Meeting Minutes of the Subcommittee on Disaster Reduction

11 November 2007, 10:00 a.m. to 12:00 p.m., Department of the Interior Room 6641

Italics indicate absent members. "T" indicate members participating via teleconference.

Officers

David Applegate (USGS), Chair Margaret Davidson (NOAA), Vice-Chair (T)

Working Group Chairs International Working Group Ralph Braibanti (State), Chair

Earth Observations Working Group

Steve Ambrose (NASA), Co-Chair Tim Battista (NOAA), Co-Chair Bruce Quirk (USGS), Co-Chair

Designated Representatives

BLM Ronald Huntsinger CDC Mark Keim DHS Bruce Davis DHS/FEMA David Maurstad DHS/USCG Suzanne Strohl DOD Al Johnson DOE Patricia Hoffman DOT Sheila Duwadi EOP / OSTP Gene Whitney

Other Attendees

DOE Merril Smith NSF Jacqueline Meszaros Dennis Wenger FEMA Mike Buckley

Doug Bellomo Steven Carruth

Agenda

10:00 Welcome and Introductions 10:03 Approval of October Meeting Minutes 10:05 Report from the Chair 10:25 Report from the Vicechair 10:50 Presentation- Southern California Wildfires 11:20 Presentation-FEMA 11:55 Close and Next Actions **NSTC Liaison** Gene Whitney (OSTP)

Infrastructure Task Group Joy Pauschke (NSF), Chair

Resource Impacts Task Group Susan Conard (USFS), Chair

EPA Peter Jutro HUD David Engel NASA Steve Ambrose NGB Daniel Bochicchio NIH Allen Dearry (T) NIST Jack Hayes Noel Raufaste NOAA Margaret Davidson (T) NSF Joy Pauschke

NIST Long Phan

Susan A. Stewart

NOAA Nell Codner

Nathalie Valette-Silver (T)

USDA/FS Mike Hilbruner

OPHS Sven Rodenbeck (T) State Jordan Muller Ralph Braibanti Fernando Echavarria USACE Barbara J. Sotirin USAID Peter Morris USDA / USFS Susan Conard USGS David Applegate Paula Gori

Secretariat Allison Kilcourse Emily Wallace

Handouts

- Agenda
- October Meeting Minutes
- Capacity to Recover and Recover Document
- Diseases after Epidemics Article

I. Call to Order

Subcommittee on Disaster Reduction (SDR) Chair Dr. David Applegate (USGS) called the meeting to order at 10:00 a.m.

II. Summary of Discussion

A. Report from the Chair

Dr. Applegate began by reiterating Dr. Gene Whitney's (OSTP) request for disaster "grabber images" for use in White House Office of Science and Technology Policy (OSTP) presentations. On Dr. Whitney's behalf he also thanked those who had already contributed.

Next, Dr. Applegate updated the group on the Steering Committee for the National Academies Disaster Roundtable. They will hold three additional meetings this year and, at the suggestion of the SDR, one meeting may focus on the disaster component of climate change. The Steering Committee is also engaging in continuous discussion on how to best handle the transition from this Presidential administration to the next.

Dr. Applegate also updated the group on the status of the four Climate Change Science Program (CCSP) hazard-related Synthesis and Assessment Products (SAPs) that the SDR elected to review and comment on. He thanked contributors for their comments and stated that the next SAP available for review is "Weather and Climate Extremes in a Changing Climate". He also suggested that members of the SDR Resource Impacts Task Group (RITG) read through SAP 4.3, "The effects of climate change on agriculture, biodiversity, land, and water resources" (no comments have been received). Dr. Margaret Davidson (NOAA) informed the group that SAP 4.1, "Coastal Elevation and Sensitivity to Sea Level Rise," will be available for public review by the end of December.

B. Report from the Vice Chair

Dr. Davidson began by suggesting the SDR hold a "strategic planning" meeting sometime this winter to discuss the transition over Presidential administrations. Next, she informed the group of a possible National Academies study focusing on *The Capacity to Cope and Recover: Indicators of Community Resilience and Adaptability*. Dr. Davidson included a draft copy of the proposal in the meeting materials for any SDR member interested in reviewing the draft and sending comments back to the Academy. The National Oceanic and Atmospheric Administration (NOAA) offered to fund a portion of the study but further help is needed from interested agencies. Dr. Greg Withee (NOAA) commented on the social sciences aspect of the proposal and suggested that NOAA's National Environmental Satellite, Data, and Information Service (NESDIS) may be interested in contributing. Mike Buckley (FEMA) and Dr. Mark Keim (CDC) added that their agencies may also be interested in contributing to the study. In response to Dr. Dennis Wenger's (NSF) question regarding what part of the Academy would receive the money, Dr. Davidson stated that the Board on Earth Science and Resources would conduct the study. Interested parties will have time to hold roughly two to three meetings and create a draft discussion document by September 2008.

