2009 NIMO Program Accomplishments and 2010 Focus

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The accomplishments in the National Incident Management Organization (NIMO) program have been focused on the nine areas outlined in the NIMO Implementation Action Plan which support the Agency Strategy for Large Fire Management. So far the actions within the program have been judged by many to be exceptional and have resulted in a demand by regional leadership to support of the expansion of the program.

CONTINUOUS IMPROVEMENT: The primary focus of the NIMO program for 2009 was on the implementation of the *Continuous Improvement (CI) in Decision Making for Large Fire Management*. Work through this initiative has started the process of institutionalizing the application of risk management, utilizing technology and engaging communities and stakeholders on 30 forests that were identified to be the most likely to have large catastrophic fires. Based on feedback and needs, NIMO has returned to those forests in 2010 to provide additional assistance in order to prepare for fire season. This focus supports initiative #9 which is the *Development and Implementation of a new complex Incident Management model.*

INCIDENT MANAGEMENT: Outside of the CI project the NIMO teams also managed or assisted in strategic planning with Agency Administrators on nine fires in 2009; five fires in California, two fires in the Pacific Northwest and two fires in the Northern Rockies. They also had four non-traditional incident management assignments consisting of:

- ***Office of Management and Budget (OMB)*** *American Recovery and Reinvestment Act (**ARRA):*** NIMO assisted OMB and the Recovery and transparency board in the unprecedented initial reporting of accomplishments of the ARRA. The Incident Management Organization had to develop a tracking system, select assistance from agencies unfamiliar with ICS, train those representatives and facilitate real time reporting. This system touched over 80 percent of the money distributed through ARRA, and dealt with over 99.9% of the issues within the time frames assigned. Close coordination with 25+ agencies and departments was required to be successful. High level official from the Vice-President to political appointees were engaged thru out the process.

- ***Operation Reclaim:*** Operation Reclaim was a pilot project involving the National Forest System, Law Enforcement and Investigation, Fire and Aviation Management, Job Corps and Trinity County Sheriff. The purpose of the pilot was to assess the use of Job Corps crews for the removal of trash, debris, hazardous material (mostly fertilizer) and irrigation pipe from illegal marijuana cultivation sites on the Shasta-Trinity National Forest. NIMO managed the planning, development, implementation and evaluation of Operation Reclaim. This pilot program has the potential to be used as a model for future projects of this nature.

- ***Okanogan / Wenatchee Lightning Bust During Incident Review:*** NIMO was requested to conduct a During Incident Review. In the review they examined what worked well and shared it widely; provided options on how the forest could go to the "next level"; and evaluated if and how actions were tiered to the primary anchors of safety, resource/ecosystem benefit and wise investment.

- ***NBA All-Star Game:*** NIMO assisted the City of Phoenix All-Hazard Incident Management Team (PHX AHIMT) during the 2009 NBA All-Star week. NIMO's role was to provide mentoring and training to PHX AHIMT during the NBA All-Star week, assist in initiating and completing Position Task Books, complete a training summary and after action review of the assignment, coordinate closely with functional counterparts and assist in maintaining the continuity of operations in the Tactical Operations Center in the event of a major emergency.

BUILDING CAPABILITY AND CAPACITY: NIMO has worked extensively mentoring Type 2 and Type 3 organizations in 5 Regions across the country.

Type 3 Mentoring: This focused on forming incident objectives, developing an incident strategy, conducting an operational period planning meeting, individual roles and responsibilities and team interaction for each of the Command and General Staff positions.

Type 2 Mentoring: has involved the integration of technology and concepts and methodologies of the *Continuous Improvement* process. These mentoring sessions were conducted both on simulated fire events as well as active fires managed by NIMO. The teams mentored were both Forest Service teams as well as interagency teams from other federal, state and local agencies. The intent is to continue to build capability at a localized level.

Wildland Fire Decision Support System (WFDSS): NIMO also spent an ample amount of time introducing field units to the Wildland Fire Decision Support System (WFDSS). This included working with developers to finalize the system, scheduled Forest and Regional trainings and developing and delivering Webinars.

Training: NIMO delivered a number of 400 and 500 level fire training courses throughout the year. Some of the highlights of training action taken were:

S-520 Advance Incident Management Course: Worked to redesign the course to reflect changes in today's fire environment.

L-580: Leadership is Action (Advanced Incident Management Leadership): NIMO and the National Leadership Training Steering Committee hosted the first Incident Management Team Staff Ride.

Bridge course for Operations to Plans Chief Positions: In order to streamline training and evaluate competency of individuals, NIMO worked with other subject matter experts to develop a bridge from Operations Section Chief to Plans Section Chief without having to go back to the start to get qualified.

