

Meeting Minutes of the Subcommittee on Disaster Reduction

4 May 2017, 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)

Jack Meszaros (OSTP)

Designated Representatives

ASPR Darrin Donato

BLM Georgette Fogle

CDC Mollie Mahany (T)

DHS Erin Walsh (T)

DHS/FEMA Roy Wright

DHS/USCG Jim Small (T)

DOD Al Johnson

DOE Patricia Hoffman

DOT Sheila Duwadi

EOP/OMB Michael Clark

EOP/OSTP Jack Meszaros

EPA Greg Sayles

FERC Marsha Palazzi

HUD Dana Bres

NASA Craig Dobson

NGA Kerri Dugan

NGB Steve Mason

NIH Aubrey Miller (T)

NIST Steve Cauffman (T)

NOAA Margaret Davidson

Mary Erickson

NPS Marcy Rockman

NSF Greg Anderson

State Fernando Echavarria

USACE Tony Niles

USAID Sezin Tokar

USCB Laura Furgione

USDA TBD

USFS Matt Rollins

Carlos Rodriguez-Franco

USGS David Applegate

USNRC Edwin Hackett

USPHS Estella Jones

Other Attendees

ASPR Brittney Seiler

DHS Mitch Erickson (T)

Daniel Massey (T)

DHS/FEMA Emily Blanton

Nick Shufro (T)

EOP/OSTP Liz Metrulas

Anjali Tripathi (T)

EPA Brendan Doyle (T)

HHS Skip Payne (T)

NASA Gerald Bawden

NASA Jamie Favors

David Green (T)

NGA Brian Cameron

Christina Roy

NIH April Bennett

NOAA Paula Davidson

NSF Sonia Esperanca

Dennis Geist

USACE Lauren Knapp

USCB Rob Sienkiewicz

USFS Mike Cherry

USGS Jonathan Godt (T)

Kris Ludwig (T)

Charlie Mandeville (T)

Alice Pennaz

USPHS Tracy MacGill (T)

STPI Rob Rozansky

NAS Elizabeth Eide

Michael Manga

SDR Secretariat

Bret Schothorst

Barbara Haines Parmele (T)

Agenda

10:00 Welcome, Introductions, and Approval of Minutes

10:05 Co-chairs Report

10:20 Briefing: Outreach on National Mitigation Investment Strategy

10:40 Presentation: NAS Report on Better Preparing for Volcanic Eruptions

11:20 Presentation: Cyber Security of Emergency Communications Systems

11:55 Close and Next Actions

Handouts

- May Meeting Agenda
- Draft April Meeting Minutes

I. Welcome and Introductions

National Science and Technology Council (NSTC) Subcommittee on Disaster Reduction (SDR) Co-chair David Applegate (USGS) called the May meeting to order at 10:01 a.m. in the White House Conference Center Lincoln Room, and participants introduced themselves.

II. Report from the Co-chairs and Approval of Minutes

The draft of the minutes for the April monthly meeting was approved with no changes.

It was noted that the SDR.gov website (<http://www.sdr.gov/>) will undergo a makeover in the coming months to make it more mobile-friendly as part of a U.S. Government mandate for all public-facing websites. Applegate passed along many thanks for undertaking this effort to NOAA, which hosts the site as part of its contribution to the Subcommittee. Applegate encouraged SDR members to have a look at the site and offer up any ideas concerning new content or features agencies would like to see added to SDR.gov during the update. Suggestions should be sent to the SDR Secretariat (bret.schothorst@mantech.com) by Friday, May 19. Applegate noted that SDR leadership would plan to report back with an update of the proposed ideas at the June meeting.

