

# Meeting Minutes of the Subcommittee on Disaster Reduction

07 May 2015, 10:00 a.m. to 12:00 p.m., White House Conference Center Lincoln Room

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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*  
**CDC** *Mollie Mahany*  
**DHS** Mary Ellen Hynes  
**DHS/FEMA** *Roy Wright*  
**DHS/USCG** *Robert Thomas*  
**DOD** *Al Johnson*  
**DOE** *Patricia Hoffman*  
**DOT** Sheila Duwadi  
**EOP/OMB** *Michael Clark*  
**EOP/OSTP** *Tamara Dickinson*  
**EPA** Brendan Doyle (T)  
*Stephen Clark*

**FERC** *Marsha Palazzi*  
**HUD** *Dana Bres*  
**NASA** *Craig Dobson*  
**NGA** Patricia Allen Aquinas (T)  
**NGB** *TBD*  
**NIH** Aubrey Miller  
**NIST** *Steve Cauffman*  
**NOAA** Margaret Davidson (T)  
Laura Furgione  
**NPS** Marcy Rockman  
**NSF** Dennis Wenger (T)  
**OPHS** Estella Jones (T)

**State** Fernando Echavarria  
**USACE** *Steven Cary*  
*Dimitra Syriopoulou*  
**USAID** *Sezin Tokar*  
**USDA** *TBD*  
**USFS** *Elizabeth Reinhardt*  
*Carlos Rodriguez-Franco*  
Matt Rollins  
**USGS** David Applegate  
**USNRC** *Steven West*

## Other Attendees

**BLM** Ron McCormick (T)  
**DHS** Mitch Erickson (T)  
Meredith Lee (T)  
Erin Walsh  
**DHS/FEMA** Douglas Ham  
**DOT** Phil Yen  
**EOP/CEQ** Sam Medlock  
**EOP/NSC** Eric Letvin  
**EOP/OSTP** Bill Murtagh

**EPA** Keely Maxwell (T)  
**NASA** Gerald Bawden  
**NGA** Robert Kluba (T)  
**NIH** April Bennett  
**NOAA** Lindsey Kraatz  
Paul Schlatter  
**NSF** Jacqueline Meszaros  
**State** Gautham Venugopalan  
**USAID** Gari Mayberry (T)

**USFS** Jason Steinmetz  
**USGS** Michael Blanpied (T)  
Lucy Jones  
Kris Ludwig  
Teresa Stoepler  
**STPI** Chris Clavin  
Mitch Ambrose  
**SDR Secretariat** Bret Schothorst  
Barbara Haines-Parmele

## Agenda

10:00 Welcome and Introductions  
10:05 Report from the Co-chairs and Approval of Minutes  
10:10 Update: Recent CEQ Activities  
10:25 Update: SDR Task Forces and Working Groups  
10:45 Briefing: USGS and Los Angeles Seismic Vulnerability Partnership  
11:15 Roundtable Discussion: Agency Activities in Response to Nepal Earthquake  
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 10:05 a.m. in the Lincoln Room of the White House Conference Center (WHCC), and participants introduced themselves.

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

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

Applegate noted that the FEMA-led interagency Mitigation Framework Leadership Group (MitFLG) is currently conducting agency review and concurrence of a proposed approach to a Federal Seismic Risk Mitigation Standard developed by the National Earthquake Hazards Reduction Program (NEHRP). The draft of the Standard will be circulated after the meeting. If you would like to have input, please contact your MitFLG agency representative. Comments are due by Monday, May 18.

Applegate drew attention to a U.S. Group on Earth Observations (USGEO)-organized session at the 2015 Geological Society of America Annual Meeting in Baltimore, MD, November 1-4, 2015 (<http://community.geosociety.org/gsa2015/home>). SDR members are encouraged to consider submitting abstracts for the session, which are due August 11 (T179, *Coordination of Civil Earth Observations: Review, Status, and Applications of Earth Observation Systems*, Organizer Timothy Stryker, OSTP, Session Chair, GSA Geology and Society Division, Discipline Categories: Public Policy, Geoinformatics). The session will provide an overview of the National Plan for Civil Earth Observations and highlight key products, services, and outcomes supported by the Earth observing systems that support the 13 Societal Benefit Areas identified in the National Plan, including climate, disasters, ecosystems, energy and mineral resources, human health, ocean and coastal resources, and water resources. Presentations that demonstrate the management, processing, integration, application of data, or products and services that utilize data from Earth observing platforms for disaster prediction, mitigation, and resilience are of particular interest.

