Due Date: December 15, 2009

Bin Item: FX-Net – Robyn Heffernan

- Funding for FX-Net has been at base level, which has limited the ability add greater capability.
- The National Weather Service (NWS) is upgrading to AWIPS2 and will no longer be using FX-Net; the deployment is expected in 2011.
- There will be a couple of years involved in the transition of the land management agencies to Thin Client AWIPS2.
- Currently FX-Net is funded through the BLM and the USDA Watershed Branch in the Washington Office..

➔ **Action Item 220:** Need to communicate anticipated funding needs upward to insure co-agency funding continues.
Responsible: Robyn Heffernan
Due Date: March 2010

Agenda Item: Real-time Observation Monitor and Analysis Network (ROMAN) Migration to Weather Information Management System (WIMS) – Tom Wordell (Exhibits C and D)

- ROMAN is currently funded $60,000 per year, by the Forest Service.
- The Fire Environment Working Team was asked to develop a Business Case for WIMS; which was presented to NWCG January 2009.

- NWCG decided to bring ROMAN under WIMS; which was already scheduled for a Tech Refresh.
- The ROMAN Migration Team includes:
  - Tom Wordell – FS Project Manager for ongoing ROMAN operations
  - Ed Delgado BLM- Business Lead ROMAN
  - John Horel University of Utah– POC Technical lead ROMAN
  - Graham Stork NWS Western Region– Technical lead ROMAN
  - Jeff Barnes FS F&AM – WIMS Project Manager
  - Sue Petersen FS F&AM – WIMS Application Steward
- ROMAN received an additional $118,000 from NWCG for the migration and to upgrade it with MesoWest functionality
- The process will be conducted in two phases
  - Phase 1 – (Stabilization Phase), 7/1/2009-3/1/2011
    Move ROMAN application to the FS National Enterprise Support Services (NESS) at the National Information and Technology Center (NITC) in Kansas City MO. Stabilize and support the current ROMAN application though March 2011.
  - Phase 2 – (Integration Phase), 3/2010-3/2011
    Begin integration of ROMAN functionality with the Weather Information Management System (WIMS).

Agenda Item: Update from FRCS, FORS, FWSC

Fire Occurrence Reporting System (FORS) – Tom Wordell

The FORS Subcommittee continues to work on standards for data elements. These standards need to be met when the data is placed in an interagency environment. The current data standards are posted at:
http://www/nwc.gov/pmu/pmo-archieve/products/standards.htm#approved

Integrated Reporting of Wildland Fire Information (iRWIn) is a task group that is currently working on a business plan to develop an end-to-end interagency fire reporting system.

The interim fire policy has led to confusion and no clear direction has been given. This has made it difficult to quantify information related to data requests. The relationship between Predictive Services and the Wildland Fire Decision Support System (WFDSS) is equally unclear.

➔ **Action Item 221:** Solicit information concerning the National Decision Support Group; their functionality, point of interaction and the role of the Geographic Areas and Predictive Services.
Responsible: Robyn Heffernan
Due Date: November 20, 2009

➔ **Action Item 222:** Find out from NMAC and Dan Smith what they envision the role and involvement of the states in WFDSS.
Responsible: Kim Christensen
Due Date: January 30, 2010

Fire Weather Subcommittee (FWSC) – Robyn Heffernan
Brian Henry from the Northern Rockies Coordination Center is the new Chair
Projects:

- NFDRS station standards – now known as the fire weather station standards. They are reworking the standards document and have placed a funding request to research new standards. They are currently using the old standards. The RAWS do not meet the World Meteorological Station Standards which make it difficult to merge data with other stations and there is currently no mechanism to enforce the standards. There is a pilot project in the Southwest Geographic Area what has provided the Meteorologists with "Super User" power in WIMS and Automated Sorting, Conversion and Distribution System (ASCADS) to allow them to input/correct the data when the station owner is not responsive. They are also making progress correlating climate data to accommodate movement of stations.
- ASCADS – Computerized Maintenance Management System (CMMS) was to be implemented, however there were problems. The RAWS Depot will still need to be contacted for maintenance. There still needs to be a back-up for ASCADS. The Fire Weather Subcommittee is working on a draft proposal for an ASCADS back-up in conjunction with the Fire Danger Subcommittee.
- Lightning Data Display – is currently in the process of being redesigned.
- RAWS Partners Groups – RAWS leaders from each of the federal agencies, as well as state representation, have attempted in the past to be chartered. They have now been chartered as the Fire Environment Observations Unit under the Fire Weather Subcommittee.
- Javelin Weather Station – the Forest Service is funding a prototype project through Voltree, to deploy the mini weather stations. They have the ability to communicate with each other and may be able to collate and send data to the nearest RAWS.
- Fire Weather Handbook – there have been suggestions to update the Handbook and bring it online with updated graphics. The update will probably take place over the next couple of years.

Remote Automated Weather Stations (RAWS) Network Analysis – Tom Wordell
The National Park Services provided $250,000 ($100,000 to DRI and $125,000 to the University of Utah) to undertake a study to determine how many RAWS are needed nationally. The University of Utah is conducting the data denial side of the analysis – what are the consequences of removing the station from the network. The draft report from the University of Utah found 95 RAWS that could potentially be removed; however further analysis on the integrity of the data is needed. Additional findings determined that the western United States is under represented.

