

# Meeting Minutes of the Subcommittee on Disaster Reduction

07 March 2013, 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** *Mark Keim*  
**DHS** Bruce Davis (T)  
**DHS/FEMA** *TBD*  
**DHS/USCG** *Austin Gould*  
**DOD** *Al Johnson*  
**DOE** *Patricia Hoffman*  
**DOT** *Sheila Duwadi*  
**EOP/OMB** *Grace Hu*  
**EOP/OSTP** Tamara Dickinson  
**EPA** Peter Jutro  
*Stephen Clark*

**FERC** Marsha Palazzi (T)  
**HUD** *Dana Bres*  
**NASA** *Craig Dobson*  
**NGA** *Paul Lewis*  
**NGB** *TBD*  
**NIH** Allen Dearry (T)  
**NIST** Marc Levitan (T)  
**NOAA** Margaret Davidson  
Christopher Strager  
**NPS** Marcy Rockman  
**NSF** Dennis Wenger  
**OPHS** Estella Jones (T)

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

## Other Attendees

**BLM** Nancy Dean  
Ronald McCormick  
**DHS** Mary Ellen Hynes  
**DHS/FEMA** Rachel Sears  
**EOP/CEQ** Jamie Pool  
**EOP/OSTP** Peter Colohan  
Allan Manuel  
**EPA** Brendan Doyle (T)  
Eric Koglin (T)  
Paul Kudaruskas  
Keely Maxwell

**FERC** Pamela Romano (T)  
**NASA** Michael Goodman  
Francis Lindsay (T)  
**NGA** Jerry Tuttle  
Kimberly Walls  
**NOAA** Nell Codner (T)  
David Helms (T)  
Kevin Werner  
**NSF** Morris Cohen  
Wendy Harrison

**State** Rajan Sen  
**USFS** Jason Steinmetz (T)  
**USGS** Matt Rollins  
**USNRC** Richard Correia  
Brett Rini  
**ISC Secretariat** Paul Domich  
Denise Richards  
**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 from the OSTP Liaison  
10:30 Review of Infrastructure Subcommittee's Resilience  
Executive Order  
11:15 Discussion on OSTP's Big Earth Data Efforts  
11:55 Close and Next Actions

## Handouts

- March Meeting Agenda
- Draft February Meeting Minutes
- EPA Handout on COAST Model
- OSTP Memo on Public Access of Data
- Executive Order on "Improving Critical Infrastructure Cybersecurity"
- Revised Post-Sandy S&T Lessons Learned Document
- Summary Handout of Proposed ISC Executive Order on "Federal Leadership in Infrastructure Resilience and Renewal"

## **I. Welcome and Introductions**

National Science and Technology Council (NSTC) Subcommittee on Disaster Reduction (SDR) Co-chair David Applegate (USGS) called the March meeting to order at 10:01 a.m., and participants introduced themselves.

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

The February meeting minutes were approved with no changes.

On behalf of Brendan Doyle (EPA), Applegate briefly mentioned a March 19, 2013, webinar discussing applications of the COAST (COastal Adaptation to Sea level rise Tool) model. COAST was developed over the course of five years with support from EPA through the Muskie School of Public Service at the University of Southern Maine and involved a number of Federal, state, and local agencies and researchers. COAST helps coastal jurisdictions make decisions, on a per-asset basis, about whether to fortify, accommodate, or relocate in response to the combined threats of sea level rise and storm surge.

Co-chair Dennis Wenger (NSF) reminded members that the SDR International Working Group (IWG) will continue to meet in 2013 on 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 March meeting, the IWG will: 1) review the potential role of the Disasters Roundtable of the National Academy of Sciences in the restructuring efforts of the U.S. National Platform for the United Nations (UN) International Strategy for Disaster Reduction (ISDR); 2) edit the working group's draft white paper on U.S.-Russia bilateral disaster risk reduction issues and challenges; and 3) discuss details and logistics of the upcoming UNISDR Global Platform meeting in Geneva, Switzerland in May.

## **III. Report from the OSTP Liaison**

In the monthly report from the SDR's Office of Science and Technology Policy (OSTP) Liaison, Tammy Dickinson (OSTP) reported several items of note:

- She described a few initial impacts that budget sequestration cuts have had on Federal government operations and proposed that agency representatives plan to share the sequestration impacts on their agencies' disaster reduction activities at the April meeting;
- Additionally, Dickinson noted that the April meeting will include a briefing by the NASA Near-Earth Object Program – tasked with detecting, tracking, and characterizing potentially hazardous space bodies that could approach Earth – in light of the last month's meteor and asteroid events;
- For information, she also discussed the recently released executive order on *Improving Critical Infrastructure Cybersecurity* and noted that more information can be found at: <http://www.whitehouse.gov/the-press-office/2013/02/12/executive-order-improving-critical-infrastructure-cybersecurity>; and
- Finally, Dickinson stated that the location of the SDR.gov website currently being hosted on NOAA servers – and more broadly, within the Department of Commerce – has come under review as part of a government-wide effort to reduce the number of .gov domain names. She asked SDR members to provide input if encountering similar issues with other interagency sites such as NEHRP, NTHMP, NSWP, etc.

