

Meeting Minutes of the Subcommittee on Disaster Reduction

6 September 2012, 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.

Co-chairs

David Applegate (USGS)
Margaret Davidson (NOAA)
Dennis Wenger (NSF)

OSTP Liaison

Tamara Dickinson (OSTP)

Designated Representatives

BLM *Edwin Roberson*

Daniel Lechefsky

CDC *Mark Keim*

DHS *Bruce Davis*

DHS/FEMA Sandra Knight

DHS/USCG *Austin Gould*

DOD *Al Johnson*

DOT Sheila Duwadi

EOP/OMB *Grace Hu*

EOP/OSTP Tamara Dickinson

EPA *Peter Jutro*

Stephen Clark

FERC Pamela Romano (T)

HUD *Dana Bres*

NASA *Craig Dobson*

NGA *Paul Lewis*

NGB *TBD*

NIH Allen Dearry

NIST Marc Levitan

NOAA Margaret Davidson (T)

Chris Strager

NPS Marcy Rockman

NSF Dennis Wenger

OPHS Estella Jones

State *Nicholas Suntzeff*

Fernando Echavarria

USACE *Steven Cary*

Dimitra Syriopoulou

USAID Sezin Tokar

USDA *TBD*

USFS *Elizabeth Reinhardt*

Carlos Rodriguez-Franco

USGS David Applegate

USNRC Jennifer Uhle

Other Attendees

DHS/FEMA Donald Daigler

Vince Maykovich

Dean Savramis

EOP/CEQ Kevin Bush

EPA Brendan Doyle

Paul Kudarauskas

NASA Francis Lindsay (T)

NOAA Nell Codner

Margaret McCalla

NSF Robert O'Connor

USCG Tung Ly (T)

USGS Kristin Ludwig

Charles Mandeville

Joseph Stachyra

National Academies

Eric Edkin

Elizabeth Eide

University of South Carolina

Susan Cutter

Secretariat Bret Schothorst

Barbara Haines-Parmele

Agenda

10:00 Welcome and Introductions

10:05 Presentation: National Academy of Sciences Resilience
Study Report *Disaster Resilience: A National Imperative*

10:50 Briefing: FEMA's Emergency Support Function
Leadership Group

11:20 Discussion on SDR Priorities and a Transition Roadmap
for the Next Administration

11:45 Report from the Co-chairs and Approval of Minutes

11:50 Report from the OSTP Liaison

11:55 Close and Next Actions

Handouts

- September Meeting Agenda
- Draft July Meeting Minutes
- Great SouthEast ShakeOut Handouts

I. Welcome and Introductions

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

II. Presentation: National Academy of Sciences Resilience Study Report *Disaster Resilience: A National Imperative*

Applegate introduced Susan Cutter (University of South Carolina), who briefed the SDR on the recently released National Research Council (NRC) report, *Disaster Resilience: A National Imperative*. Cutter chaired the ad hoc committee overseen by the Disasters Roundtable and the NRC Committee on Science, Engineering, and Public Policy that led the study, which integrated information from the scientific, technical, and public policy communities to identify ways to increase national resilience to disasters and natural hazards across communities at the Federal, state, and local levels.

Cutter began the presentation by providing an overview of where the nation stands now in terms of resilience to natural hazards and disasters and what can be done to increase it by the year 2030. Cutter stated that current information trends indicate that losses related to hazards and disasters could be reduced through increased national resilience. As such, a proactive approach to disasters that builds resilience will be more effective at reducing losses of life, property, and economic productivity than the reactive approach currently employed – one that builds upon the rich, existing body of technical, scientific, and practical knowledge about hazards and disasters, including their causes, effects, preparedness and planning, response, recovery, and mitigation.

The committee aimed to carry out five primary tasks in association with the resilience study:

- 1) Define national resilience and frame the primary issues related to increasing national resilience to hazards and disasters in the U.S.;
- 2) Provide goals, baseline conditions, or performance metrics for resilience at the U.S. national level;
- 3) Describe the state of knowledge about resilience to hazards and disasters in the U.S.;
- 4) Outline additional information or data and gaps and obstacles to action that need to be addressed in order to increase resilience to hazards and disasters in the U.S.; and
- 5) Present conclusions and recommendations about what approaches are needed to elevate national resilience to hazards and disasters.