DRI will be evaluating the data augmentation aspect of the analysis to determine the cost/benefit of adding RAWS where the University of Utah study showed under-representation or adding other available networks.

The Combined Report on the network analysis is scheduled to be completed 9/30/2009.

➔ **Action Item 223:** Discuss findings of the RAWS Network Analysis with Paul Schlobohm regarding bringing other RAWS Networks into the system and build on the success of the adoption of the Florida Network. Consider coordination with the Fire Weather Subcommittee.
Responsible: Robyn Heffernan
Due Date: March 2010

Agenda Item: Review of NPSS Strategic Plan – Tom Wordell
The Predictive Services Framework was finalized in April 2004. It included Predictive Services Mission, Vision, Values and Goals of:

- Predictive Services Mission – The Predictive Services Program supports the wildland fire community and others with information and decision support products.
- Predictive Services Vision
    - To enhance wildland fire management that emphasizes safety, cost containment, efficiency and ecosystem health.
        - We integrate climate, weather, fuels, fire danger, situational and resource status information.
        - We successfully anticipate critical fire events.
        - We partner with cooperating agencies, academia, research and the private sector
- Predictive Services Program Values
    - Safety
    - Cooperation
    - Adaptive Leadership
    - Innovation
    - Empowerment
    - Integrity
    - Efficiency
    - Pride in Service
- Predictive Services Program Goals
    1. Develop and implement a user assessment process so that user needs are understood and defined.
    2. Identify and implement standardized products and services that satisfy user needs.
    3. Determine organization, resource and programmatic requirements.
    4. Develop and implement performance standards for products and service.
    5. Enhance the interaction between the Predictive Service functions.
    6. Establish a method for communication information between Predictive Services internally and externally.
    7. Improve the data infrastructure that supports and facilitates the integration of Predictive Services and the Wildland Fire Program.
    8. Implement methods to assess and improve the products and services provided by Predictive Services.

In 2007 Shari Shetler led the group through the Strategic Plan Process. Using the Framework as a starting point, the current Strategic Plan was developed. The Strategic Plan is scheduled to be reviewed annually and updated at each meeting.

➔ **Action Item 224:** Review the Strategic Plan and develop alternatives to review and update. Present alternatives at the Annual Predictive Services Meeting.
Responsible: Robyn Heffernan
Due Date: November 16, 2009

➔ **Action Item 225:** Present information regarding the Strategic Plan and alternatives for review to the Center Managers.
Responsible: Susie Stingley-Russell and Kim Christensen
Due Date: December 15, 2009

Agenda Item: Update from NPSS Chair on Charter and Status of FY 2009 Budget and Projects – Tom Wordell (Exhibit B)
Funding requests are received in the form of a project proposal; the template was derived from the Joint Fire Science Project Proposal.

- 2009 National Seasonal Assessment Workshop – East and South:
  Funded: $4,000 Spent: $3,615
  Money was spent for travel of state employees. In 2010, NWCG will directly fund state employee travel.
- 2009 National Seasonal Assessment Workshop – West
  Funded: $4,000 Spent: $0
- Verification of National 7-Day Product
  Requested: $4,000 Not Funded
- 2010 Annual Predictive Services Joint Meeting
  Funded: $4,000 Spent: $3,000
- National Fuel Moisture Database
  Funded: $15,081
  8,250 Spent: $23,374
- Remote Monitoring of Live Fuel Moisture Using Soil Moisture Proxy
  This proposal was funded by the BLM Fuels
- Intelligence Working Group Support
  Funded: $2,500 Spent: $1,075
- Daily Product Template
  Funded: $4,400 Spent: $4,400
- Communications Plan – Brochures/Pins
  Funded: $3,000 Spent: $3,000
- ROMAN Funding
  Funded: $60,000 Spent: $60,000
- Support for Lightning Workshop
  Funded: $3,000 Spent: $1,624
- Creating MOS Equations for Additional Stations
  Funded: $7,600 Spent: $7,600

- Upgraded Servers for RSAC Predictive Services Portal
  Funded: $8,698 Spent: $8,698

Agenda Item: National Predictive Services Meeting – Fred Svetz
November 16-20, 2009
Lake Tahoe, Nevada

- Fred will be meeting with the Facilities Manager next week to review the rooms. There will be one large conference room that can be split as well as a few smaller rooms available for breakout sessions.
- room rates will be adjusted to reflect the current perdiem rate ($98.00)
- The Agenda has been distributed; each session will have a facilitator.
- The CAVE Demonstration at Desert Research Institute (DRI) has not received much interest. Fred will have Tim Brown provide additional information and Fred will send out an email.
- The GIS Workshop on Thursday afternoon is in need of laptops with ArcGIS 9.3 preloaded.

