

# Meeting Minutes of the Subcommittee on Disaster Reduction

5 November 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)  
Jack Meszaros (OSTP)  
Dennis Wenger (NSF)

## Designated Representatives

**BLM** *Edwin Roberson*  
**CDC** Mollie Mahany (T)  
**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** Jack Meszaros  
**EPA** Greg Sayles (T)

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

**OPHS** *Estella Jones*  
**State** *Fernando Echavarria*  
**USACE** Tony Niles  
**USAID** *Sezin Tokar*  
**USDA** *TBD*  
**USFS** *Matt Rollins*  
*Carlos Rodriguez-Franco*  
**USGS** David Applegate  
**USNRC** *Steven West*

## Other Attendees

**DHS** Mitch Erickson (T)  
Mila Kennett  
Dan Marasco (T)  
**DHS/FEMA** Matt Fuchs  
Jennifer Goldsmith (T)  
Eric Soucie  
**EOP/OSTP** Tammy Dickinson  
**EOP/NSC** Eric Letvin  
**EPA** Brendan Doyle  
Emily Eisenhower  
Keely Maxwell  
**NASA** Gerald Bawden

**NIH** April Bennett  
**NOAA** Lindsey Kraatz  
Dave Novak  
Paul Schlatter  
**NPS** Ann Hitchcock  
**NSF** Greg Anderson  
David Mendonca  
**OPHS** Tracy MacGill  
**UNO** Shirley Laska  
**USACE** Mary Cialone  
**USC** Susan Cutter

**USDA** Glenn Bethel (T)  
**USGS** Tim Cohn  
Jonathan Godt  
Kris Ludwig  
**USNRC** John Nakoski  
Tom Nicholson (T)  
**STPI** Chris Clavin  
Zoe Petropoulos (T)  
**SDR Secretariat**  
Bret Schothorst

## Agenda

10:00 Welcome, Introductions, and Approval of Minutes  
10:05 Report from the Co-chairs  
10:10 Update: SDR Task Forces and Working Groups  
10:30 Discussion: Agency S&T Response Activities for South Carolina Floods  
11:10 Presentation: Hurricane Katrina's 10<sup>th</sup> Anniversary  
11:55 Close and Next Actions

## Handouts

- November Meeting Agenda
- Draft October Meeting Minutes

## **I. Welcome and Introductions**

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

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

The October monthly meeting minutes draft was approved with one change as suggested via email by Brendan Doyle (EPA).

SDR Co-chair Jack Meszaros (OSTP) began the meeting by providing an update on the status of the SDR Wildland Fire Science and Technology Task Force Final Report, which recently underwent the agency clearance process with the SDR's parent body, the Committee on the Environment, Natural Resources, and Sustainability (CENRS). Subsequent to Thursday's meeting, the report passed final approval from OSTP and was rolled out publicly at the White House "Fire Chiefs Roundtable on Climate Change Impacts at the Wildland-Urban Interface" event put on by the National Security Council on Monday, November 9, in the Eisenhower Executive Office Building (EEOB). A White House fact sheet about the roundtable can be found here: <https://www.whitehouse.gov/the-press-office/2015/11/09/fact-sheet-administration-and-fire-chiefs-around-country-take-action>. The final task force report is located at: [https://www.whitehouse.gov/sites/default/files/microsites/ostp/nstc/sdr\\_wildfire\\_st\\_task\\_force\\_final\\_report.pdf](https://www.whitehouse.gov/sites/default/files/microsites/ostp/nstc/sdr_wildfire_st_task_force_final_report.pdf).

Eric Letvin (NSC) noted that the roundtable event with fire chiefs would also include NIST's release of its final disaster and failure study on the Waldo Canyon Fire, which can be downloaded at: <http://nvlpubs.nist.gov/nistpubs/TechnicalNotes/NIST.TN.1910.pdf>. In addition, Letvin thanked SDR agency representatives for their feedback on the National Security Council's development of the Executive Order – Establishing a Federal Earthquake Risk Mitigation Standard and noted that it's nearing completion and will be released in the coming weeks.

In other news from NIST reported at Thursday's meeting, the Community Resilience Planning Guide for Buildings and Infrastructure Systems was released at: <http://www.nist.gov/el/resilience/guide.cfm>. The new guide is aimed at community leaders in the public and private sectors and lays out a practical six-step process that communities can follow to develop resilience plans to help them prepare for hazards, adapt to changing conditions, and withstand and rapidly recover from disruptions. Tailored to the particular goals, hazards, needs, and resources of individual communities, these plans will help governments, utility service providers, and other organizations set priorities and allocate resources for mitigating risks, maintaining vital services, and if a hazard does strike, building back better.

