Meeting Minutes of the Subcommittee on Disaster Reduction

08 April 2008, 10:00 a.m. to 12:00 p.m., Department of Commerce Room 5215

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

Officers

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

Working Group Chairs

Earth Observations Working Group Steve Ambrose (NASA), Co-Chair Tim Battista (NOAA), Co-Chair Bruce Quirk (USGS), Co-Chair

Designated Representatives

DHS Bruce Davis
DHS/FEMA David Maurstad
DHS/USCG Steven Cohen
DOD Al Johnson
DOE Patricia Hoffman
DOT Sheila Duwadi
EOP / OSTP Gene Whitney

BLM Ronald Huntsinger

CDC Mark Keim

Other Attendees

FEMA Stephen Carruth, **NSF** Dr. Dennis Wenger **NOAA** Nell Codner John Gaynor

NSTC Liaison

Gene Whitney (OSTP)

Infrastructure Task Group Joy Pauschke (NSF), Chair

Resource Impacts Task Group Susan Conard (USFS), Chair (T)

EPA Peter Jutro HUD David Engel NASA Steve Ambrose NGB Daniel Bochicchio NIH Allen Dearry (T) NIST William Grosshandler OPHS Sven Rodenbeck State Fernando Echavarria USACE Barbara J. Sotirin USAID Peter Morris USDA / USFS Susan Conard (T)

Jack Hayes

VSGS David Applegate

NOAA Margaret Davidson (T)

Paula Gori (T)

NSF Joy Pauschke

NASA David Harding John LaBrecque NGB Leonard Kosicki

National Library of Medicine

John Scott

Secretariat Emily Wallace Barbara Haines-Parmele

Agenda

10:00 Welcome and Introductions
10:05 Approval of Meeting Minutes
10:10 Report from the Chair
10:25 Report from the Vice-Chair
10:35 Review Grand Challenges Outreach
and Distribution Plan
10:50 Upcoming Disaster Reduction
Conference and Publication Opportunity
11:00 Presentation: LiDAR
11:45 Close and Next Actions

Handouts

- Agenda
- March Meeting Minutes
- Grand Challenges Outreach and Distribution Plan with CD
- OSTP Media Advisory
- E-mail from Sean Nicklin at Tudor Rose
- "Risk Wise" Special Book participation for SDR
- LiDAR Presentation

I. Call to Order and Introductions

Subcommittee on Disaster Reduction (SDR) Chair David Applegate (USGS) called the meeting to order at 10:05 a.m.

II. Approval of Minutes

Minutes from the previous meeting (March 6, 2008) were approved as presented.

III. Report from the Chair

Applegate noted that the first round of the SDR Space Weather document clearance is nearly complete. The document will go to the White House Office of Science and Technology Policy (OSTP) next, then the Committee on Environment and Natural Resources (CENR; SDR's parent body within the National Science and Technology Council structure), and finally the White House.

Applegate also noted that SDR's annual membership re-vetting is nearly complete. He asked members to contact him regarding any questions related to status or other issues.

The next National Research Council Disasters Roundtable Workshop will focus on International issues and will be held on Thursday, October 2nd. As a result, the October SDR meeting will be moved to Friday, October 3rd.

Applegate announced the International Disaster and Risk Reduction Conference (IDRC) being held from August 25-29, 2008 in Davos, Switzerland and the Tudor Rose partner publication *Risk Wise*. Tudor Rose has requested the assistance of the SDR in coordinating U.S. contributions to *Risk Wise*. Dr. Applegate expressed appreciation to Steve Ambrose (NASA), who agreed to serve as the SDR lead.

Ambrose indicated that NASA is contributing an article to *Risk Wise* and preparing a special session for Davos. Ambrose distributed an outline from Tudor Rose suggesting additional article topics from SDR members. A one- to two-page overview of the Grand Challenges for Disaster Reduction was suggested as a potential topic. Ambrose announced that the deadline for submission is May 1st noting that written submissions can be staggered up until early July if needed. A \$10,000 contribution purchases 100 books.

Stephen Carruth (FEMA) asked if agencies needed to be bound by the suggested topics distributed by Ambrose, who indicated that they were not.

John Scott (National Library of Medicine) announced that it is the 20th anniversary of the ISDR and suggested a topic referencing the U.S. stimulation of the first conference that initiated the International Decade for Natural Disaster Reduction.

Applegate indicated that he would check with the Department of State regarding their representation in the Tudor Rose publication and/or a delegation attending Davos. He also requested that interested agencies get in touch with Steve Ambrose regarding their interest in either *Risk Wise* or the special session in Davos.

IV. Report from the Vice-Chair

Margaret Davidson announced a number of national and individual efforts focused on community resilience. Several National Research Council boards are joining together to discuss a study on community resilience and adaptation. The next SDR meeting will feature a presentation from the National Research Council regarding this topic.

V. Review Grand Challenges Outreach and Distribution Plan

Applegate announced that the Grand Challenges documents were distributed to Members of the House and Senate Appropriations Committees, House Science Committee, Senate Commerce, Science and Transportation Committee and to all Hazards Caucus members, thanking the SDR Secretariat for a herculean effort. Further, copies were available at the Disasters Roundtable Workshop and received a great plug by Bill Hooke, Disasters Roundtable Chair. The document was also discussed at the National Earthquake Hazard Reduction Program (NEHRP) Interagency Coordinating Committee Meeting with OSTP Director John Marburger.