➔ **Action Item 226:** Check with the Wildland Fire Training and Conference Center at McClellan, California on the availability of computers for use with the GIS Workshop.
Responsible: Marva Willey
Due Date: October 30, 2009

Agenda Item: Fire Behavior Service Center – Dan O'Brien (Exhibits E and F)
A Brief Review of the Pacific NW Fire Behavior Service Center 2009 Operations

- A Quick Review of the Fire Behavior Service Center Mission
  - The Service Center will:
    - Initiate analysis for emerging incidents
    - Support GACC decision-making at all times and local decision-making in short time frames where skill gaps are apparent
    - Provide services at all times through Predictive Services
    - Scale up and formally activate during periods of heavy fire activity
    - Provide, on request, analysis products for local units and established incidents in support of on-site fire analysts
    - Establish a training ground for future fire analysts
  - The Service Center will NOT:
    - Replace local expertise
    - Produce WFDSS decision documentation
    - Conducts broad, in-depth incident analyses on behalf of individual agencies
    - Manage incidents from afar
  - A handbook was developed for Service Center Operations and instructions on how to request analysis distributed to GACC dispatch centers and local units
- In 2009
  - PNW Fire Behavior Service Center Statistics

        - Formally staffed for 24 days
            - Total Analyst Days – 98
            - Lead Analyst Days – 23
            - FBAN/LTAN Trainee, THSP Days – 75
        - FSPro Analyses Completed 63
            - Incidents/Complexes – 37
            - Wildland Agencies – 5
            - FS/NPS/BLM/ODF/WFS
    - What Went Well:
        - Improved organization over 2008; smoother implementation and operations.
        - Better awareness and understanding of Service Center products and services.
        - Better networking between Service Center, incident FBAN/LTANs and local unit SMEs.
        - Functioned well as training ground for individuals seeking technical fire behavior skills.
        - Considerable informal (non-analytical) consultation.
- In 2010
    - Opportunities for Improvement:
    - Seamlessly integrate the Service Center into Predictive Services' daily operations.
    - Coordinate critical information pathways between Predictive Services meteorologists, Intelligence Coordinator, Service Center Analysts and Predictive Services/Service Center Customers.
    - Continue to establish and refine Service Center/Customer network; maintain a continuous feedback loop with local SMEs.
    - Where appropriate, use site visits as a positive interface with incidents/local units to enhance training and allow for product validation.
    - Explore the possibility of a Lead Analyst on an extended detail into the GACC for continuity of operations and consistent mentoring.
- Discussion:
    - Possible to expand and contract relative to the workload.
    - Has not been tested when multiple geographic areas have needs – there may not be enough qualified analysts available to cover needs
    - Where do the Tom Zimmerman's analysts fit into the equation?
    - California is addressing this as well; may not be going down the same path.
    - Standards and an Implantation Plan need to be defined.

➔ **Action Item 227:** Request time on the NMAC/GMAC Agenda with Tom Zimmerman, Dick Bahr and Tim ???; to discuss the expectations and what would be needed in terms of staffing, funding and training to provide support to the teams and WFDSS.
Responsible: Kim Christensen and Susie Stingley-Russell
Due Date: November 30, 2009

Agenda Item: Update form the NPSS Chair on Charter and Status of FY2009 Budget and Projects – Tom Wordell (continued)

➔ **Action Item 228:** Determine which Geographic Areas still need MOS Equations.
Responsible: Robyn Heffernan and Shelby Sharples
Due Date: December 15, 2009

FY09 Budget

- Received $122,000
- Spent $121,341

FY10 Budget

- Received over twice the previous year.
- The majority of the funding is from FEMA and will need to be spent or obligated in FY10

Wednesday, October 21, 2009

Agenda Item: NPSS Funding Allocation Decisions from NWCG FY10 – Conference Call
2009 – 122,000 (includes 60,000 ROMAN)
2010 – 266,000 (includes 60,000 ROMAN), Additional funding may be available through the Forest Service 300lite

FEMA was the primary source of funding this year. All project proposals were submitted and FEMA selected the projects they wanted to fund. They were looking for interagency products whose outputs could be used by any agency. It is critical that funds are completely spent of obligated under a contract in FY10. In addition, a one page NWCG Technology Proposal form will need to be completed for each project.

Funded:

GIS Web Portal (Heffernan, Kelly)	$15,250
Predictive Services Corporate Database (Sharples, O'Brien)	$14,350
Gridded Seasonal Assessment Forecast Product (Westerling, Wordell)	$75,000
Gridded 7-Day Forecast Pilot Proof of Concept Project (Mathewson, Jolly)	$15,000
On-line Web-based 7-Day Product (Delgado, Heffernan)	$75,000

Approximately $35,000-40,000 remains

Project Updates
On-line Web-based 7-Day Product – Ed Delgado
Ed has received a letter from the programmer regarding some of the more complex issues. He believes it should be available for a few of the Geographic Areas to test this winter; and is confident it will be available for further testing next fire season.

➔ **Action Item 229:** Schedule a conference call with RSAC to discuss the On-line Web-based 7-Day Product
Responsible: Tom Wordell, Robyn Heffernan, Ed Delgado, Brad Quayle
Due Date: October 27, 2009

Unfunded Proposals:
Fire Behavior Knowledge Database (Delgado) – a database of fire behavior supplied by individuals who have been out on the fire. This would be similar to an active database in Toronto, Canada and has the potential for international collaboration. This project is similar to efforts by the Lessons Learned Center.

Verification Tool Improvement (Wordell) – the verification product in its current form is not being utilized. More information is needed to determine what the Meteorologists would find useful.

➔ **Action Item 230:** Solicit feedback from the Meteorologist Working Group on what they are looking for in improvements to the Verification Tool.
Responsible: Shelby Sharples and Robyn Heffernan
Due Date: January 30, 2010

Critical Fire Weather Monograph (Meteorological Working Group) – update the Critical Fire Weather Handbook that was produced in the 1980s. This would be similar to the database that Ed Delgado proposed.

