Meeting Minutes of the Subcommittee on Disaster Reduction

05 February 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) Dennis Wenger (NSF)

OSTP Liaison

Tamara Dickinson (OSTP)

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 Tamara Dickinson

EPA Brendan Doyle *Stephen Clark*

FERC Marsha Palazzi
HUD Dana Bres
NASA Craig Dobson

NGA Patricia Allen Aquinas (T)

NGB TBD

NIH Aubrey Miller (T) NIST Steve Cauffman NOAA Margaret Davidson

Christopher Strager NPS Marcy Rockman NSF Dennis Wenger 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
Meredith Lee
Erin Walsh
DHS/FEMA Douglas Ham
Kimberly Hayward (T)
Ellie Graeden
Eric Soucie

EOP/CEQ Ellen Tarquinio EOP/NSC Eric Letvin EOP/OSTP Susan Monarez EPA Brian Kleinman (T) Emily Snyder (T) NASA Gerald Bawden NIH April Bennett NOAA Lindsey Kraatz NSF Greg Anderson USGS Bill Leith (T) Sandia Kristin Adair Dean Jones STPI Chris Clavin Steve Lev

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 Report for the OSTP Liaison

10:15 Agency Roundtable Budget Discussion

11:30 Briefing: FEMA Modeling and Data Working Group

11:55 Close and Next Actions

Handouts

- February Meeting Agenda
- Draft January Meeting Minutes
- Draft Charter for the SDR Technology and Innovation for Disaster Preparedness Task Force

I. Welcome and Introductions

National Science and Technology Council (NSTC) Subcommittee on Disaster Reduction (SDR) Co-chair David Applegate (USGS) called the February meeting to order at 10:02 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 January monthly meeting minutes draft was approved with no changes.

Applegate noted that the SDR International Working Group (IWG) February meeting was rescheduled for Tuesday, February 24, from 10:00-noon at USAID offices in Room 1150.17 (11th floor) of the National Press Building located 529 14th Street NW in downtown Washington, DC. Items for discussion at the group's next meeting will include: 1) logistics to support the U.S. delegation to the World Conference on Disaster Risk Reduction (WCDRR) that will take place March 14-18, 2015, in Sendai, Japan; 2) plans for the U.S. side events at the WCDRR Public Forum; and 3) the latest UNISDR draft of the post-2015 framework for disaster risk reduction, known as HFA2+. Please reach out to the SDR Secretariat (bret.schothorst@mantech.com) to attend the meeting.

Applegate highlighted that the draft charter for the SDR Technology and Innovation for Disaster Preparedness (TIDP) Working Group is nearing final clearance by the NSTC and OSTP. SDR representatives were asked to identify agency participants for the group. OSTP is still finalizing the group's Co-chairs, so interest on that is welcome as well. Please send suggestions for TIDP participation and leadership to the SDR Secretariat (bret.schothorst@mantech.com) by Friday, February 13. The main point of contact for questions about the group is Meredith Lee from DHS S&T (disastertech@ostp.gov).

Applegate also drew attention to the SDR National Preparedness Science and Technology (NPST) Task Force, which held its second meeting last week. One important challenge for the NPST will be to determine two Co-leads for each of the six sub-group Hazard Review Teams (currently meteorological, geologic, space, chemical, nuclear/radiological, and biological) – one each to represent the perspectives of both S&T and PPD-8. If SDR members have suggestions for Co-leads for the Hazard Review Teams or for participation in general, please send them to Maham Ahmed (Maham_Ahmed@ostp.eop.gov) of OSTP by Friday, February 13.

Brendan Doyle (EPA) added that the 2015 EPA International Decontamination Research and Development Conference will be held May 5-7, 2015, at EPA's Research Triangle Park, NC, Campus. The abstract submission deadline is approaching, and EPA invites all attendees to submit an abstract to make a poster or platform presentation at the conference. An abstract describing your presentation can be submitted using the conference website at https://sites.google.com/site/epadecon2015/ by February 27, 2015. The abstracts and corresponding presentations will serve as the EPA Conference Report, which will become available to the general public – so please do not include proprietary or "For Official Use Only" information in your abstract. Topics of interest for this conference include new research data or 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. Doyle asked that all agency participants register to confirm your attendance at the conference no later than April 28, 2015.