Dickinson then briefly reviewed the draft white paper of the SDR ad hoc working group focused on post-Sandy S&T lessons learned and future research opportunities for the coordination of interagency Federal S&T planning and investment in the wake of the disaster. While the document is nearing completion, agencies are still encouraged to submit input to the ongoing report by contacting the SDR Secretariat ([bret.schothorst@mantech.com](mailto:bret.schothorst@mantech.com)) and copying our OSTP Liaison ([tdickinson@ostp.eop.gov](mailto:tdickinson@ostp.eop.gov)). Regarding next steps, Dickinson noted that the agency-specific text in the document will be combined, centering

primarily around operational- and research-based S&T observations with the hopes of distributing the next iteration for discussion at the Subcommittee's April meeting.

#### **IV. Review of Infrastructure Subcommittee's Resilience Executive Order**

Applegate introduced Mary Ellen Hynes (DHS S&T), who is Director of Research for the Infrastructure and Geophysical Division within the Science and Technology Directorate at DHS. She is also Co-chair of the SDR sister NSTC subcommittee, the Infrastructure Subcommittee (ISC) under the Committee on Homeland and National Security. Hynes briefed the SDR on the ISC's effort to develop an executive order on *Federal Leadership in Infrastructure Resilience and Renewal*.

To begin her presentation, Hynes gave some background information on the ISC. The Subcommittee serves as a forum within the NSTC to develop consensus and resolve issues associated with the coordination of R&D agendas, policy, and programs related to developing, protecting, and ensuring the resiliency of the Nation's infrastructure from all-hazard threats, including weather, geohazards, and terrorism. As part of its mission, the ISC also provides R&D guidance and coordination aimed at supporting advances in resilient infrastructure, including buildings, with a particular focus on new and emerging technologies.

Regarding the draft executive order, Hynes stated that the goal and scope of the proposed directive is to establish an integrated Federal strategy for infrastructure resilience and renewal and to make the reduction of all-hazard risks to Federal buildings and infrastructure a priority for U.S. government agencies. The proposed order would require Federal agencies to methodologically examine vulnerabilities to their facilities and to create and execute long-range plans to make their facilities more resilient to disasters. Hynes underlined that the scope of the directive is broadly directed at all Federal physical infrastructure types, but, initially, the focus will be placed on Federal buildings and campuses due to the availability of building codes, performance criteria, and metrics. The scope also includes lifeline services and distribution systems that support the operation of the asset. As the knowledge base expands to other Federal infrastructure asset types, Hynes added that additional guidance will be developed for inclusion.

According to Hynes, the four primary goals for the executive order are: 1) establish a target for agency-wide initiatives to support resilience and infrastructure renewal at Federal sites in absolute terms by Fiscal Year 2020; 2) create a *Strategic Sustainability and Resilience Performance Plan* based on comprehensive risk assessments; 3) develop *Guiding Principles for Federal Leadership in High Performance Resilient Buildings*; and 4) report to OMB and CEQ annually on progress to 2020 targets. Hynes also underlined the types of resilience and risk reduction strategies that will be employed under the order:

- Application of new high-performance building materials, technologies, and systems;
- Improved design, construction, and placement of new Federal facilities and major renovations of existing facilities;
- Improved designs for campus generation and distribution systems (e.g., lifeline systems);
- Improved designs for data centers and data information networks that enhance resilience, survivability, and security;
- Increased use of recycled water, renewable resources, microgrids;
- Implementing natural approaches to threat mitigation when they enhance long-term effectiveness, sustainability and economic efficiency;
- Improved Federal building design and construction for new buildings and major renovations;
- Improved facility location and natural barrier strategies to actively support lower risk;
- New terms for lease agreements for Federal office space supporting resilient, high-performance building requirements;
- Revising terms for purchasing and contracting agreements for products and services that lower risk and improve resiliency;

- Limit on-site water extraction for purposes other than drinking water to avoid depletion of on-site water supplies; and
- Implementing and achieving the objectives identified in the *Stormwater Guidance for Federal Facilities*.