Regarding the scope of the challenge, Cutter noted that the valuation of a community's assets – including the built environment and assets with social, cultural, and/or environmental value – is important to make resilience investment decisions. Knowing the patterns of disaster losses allows communities to understand where the impacts are the greatest and what factors drive their exposure and vulnerability. Because there is no accounting mechanism across Federal, state, and local agencies for the total cost to the nation each year of natural and human-made disasters, demonstrating that community investments in resilience will yield measurable short- and long-term benefits is critical for a sustained commitment to increasing resilience.

According to Cutter, there are several nationwide factors contributing to the urgent need for increased resilience to hazards and disasters:

- Disasters continue to occur, both natural and human-made, throughout the country and costs of responding continue to rise;
- More people are moving to coasts and southern regions, resulting in higher exposure to drought and hurricanes;
- Population continues to grow and age;
- Public infrastructure is aging beyond acceptable design limits;

- Economic and social systems are becoming increasingly interdependent;
- Risk cannot be completely eliminated and residual risk must be managed; and
- Impacts of climate change and environmental degradation of natural defenses such as coastal wetlands make the nation more vulnerable.

Based on this pressing need for increased national resilience, the study committee developed a series of actionable recommendations for Federal, state, and local community leaders to follow in order to make significant gains towards achieving that goal:

- 1) *Recommendation 1:* Federal government agencies should incorporate national resilience as a guiding principle to inform the mission and actions of the Federal government and the programs it supports at all levels.
- 2) *Recommendation 2:* The public and private sectors in a community should work cooperatively to encourage commitment to and investment in a risk management strategy that includes complementary structural and nonstructural risk-reduction and risk-spreading measures or tools. Such tools might include an essential framework (codes, standards, and guidelines) that drives the critical structural functions of resilience and investment in risk-based pricing of insurance.
- 3) *Recommendation 3:* A national resource of disaster-related data should be established that documents injuries, loss of life, property loss, and impacts on economic activity. Such a database will support efforts to develop more quantitative risk models and better understand structural and social vulnerability to disasters.
- 4) *Recommendation 4:* DHS, in conjunction with other federal agencies, state and local partners, and professional groups, should develop a National Resilience Scorecard.
- 5) *Recommendation 5:* Federal, state and local governments should support the creation and maintenance of broad-based community resilience coalitions at local and regional levels.
- 6) *Recommendation 6:* All federal agencies should ensure they are promoting and coordinating national resilience in their programs and policies. A resilience policy review and self-assessment within agencies and strong communication among agencies are keys to achieving this kind of coordination.

If these recommendations are enacted, Cutter emphasized that resilience to natural hazards and disasters will be increased significantly. Cutter stated that strong governance at all levels is a key element of resilience and includes making consistent and complementary local, state, and Federal policies and involving public-private partnerships. She also noted that policies designed to improve national resilience need to take the long-term view of community resilience to help avoid short-term expediciencies that can diminish and negatively impact the overall resilience to hazards and disasters.

In closing her presentation, Cutter reiterated that a resilient nation in 2030 will have a vibrant and diverse economy and a safer, healthier, and better educated citizenry than in previous generations. It will also display the following vital characteristics:

- Individuals and communities are their own first line of defense against disasters;
- National leadership in resilience exists throughout the Federal agencies and Congress;
- Community-led resilience efforts receive federal, state, and regional investment and support;
- Site-specific risk information is readily available, transparent, and effectively communicated;
- Zoning ordinances are enacted and enforced, and building codes and retrofit standards are widely adopted and enforced;
- A significant proportion of post-disaster recovery is funded through private capital and insurance payouts;
- Insurance premiums are risk-based;
- Community coalitions have contingency plans to provide service particularly to the most vulnerable populations during recovery; and

- Post-disaster recovery is accelerated by infrastructure redundancy and upgrades.

In response to a question from Applegate regarding the complexity of coordinating Presidential Policy Directive 8 (PPD-8) at the national and local levels, Cutter explained that a necessary first step to strengthen the nation's resilience is to provide adequate leadership at all levels to establish a national "culture of resilience" that demonstrates a full and clear commitment to disaster resilience by Federal, state, and local governments. At the Federal level, Cutter noted that the nation does not have an overall vision or coordinating strategy for resilience – the implementation of PPD-8 will address some of these consistency and coordination issues, but there is still much work that needs to be done to bridge the disconnect between the Federal government's policies and programs and how they impact local communities.