Brendan Doyle (EPA) passed along that the 2015 EPA International Decontamination Research and Development Conference was held May 5-7, 2015, at EPA's Research Triangle Park, NC, Campus. Topics that were presented at the conference included new research data, field activities, and large-scale demonstrations related to the detection and decontamination of biological (including agricultural threat agents and biotoxins), chemical, and radiological threat agents in indoor or outdoor areas and materials. Email Doyle ([Doyle.Brendan@epa.gov](mailto:Doyle.Brendan@epa.gov)) for further information.

## **III. Update: Recent CEQ Activities**

Applegate introduced Sam Medlock from the White House Council on Environmental Quality (CEQ), who updated the SDR on the various ongoing activities of her organization, including:

- Recommendations from the final report of the State, Local, and Tribal Leaders Task Force On Climate Preparedness and Resilience ([https://www.whitehouse.gov/sites/default/files/docs/task\\_force\\_report\\_0.pdf](https://www.whitehouse.gov/sites/default/files/docs/task_force_report_0.pdf));
- The release of Executive Order 13690 and the draft Federal Flood Risk Management Standard (<https://www.fema.gov/federal-flood-risk-management-standard-ffrms>) – agency implementation plans for the Standard are due to the National Security Council by June 5;
- Progress on the NIST Draft Community Resilience Planning Guide ([http://www.nist.gov/el/building\\_materials/resilience/draft-community-resilience-guide.cfm](http://www.nist.gov/el/building_materials/resilience/draft-community-resilience-guide.cfm)) – the public comment period is open until June 26; and

- Linkages to the Climate Resilience and Insurance Partnership and *Building for the Future: A New Federal Guide to Infrastructure Planning and Design* (<https://www.whitehouse.gov/blog/2015/05/05/building-future-new-federal-guide-infrastructure-planning-and-design>, <http://portal.hud.gov/hudportal/documents/huddoc?id=BAInfraResGuideMay2015.pdf>).

#### IV. Update: SDR Task Forces and Working Groups

Bill Murtagh (OSTP) from the Space Weather Operations, Research, and Mitigation (SWORM) Task Force updated the Subcommittee on its development of a National Space Weather Strategy (NSWS) and Space Weather Action Plan. The NSWS public comment period is currently underway and will end on May 29 – or 30 days after the Strategy was published in the Federal Register. Agencies are encouraged to review the NSWS draft at: <https://www.federalregister.gov/articles/2015/04/30/2015-10113/national-science-and-technology-council-national-space-weather-strategy>. Please reach out to Murtagh ([William\\_J\\_Murtagh@ostp.eop.gov](mailto:William_J_Murtagh@ostp.eop.gov)) with any questions about the SWORM's activities.

Meredith Lee (DHS S&T) from the Technology and Innovation for Disaster Preparedness (TIDP) Working Group provided SDR with a summary of the TIDP's recent activities, including the launch of <http://www.data.gov/disasters/> in December 2014 and several public and private commitments secured in advance of last week's April 30 National Day of Action for *America's PrepareAthon!*. Future activities for the group according to Lee include additional updates to [disasters.data.gov](http://disasters.data.gov), updates to the MAX.gov TIDP page, the launch of Project STANDbOX, Stress-Test-a-thons, the National Maker Faire on June 12-13, a Transportation Datapalooza on June 16-17, National Preparedness Month in September 2015, and a Safety Datapalooza in October 2015. Please email Lee ([meredith.lee@associates.hq.dhs.gov](mailto:meredith.lee@associates.hq.dhs.gov)) to get your agency involved with the TIDP.