Hynes stated that, if enacted, CEQ, NSS, and OMB would serve as the lead Executive Office of the President (EOP) oversight authority offices to establish and maintain the Federal activity for improved resilience. Initially, NSS and OMB would review agency-wide initiatives to support resilience and infrastructure renewal at Federal sites to be completed by Fiscal Year 2020, and CEQ would oversee progress and refresh guidance over the long-term. CEQ and the Office of the Federal Environmental Executive would assume responsibility to include Federal resilience objectives in addition to those responsibilities previously established for sustainability in Executive Order 13514, *Federal Leadership in Environmental, Energy, and Economic Performance*. Hynes added that OMB would review and approve each agency's initial and subsequent annual update of its multi-year *Strategic Sustainability and Resilience Performance Plan* concurrent, where feasible, with OMB's review and evaluation of each agency's budget request.

To end her presentation, Hynes reviewed the desired outcome of the draft ISC executive order focused on *Federal Leadership in Infrastructure Resilience and Renewal*. The Federal leadership in infrastructure resilience and renewal established by the order will enhance continuity of operations of Federal agencies and assist the public and private sectors in properly investing in strategies that improve the resilience of their critical assets. Hynes noted that relevant guidelines are not readily available nor are specific codes and standards for improving community resilience and continuity of operations, but she believes that Federal leadership and investment will spur their development. She closed by mentioning that the following outcomes will be accomplished through the directive:

- Incentivize better community development and publicize economic benefits resulting from Federal resilience investment decisions;
- Establish and verify a systematic approach for building resilience into campuses and communities;
- Raise awareness of proven technologies and priorities for improving the resilience of critical assets; and
- Over the long-term, lower property and economic losses on a national level resulting from extreme events.

In response to comments from Peter Jutro (EPA) and Doyle regarding which specific Federal agencies would have the most infrastructure fall under their jurisdiction for the directive, Hynes agreed that GSA would have lead responsibility to make Federal facilities more resilient to disasters due to its mission as the chief manager of civilian Federal property and buildings. In addition to GSA, DoD would also play a prominent role for U.S. government-owned and government-operated property under the auspices of military construction as well as DOT for transportation-related infrastructure. Nancy Dean (BLM) and Marcy Rockman (NPS) added that their agencies would have large roles under the executive order to retrofit historic buildings and other cultural landmarks, while SDR Co-chair Margaret Davidson (NOAA) noted that HUD and EPA would be major players with respect to increasing the resiliency of public housing and wastewater treatment facilities to extreme events. ISC Co-chair Allan Manuel (OSTP) also outlined that additional engagement and coordination with state and local public officials and private sector entities will be critical to achieving the resilience goals of the proposed order.

Because the proposal is still in its draft stages, Hynes and Manuel presented Subcommittee agencies with the opportunity to engage in their effort by helping further along its objectives and fleshing out its content – to which the SDR members were very receptive. Agency representatives who are interested in working with the ISC and OSTP in the coming months on developing the proposed executive order should reach

out to Hynes ([MaryEllen.Hynes@dhs.gov](mailto:MaryEllen.Hynes@dhs.gov)) and Manuel ([Allan\\_K\\_Manuel@ostp.eop.gov](mailto:Allan_K_Manuel@ostp.eop.gov)) directly, copying the SDR Secretariat ([bret.schothorst@mantech.com](mailto:bret.schothorst@mantech.com)) and OSTP Liaison ([tdickinson@ostp.eop.gov](mailto:tdickinson@ostp.eop.gov)).

## **V. Discussion on OSTP's Big Earth Data Efforts**

Applegate introduced Peter Colohan (OSTP), who is a Senior Policy Analyst in the Environment and Energy Division at OSTP and Co-chair of the SDR sister NSTC Subcommittee known as the U.S. Group on Earth Observations. Colohan briefed the group on OSTP's Big Earth Data Initiative, specifically with regards to the potential role of natural hazards data sets.

The Big Earth Data Initiative is the follow-up activity to last year's data- and systems-driven National Earth Observing (NEO) Assessment within OSTP and is associated with the SDR-led collection of natural hazards data sets that occurred last summer for the safety data community at Safety.Data.gov. According to Colohan, his office is in the preliminary phases of ramping up an open environmental data project aimed at improving the interoperability, accessibility, and readability of federally-held, high-impact data sets through advanced metadata applications. Under recent guidance released by OSTP concerning increasing access to data, the Federal government has the responsibility to kickstart innovation by making federally-funded data available and useable to the public. Colohan sees hazards data sets – specifically, data derived during Hurricane Sandy – as the first data type to be exposed in the initiative and would like SDR's assistance in gathering information.