Meszaros also reported that the SDR Space Weather Operations, Research, and Mitigation (SWORM) Task Force led a "Space Weather: Understanding Potential Impacts and Building Resilience" event on Thursday, October 29 in the EEOB South Court Auditorium. At the event, OSTP Director John Holdren announced the release of the National Space Weather Strategy ([https://www.whitehouse.gov/sites/default/files/microsites/ostp/final\\_nationalspaceweatherstrategy\\_20151028.pdf](https://www.whitehouse.gov/sites/default/files/microsites/ostp/final_nationalspaceweatherstrategy_20151028.pdf)) and the National Space Weather Action Plan ([https://www.whitehouse.gov/sites/default/files/microsites/ostp/final\\_nationalspaceweatheractionplan\\_20151028.pdf](https://www.whitehouse.gov/sites/default/files/microsites/ostp/final_nationalspaceweatheractionplan_20151028.pdf)). These two documents were developed by an interagency group of experts, with input from stakeholders outside the Federal government, to clearly articulate how the Federal government will work to enhance national space-weather preparedness by: coordinating, integrating, and expanding existing policy efforts; engaging a broad range of sectors; and collaborating with international counterparts.

Meszaros provided an update on the SDR Technology and Innovation for Disaster Preparedness (TIDP) Working Group on behalf of Heather King (National Security Council) and Meredith Lee (DHS S&T).

Last week, an interactive panel on “Innovation for Disasters” was held as part of the Third Annual Safety Datapalooza on Friday, October 30 at the U.S. Trademark and Patent Office in Alexandria, VA. The panel highlighted continued as well as new efforts and commitments from tech and innovation stakeholders. Approximately 150 people joined the event in-person and live-stream, and highlights included innovators from the private, nonprofit, and academic sectors who have used freely available government data to build products, services, and apps that advance public safety in creative and powerful ways. A blog post summarizing the event will be available soon on the OSTP blog located at: <https://www.whitehouse.gov/administration/eop/ostp/blog>. In the meantime, the working group will be in touch in the next few weeks with regards to celebrating the one-year anniversary of [Disasters.data.gov](http://Disasters.data.gov) in December. If you have questions or ideas, feel free to contact the TIDP team at [disastertech@ostp.gov](mailto:disastertech@ostp.gov). To join the TIDP’s weekly teleconference calls every Wednesday at 10:30 a.m., please dial 202-395-6392 and enter passcode 8801570#.

Meszaros also mentioned that the work of the Hazard Review Teams within the SDR National Preparedness S&T (NPST) Task Force is well underway with regards to completing their S&T program crosswalks within the five PPD-8 mission areas. In the next few months, the NPST is planning to undertake the task of developing recommendations on a formal protocol to conduct joint, interagency post-event S&T evaluation and assessment as part of the third function laid out in the group’s charter. The protocol will leverage recent event experiences and lessons learned to identify critical science needs and inform the prioritization of future national preparedness S&T investments. Also of note, the NPST is engaged in a collaborative effort with FEMA and the National Security Council to incorporate S&T language into the recent update of the Federal Interagency Operational Plans (FIOPs). As part of this activity, the NPST tentatively plans to participate on a writing team to draft a broader S&T annex document for the FIOPs. More information on this potential activity will follow in the coming months.

In his final meeting as SDR Co-chair before sailing off to retirement, the incomparable Dennis Wenger (NSF) noted that the SDR International Disaster Risk Reduction (IDRR) Working Group is in the process of outlining a plan to reshape the U.S. National Platform to incorporate DRR perspectives from non-Federal stakeholders as the United Nations International Strategy for Disaster Reduction (UNISDR) moves towards implementing the Sendai Framework for Disaster Risk Reduction 2015-2030. Under the proposal that was approved at the IDRR Working Group’s October meeting: 1) the U.S. National Platform would invite an external stakeholder group to present its latest DRR activities to the SDR on a quarterly basis at a regularly scheduled SDR meeting to begin in 2016; and 2) the U.S. National Platform would facilitate an annual publicly notified and widely attended listening session at a previously scheduled conference, such as the Natural Hazards Center Annual Workshop in Colorado or a similar event. Please reach out to the SDR Secretariat ([bret.schothorst@mantech.com](mailto:bret.schothorst@mantech.com)) to suggest external stakeholder groups to invite to present at quarterly SDR meetings and how best to reach out and advertise the opportunity to interested entities.