Sandra Knight (FEMA) followed up on Applegate's PPD-8 question by highlighting the creation of FEMA's Mitigation Framework Leadership Group (MITFLG), a senior-level entity designed to coordinate mitigation efforts across the Federal government agencies and assess the effectiveness of all-hazards mitigation capabilities and mechanisms as they are developed and deployed to the state and local levels. The MITFLG aims to improve the Federal agencies' ability to coordinate existing hazard mitigation capabilities, authorities, and programs in concert with non-governmental and private sector organizations, and local, state, territorial, and tribal governments.

Brendan Doyle (EPA) and Margaret McCalla (NOAA) made comments related to the need for shared public-private responsibility of the risk associated with disaster recovery and the barriers to resilience, to which Cutter agreed and replied that community coalitions of local leaders from the public and private sectors, with support from Federal and state governments and with local citizenry input, are critical to assess the community's exposure and vulnerability to risk, to educate and communicate risk, and to evaluate, quantify, and expand the community's capacity to handle risk and increase resilience.

In response to an inquiry from Jennifer Uhle (USNRC) regarding the nation's ability to accurately measure and model the data on the economic loss consequences of hazards and disasters at the Federal agency level, Cutter noted that the study report does not delve into this issue on a Federal agency-by-agency basis but does make reference to the importance of risk management and how the process must involve a range of interacting parties, including: Federal, state, and local governments; home and business owners; emergency managers; the construction and building industries; insurers and reinsurers; and the economic and trade markets.

An NSTC-centric recommendation issued in the study report (recommendation three outlined above) proposes a national resource of disaster-related data that documents injuries, loss of life, property loss, and impacts on economic activity. The report envisions that such a database will support efforts to develop more quantitative risk models and a better understanding of the structural and social vulnerability to disasters. It recommends that the NSTC take the lead in convening Federal and state agencies, private sector, non-governmental organizations, and the academic research community to develop strategies and policies in support of these data collection goals. Tammy Dickinson (OSTP) encouraged the SDR to discuss its role in facilitating this recommendation more in depth at an upcoming monthly meeting this fall, with a one- or two-day workshop potentially to follow this expanded discussion in early 2013.

If SDR members have questions on the NRC study or its recommendations for increasing national resilience to hazards and disasters, please contact Cutter (scutter@sc.edu) or the study director Elizabeth Eide (eeide@nas.edu). An electronic version of the report can be found online at http://www.nap.edu/catalog.php?record_id=13457.

III. Briefing: FEMA's Emergency Support Function Leadership Group

Applegate introduced Donald Daigler (FEMA), who briefed the SDR on the FEMA-led Emergency Support Function Leadership Group (ESFLG). Much like the MITFLG mentioned earlier by Knight, the ESFLG is a senior, Federal-level coordination body responsible for resolving operational and preparedness issues related to interagency emergency response and recovery activities at the national level and for providing planning guidance and oversight over the development of interagency response- and recovery-focused plans.

According to Daigler, the ESFLG recently established a Modeling and Data Working Group (MDWG) to identify scientific- and hazards-based models and empirical data generation products and programs that can be used to inform emergency response planning and operations, particularly when faced with complex, cascading threats and incidents. These models and programs can provide FEMA decision makers with enhanced situational awareness and heightened visualization of the operational environment to prepare and assess the emergency response to disasters.

Daigler highlighted that the MDWG effort has three primary objectives:

- 1) Identify hazards-specific data sets and methodologies that FEMA will need to facilitate robust emergency planning and support functions and carry out its emergency management mission;
- 2) Create an inventory of Federal interagency community data resources that can support and inform FEMA's overall operational and response decision making needs; and
- 3) Conduct an information gap analysis of the existing hazards data inventory to determine which Federal agency or agencies can provide the desired data sets and how FEMA can best synthesize that information to support its operations and ensure that its research needs are met effectively.

In order to facilitate these objectives, Daigler would like the SDR's assistance in identifying Federal hazards-related data sets that could be useful for FEMA's emergency response planning and operation functions. Because FEMA does not have an S&T component inherent to its organizational structure, the science and technology expertise within the SDR will be critical for the ESFLG MDWG to address the most effective ways to exploit emerging hazards data generation products and scientific risk models and to determine the most effective modeling and data products to incorporate into the FEMA ESFLG structure and inform and enable strong emergency planning and support functions.