III. Report from the OSTP Liaison

Tammy Dickinson (OSTP) discussed that OSTP looking for an agency detailee to work on its natural hazards portfolio and asked SDR members to identify a potential detailee interested in working at OSTP for the next 12-18 months. Please email Dickinson (<u>Tamara L Dickinson@ostp.eop.gov</u>) with candidates.

Eric Letvin of the National Security Council highlighted that the White House and FEMA recently released a Federal Flood Risk Management Standard and associated Executive Order, which was developed in conjunction with the President's Climate Action Plan to create a national minimum flood risk management standard for Federal actions to ensure they appropriately reduce risk in the face of changes in climate and vulnerability. A set of draft implementing guidelines to guide Federal agencies in implementing the Federal Flood Risk Management Standard were also released and can be downloaded by visiting: https://www.fema.gov/media-library/assets/documents/101761. FEMA – on behalf of its Mitigation Framework Leadership Group (MITFLG) – is actively seeking comments through a series of listening session from stakeholders regarding the implementation of the Standard and its draft guidelines. To send comments, please email federal-flood-risk-management-standard-ffrms. You can also visit https://www.whitehouse.gov/the-press-office/2015/01/30/executive-order-establishing-federal-flood-risk-management-standard-and- to read the full Executive Order.

IV. Agency Roundtable Budget Discussion

A large portion of the February SDR meeting was devoted to an agency roundtable budget discussion, which allotted a few minutes apiece for SDR representatives to provide OSTP and their fellow agencies with a quick overview of any major changes in hazard-related S&T spending in the FY 2015 "Cromnibus" and the President's FY 2016 budget request – both concerning programs within their agency and interagency work. Agencies that kindly briefed the Subcommittee were: DHS S&T, EPA, FEMA, NASA, NIH, NIST, NOAA, NSF, USFS, and USGS.

Mary Ellen Hynes (DHS S&T) presented budget details from her agency, focusing on requests for funding for programs related to decision support systems, modeling and simulation, resilient critical infrastructure, expedient flood protection for tunnels, remote sensing for dam and levee integrity and stability, identity management and rapid DNA sequencing, assured communications for emergency management, and support for first responders. There are also DHS S&T requests in the President's FY 2016 budget to continue funding the Coastal Hazards Center at the University of North Carolina at Chapel Hill and provide ongoing support to projects at the National Hurricane Center and with local utility companies to protect electrical grid transformers from solar storms.

Douglas Ham (FEMA) discussed proposed increases to two disaster reduction programs at FEMA in the President's FY 2016 budget request: Risk Mapping, Assessment, and Planning (Risk MAP) and the Pre-Disaster Mitigation (PDM) Grant Program. Risk MAP provides communities with flood information and tools to enhance their mitigation plans and to take action to better protect their citizens, and through more precise flood mapping products, risk assessment tools, and planning and outreach support, Risk MAP strengthens local ability to make informed decisions about reducing risk. According to Ham, increases in the PDM Grant Program are designed to more effectively assist states, territories, tribal governments, and local communities in implementing a sustained pre-disaster natural hazard mitigation program to reduce overall risk to the population and structures from future hazard events, while also reducing reliance on Federal funding in future disasters.

Doyle briefed the Subcommittee on EPA's hazard-related S&T funding requests in the President's FY 2016 budget for its Homeland Security Research Program (HSRP) in the Office of Research and Development. Doyle noted that back in October, EPA provided a presentation to the SDR on many of HSRP's ongoing projects, such as the Wide Area Recovery and Resiliency Program (WARRP), the Incident Waste Decision Support Tool (I-WASTE), the Waste Estimation Support Tool (WEST), and the Decision Support Tool for Single-Facility Remediation (DeconST). These tools are used by those on the front line of protecting from and responding to accidental or intentional environmental threats, and Doyle added that the research that supported the development of these tools is improving the ability to detect and determine the extent of contamination, determine the level of risk to humans, develop appropriate

clean-up and waste management approaches, and increase resilience to disasters and other environmental contamination incidents.

