

Meeting Minutes of the Subcommittee on Disaster Reduction

4 October 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 *Sandra Knight*
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 (T)
HUD *Dana Bres*
NASA Craig Dobson
NGA Paul Lewis
NGB *TBD*
NIH Allen Dearry (T)
NIST Marc Levitan
NOAA Margaret Davidson (T)
Chris 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

DHS/FEMA Keith Turi
EOP/CEQ Anne Marie Pippin
Susan Ruffo
EPA Brendan Doyle
Keely Maxwell
NASA Frank Lindsay (T)

NOAA Andrea Bleistein
Nell Codner
David Helms
Margaret McCalla
Roger Pulwarty (T)
USDA Brad Rippey

USGS Bill Leith
Kristin Ludwig
USNRC Brett Rini
Secretariat Bret Schothorst
Barbara Haines-Parmele

Agenda

10:00 Welcome and Introductions
10:05 Briefing on Drought of 2012: Science, Impacts, and
Early Warning
10:40 Presentation on U.S. Agricultural Drought of 2012
11:15 Update on NEO Assessment Working Group Disasters
SBA Final Report
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

- October Meeting Agenda
- Draft September Meeting Minutes
- Great SouthEast ShakeOut Federal Agency Participation Handout
- FEMA PPD-8 National Preparedness Campaign Handout
- Schedule of Events for Sept. 14 OSTP Datapalooza

I. Welcome and Introductions

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

II. Briefing on Drought of 2012: Science, Impacts, and Early Warning

Applegate introduced Roger Pulwarty (NOAA) of the National Integrated Drought Information System (NIDIS), who briefed the SDR on the ongoing U.S. drought crisis of 2012. Pulwarty is Director of NIDIS, which is a dynamic and accessible drought information system that provides users with the ability to determine the potential impacts of drought, the associated risks they bring, and the decision support tools needed to better prepare for and mitigate the effects of drought.

Pulwarty began his presentation by highlighting that the U.S. is in the midst of its most expansive drought since December 1956, with 40 states having drought-designated counties eligible for emergency aid according to the U.S. Drought Monitor, which is produced in partnership between the National Drought Mitigation Center at the University of Nebraska-Lincoln, NOAA, and the USDA. Over 65 percent of the contiguous U.S. as of September 2012 was suffering moderate to exceptional drought, nearly twice the amount of land affected a year ago. Pulwarty underlined that one of the primary factors behind the drought is the record temperatures recorded over much of the U.S. during the summer months. In fact, July 2012 was the hottest July nationally since records were first kept in 1895.

According to Pulwarty, the combined impacts of low precipitation amounts, high temperature extremes, and reduced groundwater levels have affected many central, southern, and western states and have been major drivers of the drought's intensification over the course of the year. Pulwarty noted that unlike other natural hazards, responding to drought disasters is very different from just the initial emergency response action. Many of the precautionary measures employed before the onset of droughts – like water use restriction measures and irrigation diversion practices – are also commonplace during the event itself. While the onset of drought is critical, the most important aspects tend to be the underlying development factors and the duration of the incident. Pulwarty added that drought has little to do with single, discrete events and is one of the best examples of cumulative risk of any natural hazard.

Based on information compiled by the Drought Impact Reporter at the National Drought Mitigation Center of the University of Nebraska-Lincoln between January and August 2012, Pulwarty highlighted that the following sectors have been most affected most by drought according to 3,949 drought impact reports from the media, agricultural observers, public citizens, and other sources:

- Agriculture: 23.7%
- Water Supply and Quality: 16.5%
- Fire: 12.4%
- General Awareness: 11.9%
- Relief, Response, and Restrictions: 9.7%
- Plants and Wildlife: 8.4%
- Society and Public Health: 5.4%
- Business and Industry: 4.8%
- Tourism and Recreation: 4.6%
- Energy: 2.5%

Although fire was only the third most reported sector in the Drought Impact Reporter, Pulwarty stated that the drought conditions have led to a historic increase in wildfires, with 8.81 million acres of land having burned so far in the U.S. The 10-year average is 6.64 million acres, with the modern record sitting at 9.87 million acres in 2006.

