Meeting Minutes of the Subcommittee on Disaster Reduction

1 November 2012, 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*
Daniel Lechefsky
CDC *Mark Keim*
DHS *Bruce Davis*
DHS/FEMA *TBD*
DHS/USCG *Austin Gould*
DOD *Al Johnson*
DOT *Sheila Duwadi*
EOP/OMB *Grace Hu*
EOP/OSTP Tamara Dickinson
EPA Peter Jutro
Stephen Clark
FERC *Pamela Romano*
HUD *Dana Bres*
NASA *Craig Dobson*
NGA *Paul Lewis*
NGB *TBD*
NIH Allen Dearry (T)
NIST Marc Levitan (T)
NOAA Margaret Davidson (T)
Christopher Strager
NPS Marcy Rockman
NSF Dennis Wenger
OPHS Estella Jones
State *Nicholas Suntzeff*
Fernando Echavarria
USACE *Steven Cary*
Dimitra Syriopoulou
USAID Sezin Tokar
USDA *TBD*
USFS *Elizabeth Reinhardt*
Carlos Rodriguez-Franco
USGS David Applegate
USNRC *Jennifer Uhle*

Other Attendees

EOP/CEQ Anne Marie Pippin
EOP/OSTP James Honsa
Allan Manuel
EPA Brendan Doyle
Paul Kudarauskas
NASA Frank Lindsay
NSF Gregory Anderson
USGS Steve Brantley
USNRC Brett Rini
Secretariat Bret Schothorst
Barbara Haines-Parmele

Agenda

10:00 Welcome and Introductions
10:05 Roundtable Overview of Agency S&T Activities in Response to Hurricane Sandy
10:40 Discussion of SDR Policy Priorities for the Next Presidential Term
11:35 Report from the Co-chairs and Approval of Minutes
11:40 Report from the OSTP Liaison
11:55 Close and Next Actions

Handouts

- November Meeting Agenda
- Draft October Meeting Minutes
- Agency Slides on S&T Activities in Response to Hurricane Sandy

I. Welcome and Introductions

Subcommittee on Disaster Reduction (SDR) Co-chair David Applegate (USGS) called the meeting to order at 10:03 a.m., and participants introduced themselves.

II. Roundtable Overview of Agency S&T Activities in Response to Hurricane Sandy

In the wake of Hurricane Sandy, the SDR began the meeting with a roundtable discussion of member agencies and their S&T activities responding to the storm. The following agency perspectives were reported: NOAA/NWS, USAID/OFDA, EPA, NASA, USNRC, NSF, USGS, NPS, NGA, and USPHS.

Christopher Strager (NOAA/NWS) began the discussion by relaying media reports of the widespread impact and devastation of Hurricane Sandy. At the height of the event on October 29 and 30, approximately 8.3 million people were without power. Based on NWS forecasts and population statistics as the storm approached, it is estimated that approximately 58.7 million people were impacted by wind gusts of at least 58 miles per hour and 19.2 million people were impacted by wind gusts greater than 74 miles per hour. Record snowfalls of 2 to 3 feet across the mountains of West Virginia and western Maryland were also reported by NWS spotters. Based in part on storm surge forecasts by NOAA, several hundreds of thousands of people were evacuated from New York City and the surrounding mid-Atlantic and Northeastern coastal areas. To relay potential impact information on the hurricane, Strager added that NOAA/NWS reached across Federal agencies before, during, and after the event to determine the most effective way to communicate warning and weather alert messages to the public and monitored popular social media channels such as Twitter to determine how the information they were providing was being understood and processed. Although NOAA/NWS forecasting and modeling was accurate for the storm, Margaret Davidson (NOAA) added that Hurricane Sandy was an excellent example of the unanticipated cascading events and interdependencies that can occur during disasters, and that NOAA/NWS can still do a better job of communicating the practical impacts of these phenomena in a clear and efficient manner.

Sezin Tokar (USAID/OFDA) reported that on October 24 and 25, in advance of Hurricane Sandy's arrival, USAID/OFDA activated assessment and response teams in Haiti, Jamaica, and the Bahamas based on forecasts provided by NOAA's National Hurricane Center. In response to the effects of Hurricane Sandy, USAID/OFDA's partners have distributed a significant number of pre-positioned, USAID/OFDA-funded emergency relief commodities in Haiti. In addition, with USAID/OFDA support, items were distributed to assist displacement camp clean-up efforts. On October 28, the seven-person USAID/OFDA assessment and response team in Jamaica supported Jamaica's Office of Disaster Preparedness and Emergency Management with conducting assessments in affected areas and with compiling data for presentations to Jamaican government officials. Tokar noted that USAID/OFDA expects requests for disaster assistance made through the U.S. disaster declarations in Jamaica and Haiti in the wake of the storm to continue.