➔ **Action Item 231:** Determine if the Meteorologist Working Group is still interested in this project.
Responsible: Shelby Sharples
Due Date: January 30, 2010

Communications Plan (Marien) – there are still funding requirements for the video; which will be previewed at the Annual Predictive Services Meeting.

DRI Maintenance and Back-up (Rolinski/Brown) – this need relates to how fast the transfer is to a gridded environment. At this time, the money is better spent elsewhere.

MOS Equations for Additional Stations (Rolinski/Brown) – There will always be work as additional stations come online. Fund at $5000 (placeholder).

Modify Existing MOS Equations (Rolinski/Brown) – hesitant to do this until the verification page is utilized.

Teambuilding (Heffernan) – Fund at $5000 (placeholder).

Proposals will be accepted until early next year.

Agenda Item: Subgroup Concept for Managing Predictive Services Projects and Efforts – Shelby Sharples (Exhibit G)
Proposal for Functional Areas

- About Functional Areas
  - Functional Areas would be groupings of projects/processes/tasks performed by Predictive Service members
  - All efforts that Predictive Service members undertake will fall under a Functional Area
  - Members of Predictive Services will provide oversight of each Functional Area
- Need for Functional Areas
  - Provide Organization to task items
  - Provide method of accountability and better decision making within Predictive Services
  - Facilitate more thorough integration of Meteorologist and Intelligence Working Groups
  - Give Structure to annual meetings and monthly conference calls
  - Support and accomplish overall mission of NPSS
- Proposed Functional Areas
  - Research and Development
  - Products and Services
  - Education and Outreach
- Organization
  - Organization of the Functional Areas will be discussed at the fall meeting and is currently open to suggestions, but here are a few ideas:
  - Oversight of the Functional Areas would be rotated through the Geographic Area Predictive Services Units. A term could last two years. All Geographic Area Coordination Centers would participate.
  - Oversight could be on a voluntary basis, where the chair and vice chair would be elected by the group and change every two to three years.
  - With Functional Areas in place the distinction between Meteorologist and Intelligence working groups would diminish and separate representation would no longer be required.
  - Each Functional Area would have a voting seat on NPSS.
- Discussion:
  - If group is to restructure, the assistance of a professional would be helpful – opportunity for teambuilding session.
  - Restructuring would set the group up for moving into the future (futuring)

➔ **Action Item 232:** Present to the National Coordinators
Responsible: Susie Stingley-Russell and Kim Christensen
Due Date: November 30, 2009

Agenda Item: Future of NPSS Chair, Vice Chair and Member Positions – Tom Wordell
Tom (Chair) will be at mandatory retirement 2/26/2010
Rick Ochoa (Vice Chair) is planning to retire late February/early March

Member Rotation – It would be beneficial to extend some of the member's rotations to ensure overlap and consistency during the transition. The group has strived for multiple agency representation.

- Susie Stingley-Russell and John Barborinas joined in 2007
- Marva Willey and Kim Runk joined in 2008
  - Susie will approach the Center Managers in November regarding the Center Manager representative
  - John Barborinas will be requested to stay through the spring 2010 as the Field Level Fire Managers representative. Dick Bahr will forward the names of potential replacements to Robyn.
  - Dan O'Brien will be replacing Marva as the Intelligence Working Group representative.
  - Jennifer Zeltwanger is replacing Kim Runk as the National Weather Service representative.
  - Dan Smith (NWCG Liaison) and Rex McKnight (Geographic Operations Group Liaison) will be requested to stay through fall 2010.

Election of New Officers – For coordination purposes it has been beneficial to have one of the positions filled by someone who is at the National Interagency Coordination Center.

New Officers:

- Chair – Robyn Heffernan
- Vice Chair – Dan O'Brien

➔ **Action Item 233:** Contact Kelly Martin, FENC Chair for approval of new Chair and Vice Chair
Responsible: Tom Wordell
Due Date: October 23, 2009

Meetings – There are usually three meetings per year
October – Remote Location
February – Boise
Spring – Virtual, usually two half days

Future Meetings:

- Next Meeting
  - When: February 8-11, 2010 (will start at 0800 February 9th)
  - Where: Boise, Idaho
- Spring Meeting
  - When: Week of April 12, 2010
  - Where: Virtual Meeting

Agenda Item: Standard 209 Updates and Discussion – Charlie Leonard

- A redesign of the SIT and 209 programs has been initiated.

  - Keri Vest – Project Manager
  - Charlie Leonard – Business Lead
  - Dan Irvin – Lead Programmer
- A User Needs Assessment was conducted using the vendor Common Thread.
- The Business Case is expected to be finalized in December.
- Attempts will be made to tap into existing systems wherever possible to reduce redundancy.
- NWCG has not committed any funding to date; the group is also seeking funding through the Forest Service.
- The program will need to be NIMS compliant, in accordance with the All-Hazard 209
- FEMA currently has no intention of creating a repository for the data
- Current Changes:
  - Current changes are only being planned for the 209, but will probably necessitate changes in the SIT where the two programs interact.
  - The group is still awaiting the policy changes.
- *Discussion:*
  - Questions are being asked of the system that it was never designed to provide.
  - Policy and terminology need to be addressed prior to system design.