Using the Colorado River Basin as one example of the effects of the extended drought on local water supplies in the western U.S., Pulwarty highlighted that the demand for water in the region has now exceeded the streamflow of the river for the first time in recorded history. Combined with the fact that 1999 through 2010 ranks as the second driest 12-year period ever for the Colorado River, Pulwarty noted that the threshold for crisis in the upper and lower river basin areas is now extremely low, and major drought conditions are not required to push the system into emergency-level conditions. Another side effect of the drought conditions in this area is that most of the vegetation in the Four Corners region of the lower basin has died, and the dunes have begun to move in one of the broadest, spatial-scale die-offs seen anywhere in the U.S. Pulwarty stated that this can be attributed to the rapidly changing ecosystem dynamic due to declining precipitation levels and rising temperatures and added that a concerted multi-stakeholder effort is underway to work with tribal leaders to plant more drought tolerant species such as rice grass in these semi-arid zones.

Pulwarty's briefing identified a number of drought science and technology achievements that have been accomplished to date and underlined additional priorities in these areas going forward. Pulwarty highlighted the following improvements and increases with regards to drought risk reduction: the number of states, communities, and institutions with improved capacity to inform risk management and reduce exposure to climatic risks; the number of staff in or working with those institutions trained to develop and communicate local drought information and help reduce impacts; the number of research projects that conduct and update drought impacts and user needs assessments in drought-sensitive parts of the U.S.; and the percentage of the western U.S. population covered by adequate climate risk and early warning information systems. He also noted that both cross-agency Federal coordination and national-level drought preparedness policy still need to be developed further in order to adequately assess the socio-economic risks of extensive drought and achieve maximum efficiency in reaching state and local partners to allow them to make more-informed decisions and adapt to future risks. As Pulwarty noted in closing, there is no substitute for comprehensive local drought monitoring – it is one of the most critical aspects of effective drought risk reduction. If SDR members have questions regarding the ongoing U.S. drought crisis or NIDIS, please contact Pulwarty (roger.pulwarty@noaa.gov).

III. Presentation on U.S. Agricultural Drought of 2012

Applegate introduced Brad Rippey (USDA), who followed up Pulwarty's presentation by briefing the SDR on the ongoing U.S. agricultural drought crisis of 2012 from the USDA perspective. Rippey is an agricultural meteorologist with USDA's Office of the Chief Economist and is the managing editor of the Weekly Weather and Crop Bulletin. The Weekly Weather and Crop Bulletin provides a vital source of information on weather, climate, and agricultural developments worldwide, along with detailed charts and tables of agrometeorological information that are appropriate for the season.

Rippey started off his presentation by mentioning that three primary, independent events have contributed to the historically dry conditions currently affecting much of the U.S.: 1) La Niña in 2010-11 and 2011-12 contributed to the preceding historic drought in 2011 across the southern Plains; 2) during the 2011-12 cold season, a strong jet stream across the North Atlantic Ocean drew cold air and moisture away from the U.S.; and 3) around Memorial Day 2012, a blocking high pressure system in the North Atlantic Ocean locked in hot, dry weather across much of the U.S. To put this hot weather over the spring and summer months into perspective, Rippey noted that, for the time period between March and August 2012, 40 of the 48 contiguous states recorded the warmest or second warmest average temperatures during that six-month span in their 118-year recorded history.

Based on information collected by the U.S. Drought Monitor over that same period, Rippey outlined that residual, long-term drought persisted across much of the south in early March, but shorter-term drought rapidly expanded to the north and to the east into May, June, and July. As the season moved into August and September, the short-term drought shifted to longer-term drought in the north and west primarily

centered on the Central Plains and the Intermountain West, in the process setting a new U.S. Drought Monitor record with over 65 percent of the U.S. covered by moderate, severe, and extreme drought. Although the U.S. Drought Monitor has only been around for 13 years, Rippey highlighted that one of the reasons that it has gained an increased use within USDA and other Federal agencies is because it puts drought into historical perspective.