Responding to a question from Paul Kudarauskas (EPA) on whether FEMA has the Federal or local response community in mind when gathering its data and information, Daigler noted that FEMA is considering both the Federal and local first responder communities when carrying out the ESFLG MDWG objectives to identify hazards data sets to facilitate emergency planning and support functions. Both are critical in generating and consuming data during all phases of the disaster management cycle and will be key players in shaping the working group as it moves forward.

SDR members who are interested in providing hazards-related data and modeling assistance and expertise to FEMA's ESFLG MDWG should contact Daigler (donald.daigler@fema.dhs.gov). Please review the ESFLG MDWG membership list – which was circulated with the post-meeting action items email – to coordinate your participation if your agency is already represented in the working group.

IV. Discussion on SDR Priorities and a Transition Roadmap for the Next Administration

Tammy Dickinson (OSTP) led a short discussion on the task of identifying priorities within SDR member departments and agencies – as they relate to overall Subcommittee goals, objectives, and outcomes – to use as the basis of a transition document and roadmap forward for the next Presidential term beginning in 2013. Dickinson specifically mentioned hazards- and disasters-related S&T policy issues that the agencies would like to see addressed in the next Administration.

In order to create a draft framework of these priorities for review at the SDR's next meeting in October or November, please email the SDR Secretariat (bret.schothorst@mantech.com) with a copy to the OSTP Liaison (tdickinson@ostp.eop.gov) by Monday, September 24 to submit your agency's top 2-3 disaster reduction and resilience policy-focused priorities. The Subcommittee is also looking for volunteers to participate in or lead a working group or task force dedicated to this effort over the coming months.

V. Report from the Co-Chairs and Approval of Minutes

The July meeting minutes were approved with no changes.

Wenger reminded members that the SDR's International Working Group (IWG) will meet the first Thursday of every month from 1:00 p.m. to 2:30 p.m. in the WHCC's Lincoln Room. At the working group's September meeting, the IWG will primarily discuss the SDR's role as the U.S. National Platform for the UN International Strategy for Disaster Reduction (ISDR), as well as the U.S. response to the ISDR's next Hyogo Framework for Action (HFA) progress monitor and review for the 2011-2013 reporting period. SDR members were encouraged to provide national disaster risk reduction program input from their agencies in response to this UNISDR request. A draft template with information already compiled by IWG members from FEMA, NOAA/NWS, and the USGS was circulated after the meeting.

Your agency's input should be submitted to the SDR Secretariat (bret.schothorst@mantech.com) by Wednesday, September 19.

The Great SouthEast ShakeOut regional earthquake drill will take place on October 18, 2012 at 10:18 a.m. and will encompass five states along the Southeastern and Mid-Atlantic coast (Georgia, South Carolina, North Carolina, Virginia, and Maryland) as well as the District of Columbia. This is the first time that the National Capital Region has been involved in a ShakeOut, but more than 12.5 million people were registered to participate in ShakeOut drills worldwide in 2011. Participating is a great way for your organization to become better prepared to survive and recover quickly from major earthquakes. Please consider getting your agency to register and participate – more information is located at <http://www.shakeout.org/southeast/index.html>.

The growing role of social media and crowdsourcing was the focus of a panel discussion at the February SDR meeting. The Woodrow Wilson Center for International Scholars is hosting a follow-up workshop "Connecting Grassroots to Government for Disaster Management: A Policy Roundtable" on September 13-14, 2012 on the use of social media, crowdsourcing, and related technologies for the disaster management process. The workshop will bring together Federal agency staff, academic research practitioners, and members of the digital volunteer community to explore the current and potential future uses of these technologies and methods by Federal, state, and local agencies during disasters. More information on the event, including a live webcast link, can be found online at:

<http://www.wilsoncenter.org/event/connecting-grassroots-to-government-for-disaster-management-policy-roundtable>.

