Meeting Minutes of the Subcommittee on Disaster Reduction

4 February 2010, 10:00 a.m. to 12:00 p.m., White House Conference Center Lincoln Room

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

Officers

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

NSTC Liaison

TBD

Designated Representatives

BLM *Edwin Roberson*
Daniel Lechefsky
CDC Mark Keim (T)
DHS *Bruce Davis*
DHS/FEMA Deborah Ingram
DHS/USCG *Steven Cohen*
DOD Al Johnson
DOE *Patricia Hoffman*
DOT *Kelly Leone*
Sheila Duwadi
Tim Schmidt
EOP/OSTP TBD

EDA *Audrey Clarke*
EPA Peter Jutro
Stephen Clark
FERC *Howard Wheeler*
HUD *David Engel*
NASA Andrea Donnellan
NGA *Stephen Homeyer*
Whitney Nelson
NGB *Daniel Bochicchio*
NIH Allen Dearry (T)
NIST William Grosshandler
Jack Hayes
NOAA *John Gaynor*

NSF Dennis Wenger
OPHS *Sven Rodenbeck*
State Cari Enav
Fernando Echavarria
USACE *Barbara J. Sotirin*
Dimitra Syriopoulou
USAID *Sezin Tokar*
USDA TBD
USFS *Carlos Rodriguez-Franco*
USGS David Applegate
Paula Gori

Other Attendees

DOE Matt Rosenbaum
DOI Laurence Broun
EPA Alona Bachi
Marcy Rockman
FERC Pamela Romano (T)
NASA Craig Dobson
Michael Goodman

NOAA Helen Wood
Nell Codner
Margaret McCalla
Maria Honeycutt
NSF Joy Pauschke
State Andrew Reynolds
USAID Wayne Pennington

USFS Mike Hilbruner (T)
Natural Hazards Center
Kathleen Tierney
Secretariat Kate Cantrell
Ross Faith
Barbara Haines-Parmele

Agenda

10:00 Welcome and Introductions
10:05 Approval of December Meeting Minutes
10:08 Report from the Chair
10:12 Report from the Vice-Chairs
10:15 Agency Presentations on S&T Responses to the Earthquake in Haiti
11:15 Presentation: Natural Hazards Center
11:55 Close and Next Actions

Handouts

- Agenda
- January Meeting Minutes
- Draft SDR Calling Card to Climate Science Community
- S&T Lessons Learned from 2004 Indian Ocean Tsunami
- Agency S&T Responses to Haiti Earthquake

I. Call to Order and Introductions

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

II. Approval of December Meeting Minutes

The January Meeting Minutes were approved with the correction by Nell Codner (NOAA) that the December 3rd -5th JSOST/ORRAP Workshop on Coastal Inundation and Sea Level Rise took place at the Lansdowne Resort, not the National Conference Center. The minutes have been amended to reflect that the workshop simply took place in Lansdowne, Virginia.

III. Report from the Chair

Applegate informed Members that their meeting folders contained the most recent version of the SDR's calling card to the climate science community on developing better collaboration and communication on the parallels between disaster risk reduction and climate change adaptation. Members are invited to send the Secretariat (Ross.Faith@ManTech.com) any comments on the draft.

Applegate reported that he is exploring the idea of having the SDR team up with the U.S. Group on Earth Observations (USGEO) and the National Earthquake Hazard Mitigation Program (NEHRP) to produce a science and technology lessons learned report from the Haiti earthquake. Following the 2004 Indian Ocean earthquake and tsunami, the SDR was asked by the Office of Science and Technology Policy (OSTP) to identify the science and technology lessons learned from that disaster. The resulting report "Science and Technology Lessons Learned from the December 26, 2004 Indian Ocean Disaster" is available through the SDR's website at: http://www.sdr.gov/Tsunami%20Science%20and%20Technology%20Lessons%20Learned%202005-1130%20FINAL.pdf.