Several agricultural commodities have also been adversely affected by this historic drought, according to Rippey. Livestock has been hit hard by drought – approximately 69 percent of the domestic hay acreage in the U.S. is within an area experiencing drought and roughly 76 percent of the domestic cattle inventory. Over 84 percent of the corn-growing areas in the U.S. are currently in drought, with those areas accounting for approximately 99 percent of the overall national production. About 80 percent of soybeans are currently being grown in moderate to severe drought conditions, as well as nearly 75 percent of winter wheat. Production of multiple row crops has also been severely hampered:

- 1) Corn production is down nearly 4.1 billion bushels (28 percent) to 10.7 billion bushels overall and down to 122.8 bushels/acre from 166.0 bushels/acre in June (26 percent);
- 2) Soybean production is down 575 million bushels (18 percent) to 2.63 billion bushels overall and down to 35.3 bushels/acre from 43.9 bushels/acre in June (20 percent); and
- 3) Sorghum production is down 89 million bushels (27 percent) to 246 million bushels and down to 48.3 bushels/acre from 65.0 bushels/acre in June (26 percent).

Due to these extreme drought conditions, Rippey outlined several measures that the USDA has taken since July to try to ease the impact of the disaster:

- Intent to purchase up to \$170 million of pork, lamb, chicken, and catfish for federal food nutrition assistance programs, including food banks, to help relieve pressure on American livestock producers and bring the nation's meat supply in line with demand;
- Allowed emergency loans to be made earlier in the season;
- Intent to file special provisions with the federal crop insurance program to allow haying or grazing of cover crops without impacting the insurability of planted 2013 spring crops;
- Authorized up to \$5 million in grants to evaluate and demonstrate agricultural practices that help farmers and ranchers adapt to drought;
- Granted a temporary variance from the National Organic Program's pasture practice standards for organic ruminant livestock producers in 16 states in 2012;
- Authorized \$16 million in existing funds from its Wildlife Habitat Incentive Program and Environmental Quality Incentives Program to target states experiencing exceptional and extreme drought;
- Initiated transfer of \$14 million in unobligated program funds into the Emergency Conservation Program to help farmers and ranchers rehabilitate farmland damaged by natural disasters and for carrying out emergency water conservation measures in periods of severe drought;
- Authorized haying and grazing of Wetlands Reserve Program easement areas in drought-affected areas where haying and grazing is consistent with conservation of wildlife habitat and wetlands;
- Lowered the reduction in the annual rental payment to producers on Conservation Reserve Program acres used for emergency haying or grazing from 25 percent to 10 percent in 2012;
- Authorized counties for emergency haying and grazing outside the primary nesting season in 2012 if the county is designated as level "D0 – Abnormally Dry", as of July 19, 2012 or later, according to the U.S. Drought Monitor; and
- Simplified the USDA Secretarial disaster designation process and reduced the time it takes to designate counties as affected by disasters by 40 percent.

According to Rippey, the fast track USDA Secretarial disaster designation process is a streamlined process that provides for an nearly automatic designation for any county in which drought conditions

meet the “D2 – Severe Drought” drought intensity value for eight consecutive weeks as reported in the U.S. Drought Monitor. A county that has a portion of its area in a drought intensity value of “D3 – Extreme Drought” or higher at any time during the growing season also would be designated as a disaster area. The revised process also: streamlines the USDA Secretarial designation process by eliminating steps from the current process; implements a reduced interest rate for emergency loans that effectively lowers the current rate from 3.75 percent to 2.25 percent; preserves the ability of a state governor or tribal council to request a Secretarial Disaster Designation; removes the requirement that a request for a disaster designation be initiated only by a formal letter from a state governor or tribal council; and further streamlines the disaster designation process for severe drought occurrences by utilizing the U.S. Drought Monitor as a tool to automatically trigger disaster areas with no further documentation. If SDR members have questions regarding USDA’s role in the ongoing U.S. drought crisis or the Weekly Weather and Crop bulletin, please contact Rippey (brippy@oce.usda.gov).