Craig Dobson (NASA) mentioned a few details of his agency's recent FY 2016 budget request, noting that NASA's overall budget is healthy and adding that NASA's Earth Science Division has requested a funding increase to support the long-term planning and implementation of a sustained land imaging and climate measurement program over a decadal time scale. Within the Applied Sciences Program, the funding for the Natural Disaster Application Area is steady, which has the overall goal to use NASA's capabilities in space-borne, airborne, surface observations, higher-level derived data products and modeling and data analysis to improve natural disaster forecasting, mitigation, and response. The Natural Disaster Application Area applies its remote sensing observations, modeling, and analysis capabilities to provide hazard and disaster information where and when it is needed. Application research activities specifically contribute to: understanding the natural processes that produce hazards; developing hazard mitigation technologies; and recognizing vulnerability of interdependent critical infrastructure.

From the Department of Commerce, Steve Cauffman (NIST) noted that NIST is proposing increases in the President's FY 2016 budget request for four priority areas: 1) improving data collection, analysis, and searchability of its disaster and failure studies; 2) reducing the impacts of windstorms and storm surge; 3) reducing earthquake risks by way of measurement science to support earthquake-resilient lifelines and cost-effective technologies for advancing the earthquake performance of existing buildings; and 4) developing a national wildland-urban interface fire rating system, complementary standard fire test methods for structures, and a technical basis for fire mitigation technologies. Chris Strager (NOAA) discussed that the National Weather Service has funding requests in FY 2016 to address a number of issues, including maintenance for the Next-Generation Radar (Nexrad) network of weather radars, information dissemination infrastructure and reliability improvements, water prediction capability upgrades, and enhancements to mid-range weather outlooks. Regional coastal resiliency grants, hurricane storm surge maps, weather satellites, and research vessels were also areas of focus for NOAA in the President's FY 2016 budget request.

Greg Anderson (NSF) highlighted a new program at his agency funded in FY 2016 focused on Critical Resilient Interdependent Infrastructure Systems and Processes (CRISP). He also mentioned the development of the follow-on program to Hazards SEES, which will be known as Prediction and Resilience against Extreme Events (PREEVENTS). The goals of the CRISP initiative and its solicitation are to: 1) foster an interdisciplinary research community of engineers, computer and computational scientists, and social and behavioral scientists that creates new approaches and engineering solutions for the design and operation of infrastructures as processes and services; 2) enhance the understanding and design of interdependent critical infrastructure systems and processes that provide essential goods and services despite disruptions and failures from any cause, natural, technological, or malicious; 3) create the knowledge for innovation in critical infrastructure systems and processes so that they safely, securely, and effectively expand the range of goods and services they enable; and 4) improve the effectiveness and efficiency with which they deliver existing goods and services. Anderson noted that he'll provide a more in-depth briefing on the CRISP and PREEVENTS initiatives with SDR Co-chair Dennis Wenger (NSF) at the SDR's March meeting.

Matt Rollins (USFS) discussed proposed funding levels in the President's FY 2016 budget request for various activities at the U.S. Forest Service, including an effort to streamline the allocation of Federal funds to fight wildfires, the hazardous fuels research and development program, the national fire plan, the Joint Fire Science Program, and forest inventory and analysis. Rollins also mentioned that there was a funding increase requested in the President's FY 2016 budget for DOI's wildland fire management activities focused on saving critical habitats for sage-grouse species in the Great Basin.

Applegate presented details on USGS's hazard-related activities in the President's FY 2016 budget request, focusing on funding increases for programs in the Natural Hazards Mission Area related to: assessments and warnings for earthquakes, volcanic eruptions, and landslides; seismic networks supporting NOAA's tsunami warnings; stream gages and storm surge monitors supporting NOAA's flood and severe weather (including hurricane) warnings; coastal and marine geologic surveys and research supporting assessments of earthquake and tsunami hazards as well as coastal impacts from storms, hurricanes, and sea-level rise; geomagnetic observatories supporting NOAA and AFWA geomagnetic storm forecasts; a key role in tracking chemical and biological threats, in particular zoonotic diseases; and geospatial information supporting response operations for wildfire and many other disasters.

