Meeting Minutes of the Subcommittee on Disaster Reduction

3 December 2015, 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) Jack Meszaros (OSTP)

Designated Representatives

BLM Edwin Roberson FERC Marsha Palazzi **CDC** Mollie Mahany **HUD** Dana Bres **DHS** Mary Ellen Hynes **NASA** Craig Dobson NGA Bob Kluba (T) **DHS/FEMA** Roy Wright **DHS/USCG** Robert Thomas NGB TBD **NIH** Aubrey Miller (T) **DOD** Al Johnson **DOE** Patricia Hoffman **NIST** Steve Cauffman (T) NOAA Margaret Davidson (T) **DOT** Sheila Duwadi Laura Furgione **EOP/OMB** Michael Clark **NPS** Marcy Rockman **EOP/OSTP** Jack Meszaros **NSF** Greg Anderson **EPA** Greg Sayles

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)
Erin Walsh
DHS/FEMA Doug Ham (T)
EPA Brendan Doyle
NASA David Green
NIH April Bennett (T)

NOAA Jessie Carman Lindsey Kraatz Fred Toepfer USGCRP Amanda McQueen USGS Charlie Mandeville USNAVY Dan Eleuterio USNAVY David McCarren USNRC John Nakoski STPI Zoe Petropoulos SDR Secretariat Bret Schothorst Barbara Haines-Parmele (T)

Agenda

10:00 Welcome, Introductions, and Approval of Minutes
10:05 Report from the Co-chairs
10:20 Briefing: National Earth System Prediction
Capability Program
11:00 Discussion: Strategizing SDR Activities in 2016
11:55 Close and Next Actions

Handouts

- December Meeting Agenda
- Draft November Meeting Minutes

I. Welcome and Introductions

National Science and Technology Council (NSTC) Subcommittee on Disaster Reduction (SDR) Co-chair David Applegate (USGS) called the December 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 November monthly meeting minutes draft was approved with no changes.

SDR Co-chair Jack Meszaros (OSTP) began the meeting by reporting that the SDR *Wildland Fire Science and Technology Task Force Final Report* 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 (NSC) on Monday, November 9, in the Eisenhower Executive Office Building. 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 posted online and can be downloaded at the following link: https://www.whitehouse.gov/sites/default/files/microsites/ostp/NSTC/sdr_wildfire_st_task_force_final_report.pdf. The fire chiefs event included NIST's release of its final report on the Waldo Canyon Fire, which is available at: http://nvlpubs.nist.gov/nistpubs/TechnicalNotes/NIST.TN.1910.pdf. Applegate added that the SDR is hoping to schedule a briefing on this report at the January 7 SDR meeting.

Meszaros noted that the NSC is also in the process of spinning up a task force to look into extreme heat, anticipating problems for the coming summer. This effort is similar in scope to what has been undertaken for the recent multi-year drought and the current El Niño season. To help inform such an activity, Meszaros asked that SDR agencies involved in the production of the SDR Grand Challenges *Heat Wave Implementation Plan* review areas of progress with respect to the Plan's short-, medium-, and long-term strategic actions. SDR agencies at the meeting that expressed an interest in participating included NOAA, CDC, and EPA – others that would like to be a part of this effort are encouraged to reach out to the SDR Secretariat (bret.schothorst@mantech.com) to participate in a small *ad hoc* working group.

Erin Walsh (DHS S&T) passed along that the *National Critical Infrastructure Security and Resilience Research and Development Plan* was released this past week, identifying national priority areas in order to inform R&D investments, promote innovation, and guide research activities across the critical infrastructure community. The Plan can be downloaded at: https://www.dhs.gov/publication/national-critical-infrastructure-security-and-resilience-research-and-development-plan. A blog post co-authored by Reginald Brothers, DHS Under Secretary for Science and Technology, and Suzanne Spaulding, DHS Under Secretary for the National Protection and Programs Directorate, on the release of the Plan is located at: https://www.dhs.gov/blog/2015/12/02/protecting-our-nation%E2%80%99s-critical-infrastructure.

Meszaros also mentioned that the work of the Hazard Review Teams within the SDR National Preparedness Science and Technology (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 teams will look to draft executive summary reports on their assessments as well as undertake the task of developing recommendations on a formal protocol to conduct joint, interagency post-event S&T evaluation 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 Task Force is engaged in a collaborative effort with FEMA and the NSC to incorporate S&T language into the recent update of the Federal Interagency Operational Plans (FIOPs) (http://www.fema.gov/federal-interagency-operational-plans). 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.