During the briefing, Kevin Werner (NOAA) and Paul Kudaruskas (EPA) inquired as to which Federal data sets would be considered high-impact and what Federal agencies would play a role in supplying them. Colohan noted that base-layer hydrometeorological, topobathymetric, and geospatial data sets gleaned from NASA, NOAA, and USGS will be among the initial targets to be made machine-readable and public, but other Federal disasters-related information from DOT, EPA, NIST, USACE, and USDA – among others – will also be incorporated during the process. Bruce Davis (DHS S&T) stated that FEMA additionally will have an important role in making response and recovery data products available to contribute to the initiative's mission of improving national preparedness to hazards threats. David Helms (NOAA) and Colohan added that the highly detailed work of last year's NEO Assessment – which created an impact-based, swing-weighted “value chain” approach to assess the relative performance and criticality of inputs at each level of the assessment process surrounding 13 societal benefit areas, one of which was disasters – might be an excellent place to draw out preliminary high-impact data sets relevant to this project as well.

While his briefing provided only a primer of background information and many of the next steps are still to be determined, Colohan reported that he is meeting with a group of Federal agencies in the next few weeks to flesh out some of the initiative's specifics in more detail. One potential option under consideration could be to move the hazards subset of data currently housed in the Safety.Data.gov community to a separate Hazards.Data.gov portal on Data.gov. According to Colohan, the increased visibility and accessibility of Federal hazards data sets contained in their own web location will be a key mechanism to empower the survivors of disasters and provide the private sector with a more robust means to develop beneficial apps and tools that will increase the safety of the public during extreme events.

As the Big Earth Data Initiative at OSTP moves forward over the next few months and becomes more refined in nature, he will update the SDR on how and where to engage in the effort. Colohan can also be contacted directly ([Peter E. Colohan@ostp.eop.gov](mailto:Peter_E_Colohan@ostp.eop.gov)) by SDR member agencies that would like more information.

## **VI. Adjournment**

Applegate adjourned the SDR March meeting at 11:59 a.m.

## VII. Future Meetings

SDR meetings in 2013 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:

### 2013

- ✓ 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](mailto:bret.schothorst@mantech.com)).

## IX. 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	OSTP Liaison	202-456-6105	<a href="mailto:tdickinson@ostp.eop.gov">tdickinson@ostp.eop.gov</a>

### Secretariat

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

## X. Summary of March Actions

Action	Lead	By When
Contact the SDR Secretariat ( <a href="mailto:bret.schothorst@mantech.com">bret.schothorst@mantech.com</a> ) and OSTP Liaison Tammy Dickinson ( <a href="mailto:tdickinson@ostp.eop.gov">tdickinson@ostp.eop.gov</a> ) to participate in the ongoing efforts of the ad hoc working group focused on post-Sandy S&T lessons learned and future research opportunities in the wake of the disaster.	SDR Members	ASAP
Reach out to NSTC Infrastructure Subcommittee Co-chairs Mary Ellen Hynes ( <a href="mailto:MaryEllen.Hynes@dhs.gov">MaryEllen.Hynes@dhs.gov</a> ) and Allan Manuel ( <a href="mailto:Allan_K_Manuel@ostp.eop.gov">Allan_K_Manuel@ostp.eop.gov</a> ), copying the SDR Secretariat ( <a href="mailto:bret.schothorst@mantech.com">bret.schothorst@mantech.com</a> ) and the OSTP Liaison ( <a href="mailto:tdickinson@ostp.eop.gov">tdickinson@ostp.eop.gov</a> ), to engage with the ISC's effort to develop an Executive Order focused on <i>Federal Leadership in Infrastructure Resilience and Renewal</i> .	SDR Members	ASAP

Email OSTP Liaison Tammy Dickinson (tdickinson@ostp.eop.gov) and the SDR Secretariat (bret.schothorst@mantech.com) to assist in drafting a white paper to consider the advisability of implementing OSTP and SDR taskings related to multi-agency and multi-hazard coordination laid out in pending Congressional legislation.	SDR Members	Standing
Email the SDR Secretariat (bret.schothorst@mantech.com) and OSTP Liaison Tammy Dickinson (tdickinson@ostp.eop.gov) if willing to pilot an assessment of the progress of the short-, mid-, and long-term goals outlined in an SDR Grand Challenges for Disaster Reduction implementation plans.	SDR Members	Standing
Contact OSTP Liaison Tammy Dickinson (tdickinson@ostp.eop.gov) and 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 OSTP Liaison Tammy Dickinson (tdickinson@ostp.eop.gov) and 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 Co-chair David Applegate (applegate@usgs.gov) know if you need an Agency- or Department-specific request letter.	SDR Members	Standing
Contact Co-chair 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 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