Dr. Wenger commented that the type of study and research required for this type of proposal is not customary for the Academy. Dr. Davidson replied that the Academy seemed receptive to her request that they deviate from their usual practice and take a more interactive approach. Dr. Applegate suggested that the SDR could assist by suggesting which agencies may already have useful information to contribute.

III. Presentations

A. United States Department of Agriculture, U.S. Forest Services (USDA/USFS), "Southern California Wildfires October 2007 – An Overview," Susan A. Stewart

Dr. Applegate introduced Ms. Stewart (USDA/FS) by stating that the SDR needs to help capture this teachable moment and use it transform research into practice regarding wildfire hazards.

Ms. Stewart informed the group that the extreme drought conditions, the annual Santa Anna winds, and the heavy accumulation of wildland fuels have all combined to ignite and prolong the wildfires that are ravaging Southern California. Her presentation detailed the areas in which the fires are occurring, the damages they have caused, and the tools that USDA/FS and other agencies are using to predict, prevent, mitigate, and combat these types of fires in the future.

Suzanne Strohl (DHS/USCG) asked if USFS has investigated the source of the dramatic increase in the prevalence and strength of wildfires over the past decade. Ms. Stewart answered that most fires continue to be human-caused.

Ms. Stewart stated that annually, 98% of fires in the U.S. are quickly contained by officials and that most fire damages are the result of the remaining 2%. Doug Bellomo (FEMA) asked whether USFS had a mapping system for where this 2% will most likely occur. USFS is in the process of mapping the entire U.S. to determine the location of hazardous vegetation. However, thus far they have found that this type of vegetation is widespread throughout the entire country so it is difficult to predict where exactly the most damaging fires may occur.

Mr. Buckley asked if the information used to create these maps is available to the public. The information is contained in an online database accessible to anyone (<u>www.landfire.org</u>).

Dr. Withee questioned whether quashing so many smaller wildfires helped to perpetuate the prevalence of larger fires by adding to the hazardous wildland fuel already found in nature. Ms. Stewart stated that this is a problem the agency tries to combat by being selective when using their resources and trying to dictate when and where certain fires will occur. The USFS may choose to burn a high-risk area in a controlled environment rather than wait for the fire to occur on its own at a less convenient time.

Dr. Davidson and Dr. Applegate engaged in a short discussion about the prevalence of landslides following large wildfires. Burned basins are at risk for mudslides because in many parts of the country wildfires are often followed by heavy rain. Dr. Applegate stated it is important to have emergency services in place for when the rain comes.

Steve Carruth (FEMA) asked if USFS was encountering any issue implementing their fuels management programs. Ms. Stewart answered that the programs had run into ecological and economic barriers such as threatened and endangered species, smoke production, road building, and tree clusters.

Jordan Muller (DOS) asked who comprised most of the casualties in wildfires. Ms. Stewart answered that in the Southern California fires the casualties have been residents; sometimes when fire spreads rapidly it is impossible to warn people fast enough.

Dr. Applegate asked if any initial lessons have been learned from the Southern California experience. Although it is too soon to know the full extent to which fire services have succeeded or failed, Ms. Stewart reported that local and State governments had worked very well together to evacuate dangerous areas. Overall, the coordination between all three levels of government (local, State, and Federal) has been impressive. These fires will also open up a dialogue on the value of the reverse-911 program; the reverse-911 program requires that safety officials contact at-risk residents during an emergency. Dr. Applegate offered to talk to Dr. Whitney about how the SDR could use the wildfires to increase disaster knowledge. One possibility is to use the Grand Challenge Wildland Fire four-pager as a base to create a lessons learned document.

Dr. Applegate commented that United States Geological Survey (USGS) was focusing on debris flow, flood risk, and the impact on biodiversity and local ecosystems in Southern California. He then asked if any assessments of infrastructure damage in Southern California had been conducted. Ms. Stewart said it was too soon to know.