Following up on the April 30 National Day of Action for *America's PrepareAthon!*, there were several blog posts written that focused on the White House Innovation for Disaster Response and Recovery Initiative and the ongoing effort to build and sustain national preparedness. Thanks to all who's hard work help make these possible: 1) Unleashing Tech and Innovation for Disaster Preparedness <http://wh.gov/iB7JJ>, a WH.gov blogpost by Tammy Dickinson and David Applegate from SDR; 2) Taking Action for Disaster Preparedness: Technology and Innovation in Support of *America's PrepareAthon!* <https://www.data.gov/disasters/taking-action-disaster-preparedness-technology-innovation-support-americas-prepareathon/>, a [disasters.data.gov](http://disasters.data.gov) blogpost highlighting commitments from Federal departments, agencies, and the private sector in support of the National Day of Action; and 3) a WH.gov post <https://www.whitehouse.gov/blog/2015/04/30/taking-action-america-s-prepareathon> by Amy Pope, Christy Goldfuss, and John Holdren supporting *America's PrepareAthon!*

Matt Rollins (USFS) from the Wildland Fire Science and Technology Task Force (WFSTTF) noted briefly that the task force's final report is nearing completion and thanked SDR members for their recent participation in providing comments and edits. The group plans to send OSTP its final draft within the next week. Rollins also offered that the task force Co-chairs could provide the SDR with a longer briefing on the report's recommendations at a future meeting. Please contact Rollins ([matthewgrollins@fs.fed.us](mailto:matthewgrollins@fs.fed.us)) and the SDR Secretariat ([bret.schothorst@mantech.com](mailto:bret.schothorst@mantech.com)) for more information on the WFSTTF.

Applegate provided a short update on the National Preparedness Science and Technology (NPST) Task Force, which has been convened under SDR to address the S&T requirements of the five mission areas of Presidential Policy Directive-8 (prevention, protection, mitigation, response, and recovery) and act as an interagency conduit to more fully integrate S&T into all facets of national preparedness across Federal departments and agencies under PPD-8. The NPST will hold a two-hour introductory meeting with its Hazard Review Team Co-leads on Friday, May 15 at the White House Eisenhower Executive Office

Building. If you have not done so already, please contact Chris Clavin from the Science and Technology Policy Institute ([cclavin@ida.org](mailto:cclavin@ida.org)) to engage your agency in the initiative.

#### **V. Briefing: USGS and Los Angeles Seismic Vulnerability Partnership**

Applegate introduced Lucy Jones, who currently serves as Science Advisor for Risk Reduction in the Natural Hazards Mission Area of the USGS. Jones provided SDR with a briefing on the seismic vulnerability partnership established between USGS and the City of Los Angeles, CA, that resulted in the LA Mayor's report, *Resilience by Design* (<http://www.lamayor.org/earthquake>).

According to Jones, the Mayoral Seismic Task Force convened stakeholders and experts from academia, industry, business, government, and local communities to study the vulnerability of Los Angeles to a potential major earthquake along the San Andreas Fault. The assessment's recommendations address the city's greatest vulnerabilities from earthquakes and offer solutions to four major areas of concern:

- 1) Protect the lives of the city's residents;
- 2) Improve the capacity of the city to respond to earthquakes;
- 3) Prepare the city to recover quickly from earthquakes; and
- 4) Protect the economy of the city and all of Southern California.

Jones added that the report also focuses on improving the resilience of three major sectors to earthquakes: the fortification of buildings; the water system; and telecommunications networks. Measures recommended by the report to strengthen the city's buildings include the mandatory retrofit of soft-first story buildings, the mandatory retrofit of concrete buildings, implementing a voluntary rating system, instilling a "back to business" inspection program, and drafting an excessive damage ordinance. Actions highlighted in the report for fortifying Los Angeles's water system include increasing the supply of water for fire fighters, investing in protected fault crossings for the aqueducts, becoming less dependence on imported water, installing seismic resistant pipes, and creating a "Resilience by Design" program. Recommendations for enhancing telecommunications networks in the area include drawing up a memorandum of agreement with service providers to manage emergencies, securing more resilient power systems, promoting city-wide Wi-Fi access, and building stronger towers. Phil Yen (DOT) added that an enhanced focus on protecting transportation networks should also be included in the recommendations as a means to strengthen the city's critical infrastructure.