Peter Jutro (EPA) and Brendan Doyle (EPA) added that the EPA Headquarters Emergency Operations Center (EOC) and regional EOCs in Region 1, Region 2, and Region 3 were activated for situational awareness and to support response needs for Hurricane Sandy. On-scene coordinators have been deployed throughout these regions covering New England and the Mid-Atlantic states to characterize the nature and extent of Hurricane Sandy impacts on storage tanks, potable drinking water supplies, waste water and debris management, and other public health and environmental threats and to assist in remediation and recovery activities. The EPA laboratories in Narragansett Bay, RI and Edison, NJ were closed after the hurricane's landfall, and impacted regions continue to coordinate with Federal, state, and local agencies and are beginning to assess the damage of the storm post-landfall. Potential future resource needs are being considered, including support from EPA back-up regions and special teams. The focus of the assessment work being done is on impacts to water and waste water systems as well as releases of hazardous materials and oil. Region 2 is discussing the potential scope of mission assignments

with NY and NJ for rapid needs assessment and response activities, including household hazardous waste collection for impacted communities. As of November 1, the FEMA National Response Coordination Center remains at a Level 1 activation and the Emergency Support Function #10 desk for oil and hazardous materials response is being staffed by an EPA representative during the daytime shift. EPA has issued two fuel waivers to address supply and emissions concerns in the impacted area. Paul Kudarauskas (EPA) also reported that the Airborne Spectral Photometric Environmental Collection Technology (ASPECT) platform is being forward deployed to the Philadelphia, PA area at the request of EPA Region 2. The ASPECT Program is a remote sensing platform with the capabilities to perform standoff chemical and radiological detection and aerial imagery for both infrared and visible light wavelengths.

Frank Lindsay (NASA) noted that NASA does not have a disasters response authority or capability, but in the wake of Hurricane Sandy, the agency has been utilizing aerial and satellite imagery jointly with NWS for short-term weather prediction and has put a focus on improving models and partnerships with other Federal agencies tasked with disaster remediation and recovery from the storm.

Brett Rini (USNRC) reported that USNRC followed the storm's projected path in advance of it having any impact on the U.S. and followed well-tested plans to put additional inspector resources at nuclear plants in the path of the storm to verify that licensees took the appropriate steps to prepare their facilities for the potential of hurricane force winds and flooding. The USNRC formally entered monitoring mode on October 29 in anticipation of the effects of Hurricane Sandy and due to the fact that 34 nuclear energy facilities were located in its projected path. Of the 34 nuclear facilities from South Carolina to Vermont in Hurricane Sandy's path, 24 continued to operate safely and generate electricity throughout the event. Seven were already shut down for refueling or inspection, and three in New Jersey and New York safely shut down, as designed, because of storm conditions or grid disturbances. The three units that shut down were Indian Point Unit 3, Nine Mile Point Unit 1, and Salem Unit 1. Indian Point Unit 3 and Nine Mile Point Unit 1 both automatically shut down on October 30 and October 29, respectively, due an electric grid disturbance. Salem Unit 1 manually shut down on October 30 due to high water level at the circulating water intake structure. These three units remain shutdown as of November 1. The three above units also have other reactors on site; Indian Point Unit 2, Nine Mile Point Unit 2, and Hope Creek (co-located with Salem) continued operating, and Salem Unit 2 was already shut down for a refueling outage. The agency's Office of Public Affairs kept the public informed of agency activities as a result of Sandy with five press releases and five blog posts in two days, and also distributed information via Twitter. The office also responded to dozens of media inquiries. The agency's Office of Congressional Affairs, agency state liaisons and the Office of International Programs also kept their respective stakeholders apprised of the status of nuclear plants in the storm's path.

Dennis Wenger (NSF) reported that NSF has fielded several inquiries from researchers on the availability of grants for Rapid Response Research (RAPID). Wenger stated that he will be calling a meeting with the NSF program offices in the coming days to assess the need for a solicitation for RAPID awards. Wenger reiterated a point made earlier by Davidson that a major focus of emerging research should be centered on the effects of the cascading events and interdependencies that can occur during disasters as well as the role of crowdsourcing during a disaster and how to verify information that is being transmitted by the public via social media networks.