Applegate thanked Members for their input to the SDR on how their agencies had responded to the earthquake in Haiti from a science and technology perspective. This information is being aggregated to form a report for the President's Science Advisor and OSTP. If your agency leveraged its science and technology capabilities in responding to the disaster in Haiti and has not passed this information on to the SDR, please forward appropriate summaries to the Secretariat (Ross.Faith@Mantech.com) by COB Tuesday, February 9, 2010.

IV. Report from the Vice-Chairs

SDR Vice-Chairs Margaret Davidson (NOAA) and Dennis Wenger (NSF) ceded the time allocated to them in the agenda so the meeting's presenters would have additional time.

V. Agency Presentations on S&T Responses to the Earthquake in Haiti

Applegate asked Members to begin thinking about what activities (i.e., workshop) would be useful to inform a lessons learned report on how well science and technology was applied in responding to the earthquake in Haiti, what worked, and what gaps were revealed. He noted the large outpouring of aid from the United States and international community, which may indicate an opportunity to "build back better."

Applegate noted that it had proved difficult to gather data "on the ground" in Haiti in the event's aftermath. He cited the key role played by areal imagery from the National Oceanic and Atmospheric Administration (NOAA), the National Aeronautics and Space Administration (NASA), and specifically that provided by the Jet Propulsion Laboratory (JPL) Shuttle Radar Topography Mission. Such systems have shown that the magnitude 7.0 earthquake of January 12th caused only a partial rupture of the Enriquillo-Plantain Garden Fault, which has put additional strain on the larger fault system.

U.S. Geological Survey
Within 20 minutes of the earthquake, the U.S. Geological Survey (USGS) provided online estimates of the number of people and the names of cities in Haiti exposed to severe shaking through its Prompt Assessment of Global Earthquake for Response (PAGER) system. PAGER information is produced in partnership with the U.S. Agency for International Development (USAID) and provides a quick look at whether a humanitarian response is necessary following a given earthquake event in the world.

Sensor buoys set up in the Caribbean under the NOAA-USGS Post-Sumatra tsunami warning initiative allowed NOAA to issue a tsunami watch for the surrounding area. The watch was subsequently cancelled.

Earthquakes are atypical disaster events in that aftershocks can increase damage by causing already vulnerable buildings to fail and perpetuate the psychological fear of survivors. In Haiti, aftershocks following the January 12th earthquake occurred off to the west of Port-au-Prince. Applegate noted the double-edged sword of making predictions of future earthquakes. On the one hand, predictions can encourage people to take rise-wise measures to increase their preparedness. On the other, predictions that do not "pan out" can exacerbate rumors and create distrust among the population with authorities and the scientific community.

Applegate reported that a structural engineering team had been deployed at invitation of the U.S. Southern Command and was the first of several teams on the ground.

U.S. Agency for International Development
Wayne Pennington (USAID) stated that information on USAID's response can be found on the webpage: www.usaid.gov/helphaiti. He noted that the USAID representative to SDR, Sezin Tokar, is involved with the agency's response, which had several of its employees working 12 to 14 hour shifts to ensure 24 hour coverage at USAID's headquarters. He stated that USAID is already preparing its transition from relief to reconstruction. He added that the desire to help Haiti in the immediate aftermath had burdened the relief effort with many teams that were not yet needed but which nevertheless required food, shelter, and transportation.

National Aeronautics and Space Administration
Michael Goodman (NASA) reported that while many of the space agency's satellites could not be redirected from their normal orbit paths to focus in on Haiti after the earthquake, the ASTER (Advanced Spaceborne Thermal Emission and Reflection Radiometer) instrument flies aboard NASA's "steerable" Terra satellite and was able to return data at a 15-meter resolution, allowing experts to identify areas at risk of landslides, which are common occurrences in mountainous terrain after large earthquakes. Areas of possible landslide were identified by carefully comparing the new image with an image acquired one year prior.