### **III. Discussion: Agency S&T Response Activities for South Carolina Floods**

Applegate then kicked off a roundtable discussion on agency S&T response activities for the recent South Carolina floods. Dave Novak from NOAA, Tim Cohn of the USGS, Tony Niles from the U.S. Army Corps, Matt Fuchs of FEMA, Gerald Bawden from NASA, and Susan Cutter of the University of South Carolina provided short briefings on the historic October 2-4, 2015, rainfall and flooding event in the state.

Novak highlighted some of the meteorological characteristics on the North American storm complex that converged with Hurricane Joaquin, which included between 15” and 25” of rainfall over three days in the metro areas of Charleston and Columbia. The rainfall exceeded that of any tropical cyclone in South Carolina history, and some areas of the state saw the rainfall equivalent of a 1-in-1,000-year event (rainfall of this amount in much of South Carolina had only a 0.1 percent chance of occurring in any

given year). Novak added that the official statewide daily rainfall record was exceeded in several locations, and the statewide October monthly precipitation record was broken.

Cohn covered peak stage and streamflow data collected at area streamgauging stations, indicating that of the over 150 streamflow measurements taken by USGS, 17 site measurements were peak of record and 15 other sites were top five peak of record. Over 600 high-water marks were also recorded in the region via 13 rapid deployment gages, nine storm tide sensors, and three barometric pressure sensors. Niles then mentioned USACE missions in response to the floods with respect to flood risk management projects assessments and dam safety support. USACE dam safety engineer support to the state resulted in 653 dams being initially assessed, with a follow-up conducted of 75 dams with the highest levels of concern. Of those 75 dams, nine dams were identified as the most vulnerable and needing immediate action.

Niles also noted that USACE unmanned aircraft systems were able to geo-reference high resolution aerial imagery products over four dams, a local airport, and made two passes of an area hit hardest from the flooding. He outlined that USACE coastal assessment engineers from North Carolina and South Carolina conducted an assessment of approximately 23 non-Federal engineered beaches that sustained damages due to the severe storms and flooding. In addition, 20 USACE personnel provided FEMA with assistance in the preparation of project worksheets for its Public Assistance Program. With regards to flood fighting equipment, USACE provided roughly 100,000 sandbags to the State of South Carolina in support of the emergency response effort. Niles closed by stating that although USACE is the Nation's expert in infrastructure, states have jurisdiction and authority over most of their infrastructure, and more collaboration with states is needed in preparation for future events.

Fuchs gave a summary of opportunities that arose to improve FEMA's engagement and situational awareness in the National Flood Insurance Program (NFIP) claims process and to implement what it has learned from previous disasters. These reforms will help FEMA better prepare communities for flood events, increase market penetration of flood insurance, and ultimately reduce recovery costs. He highlighted instances of collaboration and coordination between previously disparate parts of disaster recovery, specifically noting the integration of the previously separate Flood Response Office and Joint Field Office and the deployment of FEMA insurance division experts to the affected areas. Fuchs also underlined the enhanced analysis of the flood insurance recovery process as it unfolds, by way of: 1) requesting the write-your-own insurance companies to provide more granular claims data as a flood event unfolds; 2) increasing real-time geospatial coordination with NFIP data; and 3) conducting pilot analyses – both geospatial and non-geospatial – with new granular insurance data to better understand the customer experience and claims process.

Bawden then provided examples of NASA's daily geospatial and remote sensing products that were issued to FEMA via the USGS Hazard Data Distribution System (HDDS) for the flooding's disaster response efforts. Cutter closed the discussion by providing a local perspective on the event, highlighting areas of social vulnerability, temporal variability, and cascading impacts of critical infrastructure failures, including roads, bridges, and the public water supply system. For more information on the details contained in Cutter's briefing and the work of the University of South Carolina's Hazards and Vulnerability Research Institute (HVRI), email [scutter@sc.edu](mailto:scutter@sc.edu) or visit its website at: <http://artsandsciences.sc.edu/geog/hvri/>.

#### **IV. Presentation: Hurricane Katrina's 10<sup>th</sup> Anniversary**

Applegate introduced Shirley Laska, who gave a presentation to the SDR on Hurricane Katrina's 10<sup>th</sup> anniversary. Laska is Professor Emerita of Sociology and past Founding Director of the Center for Hazards Assessment, Response and Technology at the University of New Orleans (UNO-CHART).

