

Meeting Minutes of the Subcommittee on Disaster Reduction

5 May 2011, 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
Dennis Wenger (NSF), Vice-Chair

NSTC Liaison

Tamara Dickinson (OSTP)

Designated Representatives

BLM *Edwin Roberson*
Daniel Lechefsky
CDC *Mark Keim*
DHS *Bruce Davis*
DHS/FEMA Stephen Carruth
DHS/USCG *Austin Gould*
DOD *Al Johnson*
DOT *Kelly Leone*
Sheila Duwadi
EOP/OSTP Tamara Dickinson

EDA *Audrey Clarke*
EPA *Peter Jutro*
Stephen Clark
FERC *Pamela Romano*
HUD *David Engel*
NASA Craig Dobson
NGA *Chris Crosiar*
NGB *Daniel Bochicchio*
NIH Allen Dearry (T)
NIST *William Grosshandler*
NOAA Margaret Davidson (T)

NSF *Dennis Wenger*
OPHS Sven Rodenbeck (T)
State Nicholas Suntzeff
Brian Lieke
Fernando Echavarria
USACE *Steven Cary*
Dimitra Syriopoulou
USAID Sezin Tokar (T)
USDA *TBD*
USFS Carlos Rodriguez-Franco
USGS Paula Gori (T)

Other Attendees

BLM William Ypsilantis
DHS Mary Ellen Hynes (T)
EOP/NSS Dab Kern
EPA Marcy Rockman (AAAS)
FERC Justin Smith (T)
NASA Dalia Kirschbaum
Michael Goodman (T)

John Labrecque
NIST Eric Letvin
Marc Levitan
NOAA Nell Codner
Mary Ann Kutny
Maria Honeycutt (T)
Margaret McCalla

NSF Greg Anderson (T)
Jacqueline Meszaros
Secretariat Ross Faith
Barbara Haines-Parmele

Agenda

10:00 Welcome, Introductions, and Approval of Minutes
10:05 Report from the Chair
10:15 Report from the Vice-Chairs
10:25 Report from the NSTC Liaison
10:35 Presidential Policy Directive 8: National Preparedness
10:55 Presentation: NIST Disaster and Failure Studies Program
11:25 Goals for SDR in 2011
11:55 Close and Next Actions

Handouts

- Agenda
- Draft April Meeting Minutes
- Presidential Policy Directive/PPD-8

I. Welcome, Introductions, and Approval of Minutes

Subcommittee on Disaster Reduction (SDR) Chair David Applegate (USGS) called the meeting to order at 10:11 a.m. and the participants introduced themselves. The April Meeting Minutes were approved with no changes or corrections.

II. Report from the Chair

Applegate reported that Margaret Davidson (NOAA) will be leading the U.S. Government delegation to the UN International Strategy for Disaster Reduction's Global Platform meeting (May 8-13, Geneva, Switzerland). Similar in size to the delegation that attended the Global Platform in 2009, this year's delegation includes representatives from the Department of State, FEMA, NOAA, NSF, USAID, and the USGS.

Sezin Tokar (USAID), who will be attending the Global Platform as part of the U.S. delegation, reported that she met with InterAction's Disaster Risk Reduction (DRR) Working Group on May 4th at the group's invitation. The goal of the meeting was to hold a dialogue on the key DRR issues leading up to the Global Platform. InterAction's main messages during the dialogue were the need to improve the inclusion and participation of communities and local governments in DRR efforts to strengthen capacity. The working group also stressed the need to better mobilize financial resources, strengthen transparency, and enhance integration of DRR and climate change. InterAction, which is the largest coalition of U.S.-based international nongovernmental organizations, is particularly concerned that resources, communication, practices, and policies are not trickling down from the international and national levels to the local level. The working group is in the process of completing a survey on this challenge. Tokar also noted that the working group expressed interest in pursuing further dialogue with the U.S. National Platform following the meeting in Geneva. Applegate endorsed efforts to continue the dialogue moving forward since the NGO community is an important part of the overall American presence at these UN meetings and plays a vital role in reducing disaster risk abroad. Since the SDR serves as the U.S. National Platform and participation in it is correspondingly limited to federal agencies, Applegate supported efforts to find additional pathways to engage with InterAction.

