

Project Summary

Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Air Quality and Smoke Management for Land Managers and Smokepedia for use by Fire Managers in the IMR

Discipline: Natural
Type of Project: Education/Technical Assistance
Funding Agency: National Park Service
Other Partners/Cooperators: University of Idaho
Effective Dates: 3/1/2012 - 7/1/2013
Funding Amount: \$29,997

Investigators and Agency Representative:

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Project Abstract: A focus of the National Wildfire Coordinating Group (NWCG) Smoke Committee (Smoc) is outreach and education regarding smoke from fires affecting air quality. To accomplish this Smoc provides technical training and support for Agency Fire Programs, developing NASF credited and non-credited training workshops and online courses. To date Smoc has developed two courses and an online Smokepedia tool; one is a credit course entitled "Effective Communication for smoke Management in a Changing Air Quality Environment Online Training" which is based on previously held workshops. The other course is "Smoke Management and Air Quality for Land Managers" which includes case studies in the curriculum. These courses identify current challenges to local and regional fire and air quality professionals given recent changes in EPA air quality standards. The course material stresses the value of coordination and communication between fire managers and air regulators. Based on the feedback from students who attended the workshops and completed the online training this message is helping build better communication and more productive conflict resolution between fire and air; thus, meeting our respective agencies objectives which are critical for our fire programs. Given recent changes to the Federal Fire Policy Implementation Guidance, EPA air quality regulations, policies and accepted terminology, these courses require updating to keep them current and effective.

Smoc maintains these courses with direction to our funded cooperator, below are links to some of our training products that require review and revision:

- Air Quality Educational Resources webpage <http://www.cnr.uidaho.edu/wildlandfire/smoc.htm>
Central web page from which any user may access Smoke and Air Quality tutorials and case studies, the latest training opportunities, an online interactive glossary of terms (Smokepedia), and a library of related PDF documents, websites, and downloadable software packages (Air Quality Library)
- Online tutorials and case studies
http://www.cnr.uidaho.edu/wildlandfire/restored/online_tutorials.htm
Four part tutorial highlighting basic knowledge about smoke effects, current air quality regulations and policies applicable to fire management, smoke management practices, and communication. This section of the webpage also contains three management examples of how fire operations affected air quality, the public reactions, and how personnel responded. Both of these offerings are currently in the process of being updated.
- Smokepedia is an interactive online glossary of smoke management terms and acronyms.

Task 1

Online refresher course Smoke Management and Air Quality for Land Managers, is divided into four units: 1) Impacts of Smoke, 2) Air Quality Regulations, 3) Smoke Management Techniques and 4) Communication and Coordination. Changes to rules and regulations governing emissions from wildland fires have occurred since this course was developed. Also, fire management teams have more flexibility in addressing wildfires; this has increased their responsibility in coordination and communicating with the public and air regulators. Smoc wants to ensure this course is current, thus a review is in order.

- The University of Idaho (U of I), working with Smoc, will review and recommend revisions to keep the course material contemporary and universally applicable for wildfire and prescribed fire.
- Make recommendations for the development of any new unit(s) that supports the objective of this course.

Task 2

The refresher course highlights useful information for Line Officers when confronted with smoke and air quality issues, the supplemental case studies illustrate real world occurrences of smoke impacts.

- Review of the case studies for relevancy in light of changes in regulations, guidance, policies and terminology and ensure the case's reflects current fire science information. Make recommendations to SmoC on the portions of the cases that are in need of revision.
- Identify any new fire events or cases to support the online refresher course and emerging air and smoke issues.

Task 3

The intent of the Smokepedia is to provide a current list of fire and air quality related acronyms and definitions. To ensure Smokepedia is up to date it is necessary a periodic review is preformed.

- With assistance from SmoC and the SmoC Training Sub-Committee, review Smokepedia with 358 words and cross reference with FireWords, and NWCG online dictionary for new definitions.
- Because there are documents that use the older definitions and for historical reference, SmoC has decided not to remove old definitions; but instead add the new definition, and when possible ensure there is a primary reference that identifies the change in the use of the term.

Outcomes with Completion Dates: July 1, 2013

Keywords: University of Idaho, National Park Service, National Interagency Fire Center, National Wildfire Coordinating Group's (NWCG) Smoke Committee, smoke and air quality, coursework updates