To close her presentation, Jones underscored several factors that led to the success of the report:

- A focus on what we know, not on what we don't know;
- A narrative so people see themselves in the picture;
- A place for everyone in the picture;
- Intelligence to see the implications of the hazard; and
- Courage to plan for a future.

Fernando Echavarria (State) suggested that the U.S. should more closely follow the traditions of other countries like Taiwan in preserving the history of and passing along the lessons learned from disasters as a mechanism for ongoing public education, such as turning destroyed buildings into science exhibits or museums. Jones noted that Northern California cities such as San Francisco have stored civic memories from previous severe earthquakes, but since Southern California has yet to experience an event of such magnitude, it has been more difficult to grapple with this process in Los Angeles. She indicated that the city intends to capture the lessons learned of the next great earthquake to pass on to future generations.

For more information on this unique partnership, please email Jones ([jones@usgs.gov](mailto:jones@usgs.gov)) directly.

#### **VI. Roundtable Discussion: Agency Activities in Response to Nepal Earthquake**

Applegate led an agency roundtable discussion on S&T activities in response to the April 25 Nepal earthquake. Agencies who volunteered to provide short updates at the meeting included: DHS S&T, DOT, NASA, NGA, NIH, NSF, USAID, and USGS.

Several highlights from the discussion stand out. In particular, Mary Ellen Hynes (DHS S&T) noted that four men trapped under as much as 10 feet of bricks, mud, and other debris were rescued in Nepal thanks to a new search-and-rescue technology developed in partnership by DHS S&T and NASA's Jet Propulsion Laboratory. The device called FINDER (Finding Individuals for Disaster and Emergency Response) uses microwave-radar technology to detect heartbeats of victims trapped in wreckage. Following the April 25 earthquake, two prototype FINDER devices were deployed to support search and rescue teams in the devastated areas.

Gari Mayberry (USAID) stated that as of the time of the SDR meeting, USAID contributed an additional \$11 million for earthquake response efforts in Nepal, bringing total U.S. Government humanitarian assistance to nearly \$28 million. The funding will support additional distributions of emergency shelter materials, medical supplies, and hygiene kits to earthquake-affected communities, as well as address any additional needs that emerge. Additional U.S. military aircraft arrived in Nepal on May 6 to support the Government of Nepal and international relief efforts. Mayberry added that although life in Nepal's capital city of Kathmandu is beginning to normalize, relief actors report that the humanitarian situation in remote and hard-to-reach areas such as the Himalayas and Mount Everest remains concerning.

Gerald Bawden (NASA) highlighted that SERVIR, a joint development initiative of NASA and USAID, is working to help Nepal recover from the earthquake. SERVIR partners with leading regional organizations around the globe to help developing countries use information provided by Earth observing satellites and geospatial technologies for managing climate risks and land use. SERVIR has hubs in East Africa, the Hindu Kush-Himalayas, and the lower Mekong. SERVIR-Himalaya is based in Kathmandu – near ground zero for earthquake devastation. Bawden added that NASA and its collaborators are also pulling optical and radar satellite data from international and domestic partners and compiling them into a variety of products. The products include vulnerability maps, which are used to determine risks that may be present, and damage proxy maps, which are used to determine the type and extent of existing damage. Such products can be used to better direct response efforts. From the NASA website, organizations that are using these data products and analyses include the USGS, USAID and its Office of U.S. Foreign Disaster Assistance, World Bank, American Red Cross, and the United Nations Children's Fund.