Shifting gears, Applegate spoke about the ongoing flooding in the Midwest and the Birds Point/New Madrid floodway that was recently blasted open by the U.S. Army Corps of Engineers to relieve pressure on levees at Cairo, IL, where the Mississippi and Ohio Rivers converge. This year's National Level Exercise is focused on responding to a scenario in which a portion of the New Madrid Fault ruptures, causing a magnitude 7.7 earthquake and damaging shaking in Northeastern Arkansas, Western Tennessee, the Bootheel of Missouri, Western Kentucky, and Southern Illinois. Applegate raised the New Madrid hazard to prompt thinking about what would happen and how response would be affected if a damaging earthquake occurred in the Central U.S. during a major flood.

Michael Goodman (NASA), who is stationed at the Marshall Space Flight Center in Huntsville, AL, described the impacts of the severe tornadoes that touched down in northern Alabama and throughout much of the Southeastern U.S. on April 27th. Between 6:00am and 11:00pm local time, a series of severe squall lines passed through the state of Alabama. The weather system generated an F5 tornado that tracked through northern Alabama and took out a Tennessee Valley Authority relay station near the Browns Ferry Nuclear Power Plant. While the tornado did not hit the power plant, it knocked down between 90 and 100 transmission towers, which immediately plunged all of northern Alabama into a blackout. After a few days, power was restored to the area's hospitals, followed by the gas stations and major grocery stores, then commercial buildings and the University of Alabama-Huntsville, but for almost a week many residences in northern Alabama have been without power.

Applegate noted that the damage to critical infrastructure in northern Alabama underscored the importance of ensuring the resilience of these critical lifelines. He stated that the SDR's NSTC Liaison,

Tammy Dickinson (OSTP), is also the White House representative to the NSTC Subcommittee on Infrastructure, and noted that there may be opportunities for cross-briefings between the two subcommittees in the months ahead.

In response to a question raised by Nicholas Suntzeff (State) regarding a recent Washington Post article citing confusion over the difference between warnings and watches issued by the National Weather Service, Margaret Davidson answered that the Weather Service was indeed concerned about the issue. The agency is presently conducting studies to examine whether cultural changes over the past 50 or so years have made the vocabulary used by the Weather Service less effective in getting its messages across. The studies are intended to determine whether the Weather Service's lexicon should be changed to make it more intuitive.

III. Report from the Vice-Chairs

Davidson encouraged linking the SDR to the NSTC Subcommittee on Infrastructure. Along similar lines, she also emphasized the importance of Presidential Policy Directive/PPD-8: National Preparedness, which conveys the importance of protecting critical infrastructure. She cited the directive as an opportunity for SDR Members to help inform the development of the plans requested in that document by the President.

Davidson reported that the SDR's ad hoc Coastal Inundation Working Group held a teleconference on April 28th. Much of that discussion focused on how the coastal inundation modeling community might influence the FY13 budget process. Davidson also noted the opportunity for collaboration between CEQ, the modeling working group of the U.S. Global Change Research Program, and the SDR's Coastal Inundation Working Group to help flesh out the recommendation of the Interagency Climate Change Adaptation Task Force to develop a public-private partnership on an open source community risk assessment model. Davidson stated that she hoped to invite CEQ, which is leading the effort, to present on the effort at a future SDR meeting.

IV. Report from the NSTC Liaison

Tammy Dickinson (OSTP) stated that the SDR Charter is currently making its way through the clearance process of its parent body, the Committee on Environment, Natural Resources and Sustainability (CENRS). Numerous agencies have made comments on the charter, but none have led to significant changes in the document. Dickinson also reported that OSTP's Associate Director for Environment, Shere Abbott, will be departing from her position in late June. She did not have details on who would fill the position.

Dickinson reported that the FY07-08 National Windstorm Impact Reduction Program (NWIRP) Biennial Progress Report was currently being circulated for concurrence and comments were expected by the week of May 9th. Marc Levitan (NIST) reported that agency input for the NWIRP FY09-10 Biennial Progress Report was expected by May 20th, and once received, a draft report will be circulated back to the agencies over a three week concurrence process.