Applegate kicked off the question and answer period for the drought speakers by inquiring if the anticipated transition from a drought producing mainly agricultural impacts to a drought producing more hydrologic impacts will result in persistent issues into 2013 and beyond. Rippey stated that if severely affected areas don’t get precipitation relief soon – such as the north central U.S. and the western states that have a heavy reliance on managed water – it will become a huge issue for the summer of 2013 unless there is an abundant winter snowfall this year. Because a weakened El Niño climate pattern for this winter is already expected to produce less snowfall amounts than originally anticipated, Rippey underlined that the outlook for extended relief in 2013 and beyond does not look promising.

Paul Lewis (NGA) asked if any data being collected by the lead Federal drought agencies shows that the privatization of water rights in regions severely affected by drought impacts the ability of a community to provide and utilize those resources in the public interest. Pulwarty noted that NIDIS is supporting research studies looking into the value and role of private water purchases and transfers in areas affected by drought as well as areas supplying water to drought-impacted regions but not specifically into the utilization of an exclusively privatized water resources model.

Applegate noted the difficulties and challenges of collecting socio-economic impact data for hazards such as drought, which, according to Pulwarty, have been a major issue and an area in which further assistance is needed. From the NIDIS standpoint, the immediate impact of drought on the economy is not apparent, and crop insured loss data sets have limitations in their ability to accurately represent how water-related and other crop-related impacts affect the national economy. The relationship between extreme drought and extreme precipitation events – such as floods and coastal inundation – came up in a question posed by Margaret Davidson (NOAA), and Pulwarty stated that this also has become a key issue for Federal drought experts to determine what, if any, causal role extreme precipitation events play in reducing the duration and extent of drought and its impacts on the local and national economies.

IV. Update on NEO Assessment Working Group Disasters SBA Final Report

Tammy Dickinson (OSTP) introduced David Helms (NOAA), who updated the SDR on the National Earth Observation (NEO) Strategy Assessment Working Group's work on the Disasters Societal Benefit Area (SBA). As Helms noted, the assessment of the Disasters SBA is part of a broader effort covering 12 societal benefit areas, which will guide OSTP’s creation of a 10-year strategic National Plan for Earth Observations to allocate and prioritize future resources and investments for the development, deployment, and maintenance of critical Earth-observing systems. The individual SBA reports – covering Agriculture and Forestry, Biodiversity, Climate, Disasters, Ecosystems, Energy and Earth Resources, Human Health, Oceans and Coastal Resources, Space Weather, Transportation, Water Resources, and Weather – will be finalized by October 30 and rolled up with the final reports of other individual SBAs into a single integrated document that OSTP and OMB will use in the completion of an Earth observations-based supplement to the President’s FY 2014 budget that will be publicly released with the President's budget.

The individual reports will not be released publicly – they are considered budget sensitive and will be made available by OMB on a limited basis. SDR members who have questions or concerns about the work of the NEO Strategy or the assessment of the Disasters SBA should contact Helms (david.helms@noaa.gov).

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

The September 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 October meeting, the IWG will primarily discuss the SDR's role as the U.S. National Platform for the UN International Strategy for Disaster Reduction (ISDR), as well as the postponement of the UNISDR Regional Platform Meeting and potential U.S. participation with an Organisation for Economic Co-operation and Development (OECD) Global Science Forum global all-hazards risk modeling initiative.

For the first time, the National Capital Region will be participating in a ShakeOut earthquake drill, which will take place on October 18, 2012 at 10:18 a.m. The Great SouthEast ShakeOut will encompass five states along the Southeastern and Mid-Atlantic coast (Georgia, South Carolina, North Carolina, Virginia, and Maryland) as well as the District of Columbia. To date, more than 54 Federal entities encompassing over 128,000 individuals have registered to participate. Please consider getting your agency to participate if not already doing so – the list of registered participating organizations is at <http://www.shakeout.org/southeast/index.html>. ShakeOut is also taking place on Oct. 18 in a number of other states, including Alaska, Arizona, California, Idaho, Nevada, Oregon, and Washington along with Guam and Puerto Rico. (Those in the Central U.S. should mark their calendars for 2/7/13 and those in Utah for 4/17/13, which are their next ShakeOut dates.)