Dennis Wenger (NSF) outlined that its Geotechnical Extreme Events Reconnaissance (GEER) teams have been deployed and are coordinating NSF-sponsored reconnaissance efforts for the Nepal earthquake. According to its website, the objectives and purposes of GEER are to: 1) Document geotechnical engineering and related effects of important earthquakes and other disasters to advance research and practice; 2) Advance the capabilities of individuals performing post-event reconnaissance; 3) Employ innovative technologies for post-event reconnaissance; 4) Facilitate access to equipment required for sensing and data collection; 5) Train individuals to perform effective post-event reconnaissance; 6) Disseminate timely and accurate post-event web-based reports and data; 7) Develop a coordinated response for geotechnical engineers, engineering geologists, and earth scientists, who have previously self-assembled, to form effective post-event reconnaissance teams; and 8) Promote the standardization of measurement and reporting in reconnaissance efforts. Wenger added that NSF has also activated its RAPID program in the aftermath of the disaster to provide immediate rapid response research grant funding to aid in response and recovery efforts.

Patricia Allen Aquinas (NGA) passed along that NGA has created a public website to host unclassified geospatial intelligence data, products, and services in support of U.S. and international relief efforts following the Nepal earthquake. NGA launched its website the day after the earthquake, sharing the

platform it used for its Ebola support site, which launched in October 2014. The Nepal portal hosts search and rescue atlases covering Kathmandu and six other affected areas, with maps, imagery, and data overlaid to assist rescuers and relief planners. Other products and data layers will be added as they become available, according to Aquinas.

Aubrey Miller (NIH) mentioned that the National Library of Medicine (NLM) and publisher Emergency Access Initiative (EAI) has been activated to support healthcare professionals working on the response to the earthquake in Nepal. The EAI is a collaborative partnership between NLM and participating publishers to provide free access to full-text from more than 650 biomedical journals and more than 4,000 reference books and online databases to healthcare professionals and libraries affected by disasters. It serves as a temporary collection replacement and/or supplement for libraries affected by disasters that need to continue to serve medical staff and affiliated users. It is also intended for medical personnel responding to the specified disaster. This is the seventh time the EAI has been activated. Previous support was provided following: the earthquake and subsequent cholera epidemic in Haiti; flooding in Pakistan; the earthquake and tsunami in Japan; typhoon in the Philippines; and the Ebola outbreak in West Africa.

Regarding USGS roles and responsibilities in response to the April 25 Nepal earthquake, Applegate highlighted that the 24/7 USGS National Earthquake Information Center (NEIC) provided a suite of rapid situational awareness products to government and the global public (e.g. ShakeMap, PAGER, Did You Feel It?, and ShakeCast). USGS also held S&T coordination calls that included members from Federal agencies and offices like USAID, FEMA, NASA, NSF, NIST, NGA, OSTP, NSC, and a range of university and non-governmental partners. Applegate added that the USGS: issued aftershock forecasts to provide a sense of how many, how big, and how long the aftershocks will continue; worked with landslide experts and partners to prioritize imagery acquisitions and carry out interpretative analysis; coordinated satellite tasking requests through International Charter on Space and Major Disasters; and posted the resulting imagery on USGS Hazards Data Distribution System. Applegate noted that the USGS/USAID Earthquake Disaster Assistance Team (EDAT) is a mechanism to provide technical assistance and served as a primary source of information for media outlets.

Other agency representatives involved in this disaster's response and recovery are reminded to please provide the SDR Secretariat ([bret.schothorst@mantech.com](mailto:bret.schothorst@mantech.com)) with brief written summaries (1-2 paragraphs) of agency activities for OSTP's awareness by Wednesday, May 13.

## **VII. Adjournment**

Applegate adjourned the SDR May meeting at 12:07 p.m. and noted that the group's next meeting will be held on Thursday, June 4 at 10:00 a.m. in the White House Conference Center Lincoln Room. It will tentatively feature a presentation from Roger Pulwarty of NOAA on the ongoing California megadrought.

## **VIII. SDR 2015 Meeting Calendar**

SDR meetings in 2015 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:

### **2015**

- ✓ Thursday, January 8\*
- ✓ Thursday, February 5
- ✓ Thursday, March 5
- ✓ Thursday, April 2
- ✓ Thursday, May 7
- ✓ Thursday, June 4
- ✓ Thursday, July 9\*

- ✓ Thursday, August 6\*\*
- ✓ Thursday, September 3
- ✓ Thursday, October 1
- ✓ Thursday, November 5
- ✓ Thursday, December 3

\* January and July meetings shifted to EEOB Room 430ABC on the second Thursday of the month to avoid proximity to holidays and due to WHCC renovations.