V. Presentation: NIST Disaster and Failure Studies Program

Eric Letvin is the Director of the Disaster and Failure Studies Program at the National Institute of Standards and Technology (NIST) Engineering Laboratory. Letvin joined NIST six months ago and is the first person to hold position of director for the newly formalized program. (Previous studies had been conducted by the agency's various subject matter leads and division chiefs depending on the hazard or event.) In this new position, Letvin is responsible for the national coordination of field data collection studies and for creating and maintaining a database repository related to hazard events, including earthquakes, hurricanes, tornadoes, windstorms, community-scale fires in the wildland-urban interface, structural fires, storm surge, floods, tsunamis, and man-made hazards. Data collected under the program

post-event includes the performance of the built-environment during hazard events, associated emergency response and evacuation procedures, and the technical, social and economic factors that affect pre-disaster mitigation activities and post-disaster response efforts. Letvin is also responsible for promoting and coordinating the implementation of the recommendations from disaster and failure studies to improve codes, standards, and practices, and to fill gaps in current knowledge about buildings, infrastructure, emergency response, and human behavior in hazard events.

Formerly the National Bureau of Standards (1901-1988), NIST's track record of conducting disaster and failure studies dates back to the Great Baltimore Fire of 1904, when multiple fire companies from across the region responded to the incident but could not hook up to the city's fire hydrants because their hose couplings were incompatible. During the last 50 years, NIST has conducted numerous studies of disasters and structural failures, including the Kansas City Hyatt Regency (MO, 1981), L'Ambiance Plaza (CT, 1987), the World Trade Center (2001), the Station Nightclub Fire (RI, 2003), and for several hurricanes, earthquakes, tornadoes, and fires over the years. Studies currently underway include an examination of the factors during the recent Texas wildfires responsible for damage, such as fire behavior, topographic features, vegetation, structure construction and defensive actions on losses to structures in the wildland-urban interface, and an examination in partnership with the American Society of Civil Engineers (ASCE) of building failures during the magnitude 7.0 Christchurch earthquake.

By far the most well-known investigation NIST has conducted is the structural failure of the World Trade Center following the 9/11 attack. FEMA completed its study of the World Trade Center disaster in the spring of 2002, after which NIST conducted a six-year, multi-million dollar study of its own. Letvin noted that it became apparent in the aftermath of the disaster that no agency was specifically designated and authorized to conduct disaster and failure studies of buildings. The National Construction Safety Team (NCST) Act (2002) addressed that gap by authorizing the Director of NIST to launch teams, when practicable, within 48 hours of building failures. The act was largely modeled after legislation giving the National Transportation Safety Board (NTSB) authority to conduct studies of transportation disasters. The NCST authorizes NIST as the lead agency to assess building performance, emergency response and evacuation procedures and specifies that NIST has priority over any other study team except when the NTSB is conducting an investigation, or where the building failure is caused by a criminal act. Letvin noted that there are several agencies that collect data on various hazard impacts, and he emphasized that his goal was to play a positive role in enhancing the coordination of post-event studies among federal agencies and external partners.

Whether NIST decides to lead a study following a disaster or failure or partner with other agencies or private organizations depends on the incident. For example, NIST is currently considering whether to join a FEMA effort or conduct its own study on the recent tornado impacts in the Southeast. NIST also conducts studies on overseas events in instances where the country impacted has advanced building codes, such in Chile, New Zealand, and Japan, and from which lessons learned about building failures (and successes) can be brought back to inform codes in the U.S. In the case of the Christchurch earthquake, NIST decided to join the private post-event study being led by ASCE and the Earthquake Engineering Research Institute (EERI), since those organizations already had strong relationships with the key players in New Zealand.

While there is an expectation that NIST will produce reports with recommendations for the disasters and failures that the program studies, Letvin explained that it is also important to measure, track and help implement those recommendations for improving codes and standards.