Applegate also highlighted the University of Colorado Boulder's Natural Hazards Center 42nd Annual Natural Hazards Workshop, which will take place July 9-12, in Broomfield, Colorado. The SDR plans to host a session at the 2017 workshop—tentatively scheduled for Monday, July 10 from 3:30-5:00 p.m.—following up on previous listening sessions in recent years coordinated by the SDR-led U.S. National Platform for the UN Office for Disaster Risk Reduction (UNISDR), at which multi-sectoral perspectives were sought on priorities of the former *Hyogo Framework for Action 2005-2015* and current *Sendai Framework for Disaster Risk Reduction 2015-2030*. Discussion items shaping the SDR-themed session may include recent SDR reports as well as implementation of the Sendai Framework and outcomes from this month's UNISDR Global Platform meeting. More information on the workshop is available at: <https://hazards.colorado.edu/workshop/2017>. Additional thoughts were welcomed on other discussion topics for the SDR session.

SDR Co-chair Jack Meszaros (OSTP) provided an update on the White House transition, noting that her office is still in the process of reorganizing around the priorities and needs of the new Administration. She added that the leadership of the NSTC has made the decision to extend the charters of the SDR and its task forces and working groups for six months to October 21, 2017, until new OSTP leadership is in place and can recommend either re-chartering or sunseting the various entities.

David Green (NASA) provided a brief update on the planning for the “Disaster Risk Reduction (DRR) Across the Americas” Summit that NASA and Argentina's space agency (CONAE) are hosting in Buenos Aires, Argentina, September 3-8, 2017 (overview attached). The overarching goal of the workshop is to discuss how earth observations (EO) can be used to address the Sendai Framework goals in the Americas and to strengthen ties between the emergency management entities and the S&T community in the region. The Summit will provide the unique opportunity for needed joint dialogue and work planning between representatives of the scientific EO and DRR communities, including stakeholders in regional preparedness and planning, disaster mitigation, emergency response, and recovery.

Green added in his update that, using the UNISDR Sendai Framework—which calls for an increased role for science and technology in all stages of DRR—as an impetus, countries are now recognizing the intrinsic value that EO data, information products, and decision support tools can add by improving readiness and actions through all phases of disaster management. Green noted that these topics were also addressed at a recent Ambassador-level meeting organized by NASA (on behalf of AmeriGEOSS) at the Costa Rican Embassy in Washington, DC on April 5. A follow up to that meeting will take place this summer hosted by the Brazilian Embassy. SDR members were asked to please contact Green

(david.s.green@nasa.gov) or Fernando Echavarria with State (echavarriafr@state.gov) for more information on this ongoing activity or to provide a point of contact for your agency's participation.

III. Briefing: Outreach on National Mitigation Investment Strategy

Applegate introduced Nick Shufro, Assistant Administrator of Risk Management with the Federal Insurance & Mitigation Administration at FEMA, who provided an update on the interagency Mitigation Framework Leadership Group (MitFLG) activities related to the National Mitigation Investment Strategy (NMIS) and a pilot project on mitigation-informed recovery planning.

According to Shufro, the MitFLG provides a coordinating structure for mitigation across the Federal government to encourage risk management and long-term resilience in national planning, decision making, and development. In 2017, the MitFLG is focused on the following priorities: 1) Developing the NMIS in response to a Government Accountability Office (GAO) post-Sandy recommendation (issued in GAO 15-515); and 2) A joint MitFLG-Recovery Support Function Leadership Group (RSFLG) Disaster Operations Subcommittee to advance resilience in the disaster recovery process, including a flagship Resilient Recovery Planning Pilot Project.

Regarding the NMIS, GAO recognized hazard mitigation as a strategy to help limit the nation's fiscal exposure and suggested that the MitFLG establish an investment strategy to identify, prioritize, and implement Federal investments in disaster resilience. NMIS recommendations are intended to increase the effectiveness of existing Federal programs in reducing disaster losses and increasing resilience and to incentivize significantly greater State, local, tribal, territorial (SLTT) and private sector responsibility and contributions to long-term risk reduction.