VI. Report from the OSTP Liaison

Dickinson is in the process of collecting natural hazards data sets to include in the Safety Data Community at www.safety.data.gov in advance of a White House Safety Datapalooza on Friday, September 14. The incorporation of hazards data into the recently launched Safety Data Community has been discussed as a potential near-term opportunity for SDR member agencies and their Federal colleagues to build additional visibility for existing U.S. Government natural hazards data sets through the use of this information portal. Government data are being released in unprecedented quantities as part of the Administration's commitment to increase transparency, public participation, and collaboration, and the liberation of hazards data sets can provide timely information that can improve the safety of citizens affected by disasters by enabling them to make better informed decisions. Since the overall goal of this safety data initiative is to supply the data that powers information sharing and applications in order to

help people increase their own safety and the safety of others, the inclusion of natural hazards data seems to be an excellent fit with that objective. Please email Tammy (tdickinson@ostp.eop.gov) with a copy to the SDR Secretariat (bret.schothorst@mantech.com) to participate in the White House event to announce this initiative by submitting natural hazards data sets from your department or agency.

VII. Adjournment

The meeting adjourned at 12:05 p.m.

VIII. Future Meetings

SDR meetings will be held from 10:00 a.m. to 12:00 p.m. on the dates listed below in the Lincoln Room of the White House Conference Center.

2012

Thursday, January 5	Thursday, May 3	Thursday, September 6
Thursday, February 2	Thursday, June 7	Thursday, October 4
Thursday, March 1	*Thursday, July 12	Thursday, November 1
Thursday, April 5	**Thursday, August 2	Thursday, December 6

*We shifted the July meeting to the second Thursday of the month to avoid proximity to the July 4th Federal holiday.

**Cancelled.

IX. 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 the SDR Secretariat Bret Schothorst (bret.schothorst@mantech.com).

X. Contact Information

SDR Leadership

David Applegate	Co-chair	703-648-6600	applegate@usgs.gov
Margaret Davidson	Co-chair	843-740-1220	margaret.davidson@noaa.gov
Dennis Wenger	Co-chair	703-292-8606	dwenger@nsf.gov
Tamara Dickinson	OSTP Liaison	202-456-6105	tdickinson@ostp.eop.gov

Secretariat

Bret Schothorst	703-388-0312	bret.schothorst@mantech.com
Barbara Haines-Parmelee	703-388-0309	barbara.haines-parmelee@mantech.com

XI. Summary of September Actions

Action	Lead	By When
Contact the SDR Secretariat (bret.schothorst@mantech.com) to provide national disaster risk reduction program input from your agency in response to the UNISDR Hyogo Framework for Action national progress and monitor review for the 2011-2013 reporting period.	SDR Members	Wednesday, September 19

Send Tammy Dickinson (tdickinson@ostp.eop.gov) an email copying the SDR Secretariat (bret.schothorst@mantech.com) outlining your agency's top two or three disaster reduction and resilience priorities as they relate to the overall Subcommittee goals, objectives, and outcomes to develop into a transition document and roadmap forward for the next Presidential term beginning in January 2013.	SDR Members	Monday, September 24
Please email Tammy Dickinson (tdickinson@ostp.eop.gov) copying the SDR Secretariat (bret.schothorst@mantech.com) to participate in the initiative to incorporate natural hazards data sets to the Safety Data Community.	SDR Members and Federal Colleagues	ASAP
Email Tammy Dickinson (tdickinson@ostp.eop.gov), copying the SDR Secretariat (bret.schothorst@mantech.com) to participate in a small working group or task force to discuss a disaster reduction- or community resilience-focused grand challenge or incentive prize highlighting Federal interagency programs, partnerships, and collaborations.	SDR Members and Federal Colleagues	Standing
Please consider supporting the work of the SDR and its Secretariat through a contribution from your agency. Let Dave (aplegate@usgs.gov) know if you need an agency-specific request letter.	SDR Members	Standing
Contact Tammy Dickinson (tdickinson@ostp.eop.gov) if it would be helpful for OSTP to issue a letter to your Department requesting new (or re-affirmed) designation of representatives. Ideas for other entities that should be represented on the SDR are also welcome.	SDR Members	Standing
Contact Dennis Wenger (dwenger@nsf.gov) if your agency is able to provide funding support to the University of Colorado-Boulder's Natural Hazards Center.	SDR Members and Federal Colleagues	Standing
Contact the Secretariat (bret.schothorst@mantech.com) if you are interested in participating in the SDR Coastal Inundation Working Group.	SDR Members and Federal Colleagues	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 and Federal Colleagues	Standing
Contact Bret (bret.schothorst@mantech.com) to receive copies of the Grand Challenges for Disaster Reduction Implementation Plan packets or CD.	SDR Members	Standing