Meeting Minutes of the Subcommittee on Disaster Reduction

2 June 2011, 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.

Officers

David Applegate (USGS), Chair
Margaret Davidson (NOAA), Vice-Chair
Dennis Wenger (NSF), Vice-Chair

NSTC Liaison

Tamara Dickinson (OSTP)

Designated Representatives

BLM *Edwin Roberson*
Daniel Lechefsky
CDC *Mark Keim*
DHS Bruce Davis (T)
DHS/FEMA Sandra Knight
DHS/USCG *Austin Gould*
DOD *Al Johnson*
DOT *Kelly Leone*
Sheila Duwadi
EOP/OSTP Tamara Dickinson
EDA *Audrey Clarke*
EPA *Peter Jutro*
Stephen Clark
FERC *Pamela Romano*
HUD *David Engel*
NASA Craig Dobson
NGA *Chris Crosiar*
NGB *Daniel Bochicchio*
NIH Allen Dearry (T)
NIST William Grosshandler
NOAA Margaret Davidson
NSF Dennis Wenger
OPHS Sven Rodenbeck (T)
State *Nicholas Suntzeff*
Brian Lieke
Fernando Echavarria
USACE *Steven Cary*
Dimitra Syriopoulou
USAID Sezin Tokar
USDA *TBD*
USFS Carlos Rodriguez-Franco
USGS Paula Gori (T)

Other Attendees

DHS Mary Ellen Hynes
EPA Alona Bachi (AAAS)
Brendan Doyle
FEMA Candice Abinanti (T)
NASA Dalia Kirschbaum
NIST Jack Hayes
NOAA Nell Codner (T)
Jack Hayes
Mary Ann Kutny
Margaret McCalla
Roger Pierce
Roger Pulwarty (T)
Jason Tuell
NSF Gregory Anderson (T)
USACE Andrew Bruzewicz
Woodrow Wilson Center/ Smithsonian Lea Shanley (T)
Secretariat Ross Faith
Barbara Haines-Parmele

Agenda

10:00 Welcome, Introductions, and Approval of Minutes
10:05 Report Out from the Global Platform
10:20 Presentation: Drought, early warning, and adaptation
11:00 Presentation: Midwest Flooding, Tornado Outbreaks
11:40 Report from the Chair
11:50 Report from the Vice-Chairs
11:55 Close and Next Actions

Handouts

- Agenda
- Draft May Meeting Minutes
- U.S. Statement to the Third Session of the Global Platform
- Chair's Summary of the Third Session of the Global Platform

I. Welcome and Introductions

Subcommittee on Disaster Reduction (SDR) Chair David Applegate (USGS) called the meeting to order at 10:04 a.m. and the participants introduced themselves. Approval of the Minutes and the Report Out from the Global Platform were shifted to later in the meeting.

II. Presentation: Drought, early warning, and adaptation: Linking disaster risk reduction and climate information services

Roger Pulwarty (NOAA), Director of the National Integrated Drought Information System (NIDIS) Program Office, spoke to the SDR about drought, early warning, and adaptation with a focus on linking disaster risk reduction and climate information services. Pulwarty explained that the task ahead of the group implementing NIDIS is to tie drought and early warning to adaptation and to the services and information that are needed to support adaptation research. Several Federal agencies as well as State, Tribal and local partners are involved in this NOAA-led effort.

The genesis of NIDIS was the recognition by the Western Governors Association that the extremely low flow rate of the Colorado River between 2000 and 2004 had left the region's water resources in near crisis. While diverse sources of information on drought existed, there was no systematic collection and analysis of the social, environmental and economic data focused on the impacts of drought. The Western States needed a place to turn for standardized, tested, and evaluated information and impacts. They also needed this information to be coordinated across Federal agencies and the States, rather than individual agencies and States providing separate views of drought conditions. From this backdrop came the NIDIS Act of 2006, the goal of which was to allow the Nation to move from a reactive to a proactive approach to managing drought risk. Under the act, NIDIS is intended to:

1) Provide an effective drought early warning system:
   (a) Collect and integrate key indicators of drought severity and impacts;
   (b) Produce timely information that reflect local, regional, and State differences;
2) Coordinate and integrate as practicable, Federal research in support of a drought early warning system; and
3) Build upon existing forecasting and assessment programs and partnerships.

The NIDIS Program Office is housed in the Climate Program Office of NOAA and is overseen by an Executive Council that includes representatives from several Federal agencies, the Association of State Climatologists, the private sector, Tribal Nations, and others. Along with supporting climate testbeds and grants, NIDIS runs the drought portal at www.drought.gov, which is now officially the accepted drought website for the U.S. Government, agreed to by the Secretaries of Agriculture, Commerce, and the Interior.

The Executive Council oversees the NIDIS implementation team, which in turn sets up working groups in areas that are drought prone. The working groups carry out the development of the drought early warning information system. They focus on five different areas:

1) Developing public awareness and education;
2) Engaging the practice community and using information;
3) Improving forecasts at the regional and local scales;
4) Making sure that forecasts are held to the requirements of the data; and
5) Ensuring that the impacts assessments work.