Applegate also indicated that OSTP staff has provided tremendous help with distribution and the release of a Media Advisory. Applegate has been contacted by *Science News* as a result of the advisory and is preparing an opinion piece for that publication.

Emily Wallace provided a review of the Grand Challenges PowerPoint presentation and CD contents. Emily requested that members let her know how many CD's they require. Applegate encouraged SDR members to use the CD for briefings within their own agencies.

Applegate also requested that members let him and Emily know how the Grand Challenge documents are being distributed.

VI. Presentation: LiDAR – David J. Harding: Geophysicist, Planetary Geodynamics Laboratory, Solar System Exploration Division, Sciences and Exploration Directorate, NASA

Steve Ambrose (NASA) introduced David Harding to discuss LiDAR and the goal of using LiDAR to produce national high-resolution mapping data. Harding's presentation focused on showing the need for updated elevation data and revealing an implementation plan to achieve it.

Harding highlighted the Grand Challenges and the numerous references to the need for improved elevation data and the use of LiDAR to achieve it. He also noted that two National Research Council committee reports issued in January of 2007 recommended the execution of LiDAR on a national scale.

LiDAR has the capability of providing spatial resolution down to 3 meters from the current 10 meters obtained by the Shuttle Radar Topography Mission. LiDAR has the ability to provide elevation images of the Earth's solid surface and its overlying covers of vegetation, water, snow, ice and structures. Volcano monitoring, earthquake faults, hydrologic/hydraulic information, urban response, coastal inundation, land cover, carbon/biomass, and wildland fire information can be derived from LiDAR.

Harding indicated that the most significant implementation issue is the lack of sufficiently defined instrument and data standards. Implementation goals include defining and advancing standards and collecting data to the defined standards. LiDAR implementation will likely be a mixture of commercial and advanced technology capability.

Harding concluded the presentation by indicating that NASA has developed the LiDAR technology but has partnered with multiple agencies, states and the commercial sector for implementation. USGS will manage the program for national coverage. The cost estimate for implementation is \$131 million.

The next National LiDAR Conference is being held on May 21 and 22nd at USGS. If anyone is interested, they are most welcome to attend.

Sue Conard (Forest Service) asked how the Forest Service and Department of the Interior land management agencies have been engaged. Harding indicated that they are fairly engaged with the Forest Service research group in Eugene, Oregon.

Emily Wallace (Secretariat) asked about data management costs. Mr. Harding indicated that the USGS data center will distribute and manage LiDAR data as part of the National Elevation Database program. Data management costs are not included in the \$131 million cost estimate.

Applegate (USGS) asked how the states fit in. LiDAR's major state representation is from the Association of American State Geologists and through departments of natural resources at the State level. Harding noted that not all states have the technical expertise to implement LiDAR accurately. Increased education is necessary at the state level. Nell Codner (NOAA) indicated that Delaware is engaging in a statewide LiDAR program. Nell will provide an updated list of states engaged in LiDAR to Mr. Harding.

Applegate (USGS) asked what is the biggest obstacle to standardization. Harding indicated that the private sectors methods and practices are proprietary, making it difficult to obtain insight into their data sets. John LaBrecque stated that the private sector also lacks an understanding of the additional data sets that might be gathered such as the gravity field. The NGS' top priority is to re-map the gravity field at a cost of \$35 million. The LiDAR mapping effort could accommodate Gravimeters on their aircraft to collect gravity field data and increase the cost-effectiveness of the project.

Other agencies that could benefit from LiDAR include the BLM, State Resource Agencies, Federally Recognized Indian Tribal Governments and the National Guard Bureau. FEMA could be a customer but does not fund the actual collection of data.

Applegate thanked Harding for presenting and announced that the presentation will be posted to the SDR member site.

VI. Adjournment

The meeting adjourned at 11:32 a.m.

Future Meetings

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

May 3, 2008 June 5, 2008 July 17, 2008 August 7, 2008 September 4, 2008 Friday, October 3, 2008

November 6, 2008 December 4, 2008

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, 703-648-6714, 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

Secretariat

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

IX. Summary of March Actions

Action	Lead	By When
	SDR Members	Standing
Contact Dave (applegate@usgs.gov) if you	SDR Members	Standing
would like a personalized support request letter		
to the SDR representative or someone else in		
your agency		
Contact Emily (ewallace@grs-solutions.com) to	SDR Members	Standing
receive copies of the Grand Challenges for		
Disaster Reduction Implementation Plan packets		
or CD		
Let Emily or Dave know how you use the	SDR Members	Standing
implementation plans, including when you link		
to the plans from your agency websites.		
Send Emily or Dave additional distribution	SDR Members	Standing
suggestions, including relevant contact		8
information		
Initiate OSTP Space Weather document	Secretariat	18 April
clearance	Secretariat	1071011
Cicaranec		
Complete SDR membership re-vetting	OSTP/NSTC/Secretariat	18 April
Contact Steve Ambrose with interest in	Steve Ambrose	01 May
contributing to RISK WISE, the partner		
publication to IDRC Davos 2008.		