Meszaros provided an update on the SDR Technology and Innovation for Disaster Preparedness (TIDP) Working Group, which is celebrating the one-year anniversary of Disasters.data.gov this month. A blog entry will be posted to https://www.whitehouse.gov/administration/eop/ostp/blog on Tuesday, December 15, highlighting new agency tools, datasets, and commitments for the Disasters.data.gov website as well as listing the working group's activities and accomplishments in the past year. If your agency has tools, datasets or commitments that you would like to see highlighted, feel free to contact the TIDP team at disastertech@ostp.gov. To join the TIDP's weekly teleconference calls every Wednesday at 10:30 a.m. EST, please dial 202-395-6392 and enter passcode 8801570#.

Applegate highlighted that the SDR International Disaster Risk Reduction (IDRR) Working Group is in the process of reshaping the U.S. National Platform to incorporate DRR perspectives from non-Federal stakeholders as the UN Office for Disaster Risk Reduction moves towards implementing the *Sendai Framework for Disaster Risk Reduction 2015-2030*. Under the proposal that was approved at the SDR November meeting, the U.S. National Platform plans to invite external stakeholder groups to present their latest DRR activities to the SDR on a quarterly basis at regularly scheduled SDR meetings to begin in early 2016. Please reach out to the SDR Secretariat (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.

Also of note, Sezin Tokar (USAID) mentioned that the IDRR Working Group is in the process of reviewing the draft global, disaster reduction progress targets and indicators set forth by UNISDR for the Sendai Framework (http://www.preventionweb.net/files/43291_sendaiframeworkfordrren.pdf) and plans to undertake an analysis of how the U.S. Government tracks disaster losses and other hazards-related statistics as a related effort. Next steps on this initiative will be discussed more in depth at the January 7 SDR meeting.

III. Briefing: National Earth System Prediction Capability Program

Applegate introduced Fred Toepfer of NOAA, along with colleagues Jessie Carman from NOAA and David McCarren and Daniel Eleuterio of the U.S. Navy, who briefed the SDR on the National Earth System Prediction Capability (ESPC) Program.

The ESPC is an integrated national weather and climate forecast capability that addresses the U.S. Federal need for earth system predictions for the provision of operational products and services, specifically with regards to: 1) the protection of life and property; 2) economic development, aviation, maritime, shipping, and agriculture; 3) national defense and homeland security; and 4) strategic decision-making. Toepfer underlined that the program's products include near-term, medium-range, and extended-range weather prediction (< 90 days), seasonal and inter-annual climate prediction (90+ days), and sub-decadal to decadal multi-model ensemble systems across scales spanning both weather and climate.

Regarding bridging the skill gap in operational products and strategic decision support with respect to weather and climate, Toepfer stated that a main goal of the ESPC is to extend weather forecasting skill past traditional weather scales through: fully coupled air-ocean-land-ice modeling systems; multi-model ensembles; and improved data assimilation techniques, particularly for ocean-land-ice. He added that the ESPC also aims to improve climate model skill at sub-seasonal scales via data assimilation, reanalysis and reforecast, and process representation. Also needed across time scales for both weather and climate are: improved high-performance computing utilization, including advanced architectures; common model architectures; multi-model ensemble management; uncertainty depiction and metrics suited for longer time scales; and product creation.

According to Toepfer, the ESPC leverages existing and planned agency operational capabilities, research and development programs, and projects with a strong need identified for interagency coordination. A key component of the dynamic is to have research agencies work within mission expertise to improve skill and have operational agencies exploit the research for skill improvements. Toepfer noted that NOAA, Navy, Air Force, NASA, DOE, and NSF have key roles and responsibilities within the program primarily at the intersection of worldwide observations and a global, coupled air-ocean-land-ice model capability, encompassing processes in tropical, mid-latitude, and polar teleconnections that are key to the prediction of high-impact events over the U.S. and around the world.

Tokar was encouraged by the ESPC briefing, noting that the possibility of accurate weather and climate predictions extending beyond the current two-week timeframe could have significant positive implications for USAID operations, specifically with regards to logistics and timing related to the delivery of food and resource aid to disaster-stricken countries around the world. David Green (NASA) added that there is also an interest in this effort from the U.S. satellite agencies with respect to defining the parameters and overlap of the timeframe of a weather or climate event itself with the beginning of its disaster recovery phase, as well as articulating what distinct information products are available and at what point during those periods.