\*\* August meeting subject to cancellation.

**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](mailto:bret.schothorst@mantech.com)).

**X. Contact Information**

**SDR Leadership**

David Applegate	Co-chair	703-648-6600	<a href="mailto:applegate@usgs.gov">applegate@usgs.gov</a>
Margaret Davidson	Co-chair	843-740-1220	<a href="mailto:margaret.davidson@noaa.gov">margaret.davidson@noaa.gov</a>
Dennis Wenger	Co-chair	703-292-8606	<a href="mailto:dwenger@nsf.gov">dwenger@nsf.gov</a>
Tamara Dickinson	Co-chair	202-456-6105	<a href="mailto:tdickinson@ostp.eop.gov">tdickinson@ostp.eop.gov</a>

**Executive Secretariat**

Bret Schothorst	703-388-0312	<a href="mailto:bret.schothorst@mantech.com">bret.schothorst@mantech.com</a>
Barbara Haines-Parmele	703-388-0309	<a href="mailto:barbara.haines-parmele@mantech.com">barbara.haines-parmele@mantech.com</a>

**XI. Summary of May Actions**

Action	Lead	By When
Provide the SDR Secretariat ( <a href="mailto:bret.schothorst@mantech.com">bret.schothorst@mantech.com</a> ) with brief written summaries (1-2 paragraphs) of agency S&T response activities to the Nepal earthquake for OSTP's awareness.	SDR Members	Wednesday, May 13
Contact your MitFLG agency representative if you would like to provide input on the proposed approach to a Federal Seismic Risk Mitigation Standard.	SDR Members and Federal Colleagues	Monday, May 18
Submit public comments on the SWORM National Space Weather Strategy draft at: <a href="https://www.federalregister.gov/articles/2015/04/30/2015-10113/national-science-and-technology-council-national-space-weather-strategy">https://www.federalregister.gov/articles/2015/04/30/2015-10113/national-science-and-technology-council-national-space-weather-strategy</a> .	SDR Members and Federal Colleagues	Friday, May 29
Submit public comments on the NIST Draft Community Resilience Planning Guide ( <a href="http://www.nist.gov/el/building_materials/resilience/draft-community-resilience-guide.cfm">http://www.nist.gov/el/building_materials/resilience/draft-community-resilience-guide.cfm</a> ).	SDR Members and Federal Colleagues	Friday, June 26
Consider submitting abstracts to a USGEO-organized session at the 2015 Geological Society of America Annual Meeting November 1-4 in Baltimore, MD, to Tim Stryker ( <a href="mailto:Timothy_S_Stryker@ostp.eop.gov">Timothy_S_Stryker@ostp.eop.gov</a> ).	SDR Members and Federal Colleagues	Tuesday, August 11

<p>Email Bill Murtagh (William_J_Murtagh@ostp.eop.gov) – SWORM, Meredith Lee (meredith.lee@associates.hq.dhs.gov) – TIDP, Matt Rollins (matthewgrollins@fs.fed.us) – WFSTTF, the SDR Secretariat (bret.schothorst@mantech.com) – WFSTTF and WWG, or Chris Clavin (cclavin@ida.org) – NPST, for more information on our various SDR task forces and working groups.</p>	<p>SDR Members and Federal Colleagues</p>	<p>Standing</p>
<p>Reach out to Lucy Jones at USGS (jones@usgs.gov) for more information on the LA Mayor's report, Resilience by Design (<a href="http://www.lamayor.org/earthquake">http://www.lamayor.org/earthquake</a>).</p>	<p>SDR Members and Federal Colleagues</p>	<p>Standing</p>
<p>Contact OSTP Liaison Tammy Dickinson (tdickinson@ostp.eop.gov) if it would be helpful for OSTP to issue a letter to your agency or department requesting new (or re-affirmed) designation of official representatives. Ideas for other entities that should be represented on the SDR are also welcome.</p>	<p>SDR Members</p>	<p>Standing</p>