Goodman reported that mountainous areas surrounding Port-au-Prince may be subject to landslide as shattered rock substrate can expose areas to severe erosion. While large numbers of landslides had not been reported since the earthquake, the landslides which did occur (primarily shallow soil slips and more damaging rock falls) had affected communities such as Leogane, at the quake's epicenter. Also, roadways between Port-au-Prince and Jacmel had been blocked, hampering relief efforts in those areas.

The risk of landslide is expected to increase when the rainy season picks up. Already destabilized slopes will likely serve as enormous source-areas for massive debris flows and mudslides. NASA's landslide inventory shows that there have been over 150 casualties from 2007 to 2009 – almost all in the Port-au-Prince area – due to landslides which were triggered by several different tropical storms between the months of August and October. Goodman expected that the massive amounts of debris left in the wake of the earthquake will only exacerbate the potential for catastrophic landslides when the rainy season starts in April and the hurricane season begins shortly thereafter in the June-July timeframe.

The Advanced Land Imager (ALI) instrument aboard NASA's Earth Observing-1 satellite took an image of Port-au-Prince three days after the earthquake. When compared to the same view taken in September 2008, the image showed that a pier in Port-au-Prince harbor had collapsed.

Craig Dobson (NASA) reported that Haiti is being crushed by the Earth's plates at a rate of about 1 centimeter per year. Over 100 to 300 years, this translates into plate movement of approximately 1 to 3 meters, which loads the fault systems around Haiti until the strain becomes too much.

Dobson noted that a Japanese satellite with L-band sensing capability makes a pass over Haiti and the surrounding Caribbean once every 46 days, but that in general, remote sensing coverage for land deformation in Haiti is quite limited. This dearth of coverage led NASA to modify the flight path of its UAVSAR.

NASA's Uninhabited Aerial Vehicle Synthetic Aperture Radar (UAVSAR), which is currently in use aboard a Gulfstream-III jet (and in the future will be flown on an uninhabited aerial vehicle), captured a false-color composite image of Port-au-Prince, Haiti, and the surrounding region on January 27th using three channels of UAVSAR polarimetric data. As a repeat-pass L-band InSAR, the UAVSAR was designed to provide rapid access, short revisit interval, high resolution and variable viewing geometry to optimize observation of post-seismic deformation and landslide hazards. Like a pair of polarized sunglasses, these images are sensitive to different parts of the radar signal that is reflected from Earth's surface. The Horizontal transmit-Vertical receive (or HV polarization) mode is sensitive to multiple scattering that typically occurs in vegetation, giving the hills a green color. Vertical transmit-Vertical receive (or VV polarization) mode is sensitive to scattering from surfaces, imparting a bluish tint to water and non-vegetated soil. Finally, Horizontal transmit-Horizontal receive (or HH polarization) mode is sensitive to structures and vertical tree trunks, which gives some urban areas and vegetated regions a reddish tint.

The January 25 – February 14, 2010, Central America Deployment of UAVSAR has been modified to allow for flights over the two major active fault systems in Hispaniola: the Enriquillo-Plantain Garden Fault, responsible for the damage to Port-au-Prince; and the Septentrional Fault Zone to the north, which is also capable of producing major earthquakes. Objectives the UAVSAR flights over Haiti are:

Enriquillo-Plantain Garden (EPG) Fault (flights scheduled for Jan. 27, Feb. 3, and Feb. 13)
- Post-seismic deformation
- Deformation field of aftershocks or potential triggered earthquakes
- Landslide hazards

Septentrional Fault Zone (2nd priority) (Flight tentatively scheduled for Feb. 14)
- Baseline observations for possible future events

National Oceanic and Atmospheric Administration
Nell Codner (NOAA) reported that NOAA issued a Tsunami watch immediately following the earthquake and then cancelled the watch one hour later.

Codner indicated that the NOAA Homeland Security Office, set up after September 11, 2001, had functioned quite well in the response to the Haiti earthquake by allowing requests from the National Coastal Data Development Center (NCDDC) and the Naval Oceanographic Office (NAVO) to be handled quickly and efficiently.