➔ **Action Item 234:** Provide list of short term and long term proposed changes to the National Coordinators.
Responsible: Charlie Leonard, Susie Stingley-Russell and Kim Christensen
Due Date: November 30, 2009

Agenda Item: Project Status Reports and Updates – Conference Call
Online 7-Day – Ed Delgado
As was discussed yesterday; Ed is finishing up on some of the details. He will be making a presentation at the Annual Predictive Services Meeting and he is confident the project will be available for further testing next spring. Initial testing will take place this winter in selected Geographic Areas (Eastern Great Basin, Southern California, Southwest, Northwest and Rocky Mountain)

National Fuel Moisture (NFMD) and Lightning/Dryness Products – Ed Delgado
- NFMD – Additional import functions have been added and the User Guide has been updated. The standards for collecting fuel moistures have not yet been published.
- Lightning/Dryness – Predicts lightning probability based on dryness level. Currently waiting on RSAC.

RAWS Location Discrepancy Issues (WIMS versus ASCADS) – Chuck McHugh (Exhibit H)
Analysis of Remote Automated Weather Station (RAWS) Metadata Information
- Previous Work
  - Focused on QA/QC of RAWS stations and quality of recorded data elements
  - Study of station metadata overdue (Zachariassen et al. 2003)
  - Region 3, Chuck Maxwell

"… found that two-thirds of our stations had discrepancies between at least one of the 'location' fields…elevation, latitude, longitude…and one-third had discrepancies between ALL of these fields."

- Issues
  - Inconsistency in Latitude/Longitude Entries
  - Two Systems
    - WIMS – Degrees/Minutes/Seconds (DMS) and Decimal Degrees (DD)
    - ASCADS – DMS only
  - WRCC – DMS
  - Elevation Discrepancies
  - Differences in locations when viewed in GIS or Google Earth
  - Dependency on correct location information by multiple systems.
- Ramifications/Impacts
  - Incorrect Locations and Elevations Affect:
    - NWS forecasts
    - Spot Weather Forecasts
    - NDFD Validations
    - Station Selection in Wildland Fire Decision Support System (WFDSS) Fire Behavior Application
    - Station Selection by Fire Behavior Analyst (FBAN) and Long-Term Analyst (LTAN)
- Potential Sources Data Error
  - Conversion Issues
    - DMS to DD
    - Legal Descriptions to Geographical Coordination
  - Data Entry Errors
  - Incorrect Geodetic Datum
  - Precision and Accuracy of Coordinates
- Precision Issues
  - Shifting of locations affected by the level of precision when recording geographic locations
  - Desired level of precision four to five digits.
  - The effect on location based on the level precision varies by latitude and longitude.
- Analysis Objectives
  - Quantify the differences in location information between WIMS and ASCADS
  - Summarize the information
  - Distribute to interested parties
- Data Sources – WIMS
  - All stations cataloged NFDRS Type 2, 4 or 6 currently listed in WIMS
  - 2,216 Stations
    - 264 Type 2 (Manual NFDRS)
    - 1,831 Type 4 (Satellite NFDRS)
    - 121 Type 6 (Non-Satellite NFDRS)
  - 281 stations had no NESDIS ID
    - Type 2 (262)

        - Type 4 (11)
        - Type 6 (8)
- Data Sources – ASCADS
    - ASCADS Current Available Stations – 2,492
    - 120 Stations had no Latitude or Longitude
    - 100 Stations had no NESDIS ID
        - Portables, Test Stations or Research Stations
- Analysis Methods
    - Assumed all coordinates in WGS84
    - Assumed ASCADS location information "Gold Standard"
    - Quantify the difference in station locations based on global distance
        - Results difference in miles WIMS location is from ASCADS location
    - Created individual files each dataset
    - Joined data based on NESDIS ID
        - ASCADS to WIMS
        - Matched 1,768 stations from WIMS to a station from ASCADS
        - Deleted 66 stations from combined dataset
        - Analyzed 1,702 stations
- Results
    - For all 1,702 stations with a common NESDIS ID in WIMS and ASCADS
    - Miles separation WIMS location compared to ASCADS
    - Distance is the global distance in miles not a straight line distance
- Summary Statistics
    - Study analyzed the difference in RAWS locations between WIMS and ASCADS, both in distance and in elevation.
    - Results were summarized by Geographic Area
- Other Issues
- NESDIS ID assigned to inactive WIMS stations assigned to a station in ASCADS
    - Incorrect State IDs in RAWS station ID.
      Example, Hawaii (6 stations) in Kentucky
    - Inconsistent in data entry for elements
    - Stations in WIMS not actively collecting data
        - 147 stations in WIMS have not collected data in the last 10 years
- Recommendations
    - Consistent Georeferencing for Station Locations
    - Standardized entry format
        - Specified Coordinate System
            - DMS, DD
        - Specified Geodetic Datum
            - NAD27, NAD83 or WGS84
        - Specified Level of Precision
            - Decimal Degrees four to five digits
    - One "go-to" database
- *Discussion:*
    - Additional decimal places were not added in WIMS until 2002/2003 timeframe.

