Meeting Minutes of the Subcommittee on Disaster Reduction

8 September 2005, 10:00 a.m. to 12:00 p.m., White House Conference Center, Eisenhower Room

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

Officers

Helen Wood (NOAA), Chair

David Applegate (USGS), Vice-Chair

NSTC Liaison Gene Whitney (OSTP)

Working Group Chairs International Working Group Larry Roeder, Jr. (State), Co-Chair Fernando Echavarria (State), Co-Chair Dennis Wenger (NSF), Co-Chair

Remote Sensing Applications Working Group Steve Ambrose (NASA), Co-Chair Peter Rinkleff (NGA), Co-Chair

Jay Feuquay (USGS), Co-Chair

Earth Observation Task Group Margaret Davidson (NOAA), Chair **Grand Challenges Task Group**

Noel Raufaste (NIST)

WindHRP Task Group John Gaynor (NOAA), Chair

Drought Task GroupPai-Yei Whung (USDA), Co-Chair
Jay Lawrimore (NOAA), Co-Chair

Designated Representatives

CDC Dan Sosin
DHS Bruce Davis
DHS/FEMA Mike Buckley
John Gambel (T)
DOD Earnest Paylor
DOE Alex de Alvarez
DOI Larry Braun
DOI / USGS David Applegate
DOT K. T. Thirumalai
EOP / OSTP Gene Whitney
EPA Peter Jutro
Ed Washburn

HUD John Kennedy
NASA Steve Ambrose
NGA Monica Gaughan
Peter Rinkleff
NGB Peter M. Aylward
Stephen Davis
NIST Jim St. Pierre
Noel Raufaste
NOAA Helen Wood
Margaret Davidson
NSF Dennis Wenger

OPHS John Babb
Boris Lushniak
State Fernando Echavarria
Larry Roeder, Jr.
USACE Michael O'Connor
USAID Peter Morris
USDA Allen Dedrick
USDA / USFS Susan Conard
USGS David Applegate

Other Attendees

DOT Sheila Rimal Duwadi **NASA** Craig Dobson **NSF** Jacqueline Meszaros Bob O'Connor NOAA John Gaynor Michael Hales Doug Harper Keelin Kuipers Mararet McCalla Nathalie Valette-Silver Rodney Weiher State Kathryn Stevens USACE Andy Bruzewicz USAID Jean Hacken USDA Pai-Yei Whung Secretariat Dori Akerman Will Hottel (T)

Emily Wallace

Agenda

10:00	Welcome and Introductions
10:03	Approval of August Meeting Minutes
10:05	Report from the Vice-Chair
10:10	Report from the NSTC Liaison
10:15	Hurricane Katrina: S&T Response and
	Lessons Learned
11:55	Close and Next Actions

Handouts

- Agenda
- August Meeting Minutes
- Invitation to hear the NSF tsunami researcher reports
- Tsunami Risk Reduction for the United States and Tsunami Lessons Learned Interim Report CENR document clearance packet
- USAID Press Release: USAID Announces Launch of Indian Ocean Tsunami Warning System Program
- Post-Hurricane Katrina SDR Work Request from OSTP

I. Call to Order

SDR Vice-Chair David Applegate called the meeting to order at 10:00 a.m.

II. Approval of Minutes and Review of Actions

Members approved the August meeting minutes. All actions from the August meeting are complete.

III. Summary of Discussion

A. Report from the Vice-Chair

Dr. David Applegate reported that CENR clearance has been initiated on the two tsunami documents: "Tsunami Lessons Learned Interim Report," and "Tsunami Risk Reduction for the United States: A Framework for Action." The SDR is asking all members to contact their representatives on CENR to ensure clearance by September 21.

Dr. Applegate announced that next Thursday and Friday (September 15 and 16) the National Science Foundation (NSF) will host scientists reporting on their NSF-funded research in the tsunami-affected regions. SDR Members are invited to attend the "lessons learned" portion of that meeting at no charge: Thursday, 15 September, from 4:30-6:00 p.m. in Room 555 of Stafford II at NSF. If you are interested in attending, please inform the Secretariat no later than Tuesday, 13 September at 5:00 p.m. (dori@grs-solutions.com).

B. Report from the NSTC Liaison

Dr. Gene Whitney addressed the issues and activities related to Hurricane Katrina. The White House Office of Science and Technology Policy (OSTP) is compiling information about affected research facilities, affected agency staff and university faculty as well as graduate students. OSTP is looking to ensure that federally funded research grants for investigators in areas affected by Hurricane Katrina are tracked and administered evenly across agencies (i.e. any allowances or extensions granted by one agency for research is mirrored by other agencies).

