## Project Summary Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Assessment of NWCG Courses and Positions for Smoke and Air Quality Content

Discipline: Natural

Type of Project: Technical Assistance
Funding Agency: National Park Service
Other Partners/Cooperators: University of Idaho

**Effective Dates:** 8/1/2009 - 9/30/2010

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## Investigators and Agency Representative:

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Project Abstract: The 2009 Guidance for Implementation of Federal Wildland Fire Management Policy allows wildfires to be managed for the multiple objectives of full suppression and resource benefit simultaneously. The consequence is a revamping of Incident Management Team (IMT) structure and some positions. A stated goal by agencies implementing the Updated Guidance is to consider air quality and smoke impacts in their decisions, tactics and strategies on wildfires. In order to develop recommendations of how this air quality goal can be operationally accomplished, an analysis of smoke and air quality training and role in IMT's, Area Command's (local geographic area to National) and Agency Administrator positions is needed. In addition, tightening of the National Ambient Air Quality Standards (NAAQS) by the Environmental Protection Agency (EPA) presents greater challenges for State, Federal, Tribal and Private land managers that use prescribed fire. The time is right to evaluate fire training courses to ensure they are current with air quality regulations, eliminate redundant information and clarify training objectives and how they play a role in both wildfire and prescribed fire positions. The outline below lays out the tasks the NWCG Smoke Committee decided are warranted for the review and recommendations.

Task 1 ("Position Smoke/AQ Requirements"): Identify all air quality and smoke requirements in wildfire and prescribed fire positions as found in position task books, requirements found in NWCG 310-1 and FS 5100.17 documents. Include the NWS Incident Meteorologist (IMET) position in the assessment.

Task 2 ("Standardized Course Assessment for Smoke/AQ"): Assess all NWCG courses where smoke and air quality are included and outline course and unit objectives.

- Includes the "S" through "Rx" courses
- "Standardized" course materials

Task 1+2 ("Smoke/AQ Gap Analysis"): Merge the results of Task 1 and Task 2 to identify gaps in what different positions are supposed to know about smoke/AQ and whether they are getting that training via the various courses or task book requirements. This task and task 2 will also help identify any redundancies in the NWCG courses. Utilize Subject Matter Expertise (SME) for validation.

Task 3 Incident Qualifications and Certification System Queries (IQCS Queries): Identify Positions taking smoke/AQ coursework and Positions that are required to take AQ/smoke coursework through queries of the IQCS.

- Query the IQCS database to determine the Positions that take courses with smoke/AQ included (to be conducted by Smoke Committee with assistance of SME).
- Identify the Positions that are required to take courses that include smoke/AQ
- Then determine how the results of the first two bullets relate. For example, RXB1 and LTAN Positions are required to take Rx410 have most RXB1's and LTAN's done so? Is it mostly RXB1's and LTAN's in the Rx410 class or are other Positions often taking the
- Execute queries looking at who has taken RX-410 (and its ancestor versions), and what they are now qualified for and currently doing (recent experience records) in both prescribed fire programs as well as on wildfire IMT's. They may NOT actually now be working in positions we might ID in Tasks 1 and 2 as needing the training and yet may

have learned the skills along the way. This will support assessment of whether we hit the right audience with past training delivery.

Task 4 ("Recommendations of Changes to Positions and Course Content"): Identify and recommend Positions that should include smoke/AQ training and identify training goals. Identify possible positions and responsibilities that will facilitate meeting the goal of considering air quality and smoke impacts in wildfire decision-making. Identify changes that need to be made as well as opportunities for improvements for course delivery. Utilize an SME that has IMT experience and long-term wildfire management experience to insure potential feasibility of recommendations.

- This will probably be a combination of SmoC and Cooperator(s) interaction
- Assess possible positions and responsibilities in the IMT, Area Command and Agency Administrator role to facilitate meeting the goal of considering air quality and smoke impacts in wildfire decision-making
- For example, based on the IQCS (Incident Qualifications and Certification System) queries and the results of the gap analysis, it may be determined that RXB2's should have Rx410 need to do the query analysis before making such determinations, and identification of material for online delivery may help with the argument as well.

Task 5 ("Course Delivery Assessment"): Assess course content to identify what could be delivered online and what is best delivered via classroom instruction

- Idetify those training elements/units which may be delivered via on-line or other means as well as in-person traditional training.
- Assss NOAA COMET Meteorological On-line Training Packages and recent NWCG on-line packages.

Task 6 ("Non-standardized Course Assessment"): Evaluate other regional or non-standardized courses that include smoke and air quality for utility in meeting objectives stated above, for example:

- Thomas Dzomba's smoke modeling course (Region 1 USFS)
- Regional Burn Boss refresher courses
- NRCS air quality and prescribed burning courses
- State smoke management courses (NC, FL, others)

## Outcomes with Completion Dates:

Task 1 and task 2 will be merged into a single report that will identify gaps in positions knowledge dealing with air quality and smoke impacts and whether they are getting that training via the various NWCG courses or task book requirements. November 1, 2009

Task 3 through 6 will be funded when money is made available, by modifying this agreement.

Keywords: NPS-Visitor Services Program, Visitor Survey Card, visitor surveys, University of Idaho