- Findings need to be forwarded to the field – on the agenda for the next Fire Weather Committee conference call for them to take to the Fire Environment Committee.
- Line Officers need to understand the importance of correct data.

Missoula Lab Updates/7-Day Dryness Levels – Matt Jolly
7-Day Fire Danger Forecasts for Predictive Service based on Dryness Levels – Building an operational Fire Danger Forecast System based on Fuel Moistures from Wildland Fire Assessment System (WFAS) using NFDRS algorithms. System will be operational for Energy Release Component (ERC), Burning Index (BI) or Ignition Component (IC). GeoTIFF outputs will be available for direct outputs into GIS applications. It is not a MOS forecast and points will be extracted from a grid without correction. It will cover more than the continental United States. He would like to be able to evaluate the use of unmodeled data from National Digital Forecast Database (NDFD).

BLM Lightning Data Display Redesign – Katy Madrid
The BLM is currently in the process of redesigning their Lightning Display Program. Surveys have been distributed and feedback has indicated the desire for additional functionality. The new GIS Lightning Application should be available next spring with future enhancements released at a later date.
RSAC and Predictive Services Portal – Brad Quayle and Kim Kelly (Exhibit I)
http://svinetfc6.fs.fed.us/NPSG
Predictive Services Group (PSG) Geospatial Portal Status Report

- PSG Geospatial Portal Map Products
  - 7-Day Significant Fire Potential
    - Updated half hourly between 7AM and 1:30PM MT
    - Updated web server monitoring verifies half hourly map updates
    - Map product updates posted to NIFC FTP site
  - AHPS/Lightning Summary Map
    - Updated hourly between 9AM and 11AM MT
    - Planned enhancements
      - Decreased latency in product creation
      - Index map of AHPS data coverage/availability at each update
- PSG Core Data Layer Map Services
  - Centralized geospatial data hosting for core Predictive Services data layers
  - Published and hosted using ESRI ArcGIS Server technologies
    - Accessible using the following clients
      - PSG Portal Interactive Web Map Application
      - ArcMap
      - ArcGIS Explorer
    - User Guides for accessing services using ESRI clients are posted on PSG Portal website
  - Approximately 175 geospatial data layers currently updated operationally
  - Automatic monitoring verifies all dataset and service updates
- Current PSG Geospatial Portal Action Items
  - Core data layers to be added to PSG map services

        - PSG Monthly Outlooks
        - PSG Seasonal Outlooks
        - 500mb Heights
        - Bathymetry/Sea Surface Temperature
        - NICC Significant Fires
        - Fire Weather Watches/Warnings – Day 1 versus Day 2
        - NFDRS Adjective Fire Danger Rating
        - NWS Quantitative Precipitation Forecasts
        - NWS Lightning Activity Level
        - NWS Lightning Probability
        - Lightning Analysis Products
        - Haines Index
        - NDVI – Relative Greenness
        - NDVI Departure from Average
        - Growing Season Index
    - Historical Dataset Accessibility
        - Lightning (coordinate with WFMI)
        - 7-Day Significant Fire Forecast (2007 to Present)
- PSG Fire Weather Outlook Map Template Tool
    - ArcMap Tool for compiling Fire Weather Outlook maps by Geographic Area
    - PSG Map Services provide Weather and related datasets
- Predictive Services Web Application Server Status
    - PSG provided FY09 funds to RSAC for server purchase
    - PSG web server ordered in spring, funds obligated
    - USFS server acquisition contract expired; RSAC worked directly with USFS CIO and IBM to purchase server
    - Server shipped October 19, 2009??
    - RSAC will migrate PSG applications, data services, etc. to new server
        - PSG Geospatial Portal Website
        - PSG Mapping Services
        - PSG Interactive Web Map Application
        - 7-Day Significant Fire Potential
        - AHPS/Lightning Summary Map Product
        - 7-Day Online Application
        - National Fuel Moisture Database

Geospatial Database Development Concept – Kim Kelly (Exhibit J)

- NICC Corporate Database and Geodatabase Concept
  NICC support needs requested Fire Season 2009 – Develop consistent method of acquiring, storing, archiving and delivering Intelligence and Predictive Services Products
- Support Needs
    - Assistance with developing clear requirements
    - Assistance with determining which database software to build system with
    - Design system schema (consider future development within the design)
- Design Requirements
    - Efficient storage and retrieval of Predictive Services data and products

  - Flexibility for local data base administration (add/modify macros, include newer data sets…)
  - Design that supports Intelligence /Predictive Services operational workflow (to be provided)
- Product Requirements
  - Consolidate various database, excel and spatial information needed for Predictive Services into a single, comprehensive system
  - Efficient storage and retrieval of data and products
  - Archive Capability
  - Flexibility for users to add data, create and modify operational macros
- Future Development
  - Incorporate front-end forms for manual data entry (Morning Report, Critical Resources Update)
  - Incorporate back-end canned reports
- Thoughts????
  - Could act as prototype for larger Predictive Services Database work
  - Formal proposal to NPSS on Project Design
  - Possibilities to partner with RSAC or other entities to accomplish work
  - Minimal requirements – not a large system design

Proposed Changes to Monthly and Seasonal Products – Robyn Heffernan (Exhibit K)
The Seasonal Significant Wildland Fire Potential Outlook is currently a trend forecast based on the Monthly Outlook and only depicts the "Above Normal" category; which was determined at the time to be the most beneficial to the users. The inclusion of all possible categories resulted in the map become difficult to follow. However, there may be potential value in including normal and below normal in the forecast.