Social Media Webinars: NIMO organized and hosted several social media webinars to Public Information Officers and Public Affairs Officers nationwide to develop a better understanding in how this medium could be used during a large fire and how to monitor to ensure the correct information is getting disseminated.

LEADERSHIP: The NIMO program tackled several Fire and Aviation Management national issues which included the following:

Worked with specialist on the development of the National Fire Suppression Risk Management Protocol: The intent is to for the organization shift to a risk informed measured response based on the best available risk and decision science, as well as a national-level system of monitoring and governance that assures the proper alignment of risk-based decision making and cost consciousness.

Provided input into the Forest Service Fatality Protocols: NIMO was requested to provide insight based on experience of managing Iron 44. This incident presented a myriad of questions regarding the appropriate policy regarding covering expenses for tributes, non-Forest Service staff, etc. Based on research and personal experience, NIMO made recommendations to better address some of these issues for future situations.

Southern Region Succession Planning Project: Region 8 made a commitment to build future leaders through a comprehensive "pathway to fire leadership" that entails all facets of fire training, education, qualifications and mentoring. Collaborative work between NIMO, HCM and Region 8 fire leadership produced a strategic background document and an interactive web-based tool (FAMCAT-Fire and Aviation Management Career Advancement Tool) as a basis for leadership development within Fire and Aviation Management. FAMCAT can be used both by candidates and managers to identify and intentionally develop employees through career pathways and the training, development and qualifications that will make them competitive applicants as they move through fire leadership positions.

Emerging Technology Criteria: NIMO worked with personnel from Missoula Technology Development Center to develop criteria for the utilization and the testing of intelligence gathering and distribution technologies.

Risk Management: NIMO coordinated with Forest Service Aviation and Human Performance to bring consistency to risk management approaches between ground and aviation.

Completed Fire and Aviation Management Transformation reporting.

Evans Road and South One Large Fire Cost Reviews: A NIMO team was requested to conduct Large Fire Cost Reviews (LFCR) for the U.S. Fish and Wildlife Service (USFWS) Evans Road (Region 4) and South One (Region 5) incidents. The reviews were conducted using the new Interagency Large Fire Cost Review Guidebook (July 2008) direction. This was the first opportunity for the USFWS to use this direction. The objectives of the review were to focus on strategic decisions and tactical actions, compliance with policy and law, risk analysis and management. Commendations, trends and analysis, findings and recommendations were presented and documented with the two regions and forwarded to the USFWS National Office for review and approval.

North Carolina Division of Forest Resources (NCDFR), Evans Road After Action Review: NIMO assisted the North Carolina Division of Forest Resources (NCDFR) and the United States Fish and Wildlife Service (USFWS) on the Evans Road Fire in the summer of 2008. The fire burned for 90 days and was very challenging from a number of perspectives. Given NIMO's prior experience on Evans Road and other large fires, NCDFR requested NIMO serve as facilitators for the Evans Road Fire AAR.

2010 PROGRAM FOCUS: As mentioned earlier, NIMO is still focusing on assisting the 30 forests in *Continuous Improvement (CI) in Decision Making for Large Fire Management*. In addition to that work below is a few other projects NIMO is supporting:

National Accelerated Training Program: Individuals selected to participate in the NATP will be required to attend up to four residential training sessions. Participants will learn about mental models, leadership archetypes, crisis communication, continuous improvement, Just Culture, network mapping and emotional intelligence. Assessments will be conducted and used to develop a program-specific Individual Development Plan (IDP) that can also be used when participants complete their annual IDP. Individuals will work to complete all necessary technical training and will work with the NIMOs to acquire any incident experience that might be needed. A reading list must be completed and will mix standard technical works with creative, non-traditional material which will ignite curiosity and spark debate. Individual coaching will be provided for each of the participants on a recurring basis throughout the programs duration. The NATP will also provide an excellent networking opportunity for the individuals who will be leading the agency's fire management program in the future.

Emerging Technology for Large Fire Management: The purpose of NIMOs efforts is to improve decision support and situational awareness through the expanded availability of technology in the field. The goal is to provide real-time intelligence gathering, enhance communication capabilities between firefighters on the line and decision-makers at the ICP and/or forest unit, and enhance risk management and mitigation through the use of mobile field technology. While the NIMO employees and others have worked on this effort for a couple of years, a Technology X-Team was formed in October 2009 to provide a more focused effort. The X-Team includes members of all four NIMO teams and representatives from

the Missoula Technology and Development Center (MTDC), Google Earth Technology Advancement (GETA), Chiefs Information Office (CIO), Washington Office Fire and Aviation Management, and individual forest units. They are currently entering Phase 2 of a 3 Phase plan. Phase 1 was procurement of equipment, and Phase 2 is field testing and research.