FEMA has drafted a discussion paper on their PPD-8 campaign to build and sustain national preparedness. The campaign's long-term vision is for individuals and communities to take the necessary actions to be better prepared for the threats and hazards they face, creating a more secure and resilient Nation as called for in the National Preparedness Goal released in October 2011. Planned focus areas for the campaign include: updated preparedness messaging on Ready.gov and via other Federal agencies and partners at all levels rooted in continued social science research; increased earned and paid media for targeted initiatives; promoting community activities that build and sustain preparedness; and launching a national day of action and multi-hazard drill. These efforts are intended to directly affect public knowledge, attitudes, and behaviors about preparedness. For more information on the initiative, please visit <http://www.fema.gov/presidential-policy-directive-8-national-preparedness#5>. And please let the SDR Secretariat (bret.schothorst@mantech.com) know if you would like to be involved in the campaign (or find out how your agency is involved).

The growing role of social media and crowdsourcing was the focus of a panel discussion at our February SDR meeting. The Woodrow Wilson Center for International Scholars hosted a follow-up workshop "Connecting Grassroots to Government for Disaster Management: A Policy Roundtable" on September 13-14, 2012 on the use of social media, crowdsourcing, and related technologies for the disaster management process. The workshop brought together Federal agency staff, academic research practitioners, and members of the digital volunteer community to explore the current and potential future uses of these technologies and methods by Federal, state, and local agencies during disasters. The Wilson Center will be publishing a report on the workshop by the end of the calendar year, but in the interim, archived videos from the two-day event can be found on their website at <http://www.wilsoncenter.org/event/webcast-day-1-connecting-grassroots-to-government-for-disaster-management-policy-roundtable-0> (Day 1) and <http://www.wilsoncenter.org/event/webcast-day-2->

[connecting-grassroots-to-government-for-disaster-management-policy-roundtable](#) (Day 2). If SDR members are interested in the follow-on formation of a social media/crowdsourcing and disasters interagency working group at the Wilson Center, please contact Lea Shanley (Lea.Shanley@wilsoncenter.org).

VI. Report from the OSTP Liaison

Dickinson reminded SDR members that the November meeting will be devoted to a discussion identifying disaster risk reduction policy priorities – as well as future Subcommittee 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).

VII. Adjournment

The meeting adjourned at 12:10 p.m.

VIII. 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, January 5	Thursday, May 3	Thursday, September 6
Thursday, February 2	Thursday, June 7	Thursday, October 4
Thursday, March 1	*Thursday, July 12	Thursday, November 1
Thursday, April 5	**Thursday, August 2	Thursday, December 6

*We shifted the July meeting to the second Thursday of the month to avoid proximity to the July 4th Federal holiday.

**Cancelled.

IX. 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).

X. 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-Parmelee	703-388-0309	barbara.haines-parmelee@mantech.com

XI. Summary of October Actions

Action	Lead	By When
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Email the SDR Secretariat (bret.schothorst@mantech.com) copying Tammy Dickinson (tdickinson@ostp.eop.gov) 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
Please email David Helms (david.helms@noaa.gov) if you have questions or concerns about the work of the NEO Strategy or the assessment of the Disasters SBA.	SDR Members	ASAP
Contact Roger Pulwarty (roger.pulwarty@noaa.gov) or Brad Rippey (brippy@oce.usda.gov) with questions regarding the ongoing U.S. drought crisis.	SDR Members	Standing
Email Lea Shanley (lea.shanley@wilsoncenter.org) if interested in the formation of a social media/crowdsourcing and disasters interagency working group at the Wilson Center.	SDR Members	Standing
Please email 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 (aplegate@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