➔ **Action Item 235:** Provide representative examples to the Center Managers for their discussion and opinion on how the information should be displayed.
Responsible: Susie Stingley-Russell and Kim Christensen
Due Date: November 2, 2009

National Weather Service (NWS) Chat and Other Ways to Disseminate Information – Robyn Heffernan
Robyn has been working on this. The BLM did grant approval for use at NICC and the GACCs. The initial request was for use by the "fire community" so it has been returned for further consideration; but believes it will be approved. The Forest Service did approve the use of NWS Chat and then revoked their decision two hours later.

The NWS also provides text message alerts and mobile web for blackberries.

➔ **Action Item 236:** Add link to Interactive National Weather Service (iNWS) to the NPSS webpage.
Responsible: Robin Heffernan and Tom Wordell
Due Date: December 15, 2009

Thursday, October 22, 2009

Agenda Item: Standard Position Description Update and Discussion – Kim Christensen
The Management Efficiency Study is still being discussed somewhere between NWCG and the Fire Executive Council. Standardized Position Descriptions were identified in the study; however it was not necessary to wait for final determination from the study to proceed. Position Descriptions have already become standardized at the local dispatch levels. The group has decided to reconvene and work on standardizing the Position Descriptions at the Geographic Area Coordination Center (GACC) level. To date they have completed the GS-9 Intelligence Assistance, GS-11 Intelligence Coordinator and the GS-11 Aviation Coordinator. The group will also be evaluating the Fire Behavior Analyst and the GIS Staff Assistant; even though these positions are not utilized at all of the GACCs. Originally it was thought the Meteorologist positions were recent and did not need to be evaluated; that has changed. The Meteorologist positions will also be evaluated for currency. The status of the GS-12 Assistant Center Manager and the GS-13 Center Manager remains in limbo pending agency direction. The project should be completed before the 2010 Fire Season.

Task Group Members:
Kim Christensen – National Interagency Coordination Center
Susie Stingley-Russell – Southern California Coordination Center
Gerry Day – Northwest Area Coordination Center
Kathy Elzig – Northern Rockies Coordination Center
Nelda St. Clair Western Great Basin Coordination Center

Bin Item: Integrating Air Quality Tools with WFDSS – Pete Lahm
Integrating Air Quality Tools with WFDSS

- Goals:
  - To provide access to available air quality and smoke tools quickly and easily through WFDSS
  - To use data from WFDSS to drill-down into existing tools for relevant information
  - To avoid the need for duplicate entry of information
  - To provide “one-stop” portal access to the most useful and relevant air quality tools
  - To provide help and how-to-use instructions
- Status and Next Steps
  - Website currently in prototype phase
  - Work being done to add drill-down capability
  - Some tools being revised to work with WFDSS data
  - Currently using fire locations from WFDSS
  - Future work will incorporate additional WFDSS data
- *Discussion*
- Product is expected to be available in December.

- Product would be a test output –dispersion parameters for a specific location based on DRI information.
- Pete is currently working with the RAWS Depot to be able to order smoke monitoring equipment and integrate it with current satellite transmittal data.
- Further discussion is needed concerning the roles of Incident Meteorologists (IMETs), Predictive Services, NMAC and Line Officers regarding air quality, the long term impacts of smoke and how it should influence some of our decision making.

➔ **Action Item 237:** Provide Pete with contact information to produce a Webinar on the inclusion of Air Quality Tools in WFDSS.
Responsible: Reeve Armstrong
Due Date: November 30, 2009

➔ **Action Item 238:** Tie Pete in with Jeff Barnes and the RAWS Refresh Project.
Responsible: Tom Wordell
Due Date: November 30, 2009

Agenda Item: NPSS Action Item Progress – Tome Wordell (Exhibit A)
The Action Item Tracking Table was updated

- Action Item 151 – Still needs to be completed, should be evaluated with the Strategic Plan Review.
- Action Item 160 – Rick has been in contact with Western Trophy, just need to follow-up.
- Action Item 195 – On hold until Strategic Plan is reviewed.
- Action Item 196 – On hold until Strategic Plan is reviewed.
- Action Item 197 – The questionnaire has been distributed. Marva Willey will be compiling the results.
- Action Item 198 – This was dropped by John Barborinas.
- Action Item 206 – Shelby Sharples has distributed the questionnaire, she will work with Marva Willey to compile the responses.
- Action Item 207 – On hold until Strategic Plan is reviewed.
- Action Item 211 – Decided not to pursue at this time.
- Action Item 213 – Need to follow up at December FENC meeting.
- Action Item 215 – Tom will verify; believes information has been posted online.