Improving Access to Fire Social Science: NIMO has been working with Forest Service Research and Development to develop a chartered team that will focus on a more systematic and cohesive means of ensuring that social science research is providing fire and aviation managers with the information and tools they need. This team will address four areas:

- Identify and prioritize specific social science information needs of managers.
- Identify existing science-based knowledge that can meet these needs.
- Develop materials and dissemination plans to improve adoption by on-the-ground users.
- Facilitate development of research and tool development to fill gaps in understanding and application.

Wildfire Outcome Analysis: NIMO is working with scientists and GIS analysts from the National Fire Decision Support Center (NFDSC) in conducting a study to geospatially track the productivity of suppression resources and the associated wildfire outcomes. The initial phase of this project was tested last year with the NIMO teams on fires and has been refined to expand to other Type 1 and Type 2 teams in 2010. Impact on the team is for no more than 15 minutes a day and the information is gathered and analyzed on a daily basis. The information will provide the IMT with valuable information on the efficacy and productivity of various resources. Additionally, we believe this research will provide output that teams can use very effectively to improve After Action Reviews.

Joint Fire Science Projects: NIMO is currently supporting three different Joint Fire Science projects for 2010. Below is a brief description of each project and desired outcome.

Integrated Indicators for Sustainable Fire and Forest Management (Toddi Steelman, Tony Cheng, Dennis Becker, Cass Moseley):
Many recognize that the key to lowering wildfire costs rests with making progress on the multiple factors that contribute to the wildfire problem, including better fire management, reducing hazardous fuels, restoring fire adapted ecosystems, and providing community assistance to create fire adapted communities (QFR 2009; WGA 2006). These factors suggest that we should be tracking indicators that measure progress in these areas to assess cumulative efficacy in fire policy. However, managers tend to focus on some of these indicators to the exclusion of others. For instance, it is most common to track hazardous acres treated, amount spent on suppression or acres burned (need citations). These are also the measures that are most commonly tracked in the media and in government reports. Consequently, policy makers and managers are sensitized to focus on and work toward narrow indicators that actually compromise long term progress. This project is intended to develop an integrated set of spatially

explicit economic, social and ecological data that provide a clearer picture of progress toward sustainable fire and forest management. Much of this information exists in current databases and has not been leveraged well or integrated. A more comprehensive set of indicators could provide policy makers and managers incentives to work toward more long term sustainable solutions to the wildfire problem.

Systematic Learning After a Wildfire: Development of a Post-Fire Research Protocol (Sarah McCaffrey, Research Social Scientist at the USFS Northern Research Station):

The National Incident Management Organization (NIMO) has been tasked through the US Forest Service to evaluate and develop a system to manage large/complex wildfires. In doing so, NIMO tries to work closely with research and the Wildland Fire Lessons Learned Center to appropriately evaluate how business is currently conducted and tweak the system to better reflect what works effectively. The Forest Service often conducts post-fire reviews of large costly fires to determine tactically what might be done differently to mitigate risks and reduce costs in the future. Unfortunately, there has never been a systematic approach or consistency to these reviews, which makes learning and redeveloping a system based on the information gathered a challenge.

In recognizing this, our group will be happy to assist in providing the research team with the necessary data and entrée to support the development of post-fire research protocols. We hope in doing so, this more systematic approach will provide us with the information we need to truly evaluate large and small fires so we can provide different approaches to managing fires in the future.

Community-Agency Information Flow on Wildfires (Toddi A. Steelman, Ph.D. Department of Forestry and Environmental Resources, NC State University; Branda Nowell, Ph.D. and Deena Bayoumi, School of Public and International Affairs, NC State University; Sarah McCaffrey, Ph.D. USFS Northern Research Station)

Effective information flows are important to manage a wildfire event, avoid injury or loss of life, protect personal and community assets, maintain vital services, connect key participants on the fire, and build relationships and trust among those involved in the fire. At present, little empirical work exists to document how information flows during a fire event. In this research, we used and in 2010 will use social network analysis to better understand information processes in fire management.

The Fire Policy Council "Fire Exercise": NIMO is working with the Office of Wildland Fire Coordination (OWFC) to develop an exercise designed to assist senior executives as they: address significant media interests associated with national fire policy or issues; anticipate and manage congressional inquiries and concerns; prepare for responding to serious accidents and fatalities; and manage and prioritize multiple disaster scenarios and competition for scarce national resources.

The exercise will present 5 scenarios that set the stage for a facilitated discussion. The scenarios are: Fire Season Outlook; Preparedness; Serious Accident and Fatalities; Fire Response and Federal Disaster Declaration.