Beginning on January 13th the National Weather Service's Southern Region office provided 67 daily forecasts, outlooks and updates for Miami, Guantanamo Bay Naval Station, and Port-au-Prince.

NOAA's remote sensing of Haiti following the earthquake included:

- 3298 images delivered
- 692 sq miles covered
- 921 miles of flight lines
- 670 GB NOAA data uploaded to USGS
- 9.66TB NOAA data downloaded from USGS (as of Jan 26)
- Private entities, Google, ESRI, Leica Geosystems, and ERDAS had downloaded NOAA data and added value before making it available to the public.

NOAA's National Ocean Service (NOS) had provided aerial surveys and assessment of damage for response planning. NOAA was also standing by with hydrographic survey response teams and readying to respond to hazardous materials spills.

Jerry Miller (OSTP) noted that hazardous waste washout could have implications for local fisheries.

National Geospatial-Intelligence Agency
Whitney Nelson (NGA) reported that the agency's ability to share some of its information to add value to unclassified products in legal and proper ways in response to the Haiti crisis was a major success story. NGA's Haiti Earthquake Crisis Relief webpage is at https://www.geoint-online.net/community/HaitiCrisisResponse/default.aspx.

Applegate noted that it was impressive to see such collaboration among the Earth observations community. He also pointed members to the International Charter for Space and Major Disaster's webpage: www.disasterscharter.org.

National Science Foundation
Wenger noted that while the National Science Foundation (NSF) is not a mission agency, it had been active in providing funding support to studies of the earthquake in Haiti. The NSF was currently supporting rapid deployment of teams to Haiti to gather perishable, post-earthquake research data, which will be broadly disseminated. Funding had gone to:

- Earthquake Engineering Research Institute (EERI) Learning from Earthquakes (LFE) Program (NSF-supported for several decades), to focus on multidisciplinary data (e.g., engineering, social sciences)
- Geo-engineering Extreme Events Reconnaissance (GEER) Association, to focus on geotechnical observations and data
- Natural Hazards Center (University of Boulder, CO), to focus on social science observations and data

- A small engineering team from the NSF-supported EERI/LFE, GEER, and Network for Earthquake Engineering Simulation (NEES) projects, in collaboration with the USGS and with assistance from the U.S. military (SOUTHCOM), have already deployed to Haiti for early data gathering. Data gathered will be used to inform follow-on EERI, GEER, and other NSF-supported teams.

Under NSF's Grant for Rapid Response Research (RAPID) program, awards had so far gone to Purdue University geophysicist, Dr. Eric Calais, who is leading a team to study the cause of the Haitian earthquake as well as regional risk. He and his team will map the area of the fault that ruptured, resurvey existing GPS markers, and install 10 new continuous GPS sites to monitor future changes to the fault. The Haitian Bureau of Mines and Energy and the Haitian Civil Protection Agency invited Calais and his team to the country, as the researchers had prior NSF support to study seismicity of the region. Findings from that study, published and disseminated to the Haitian government in 2008, identified the risk for a magnitude 7.2 earthquake along the Enriquillo and Septentrional Faults on Hispaniola.

Wenger stated that as part of the NSF-supported TeraGrid, the Texas Advanced Computing Center (TACC) at the University of Texas-Austin is providing the *Corral* data resource - and its 1.2 petabytes of storage - to rapidly compute and distribute large data sets under the current emergency conditions. To aid collaborators at the NASA-supported Center for Space Research (CSR) at the university, CSR's Mid-American Geospatial Information Center (MAGIC) repository provides accurate satellite and aerial imagery to disaster researchers and first responders. As new fault and devastation data arrive, TACC and the MAGIC team members prepare those files for use in Haiti.