➔ **Action Item 239:** Linked to Action Item 213. Discuss at FENC meeting; incorporation of non-RAWS into WIMS.
Responsible: Robyn Heffernan
Due Date: December 2009

➔ **Action Item 240:** Initiate annual review of the Predictive Services Handbook.
Responsible: Robyn Heffernan
Due Date: December, 2009

Action Item: Developing an Incident Management Organization (IMO) Intelligence Unit – Jeff Whitney and Bill Phillips Geospatial Equipment Technology and Application Group (GETA) (Exhibits L and M)
Common Operating Picture
Converting Information to Intel

- Organizing information early on in any emerging incident is vital for the initiation of effective response
    - Land Management Plan – Fire Management Plan – Field Observation – GIS, Google Earth, WFDSS – how to take the information, process it through filters and come up with "Intel"
- Additional information
    - Weather (current and expected)
    - Fuels Conditions
    - Resource Availability
    - …provide the foundation of local initial response.
- Utility for all users
    - As an incident expands in complexity, so does the available information and the corresponding demand from a broad spectrum of end users for near instantaneous Intel.
- Shared, Timely Information – *The value of shared timely information cannot be overstated.*
    - The evolution in how the information is organized and shared serves Agency Administrators, Incident Management Organizations, Area Command, MAC groups at all levels, senior agency leadership, the larger jurisdictional community, stakeholders and the public at large *all have some demand on information.*
- Updated policy interpretation
    - Response options range from suppression of human-caused wildfires to the potential for a blend of multiple objectives over the duration on wildland fires of natural origin.
- Wildland Fire Decision Support System (WFDSS)
    - Has increased the ability to meet expectations for rapid real time, site specific planning and deliberate response to emerging incidents.
    - Requires that all involved improve their technical skills and coordination.
- Common Operating Picture (COP) – *still trying to figure out who is on first*
    - In order to be of maximum value, the available information is synthesized into intelligence (Intel)
    - Once broadly available, Intel provides the basis for a "common operating picture" (COP) – *reduce some of the need and confusion*
    - A COP is the display of relevant information available to all involved to assure:
    - Situational awareness
    - Collaborative planning
    - Incident support
    - Lateral and vertical sharing of Intel within and across jurisdictions involved…
    - In the management and/or support to any single incident or combination of multiple incidents.
    - Dispatch maintains the COP

        - The demand for timely, organized Intel will require an evolution within the Intel community at the local Agency field units and dispatch sectors.
        - Once an incident exceeds Response Level 1 the assigned IMO may be assigned maintenance of the COP for that incident.
- Situational Assessment
  The components are *chronology*:
    - Current Situation
    - Values at Risk
    - Potential Threats
    - Risk Identification
    - Opportunity Recognition
    - Risk Management
- Course of Action *(tab in WFDSS)* developed by Agency Administrator(s) with Duty Officers and /or Incident Commanders
    - The development of objectives, strategies, tactics and timing of resource deployment for specific tasks is facilitated. Having a well developed COP affords for optimum allocation of resources for deliberate application in addressing a myriad of safety, socio-political, socio-economic and natural resource value issues simultaneously in a balanced and cohesive manner.

- (GETA) http://geta.firenet.gov
    - Participated in two incidents this year – Shanta Creek and Red Rock
        - Shanta Creek
            - Common Operating Picture (COP)
            - Operational Support
            - Strategic Planning Support
            - Social Networking and Visualization for Public Meetings
            - Semi-Real-time Tracking of Resources
            - Support From Tactical Resources
            - Education
            - Experimental
            - Specialty Map Creation
        - Red Rock
            - Intel Unit with a Remote Situation Unit
              BGAN Satellite Communications (OODA Kit)
              COP/Field Observers
              Remote Map Creation/IAP Distribution
              Administration Functions
            - Tachyon Unit
              Incident Specific Data
              Personal Communications
- *Discussion*
    - Utilizes Google Earth Enterprise Client.
    - Bridges the gap between voice communications and digital communications.
    - Provides information sharing.
    - Fire personnel (Fire Use Module members) were trained and imbedded.

- Potential to coordinate with Bob Roth and his Google Earth project.

➔ **Action Item 241:** Bring to the Annual Predictive Services Meeting as a topic for the Intelligence Working Group.
Responsible: Marva Willey
Due Date: November 30, 2009

Agenda Item: Brainstorm on How to Ensure Better 7-Day Coverage and Accountability for Predictive Services Products During Peak Fire Season (as outlined in the Predictive Services Handbook) – Robyn Heffernan

- Current verbiage in the Handbook ties seven-day product to Preparedness Level 2 and the "primary fire season".
- This has left some ambiguity in the interpretation of when the product is expected.
- There are two issues:
  - Seven Day Coverage
  - Producing the 7-Day Product
- A better approach may be to verify the period the product would be required and allow the Center Managers to determine how to accomplish it.
- Requirement should be included in the National Interagency Mobilization Guide and codified elsewhere. (Interagency Standards for Fire and Fire Aviation Operations – Red Book)

➔ **Action Item 242:** Review Fire Family Plus and verify "primary fire season"
Responsible: Tom Wordell and Robyn Heffernan
Due Date: November 30, 2009

➔ **Action Item 243:** Ensure language is consistent in the National Interagency Mobilization Guide and in the Red Book.
Responsible: Robyn Heffernan and Kim Christensen
Due Date: January 30, 2010

➔ **Action Item 244:** Brief the Center Managers regarding the need for compliance in producing the 7-Day Significant Fire Potential Product and providing seven-day coverage during specified time periods.
Responsible: Susie Stingley-Russell and Kim Christensen
Due Date: November 30, 2009

Bin Item: Wrap Up

- Remember to communicate back to the groups you represent.
- Forward any meeting topics back to Robyn Heffernan.

Meeting Adjourned