To help policy makers anticipate the next big disasters, SDR members will be authoring a series of one-page documents that spell out the likely impact of potential disasters such as the collapse of Mt. Rainier, a major Pacific tsunami, and a Category 5 Hurricane in the gulf or along the Atlantic seaboard. Each disaster discussed must have the potential to cause at least \$10 billion in property damage. These one-page documents will form the text of a memo from Dr. Marburger to President Bush about the next big disasters and will aid disaster planning. An ad-hoc working group will be pulled together to author these documents. Please contact the Secretariat (dori@grs-solutions.com) by 5:00 p.m. EDT on 14 September 2005 if you would like to participate.

An ad-hoc working group also will be assembled to write a lessons learned document about Hurricane Katrina. Dr. Whitney suggested the group look at the Elements for Disaster Risk Reduction and Hazard Management (disaster process R&D, hazard identification, risk assessment, risk communication, mitigation, prediction, preparedness, response and recovery) and determine the necessary actions for each stage. Then, using those same definitions, describe the events leading up to and immediately following Hurricane Katrina. Specifically, zero in on science and technology gaps that must be addressed in order to mitigate future potentially devastating events. Members interested in authoring this document should contact the Secretariat (dori@grs-solutions.com) by 5:00 p.m. EDT on 14 September 2005.

C. Hurricane Katrina: Early Science and Technology Response and Lessons Learned Members were asked to identify the science and technology response of their agencies to Hurricane Katrina and some of the lessons learned.

- **FEMA.** Mr. Gambel said that FEMA is overwhelmed by providing shelters for evacuees (700 shelters nationwide), but expects to see an increase in mitigation activities over the next several weeks as the focus transitions from response to recovery. Current FEMA science and technology activities related to the hurricane include HAZUS, coastal surge modeling, and collecting perishable data.
- **NOAA.** Dr. Davidson reported that NOAA was very successful in forecasting and tracking the storm, but could do better with storm surge modeling. An important lesson learned from this event was the significant role that natural features play in the path and impact of a major storm, especially in the case of wetlands. Significant communications challenges also exist before, during and after the storm, as the people most at risk were difficult to reach. To address this problem NOAA is scheduling a limited participation workshop on developing next generation communications systems.
- **USGS.** Dr. Applegate reported that USGS is working with NASA and NOAA to provide information on water levels and installing temporary stream gauges.
- **USACE.** Mr. Bruzewicz pointed out that USACE models and lessons learned from previous exercises and events were not applied in this case. There has been a decline in the number of exercises that are being conducted for natural disasters in favor of terrorism exercises. Though a great deal of imagery is available from this event, it has not been well organized. Causing additional problems, individuals are able to download images of the disaster (with very large file sizes) from various agency websites. This has slowed down the entire Internet. More accurate measures of water levels are still needed for New Orleans in order to determine the safety of the roads.
- **NGB.** LTC. Davis said that better communications are required, as well as better modeling and imagery. The Guard faces ongoing challenges with rescue operations, fire fighting, chemical spills and other issues.
- **NSF.** Dr. Wenger pointed out that many issues that arose during the tsunami parallel the challenges presented by Hurricane Katrina, such as disposal of bodies and the impact on the tourism industry. NSF is currently soliciting proposals for two grants for exploratory research related to Hurricane Katrina. The Civil Engineering Center at Texas Tech is heading up an effort to compare the effectiveness of Quickbird imagery vs. traditional methods of surveying damages to structures. The electrical engineers plan to fund investigations about cascading power failures.
- **EPA.** Mr. Washburn said the EPA has focused on treatment of water, oil and chemical cleanup, and issued public health advisories related to waste disposal.
- **NGA.** Mr. Rinkleff reported that NGA's most important lesson learned is the need for GIS imagery before an event happens so that elevation and infrastructure information is available. NGA has been providing Shape files and a number of image files throughout the day. There is a link on the NGA webpage (www.nga.mil) for Hurricane Katrina support imagery.
- **DOT.** Extensive damage assessments by DOT are ongoing. The agency also is preparing for highway rebuilding. In order to get heavier loads into affected areas many weight restrictions have been lifted on roads and bridges. A number of bridges in the area were being monitored prior to the event, but it is not known what kind of data is available as communications have been lost.