One of the major efforts under the newly created program is to develop and maintain an archival repository (or database) of all the data that is collected for each hazard and failure event, including data on the performance of the built-environment; associated emergency response and evacuation procedures;

and the technical, economic and social factors that affect mitigation activities. Such efforts have been conducted for individual hazards, but never for all hazards in one place. Letvin noted that NIST's data will be put into the database, which he would also like to open up to data from FEMA, USGS, the NSF RAPIDS, and other federal agencies. Letvin noted that there is also broad interest from the civil engineering community for the collection of this information. One of the challenges NIST is trying to address is the creation of minimum standards so the repository data can be used with quality assurance and searched for trends. The goal is to make as much of the data as possible publicly accessible. While the data from the World Trade Center study has been previously released in "chunks" under the Freedom of Information Act (FOIA), Letvin noted that NIST would be going live on its website with the vast majority of data for that event (approximately 2 terabytes) in the near future.

Letvin's presentation is available on the SDR Members Only website:

<http://www.sdr.gov/formembers.html> (username SDR.member; password SDR#2003. including the period at the end).

VI. Presentation: Presidential Policy Directive/PPD-8: National Preparedness

Dab Kern (White House National Security Staff) summarized the Presidential Policy Directive/PPD-8: National Preparedness, which was recently issued on March 30, 2011. PPD-8 replaces and rescinds most of its 2003 ancestral document, Homeland Security Presidential Directive (HSPD)-8. The issuing of PPD-8 is part of a larger effort, begun after President Obama took office, to reduce the number of—and streamline—presidential directives relating to emergencies and disasters, of which there are currently 26. Kern noted that the White House's decision to revise HSPD-8 first stemmed from the fact that the directive is quite far-reaching in scope, so revisions to it should help facilitate changes to other directives as the streamlining process moves forward.

In departure from HSPD-8 and other past directives, PPD-8 forgoes the concept of scenario-based planning in favor of capabilities-based planning. Kern noted the tendency in scenario-based planning is to prepare to "fight the last war" or mitigate the most recent disaster: the capabilities-based concept is an attempt to work beyond that tendency for narrow vision. It also underscores the recognition that analogous crises often demand similar responses, and that preparedness efforts should be integrated to maximize resources and streamline distribution systems.

PPD-8 essentially calls for four important deliverables or sets of deliverables: 1) a national preparedness goal within 180 days, 2) a national preparedness system within 240 days, 3) an interagency implementation plan within 60 days, and 4) interagency frameworks with deadlines to be specified in the plan. Tasked to the Secretary of Homeland Security in the first two instances, the goal will identify the core capabilities necessary for preparedness, and the system shall be an integrated set of guidance, programs, and processes that will enable the Nation to meet that goal. Development of the interagency implementation plan and the planning frameworks—covering prevention, protection, mitigation, response, and recovery—are charged to the Assistant to the President for Homeland Security and Counterterrorism. Kern reported that the national response framework has already been developed, and the national recovery framework is in its final stages. The remaining three frameworks are expected to be finalized over the coming weeks and months.

Importantly, the system is to include "a comprehensive approach to assess national preparedness that uses consistent methodology to measure the operational readiness of national capabilities at the time of assessment, with clear, objective and quantifiable performance measures, against the target capability levels identified in the national preparedness goal." In addition to the focus on methodology and the capabilities-based approach, the third major theme of the directive is an "all-of-Nation" approach that stresses the need for all sectors, all levels of government, and the public to do their part.

Applegate highlighted the efforts surrounding PPD-8 in general, and the mitigation framework specifically, as opportunities for the SDR to contribute expertise in disaster risk reduction.

VII. Goals for SDR in 2011

Dickinson stated that recent disasters like the earthquake and tsunami in Japan have increased the profile of hazards in the U.S. The White House is not only listening but also asking for information on what else it should be doing to reduce risks in the country. The SDR has been very visible within OSTP during the past few months.

Applegate reported that there is strong interest from the National Earthquake Hazard Reduction Program (NEHRP) to develop a document on the lessons learned from the disaster in Japan. That effort would ostensibly be a joint undertaking, involving the SDR and perhaps the National Tsunami Hazard Mitigation Program (NTHMP).