Toepfer closed his presentation by underscoring that the initiative could look to bodies – such as the SDR or FEMA's Modeling and Data Working Group – in the future for further interagency linkages, guidance, and a strategic-level coordination of issues. Meszaros added that OSTP would look into where the group might fit into the existing NSTC structure. Please reach out to Toepfer (frederick.toepfer@noaa.gov) with any questions on the ESPC.

IV. Discussion: Strategizing SDR Activities in 2016

Applegate then devoted the remainder of the December meeting to a roundtable discussion on plans and priorities for SDR activities in 2016. Items raised during the conversation – as well as in discussions earlier in the meeting – for consideration to be placed on SDR's docket for the New Year included:

- Engaging with an NSC interagency task force on extreme heat;
- Undertaking a progress report on the SDR *Grand Challenges for Disaster Reduction*;
- Working with the NPST Task Force on its post-event S&T assessment protocol;
- Participating in a writing team with the NSC and FEMA to draft an S&T annex to the FIOPs;
- Promoting TIDP Working Group activities for the Disasters.data.gov one-year anniversary;
- Linking with USGCRP to discuss disaster risk reduction and climate change adaptation;
- Working with the IDRR Working Group on targets and indicators of the Sendai Framework;
- Hosting IDRR-led quarterly U.S. National Platform meetings with non-Federal stakeholders; and
- Analyzing how the U.S. Government tracks disaster losses and other hazards-related statistics.

Concerning the last discussion item focused on the U.S. Government's tracking of disaster losses, Laura Furgione (NOAA) passed along a useful link to the NOAA National Centers for Environmental Information (NCEI) and its overview of billion-dollar weather and climate disasters located at: http://www.ncdc.noaa.gov/billions/. Others at the meeting mentioned that organizations outside the Federal government such as the Brookings Institution, PricewaterhouseCoopers, and the Hazards & Vulnerability Institute at the University of South Carolina under Dr. Susan Cutter have also looked into the issue of how to accurately track disaster losses in the U.S. A follow-up discussion on this topic will be held at the January 7 SDR meeting. Additional agency suggestions of SDR plans and priorities for consideration in 2016 should be sent to the SDR Secretariat (bret.schothorst@mantech.com).

V. Adjournment

Applegate adjourned the SDR December meeting at 12:01 p.m. and noted that the group's next meeting will be held on Thursday, January 7, in the White House Eisenhower Executive Office Building (EEOB) Room 430ABC. WAVES information for entering EEOB will be sent at the end of the month.

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

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).

VIII. 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
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

^{*} 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.

IX. Summary of December Actions

Action	Lead	By When
The next SDR meeting will be held on Thursday, January 7 in the White House Eisenhower Executive Office Building (EEOB) Room 430ABC. WAVES information for entering EEOB will be sent at the end of the month.	SDR Members	ASAP
Contact the SDR Secretariat (bret.schothorst@mantech.com) if your agency would like to participate in a small ad hoc working group to look at progress on the short-, medium-, and long-term strategic actions of the SDR Grand Challenges <i>Heat Wave Implementation Plan</i> .	SDR Members	ASAP
Email the Technology and Innovation for Disaster Preparedness (TIDP) Working Group team at disastertech@ostp.gov if your agency has new tools, datasets, and commitments that could be highlighted in an upcoming blog for the Disasters.data.gov website.	SDR Members	ASAP
Dial 202-395-6392 and enter passcode 8801570# to join the SDR Technology and Innovation for Disaster Preparedness (TIDP) Working Group's weekly teleconference calls every Wednesday at 10:30 a.m.	SDR Members and Federal Colleagues	For Information
View the DHS S&T National Critical Infrastructure Security and Resilience Research and Development Plan at https://www.dhs.gov/publication/national-critical-infrastructure-security-and-resilience-research-and-development-plan.	SDR Members and Federal Colleagues	For Information
View the SDR Wildland Fire Science and Technology Task Force Final Report at: http://1.usa.gov/1S4Sn4J.	SDR Members and Federal Colleagues	For Information
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
Reach out to Fred Toepfer (frederick.toepfer@noaa.gov) of NOAA with any questions on his briefing on the National Earth System Prediction Capability (ESPC) Program.	SDR Members and Federal Colleagues	Standing
Submit additional agency suggestions of SDR plans and priorities for consideration in 2016 to the SDR Secretariat (bret.schothorst@mantech.com).	SDR Members	Standing