Also, the NSF-supported OpenTopography portal (http://www.opentopography.org/) at the University of California, San Diego/San Diego Supercomputer Center hosts airborne LiDAR data collected over Haiti by the National Geospatial-Intelligence Agency. Those data may be of utility for geoscience research efforts in the region, and may be broadly accessible through the portal.

As part of the National Earthquake Hazards Reduction Program (NEHRP), NSF supports the George E. Brown, Jr. Network for Earthquake Engineering Simulation (NEES), a university- operated network of 14 earthquake engineering experimental facilities, which are available for post-earthquake laboratory studies and for deployment of mobile equipment for structural and geotechnical field studies.

Centers for Disease Control and Prevention

Mark Keim (CDC) reported that the Centers for Disease Control and Prevention was tracking the main developing public health issues in Haiti. He reported that water delivery systems were working but inadequate, though consolidation of water and food distribution had been mostly good. The relief effort was transitioning from MRE to dry food rations.

As of February 4, 340 CDC staff members were involved in the response, including 23 in Haiti, 3 in Washington, DC, and 1 in Miami. The CDC's Emergency Operations Center was being supported by 313 staff members in Atlanta. CDC also was supporting HHS as one of 157 members in the UN Health Cluster organizing the Haiti public health and medical response, focusing on needs assessment, health surveillance and education, and medical stockpiles.

Keim noted that there had been little evidence in Haiti to cause concern over the outbreak of an epidemic, but the CDC was nevertheless continuing to conduct robust surveillance. He added that a

common misconception was that dead bodies cause disease outbreaks, when in fact "live bodies" actually spread disease more easily.

Federal Emergency Management Agency
Deb Ingram (FEMA) reported that the Federal Emergency Management Agency was working with USAID on response to the earthquake and was engaged with both USAID and the Department of State in recovery planning. As a NEHRP agency, FEMA has information on building standards, risk analysis, flooding, and landslides that it was streamlining to address the current situation in Haiti.

Department of State
Cari Enav (State) reported that the State Department's Office of Human Rights was working in five task teams "around the clock." She indicated that State was working with the U.S. Southern Command as well as doing its best to work within the UN rubric. International donor organizations are expected to hold a conference on March 31st on how to most effectively reconstruct Haitian infrastructure and communities.

Enav noted that Margareta Wahlström (UN Assistant Secretary-General for Disaster Risk Reduction and Special Representative of the Secretary-General for the implementation of the Hyogo Framework for Action in the Secretariat for the International Strategy for Disaster Reduction) would be available for an informal meeting with SDR Members on February 12th in Washington, DC. Let Ross (ross.faith@mantech.com) know if you would be interested in attending.

Department of Transportation
Sheila Duwadi (DOT/FHWA) reported that the Federal Aviation Administration (FAA) was active in the response. Specifically, to facilitate the rapid flow of rescue and relief personnel and supplies, the FAA is providing technical assistance for air traffic management and airport evaluations. A seven-member team from the FAA is working with the Haitians and Department of Defense combat controllers to improve the flow of air traffic moving in and out of the airport there. The FAA issued a Notice to Airmen (NOTAM) for all fixed-wing aircraft inbound to Haiti in support of earthquake relief operations. The NOTAM establishes a process to obtain an arrival slot for Port-au-Prince International Airport.

VI. Presentation: Natural Hazards Center

Wenger welcomed and introduced Kathleen Tierney, Director of the Natural Hazards Center at the University of Colorado-Boulder. Tierney has over 25 years of experience in the disaster field and has been involved in research on the social aspects and impacts of major earthquakes in California and Japan, floods in the Midwest, Hurricanes Hugo and Andrew, and many other major natural and technological disaster events. Since September 11, 2001, she has been directing a study on the organizational and community response in New York following the terrorist attack on the World Trade Center. Her other recent research projects include studies on public perceptions of the earthquake threat in the Northern California Bay Area, socio-behavioral aspects of real-time warning systems for earthquakes, risk communication, and the business impacts of disasters. Kathleen is the author of dozens of articles, book chapters, and technical reports on the social aspects of hazards, disasters, and risk. She is a member of the National Construction Safety Team Advisory Committee, which is overseeing the official federal investigation of the World Trade Center disaster, and serves on Leaders Working Group on Biodefense of the University of Pittsburgh Medical Center on Biosecurity/Johns Hopkins University Center for Civilian Biodefense Strategies and the executive committee of the Multidisciplinary Center for Earthquake Engineering Research.