Dickinson endorsed the lessons learned effort as a worthwhile undertaking. She also encouraged the exploration of drafting a white paper covering all hazards. Since 2009, a multi-hazard reauthorization bill has been under consideration by Congress. If passed in present form, the bill would direct the SDR to draft a report on research, development and technology transfer related to hazard mitigation. Applegate stated that regardless of whether the bill is actually passed, the effort to author an all-hazards white paper would be a valuable contribution. It was suggested that the National Windstorm Impact Reduction Program (NWIRP) Working Group might be broadened to undertake such an effort. Jacqueline Meszaros (NSF) stated that during the past year the SDR had heard several presentations focusing on the importance of baselines and metrics for risk and vulnerability. She thought these aspects of disaster reduction should be considered for inclusion if a white paper is developed. Nell Codner (NOAA) added that the National Academies' Committee on Science, Engineering, and Public Policy (COSEPUP) is expected to issue the report "Increasing National Resilience to Hazards and Disasters" in the coming months—perhaps later this summer. The report is expected to address the issue of metrics.

Dickinson also noted that she had worked with Mary Ellen Hynes (DHS) to introduce hazards-related language into the OSTP/OMB R&D budget memo. So far the language has gotten traction within OSTP. It will next be considered by OMB.

The group also identified the following ongoing subcommittee efforts and opportunities for future undertakings.

- **U.S. National Platform:** The SDR organized the U.S. Government delegation to the 2011 Global Platform meeting of the UN International Strategy for Disaster Reduction (ISDR). Canada has expressed interest in continuing regional collaboration with the U.S. National Platform.
- **Coastal Inundation Working Group (CIWG):** As noted in the Report from the Vice-Chair, the SDR's ad hoc Coastal Inundation Working Group has been spun up once again. Opportunities include efforts to inform the FY13 budget cycle and the development of a public-private partnership on an open source community risk assessment model as recommended by the Interagency Climate Change Adaptation Task Force.
- **National Windstorm Impact Reduction Program (NWIRP) Working Group:** The FY07-08 Biennial Progress Report is in the clearance process of the Committee on Environment, Natural Resources and Sustainability (CENRS) and is expected to be cleared in the coming weeks. The FY09-10 report is currently being developed by the member working group agencies and is expected to be submitted to OSTP in mid-June.
- **IPCC Special Report: Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation (SREX):** The SDR has been involved in the past in nominating experts to the UN working group drafting the report and more recently has nominated individuals

to the U.S. Government panels reviewing it. The SDR expects to be involved in the line-by-line review of the report's Summary for Policy Makers, scheduled for August 22 – October 14, 2011.

- **Presidential Policy Directive/PPD-8: National Preparedness:** Applegate encouraged the SDR to look for opportunities to inform efforts surrounding PPD-8 in general, and specifically the mitigation framework that it calls for.

VIII. Adjournment

The meeting adjourned at 12:08 p.m.

IX. Future Meetings

In 2011, the SDR will meet from 10:00 a.m. to 12:00 p.m. on the first Thursday of each month in the Lincoln Room of the White House Conference Center. The meeting dates are:

Thursday, June 2, 2011 Thursday, September 1, 2011 Thursday, November 3, 2011
 Thursday, July 7, 2011 Thursday, October 6, 2011 Thursday, December 1, 2011
 *Thursday, August 4, 2011

*Subject to cancellation

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

David Applegate	Chair	703-648-6714	applegate@usgs.gov
Margaret Davidson	Vice Chair	843-740-1220	margaret.davidson@noaa.gov
Dennis Wenger	Vice Chair	703-292-8606	dwenger@nsf.gov

Secretariat

Ross Faith	703-388-0308	Ross.Faith@ManTech.com
Barbara Haines-Parmelee	703-388-0309	Barbara.Haines-Parmelee@ManTech.com

XII. Summary of May Actions

Action	Lead	By When
Contact the SDR Secretariat (ross.faith@mantech.com) if you are interested in participating in a working group that will be drafting a lessons learned report covering the earthquakes and tsunami in Japan, New Zealand, Chile, and Haiti.	SDR Members and Federal colleagues	ASAP
Contact Dave (applegate@usgs.gov) or Ross (ross.faith@mantech.com) for information on how to tie into the National Level Exercise 2011 calendar of events.	SDR Members and Federal colleagues	ASAP
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 and Federal colleagues	Standing

Action	Lead	By When
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 (applegate@usgs.gov) 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