Structured around six outcomes, Shufro noted that the recommendations will provide guidance to Federal agencies and departments, as well as SLTT entities and the private sector, to consider in making resource allocation decisions regarding the use of existing programs. Beginning in July 2017 through May 2018, he added that the MitFLG will conduct research and stakeholder engagement across a wide range of citizens, organizations, and businesses to ground-truth the viability of proposed strategies, pilot recommendations, and develop Federal governmental action plans—with the goal to begin implementing the strategy in 2019.

To end his briefing, Shufro covered the MitFLG and RSFLG Joint Disaster Operations Subcommittee, which was set up to advance resilience in the disaster recovery process. It will develop a set of recommendations to improve the delivery of resilience through community recovery, focusing on the improved timing of mitigation delivery, improved risk communication and improved incentives. Its recommendations will be informed by piloting a "Resilient Long-Term Recovery Planning Pilot" in Louisiana under DR 4277 issued for severe storms and flooding in August 2016.

The State-led pilot in development will focus on integrating resilience into the long-term recovery planning process with Louisiana communities that often lack access to the training and technical assistance needed to successfully integrate mitigation into the recovery planning process. The pilot is in the scoping stage, and the local Joint Field Office is working in concert with the State to come up with a shared approach that will help determine timeline goals for 2017.

Members were asked to please reach out to Shufro (nick.shufro@fema.dhs.gov) with any questions on these MitFLG activities.

IV. Presentation: NAS Report on Better Preparing for Volcanic Eruptions

Applegate introduced Michael Manga, who is Professor of Earth and Planetary Science at the University of California, Berkeley, and Chair of the National Academy of Sciences committee that produced the

recently released report “Volcanic Eruptions and Their Repose, Unrest, Precursors, and Timing (ERUPT)” (<http://www8.nationalacademies.org/onpinews/newsitem.aspx?RecordID=24650>).

According to the ERUPT report, despite a broad understanding of volcanoes, our ability to predict the timing, duration, type, size, and consequences of volcanic eruptions is limited. To improve eruption forecasting and warnings to save lives, Manga noted that the report identifies research priorities for better monitoring of volcanic eruptions and highlights three grand challenges facing the volcano science community: 1) Forecast the size, duration and hazard of eruptions by integrating observations with quantitative models of magma dynamics; 2) Quantify the life cycles of volcanoes globally and overcome our biased understanding; and 3) Develop a coordinated volcano science community to maximize scientific returns from any volcanic event.

In his presentation, Manga cross-walked these challenges with SDR’s 2008 Grand Challenges for Disaster Reduction *Volcano Implementation Plan* (http://www.sdr.gov/docs/185820_Volcano_FINAL.pdf). Other study tasks included to summarize the current understanding of how magma is stored, ascends, and erupts, discuss new disciplinary and interdisciplinary research on volcanic processes and precursors that could lead to forecasts of the type, size, and timing of volcanic eruptions, describe new observations or instrument deployment strategies that could improve quantification of volcanic eruption processes and precursors, and identify priority research and observations needed to improve understanding of volcanic eruptions and to inform monitoring and early warning efforts.

The primary Federal sponsors of the study were NSF, NASA, and USGS. Members were asked to please email Manga (manga@seismo.berkeley.edu) with any questions about the report.

V. Presentation: Cyber Security of Emergency Communications Systems

Applegate introduced Daniel Massey from DHS S&T for a briefing on some of his research highlighting the cyber security of emergency communications systems. A recently published Washington Post story (http://wapo.st/2nRcz0G?tid=ss_mail) on the hacking incident associated with the Dallas, Texas, tornado sirens was a jumping-off point for SDR leadership thinking that it would be good to get a briefing about issues related to cyber security and emergency communications and hazard warnings.

By recounting some recent examples of multi-state Telephony Denial of Service (TDoS) attacks perpetrated on 9-1-1, Massey highlighted the technological vulnerabilities of emergency call centers across the U.S. According to Massey, in 38 states no money was spent in 2015 on cyber security for 9-1-1 centers, and only 420 out of 6,500 9-1-1 centers had implemented a cyber security program.