Regarding the work of the USGS, Applegate stated that USGS field crews are deployed from Maine to Maryland, totaling 164 personnel, in response to Hurricane Sandy. USGS sensors also are deployed and include 149 storm surge sensors, 8 rapid deployment streamgages, 16 wave sensors, and 48 barometric pressure sensors. High-flow samples were collected at the Delaware River at Trenton, NJ, and the Raritan River at Queens Bridge at Bound Brook, NJ, and water-quality samples are being collected at selected river monitoring sites for the Chesapeake Bay Program, which include sites in PA, MD, and VA

as well as sites in the Susquehanna, Potomac, Choptank, Rappahannock, and Patuxent River basins. USGS staff members at the Woods Hole, MA, and St. Petersburg, FL, Coastal and Marine Science Centers are working to assess the impact of the storm on the coastline from Cape Hatteras to Montauk, Long Island. The collection of oblique aerial photography via a two-day mission is planned along open coast shoreline that will provide a qualitative look at coastal erosion. The USGS is conducting LIDAR topography surveys of beaches, and coordination is underway with other groups to make preliminary data available for emergency recovery efforts a week after collection. After issuing an alert for potential landslides in the storm's path, the USGS also is conducting a post-storm landslide inventory in cooperation with state geological surveys and for the first time using the new USGS *Did You See It* website that allows the public to lend a hand providing citizen science on landslides (http://landslides.usgs.gov/dysi/). Applegate added that a USGS geospatial information response team is making available a wide range of imagery products – including remote sensing and aerial photography from NOAA and the Civil Air Patrol, which are posted on the USGS Hazard Data Distribution System on a daily basis – and that the International Charter for Space and Major Disasters has been activated at the request of FEMA.

Marcy Rockman (NPS) highlighted that the NPS Eastern and Midwestern Incident Management Teams have been mobilized and moved on October 31 from Hagerstown, MD to the New York City area. The National Center for Preservation Training and Technology *Heritage in Disasters* website also has been updated (http://ncptt.nps.gov/articles/disasters/) with disaster preparation and recovery effort information to help people to mitigate risks to cultural resources, historic buildings and structures, and museum collections when faced with a disaster such as Hurricane Sandy.

Christy Crosiar (NGA) added that the Pentagon is feeding civilian first responders satellite imagery of storm damage through their smartphones, according to the Department of Defense. As the military's mapping office, NGA is providing the graphics so that FEMA can allocate resources appropriately in the wake of Hurricane Sandy. First responders can obtain – and store – the information through several communications channels in case connectivity fails. Due to power outages and physical damage in savaged areas, as much as 25 percent of cell phone sites were not operating as of October 30, according to the Federal Communications Commission. Thus, NGA has launched a restricted access website that provides authorities with geospatial data and viewing tools and ensures many of its products can be utilized and cached via handheld mobile devices, making access to timely information easily accessible for assessment and rescue operations, even in areas experiencing intermittent or disconnected cell service connectivity.

Estella Jones (USPHS) reported that the U.S. Public Health Service Uniformed Corps had provided rapid and continuous response to Hurricane Sandy this past week. To date, roughly 100 officers from Rapid Deployment Force (RDF-2), Applied Public Health Team (APHT-2), Regional Incident Support Teams (RIST-1, RIST-2, RIST-3), and National Incident Support Teams (NIST-B) are currently deployed to disaster-stricken zones. Jones also noted that USPHS activated Mental Health Teams (MHT-3 and possibly MHT-2) in response to the mental health needs at seven shelter sites in New York City. Additionally, the following teams are on alert: RDF-3, APHT-3, NIST-C, MHT-2, MHT-3, and Services Access Teams (SAT-2, SAT-3). These teams represent 250 officers on alert and are also augmented by additional 750 rostered on-call officers.

Please email our OSTP Liaison Tammy Dickinson (tdickinson@ostp.eop.gov) copying the SDR Secretariat (bret.schothorst@mantech.com) if you'd like to submit relevant or updated information regarding your agency's S&T activities in response to the disaster.

III. Discussion of SDR Policy Priorities for the Next Presidential Term

Building on this conversation of the impacts, response activities, and lessons learned from Hurricane Sandy, the last portion of the meeting was devoted to a discussion identifying SDR disaster risk reduction policy priorities -– as well as future Subcommittee goals, objectives, and outcomes -– to use as the basis of a roadmap forward for OSTP during the next four years. Although the discussion was cut short due to the previous roundtable and will continue further at the December meeting, the following policy objectives were brought up as preliminary possibilities for the SDR to begin addressing:

- Determine the appropriate distribution of disaster-related responsibilities among the NSTC committees and subcommittees;
- Identify opportunities associated with PPD-8 and explore S&T related roles within the framework;
- Assess progress on hazards-specific goals put forth in the implementation plans of the Grand Challenges for Disaster Reduction;
- Define what disaster reduction means and determine how that definition affects outcomes;
- Analyze the social science impact and contribution to risk communication issues, social memory capacity, and social media capture;
- Develop a platform for Federal disaster-related resource sharing;
- Strengthen and expand the SDR role as the U.S. National Platform to the UN International Strategy for Disaster Reduction (ISDR);
- Review and identify partnerships and linkages with standard coordination mechanisms among the Federal agencies;
- Assist organizations with enacting a North American Risk Model framework assessing natural hazards threats;
- Collaborate with National Security Staff to promote linkages between disaster resilience and national security and to inform the S&T agenda for disaster preparedness and risk reduction; and
- Develop a report on how agency R&D agendas for various hazards can be better coordinated per the suggested draft language in the Natural Hazards Risk Reduction Act of 2011.