NIDIS includes the National Drought Monitor that allows comparison of aspects of drought across the country. Information at the local and watershed scale is critical for decision making, but in years past the information available at these scales was not robust and reliable enough for planning, managing agriculture, water use, etc. So one goal of NIDIS was to develop regionally specific drought monitors that feed local information directly back into and adjust the National Drought Monitor accordingly on a

weekly basis. This innovative approach helps to ensure that regional monitors do not disagreed with the national monitor.

NIDIS puts the information it gathers on the drought portal and then works with users on how best to apply it. The five areas were developed based on a careful assessment to identify the major components that need to be supported for an early warning system that is not just a forecast but an early warning information system that can be used as data and for warning, forecasting, assessments, risk analysis, and risk communication and preparedness. NIDIS provides a clearinghouse for cases of local innovation and best practices and develops the early warning information systems that are focused on forecasting, engagement and preparedness, and actual communication and dissemination of information.

In the NIDIS Act and the Western Governors Association NIDIS report that spurred it, the coordination of existing drought activities on monitoring, prediction, and research was deemed critical. A major issue was how to identify and transfer the indicators of drought, both impacts and physical indicators, decision support tools, and strategies already in use that could make other parts of the country more resilient. Through NIDIS, lessons are transferred to other parts of the country, especially to underserved areas. The three major prototype regional drought information systems that NIDIS is using are for the Upper Colorado River Basin, the Apalachicola-Chattahoochee-Flint River Basin, and California.

III. Presentation: National Weather Service 2011 Performance Highlights

Jack Hayes, Director of the National Weather Service (NWS), spoke to the SDR about the agency's 2011 performance highlights and several recent severe weather events.

The National Weather Service (NWS) has been serving the Nation and making a difference in Americans' lives for 140 years. Today, the NWS has a presence in 122 communities around the country. Through this structure, it provides timely and accurate weather, water, climate, and environmental information to enhance the national economy, protect property, and help people make life-saving decisions every day. The NWS's vision is to build a "Weather-Ready Nation." To achieve its mission, the NWS depends upon partnerships with private sector meteorologists, the media, and other Federal, State, and local partners.

While the NWS mission has remained consistent over the years, the agency's approach to fulfilling it has changed. In the 1990s, the NWS made the conscious decision to scale back its presence around the Nation, from over 300 communities to 122 today, in order to free up funding for investment in science and technology to provide more advanced weather forecasting and warnings.

The U.S. experiences more severe weather than any nation on Earth, and no part of the country is immune from weather-related disasters. Ninety percent of all Presidential disaster declarations are weather-related. A typical year in the U.S. includes:

- 6 Atlantic hurricanes
- 1,300 tornadoes
- 5,000 floods
- Drought and large wildfires
- 26,000 severe thunderstorms
- 600 weather-related fatalities
- $14 billion in weather-related losses

Hayes (NWS) stated that while the NWS has improved warning lead times over the years, high death tolls from weather-related events continue to be an ongoing challenge. The continued loss of life points to the need to improve communication of risk so that citizens are motivated to act upon warnings, and seek appropriate shelter from storms. Hayes stated that improving communication was an area where behavioral social scientists could assist the NWS in saving lives. SDR Vice-chair Dennis Wenger (NSF)

stated that the social science theories still used to inform communication of warnings are based on World War I era societal constructs and interpersonal communication models. Since that time, of course, communication in society has been vastly transformed by technology, including television, GPS, cell phones, the internet, and social media. He stressed the need for updating the theories that underlie communication of warnings to reflect these advances and how they have changed the way Americans receive and act upon information and interact within their communities. In particular, he advocated the need to shift models from interpersonal to mass communication, with the recognition that people often take action based on interaction with their neighbors, rather than on messages from the NWS or other authority issuing the warning.

Hayes (NWS) stated that the increased frequency of weather-related disasters this year has placed a strain NWS personnel, who have been operating at a high "ops tempo" and working large amounts of overtime in response to the blizzards that canvassed much of the country during the winter, the severe tornado outbreaks in the Southeast and Midwest this spring, the ongoing flooding in the Midwest, and the start of the Atlantic hurricane season, which officially began on June 1st. This strain on personnel underscores the need for continuing to enhance and leverage partnerships among the Federal agencies and other sector actors, especially in light of the current budget environment.

Hayes (NWS) also touch upon the space weather hazard that threatens the Nation's communications and electricity grid infrastructure ever more each passing year as society's dependence on technology increases while mitigation of the threat lags, which in turn heightens vulnerability. Hayes stated that he recently helped to launch an initiative of industrialized countries at the World Meteorological Congress to build an online portal for the sharing of data and information related to the space weather hazard.

Sandra Knight (FEMA) echoed the importance of leveraging resources among the various Federal agencies. She highlighted the NWS Inter-Regional Integrated Services (IRIS) as an opportunity to leverage resources and share data between the NWS and FEMA. She also noted that addressing hazards such as severe storms, flooding, drought, and other weather-related hazards independently would not provide a clear picture of the entire water cycle. Rather, the models and data that inform these individual hazards should be better integrated to inform the broader picture.