Through DHS S&T’s mission requirements of developing and delivering new technologies, tools and techniques to defend and secure current and future systems and networks, conducting and supporting technology transition efforts, and providing R&D leadership and coordination, the agency is funding research in several areas: 1) Understand TDoS vulnerabilities and cyber threats to 9-1-1 systems (voice-based services like E9-1-1 and NG9-1-1 as well as text to 9-1-1); 2) Develop TDoS defense and cyberattack-resilient solutions; 3) Transition to practice by working closely with project partners and stakeholders. DHS S&T is also working on R&D solutions of integrated TDoS defenses that are affordable and cost-effective, easy to configure and manage, fill capability gaps, and offer plausible integration with Emergency Services IP Network (ESInet) architecture.

SDR members were asked to please contact Massey (Daniel.Massey@hq.dhs.gov) for more information on this important research.

VI. Adjournment

Applegate adjourned the SDR May meeting at 12:00 p.m. and noted that the group’s next meeting will be held on Thursday, June 1, 2017, in the White House Conference Center Lincoln Room.

VII. SDR 2017 Meeting Calendar

SDR meetings in 2017 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 unless otherwise noted:

2017

- ✓ Thursday, January 5
- ✓ Thursday, February 2
- ✓ Thursday, March 2
- ✓ Thursday, April 6
- ✓ Thursday, May 4
- ✓ Thursday, June 1
- ✓ Thursday, July 13*
- ✓ Thursday, August 3**
- ✓ Thursday, September 7
- ✓ Thursday, October 5
- ✓ Thursday, November 2
- ✓ Thursday, December 7

* July meeting shifted to the second Thursday of the month to avoid proximity to the Independence Day Federal holiday.

** August meeting subject to cancellation.

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 the SDR Secretariat (bret.schothorst@mantech.com).

IX. Contact Information

SDR Leadership

David Applegate	Co-chair	703-648-6600	applegate@usgs.gov
Jack Meszaros	Co-chair	202-456-6020	Jacqueline_R_Meszaros@ostp.eop.gov

Executive Secretariat

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

X. Summary of May Actions

Action	Lead	By When
Note that the next SDR meeting will be held on Thursday, June 1 in the White House Conference Center Lincoln Room.	SDR Members	For Information
Send suggestions of new content or features for SDR.gov to the SDR Secretariat (bret.schothorst@mantech.com) by Friday, May 19.	SDR Members	Friday, May 19

Provide thoughts for an SDR-themed parallel session at the upcoming Natural Hazards Center Annual Workshop, July 9-12, in Broomfield, CO. More info at: https://hazards.colorado.edu/workshop/2017 .	SDR Members and Federal Colleagues	ASAP
Contact David Green (david.s.green@nasa.gov) or Fernando Echavarría (echavarríafr@state.gov) for more information on the “Disaster Risk Reduction (DRR) Across the Americas” Summit and to provide agency points of contact.	SDR Members and Federal Colleagues	ASAP
Reach out to Nick Shufro (nick.shufro@fema.dhs.gov) with any questions on the NMIS or other recent MitFLG activities.	SDR Members and Federal Colleagues	Standing
Email Michael Manga (manga@seismo.berkeley.edu) with questions about the National Academy of Sciences ERUPT report.	SDR Members and Federal Colleagues	Standing
Contact Daniel Massey (Daniel.Massey@hq.dhs.gov) for more information on research highlighting the cyber security of emergency communications systems.	SDR Members and Federal Colleagues	Standing
Send additional disaster-related priorities from your agency for consideration in the new Administration to the SDR Secretariat (Bret.Schothorst@ManTech.com) on a rolling basis.	SDR Members	Standing
Send Dave Applegate an email (applegate@usgs.gov) if you are interested in contributing to the work of the SDR and would like additional documentation or an agency-specific letter.	SDR Members	Standing
Email the SDR Secretariat (bret.schothorst@mantech.com) to suggest external DRR stakeholder groups to invite to present at quarterly SDR meetings on behalf of the U.S. National Platform for UNISDR.	SDR Members	Standing