NASA. Dr. Ambrose said that NASA has continued to make imagery available and has been soliciting for research grants that are due November 22.

NIST. Dr. Raufaste reported that NIST has deployed a national response team to investigate damage and support future planning for building codes.

V. Working Group Reports

WindHRP Working Group. The Windstorm Impact Reduction Implementation Plan, requested by Congress, is about eighty percent complete. The group is focused on accurately and clearly describing the current agency efforts and prioritizing recommendations for additional activities. Also, the Working Group is actively pursuing input from HUD and USACE. The agencies contributing to this plan are NIST, NSF, NOAA, FEMA, NASA, HUD, USACE, and FWHA. A draft version will be available for SDR review at the October meeting. The document is due to Congress on October 25, 2005.

International Working Group. The International Working Group did not meet in August.

Remote Sensing Applications Working Group. The Remote Sensing Applications Working Group did not meet in August.

Earth Observation Task Group. The Earth Observation Task Group did not meet in August.

Grand Challenges Task Group. The Grand Challenges Task Group did not meet in August. The next meeting is scheduled for 9 September at 10:00 a.m. in Room 580 of the Stafford I Building at NSF.

VI. Adjournment

The meeting adjourned at 12:05 a.m. EDT.

VII. Future Meetings

The SDR meets on the first or second Thursday of every month from 10 a.m. to 12 p.m. ET in the Eisenhower Room of the White House Conference Center:

October 6, 2005	March 2, 2006	August 3, 2006
November 3, 2005	April 6, 2006	September 14, 2006
December 1, 2005	May 4, 2006	October 5, 2006
January 12, 2006	June 8, 2006	November 2, 2006
February 2, 2006	July 13, 2006	December 7, 2006

VIII. 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 Dori Akerman (dori@grs-solutions.com).

IX. Contact Information SDR Leadership

Helen Wood, Chair, 301-713-1140, helen.wood@noaa.gov David Applegate, Vice-Chair, 703-648-6715, applegate@usgs.gov

International Working Group

Larry Roeder, Jr., Co-Chair, 202-647-5070, roederla@state.gov Fernando Echavarria, Co-Chair, 202-663-2395, echavarriafr@state.gov Dennis Wenger, Co-Chair, 703-292-7014, dwenger@nsf.gov

Remote Sensing Applications Working Group

Steve Ambrose, Co-Chair, 202-358-1513, sambrose@nasa.gov Jay Feuquay, Co-Chair, 703-648-5057, feuquay@usgs.gov Peter Rinkleff, Co-Chair, 301-227-5694, rinklepg@nga.gov

Earth Observation Task Group

Margaret Davidson, Chair, 843-740-1220, Margaret.davidson@noaa.gov

Grand Challenges Task Group

Noel Raufaste, Co-Chair, 301-975-6062, noel.raufaste@nist.gov

Drought Task Group

Pai-Yei Whung, Co-Chair, (301) 504-4868, pai-yei.whung@nps.ars.usda.gov Jay Lawrimore, Co-Chair, 828-271-4750, jay.lawrimore@noaa.gov

WindHRP Task Group

John Gaynor, Chair, 301-713-0460 x117, john.gaynor@noaa.gov

Secretariat

Dori Akerman, 703-560-7448, dori@grs-solutions.com

X. Summary of Actions

SEPTEMBER MEETING ACTIONS

Action	Lead	By When
The Secretariat will work with	Secretariat	October 6, 2005
Jack Meszaros at NSF to		
provide tsunami program slides		
and abstracts to the members		
following the tsunami lessons		
learned briefing.		
Members interested in	SDR Members	September 14, 2005
participating in the ad hoc		
working group to write Katrina		
lessons learned document will		
contact the Secretariat		
(dori@grs-solutions.com).		
Members interested in	SDR Members	September 14, 2005
participating in the ad hoc		
working group to identify and		
describe the next high impact,		
low probability disasters will		
contact the Secretariat		
(dori@grs-solutions.com).		
Andy Bruzewicz will provide	Andy Bruzewicz	September 14, 2005
web links for Katrina imagery		
and the Secretariat will		
distribute to members.		
Members will submit	SDR Members	As soon as possible and

Action	Lead	By When
information on the impact of		ongoing
Hurricane Katrina on all current		
science and technology		
initiatives to Gene Whitney		
(gwhitney@ostp.eop.gov, 202-		
456-6081).		
Working group chairs will	Working Group Chairs	September 14, 2005
submit paragraphs on working		
group activities for inclusion in		
the September meeting minutes.		