Since 1976, the Natural Hazards Center has served as a national and international clearinghouse of knowledge concerning the social science and policy aspects of disasters. The Center collects and shares research and experience related to preparedness for, response to, recovery from, and mitigation of disasters, emphasizing the link between hazards mitigation and sustainability to both producers and users of research and knowledge on extreme events.

A basic goal of the Center is to strengthen communication among researchers and the individuals, organizations, and agencies concerned with reducing damages caused by disasters. More than a quarter century of cultivating discourse among these groups has placed the Natural Hazards Center center-stage in both the national and global hazards communities.

The Center is funded by a consortium of federal agencies (Federal Emergency Management Agency, National Science Foundation, U.S. Geological Survey, National Oceanic and Atmospheric Administration, National Aeronautics and Space Administration, U.S. Army Corps of Engineers, the Centers for Disease Control and Prevention, and the U.S. Forest Service) and the Public Entity Risk Institute.

The Center is guided by a National Advisory Committee comprised of representatives of federal agencies that have an interest in hazards as well as stakeholders from academia, state and local government, the private sector, and nongovernmental organizations. The Center has always promoted an all-hazards approach for dealing with environmental extremes and has been a leading proponent of cooperative partnerships among varying disciplines.

The Center carries out its mission through the following activities:

- Publishing the bimonthly newsletter, the ***Natural Hazards Observer***, and the electronic biweekly newsletter, ***Disaster Research***;
- Maintaining a website of updated information on upcoming conferences and links to publications, organizations, and other internet resources for hazards research and practice;
- Maintaining one of the largest **library collections** in the world of social science literature focused on natural hazards and extreme events (over 30,000 books, articles, reports, and journals), as well as our searchable online database, HazLit;
- Hosting the annual invitation-only **Hazards Research and Applications Workshop**, which is held annually in July (this year July 10-13) to:
  - Strengthen links among the research, policy, and end-user communities
  - Facilitate discussions among participants
  - Address topics of current and ongoing interest, recent disaster events, policies
    (* In 2009 the workshop drew 450 attendees from the U. S. and 14 other countries)
- Participating in separately funded multidisciplinary **research initiatives** that are consistent with the Center's mission and provide hands-on research training to graduate students;
- Publishing **books, reports, and papers** on hazards research and emergency management practices available for free on the Center's website;
- Administering the **Quick Response Program**, which provides funds for researchers to travel to the site of a disaster soon after it occurs to gain valuable information concerning immediate impact and response;

- Moderating the **Disaster Grads** listserv to bring graduate students interested in hazards together in an online forum; and

- Cosponsoring the publication of the ***Natural Hazards Review*** with the American Society of Civil Engineers.

Tierney co-edits the Natural Hazards Review with James Beavers, a structural engineer at the University of Tennessee. The Review brings together the regulatory and policy environments and the social, behavioral, and physical sciences to confront natural hazards loss reduction through publication of original, peer-reviewed papers. It also explores innovative and practical solutions to the problems and challenges faced by all sectors of the hazards community, including government, academia, the private sector, and non-governmental organizations. Articles containing detailed case studies are complemented by ones reporting original research findings to describe both practical projects and the latest cutting-edge knowledge on significant hazards issues Extending beyond the boundaries of one traditional discipline, it serves as a forum for holistic approaches to natural hazards mitigation.