Please email our OSTP Liaison Tammy Dickinson (tdickinson@ostp.eop.gov) copying the SDR Secretariat (bret.schothorst@mantech.com) if you have further suggestions.

IV. Report from the Co-Chairs and Approval of Minutes

The October meeting minutes were approved with no changes.

Wenger reminded members that the SDR's International Working Group (IWG) will meet the first Thursday of every month from 1:00 p.m. to 2:30 p.m. in the WHCC's Lincoln Room. At the working group's November meeting, the IWG will discuss restructuring options for the U.S. National Platform for UNISDR with the OSTP General Counsel as well as the rescheduled UNISDR Regional Platform Meeting that will be held November 26-28, 2012 in Santiago, Chile.

V. Report from the OSTP Liaison

Dickinson reminded SDR members that the December meeting will be devoted to a continued discussion identifying disaster risk reduction policy priorities – as well as future SDR goals, objectives, and outcomes – to use as the basis of a transition roadmap forward for OSTP during the next presidential term. Please consider brainstorming disaster reduction S&T priorities from your agency in advance of the meeting and send your input to the SDR Secretariat (bret.schothorst@mantech.com) with a copy to Dickinson (tdickinson@ostp.eop.gov).

VI. Adjournment

The meeting adjourned at 12:01 p.m.

VII. Future Meetings

SDR meetings 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:

2012

- ✓ Thursday, December 6

2013

- ✓ Thursday, January 10 (to avoid proximity to the New Year's Day Federal holiday)
- ✓ Thursday, February 7
- ✓ Thursday, March 7
- ✓ Thursday, April 4
- ✓ Thursday, May 2
- ✓ Thursday, June 6
- ✓ Thursday, July 11 (to avoid proximity to the Independence Day Federal holiday)
- ✓ Thursday, August 1
- ✓ Thursday, September 5
- ✓ Thursday, October 3
- ✓ Thursday, November 7
- ✓ Thursday, December 5

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 November Actions

Action	Lead	By When
Email Tammy Dickinson (tdickinson@ostp.eop.gov) copying the SDR Secretariat (bret.schothorst@mantech.com) to submit relevant or updated information regarding your agency's S&T activities in response to Hurricane Sandy.	SDR Members	ASAP

Email Tammy Dickinson (tdickinson@ostp.eop.gov) copying the SDR Secretariat (bret.schothorst@mantech.com) to offer up SDR disaster risk reduction policy priorities for a roadmap forward for OSTP during the next presidential term beginning in January 2013.	SDR Members	ASAP
Contact Tammy Dickinson (tdickinson@ostp.eop.gov) copying the SDR Secretariat (bret.schothorst@mantech.com) to participate in the initiative to incorporate natural hazards data sets to the Safety Data Community.	SDR Members and Federal Colleagues	Standing
Email Tammy Dickinson (tdickinson@ostp.eop.gov), copying the SDR Secretariat (bret.schothorst@mantech.com) to participate in a small working group or task force to discuss a disaster reduction- or community resilience-focused grand challenge or incentive prize highlighting Federal interagency programs, partnerships, and collaborations.	SDR Members and Federal Colleagues	Standing
Please consider supporting the work of the SDR and its Secretariat through a contribution from your agency. Let Dave (applegate@usgs.gov) know if you need an agency-specific request letter.	SDR Members	Standing
Contact Tammy Dickinson (tdickinson@ostp.eop.gov) if it would be helpful for OSTP to issue a letter to your Department requesting new (or re-affirmed) designation of representatives. Ideas for other entities that should be represented on the SDR are also welcome.	SDR Members	Standing
Contact Dennis Wenger (dwenger@nsf.gov) if your agency is able to provide funding support to the University of Colorado-Boulder's Natural Hazards Center.	SDR Members and Federal Colleagues	Standing
Contact the Secretariat (bret.schothorst@mantech.com) if you are interested in participating in the SDR Coastal Inundation Working Group.	SDR Members and Federal Colleagues	Standing
Send Sezin Tokar (stokar@usaid.gov) your ".gov" e-mail address to receive USG-only updates from USAID on global disaster response activities.	SDR Members and Federal Colleagues	Standing
Contact Bret (bret.schothorst@mantech.com) to receive copies of the Grand Challenges for Disaster Reduction.	SDR Members	Standing