To close the budget discussion, Aubrey Miller (NIH) highlighted next steps and funding opportunities for the NIH Disaster Response Research (DR2) Project that aims to improve the response to and recovery from disasters through enhanced rapid environmental health research coordination in the immediate aftermath of an emergency. Miller stated that the primary objectives of the DR2 Project are to: 1) create a central repository of data collection tools and research protocols to be used by researchers to get to the field quickly; 2) develop new capabilities to rapidly collect baseline and early epidemiological and clinical data and biospecimens for the research community; 3) develop a "Disaster Research Responder" website and a concept of operations for the disaster research community; 4) identify and prioritize the specific acute health data needed during disasters; 5) create a new environmental health disaster research response network that can do research regardless of Federal declarations; 6) identify and train extramural disaster research responders; and 7) share this model with other research coordination bodies and integrate it into HHS and the Federal response and recovery frameworks.

V. Briefing: FEMA Modeling and Data Working Group

Applegate introduced Eric Soucie from the Planning Division of FEMA's Response Directorate and his colleague Ellie Graeden, who briefed the SDR on the Modeling and Data Working Group (MDWG) under FEMA's Emergency Support Function Leadership Group (ESFLG).

Soucie began by noting that the main objectives of the MDWG project were to determine what information is needed by whom, develop an ontology to categorize the information requirements, identify and characterize the data and models used for Federal emergency management, perform network analysis to define gaps and identify linkages between resources and users and producers, and build an interactive inventory cataloging those resources. Graeden then walked through an analysis of the information resource network currently used for hurricanes and other hazards, noting that the project found several deficiencies and gaps including:

- 1) A lack of robust connections between resources;
- 2) That networks rely on a few highly central, widely used resources with varying levels of support;
- 3) Unconnected, redundant situational awareness viewers;
- 4) A lack of operations-focused resources;
- 5) Operations-focused resources poorly connected to real-time event data; and
- 6) A lack of emergency response modeling for operations.

The group plans to address these gaps by developing real-time operational consequence and response modeling and analysis tools as well as emergency response models. It also aims to improve operational information-sharing between Federal emergency support functions. Please reach out to Soucie (Eric.Soucie@fema.dhs.gov) to engage your agency in the MDWG's activities.

VI. Adjournment

Applegate adjourned the SDR February meeting at 12:03 p.m.

VII. 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

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 (bret.schothorst@mantech.com).

IX. 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-Parmele 703-388-0309 barbara.haines-parmele@mantech.com

X. Summary of February Actions

Action	Lead	By When
The SDR International Working Group February meeting was rescheduled for Tuesday, February 24 from 10:00-noon at USAID offices in Room 1150.17 (11th floor) of the National Press Building located 529 14th Street NW in downtown Washington, DC. Please reach out to the SDR Secretariat (bret.schothorst@mantech.com) to attend.	SDR Members	ASAP

^{*} 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.

Email suggestions for participation and leadership on the SDR Technology and Innovation for Disaster Preparedness Working Group to the SDR Secretariat (bret.schothorst@mantech.com).	SDR Members	Friday, February 13
Email suggestions for Co-leads for the Hazard Review Teams of the SDR National Preparedness Science and Technology Task Force to Maham Ahmed (Maham_Ahmed@ostp.eop.gov) of OSTP.	SDR Members	Friday, February 13
Reach out to Tammy Dickinson (Tamara_L_Dickinson@ostp.eop.gov) with agency candidates who would be willing to detail at OSTP covering the natural hazards portfolio.	SDR Members and Federal Colleagues	Standing
Send comments on the draft implementing guidelines for the recently released Federal Flood Risk Management Standard to FEMA-FFRMS@fema.dhs.gov.	SDR Members and Federal Colleagues	Standing
Contact Eric Soucie (Eric.Soucie@fema.dhs.gov) to engage your agency in the activities of FEMA's Modeling and Data Working Group under the Emergency Support Function Leadership Group.	SDR Members	Standing
Please consider supporting the work of the SDR and its Secretariat through a contribution from your agency. Let SDR Co-chair David Applegate (applegate@usgs.gov) know if you need an Agency- or Department-specific request letter.	SDR Members	Standing
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.	SDR Members	Standing