Jack Hayes (NIST) stated that NIST deployed a team of four experts to Joplin, MO on a preliminary reconnaissance mission following the severe tornado that struck the city on May 22. The team's mission was to collect information and to determine whether a larger, more detailed, follow-on reconnaissance effort was needed. Hayes suspected that NIST would have more information to relay to the SDR at the subcommittee's July 7 meeting.

IV. Approval of Minutes

The May Meeting Minutes were approved with changes to the summary of the NIST Disaster and Failure Studies presentation.

V. Report Out from the Global Platform

SDR Vice-Chair Margaret Davidson (NOAA) led the U.S. Delegation to the UN International Strategy for Disaster Reduction's Third Session of the Global Platform for Disaster Risk Reduction (May 8-13, Geneva, Switzerland). The delegation included representatives from the Department of State, FEMA, NOAA, NSF, USAID, and the USGS. The delegation was able to cover the broad majority of concurrent sessions that took place during the Global Platform. Hardcopies of the U.S. Statement delivered at the conference as well as the Chair's Summary of the conference were provided to SDR Members in the meeting folders. Japan has offered to host the Third World Conference on Disaster Reduction in 2015. That conference is expected to focus on the linkage between natural hazards and nuclear safety and have a strong emphasis on cascading disasters.

Davidson drew attention to several issues and opportunities on the international front. She noted the increasing importance of cascading disasters for both the science and practitioner communities. She also highlighted that U.S. Government preparations are already underway for the Rio +20 UN Conference on Sustainable Development (June 4-6, 2012, Brazil), and emphasized the importance of working to integrate the Global Platform's prime disaster risk reduction messages into the climate adaptation and sustainability agendas of the conference. Also on the international front, Davidson noted her involvement in planning for the next Asia-Pacific Economic Cooperation (APEC) meeting, which will be hosted this fall in Honolulu. The U.S. Chamber of Commerce and the U.S. Pacific Command (PACOM) will be co-hosting an advance preparatory meeting, also in Honolulu, in August, on energy, climate, water, and natural disasters in the Asia-Pacific Region. Davidson stressed the importance of working to cross-thread the themes of these international meetings so the outcomes are mutually reinforcing.

Wenger encouraged SDR Members to read the Global Assessment Report for Disaster Risk Reduction, which was rolled out just prior to the start of the Global Platform meeting. The report is available at: http://www.preventionweb.net/english/hyogo/gar/2011/en/home/index.html. He stated that one of the ISDR's strengths has been laying out the foundation and conceptual framework for advancing the disaster risk reduction agenda. The report links disaster risk reduction to rural and urban poverty, climate change, declining ecosystems, and development choices.

Pulwarty stated that the Organization of American States (OAS) would be hosting a presentation on the Global Assessment Report at its headquarters in Washington, DC, in June, and that the ISDR had expressed interest in providing a similar presentation on Capitol Hill. It was also suggested that a presentation to the Federal agencies would be valuable.

VI. Report from the Chair

No formal report was given by the Chair.

VII. Report from the Vice-Chairs

No formal report was given by the Vice-Chairs.

VIII. Report from the NSTC Liaison

No formal report was given by the NSTC Liaison.

IX. Adjournment

The meeting adjourned at 12:14 p.m.

X. Future Meetings

In 2011, the SDR will meet from 10:00 a.m. to 12:00 p.m. on the first Thursday of each month in the Lincoln Room of the White House Conference Center. The meeting dates are:

Thursday, July 7, 2011	Thursday, September 1, 2011	Thursday, November 3, 2011
*Thursday, August 4, 2011	Thursday, October 6, 2011	Thursday, December 1, 2011

*Subject to cancellation

XI. 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 Ross Faith (ross.faith@mantech.com).

XII. Contact Information

SDR Leadership

David Applegate	Chair	703-648-6714	applegate@usgs.gov
Margaret Davidson	Vice Chair	843-740-1220	margaret.davidson@noaa.gov
Dennis Wenger	Vice Chair	703-292-8606	dwenger@nsf.gov

Secretariat

Ross Faith	703-388-0308	Ross.Faith@ManTech.com
Barbara Haines-Parmele	703-388-0309	Barbara.Haines-Parmele@ManTech.com

XIII. Summary of June Actions

Action	Lead	By When
Contact the SDR Secretariat (ross.faith@mantech.com) if you are interested in participating in a working group that will be drafting a lessons learned report covering the earthquakes and tsunami in Japan, New Zealand, Chile, and Haiti.	SDR Members and Federal colleagues	ASAP
Contact Dave (applegate@usgs.gov) or Ross (ross.faith@mantech.com) for information on how to tie into the National Level Exercise 2011 calendar of events.	SDR Members and Federal colleagues	ASAP
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 Ross (ross.faith@mantech.com) to receive copies of the Grand Challenges for Disaster Reduction Implementation Plan packets or CD.	SDR Members	Standing
Let Dave (applegate@usgs.gov) or Ross (ross.faith@mantech.com) know how you use the implementation plans, including when you link to the plans from your agency websites. Send Ross or Dave additional distribution suggestions, including relevant contact information.	SDR Members	Standing