The Center's staff is divided into two core areas: 1) a research program, and 2) a clearinghouse for knowledge related to social science and policy aspects of disasters. The research program includes 3 Ph.D. researchers, 4 doctoral student, research assistants and affiliated research faculty. Clearinghouse efforts are staffed by a program manager, office manager, 2 editors, a library manager, and research assistants. The Center's staff maintain an extensive network of relationships with key agencies and organizations in the disaster loss reduction arena and speak regularly at meetings of scholarly and professional associations, including international meetings. Staff also are extensively involved in interactions with print and electronic media outlets, such as providing context and scientific insights on the Haiti earthquake: CNN, NPR, AP interviews that generated numerous print and electronic reports

The Center's Quick Response Research Grants enable social and behavioral scientists to travel to disaster-stricken areas immediately after impact in order to gather perishable data. The two largest funding efforts to date are research related to the September 11 terrorist attacks and Hurricane Katrina. Currently, the Center is supporting Quick Response Research for Haiti Earthquake as follows:

- Natural Hazards Center Assistant Director Liesel Ritchie is currently working in Haiti
- 2 projects cleared for activation when travel plans are finalized
- 2 projects pending, conditional on favorable proposal reviews
- 20 additional inquiries that may result in Quick Response proposals and subsequent funding

Recently, the Center had been pursuing the following Special Projects:

- Dissertation Enrichment Fellowships, sponsored by NSF and PERI
- Updated Report (post-Katrina) on "Sustainable Disaster Recovery"
- Report for NRC Transportation Research Board on Transportation Systems and Disasters

The Center's main Quick Response Research Publications include the reports "Beyond September 11: An Account of Post-Disaster Research" (2003) and "Learning from Catastrophe" (2006). These publications and additional information on the Natural Hazards Center are available at www.colorado.edu/hazards.

VII. Adjournment

The meeting adjourned at 12:00 p.m.

VIII. 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.

March 4, 2010	July 1, 2010	October 7, 2010
April 1, 2010	August 5, 2010	November 4, 2010
May 6, 2010	September 2, 2010	December 2, 2010
June 3, 2010		

*Note: The SDR's 2010 meetings are scheduled to be held at the White House Conference Center.

X. 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 Ross Faith (ross.faith@mantech.com).

XI. Contact Information SDR Leadership

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Margaret Davidson, Vice Chair, 843-740-1220, margaret.davidson@noaa.gov
Dennis Wenger, Vice Chair, 703-292-8606, dwenger@nsf.gov

Secretariat

Kate Cantrell, 703-485-8053, Kate.Cantrell@ManTech.com
Ross Faith, 703-388-0308, Ross.Faith@ManTech.com

XII. Summary of January Actions

Action	Lead	By When
Send revisions and additional input on agency S&T earthquake responses to Ross (ross.faith@mantech.com)	SDR Members	COB Tuesday, February 9th
Let Ross (ross.faith@mantech.com) know if you would be interested in an informal meeting with Margareta Wahlstrom on Feb. 12th in DC.	SDR Members	ASAP
Let Ross (ross.faith@mantech.com) know if you would like to participate in an ad hoc SDR working group on how S&T can inform the recovery and rebuilding process in Haiti.	SDR Members	Standing
Send Ross (ross.faith@mantech.com) comments on the SDR calling card on disaster risk reduction and climate change adaptation.	SDR Members	Standing
Contact Jack Hayes (jack.hayes@nist.gov) if your agency is interesting in exploring how to make use of the NEES facilities for earthquake research.	SDR Members	Standing
Send Sezin Tokar (stokar@usaid.gov) your ".gov" e-mail address to receive USG-only updates from USAID on global disaster response activities.	SDR Members	Standing
Contact Ross (ross.faith@mantech.com) to receive copies of the Grand Challenges for Disaster Reduction Implementation Plan packets or CD.	SDR Members	Standing
Let Dave or Ross (ross.faith@mantech.com) know how you use the implementation plans, including when you link to the plans from your agency websites. Send Ross or Dave additional distribution suggestions, including relevant contact information.	SDR Members	Standing