Mr. Muller questioned how the U.S. increasing wildfire statistics compared with that of the rest of the world. Ms. Stewart answered that this is a global phenomenon linked to temperature and precipitation levels.

Dr. Withee suggested that it would be interesting to conduct a study on the difference between the houses that survived the wildfires as opposed to those that did not. Dr. Wenger stated that the National Science Foundation (NSF) had done a similar study on earthquakes and might be interested in taking on wildfires. Mr. Buckley also commented that FEMA is currently working on a lessons learned document wildfires in 2003.

Finally, Dr. Long Phan (NIST) stated that the National Institute of Standards and Technology (NIST) would be interested in comparing the flammability of different building materials; he will put someone in touch with the SDR to discuss the subject.

B. Federal Emergency Management Agency (FEMA), "Flood Map Modernization," Doug Bellomo

Doug Bellomo (FEMA) discussed FEMA's flood mapping modernization program – the goal of which is to update National Flood Insurance Program maps which are used by over 20,000 local governments and referenced over 35 million times per year. Map updates focus on increasing the quality of the flood hazard data and utility of the product (e.g. making it digital).

Dr. Withee questioned whether FEMA's flood mapping program accounts for increased development. Mr. Bellomo explained that physical, environmental, and science/technology changes can alter the makeup of a flood map. Considering these changes, there are three different options when modernizing a flood map: creating a new map, updating an existing map, or affirming the validity of an existing map.

Dr. Wenger asked if FEMA has changed the controversial 100 year floodplain. Mr. Bellomo informed the group that there is legislation being passed around congress regarding the 100 year floodplain but there was no updated news to report. He reminded the group of the limitations of government and of the large human factor involved in flood losses. Col. Daniel Bochicchio (NGB) agreed that the need for increased individual responsibility crosscuts all disasters.

Mr. Buckley stated that integration and resources are necessary in order to move into the next generation of flood mapping modernization. There are currently bills in the House of Representatives and the Senate to expand the flood insurance programs and authorize up to 400 million dollars every year for the next several years. Dr. Phan suggested that agency collaboration could increase resources. He stated that NIST is attempting to partner with NOAA for a disaster

resilient communities study because NIST's own flood risk assessment program budget is very limited.

V. Adjournment

The meeting adjourned at 12:00 p.m.

Future Meetings

The SDR meets on the first or second Thursday of every month from 10 a.m. to 12 p.m.

December 6, 2007	March 6, 2008	July 3, 2008	November 6, 2008
January 10, 2008	April 3, 2008	August 7, 2008	December 4, 2008
February 7, 2008	May 3, 2008	September 4, 2008	
March 6, 2008	June 5, 2008	October 3, 20078	

VII. Agenda Items and Other Communications with the Subcommittee

Please send proposed agenda items and any other items intended for distribution to the full Subcommittee to Emily Wallace (ewallace@grs-solutions.com).

VIII. Contact Information SDR Leadership

David Applegate, Chair, 703-648-6715, applegate@usgs.gov Margaret Davidson, Vice Chair, 843-740-1220, Margaret.davidson@noaa.gov Gene Whitney, NSTC Liaison, 202-456-6081, gwhitney@ostp.eop.gov

International Working Group

Ralph Braibanti, Chair, 202-663-2330, braibantirl@state.gov

Earth Observations Working Group

Steve Ambrose, Co-Chair, 202-358-0851, sambrose@nasa.gov Tim Battista, Co-Chair, 301-713-3028 x171, tim.battista@noaa.gov Bruce Quirk, Co-Chair, 605-594-6040, quirk@usgs.gov

Secretariat

Emily Wallace, 703-560-7448, ewallace@grs-solutions.com

IX. Summary of September Actions

Action	Lead	By When
Discuss the possibility of a lessons learned	Dr. Applegate and Dr.	15 November
document taken from the Southern California	Whitney	
wildfires		
Volunteer to comment on the following Climate	SDR Members	30 November
Change Science Program Synthesis and		
Assessment Products:		
Coastal Elevation and Sea Level Rise		
Check the CCSP website for new SAPs available	Secretariat	30 November
for comment		
Request a GAO briefing the SDR future meeting	Secretariat	30 November

Allocate time at the December or January meeting to discuss SDR's transition across Presidential administrations	SDR Leadership/Secretariat	30 November
Post meeting presentations on the SDR website	Secretariat	30 November
Contact Robert Meyer with the Wharton School about briefing the SDR in a future meeting	Secretariat	30 November