Since Katrina, Laska's work at UNO-CHART has been focused specifically on lessons learned from the event, especially in the realm of community recovery and hazard resiliency. Laska noted in her presentation that the most important actors in the recovery of survivors from disasters are the survivors themselves. When making reference to survivor "agency," Laska eluded to the actions taken by people who have the power to act as they determine, permitting a survivor to make their own contributions to their own recovery. Laska added that survivor "agency" is required for a community to achieve resilience.

Laska noted that further research is needed to support proactive policy changes to this end by: 1) determining how to increase the "agency" of the survivors whom local, state, and Federal entities are responsible to help; 2) determining the characteristics of survivors who have "agency" and what their recovery programs should aim to enhance; and 3) determining how government and non-profit recovery programs as they are defined and implemented can make the recovery of survivor "agency" a paramount goal. The ultimate objective should be to give survivors the right to experience recovery assistance that is delivered professionally, successfully, and timely.

In response to Laska's presentation, Eric Soucie (FEMA) wondered if there is some quantifiable way to understand the most recent disaster experiences of survivors and use those experiences to help drive the "agency" of survivors as an asset to community response and recovery efforts. Ann Hitchcock (NPS) also inquired as to the role of cultural heritage in New Orleans in relation to its community "agency" in the aftermath of Hurricane Katrina. Laska noted that the city has struggled with certain aspects of cultural heritage and historic preservation, citing that municipal officials have unwisely placed aesthetics ahead of safety in some rebuilding efforts. Contact Laska ([slaska@uno.edu](mailto:slaska@uno.edu)) with questions regarding her briefing.

## **V. Adjournment**

Applegate adjourned the SDR November meeting at 12:05 p.m. and noted that the group's next meeting will be held on Thursday, December 3 in the White House Conference Center Lincoln Room.

## **VI. SDR 2016 Meeting Calendar**

SDR meetings in 2016 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:

### **2016**

- ✓ Thursday, January 7\*
- ✓ Thursday, February 4
- ✓ Thursday, March 3
- ✓ Thursday, April 7
- ✓ Thursday, May 5
- ✓ Thursday, June 2
- ✓ Thursday, July 7
- ✓ Thursday, August 4\*\*
- ✓ Thursday, September 8\*\*\*
- ✓ Thursday, October 6
- ✓ Thursday, November 3
- ✓ Thursday, December 1

\* January meeting will be held in Room 430ABC of the White House Eisenhower Executive Office Building (EEOB).

\*\* August meeting subject to cancellation.

\*\*\* September meeting shifted to the second Thursday of the month to avoid proximity to the Labor Day Federal holiday.

**VII. 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)).

**VIII. 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>
Jack Meszaros	Co-chair	202-456-6020	<a href="mailto:Jacqueline_R_Meszaros@ostp.eop.gov">Jacqueline_R_Meszaros@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>

**IX. Summary of November Actions**

Action	Lead	By When
The next SDR meeting will be held on Thursday, December 3 in the White House Conference Center Lincoln Room.	SDR Members	For Information
Dial 202-395-6392 and enter passcode 8801570# to join the SDR Technology and Innovation for Disaster Preparedness Working Group’s weekly teleconference calls every Wednesday at 10:30 a.m.	SDR Members	For Information
View the SDR Wildland Fire Science and Technology Task Force Final Report at: <a href="http://1.usa.gov/1S4Sn4J">http://1.usa.gov/1S4Sn4J</a> .	SDR Members and Federal Colleagues	For Information
View the SDR Space Weather Operations, Research, and Mitigation Task Force National Space Weather Strategy and Action Plan at: <a href="http://1.usa.gov/1OdeWpG">http://1.usa.gov/1OdeWpG</a> and <a href="http://1.usa.gov/1X8k0v5">http://1.usa.gov/1X8k0v5</a> .	SDR Members and Federal Colleagues	For Information
Email the SDR Secretariat ( <a href="mailto:bret.schothorst@mantech.com">bret.schothorst@mantech.com</a> ) 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
Contact Susan Cutter at <a href="mailto:scutter@sc.edu">scutter@sc.edu</a> or visit <a href="http://artsandsciences.sc.edu/geog/hvri/">http://artsandsciences.sc.edu/geog/hvri/</a> for more information on the details contained in her briefing on the recent South Carolina floods.	SDR Members and Federal Colleagues	Standing
Reach out to Shirley Laska ( <a href="mailto:slaska@uno.edu">slaska@uno.edu</a> ) with additional questions regarding her presentation on Hurricane Katrina’s 10 <sup>th</sup> anniversary.	SDR Members and Federal Colleagues	Standing