Meeting Minutes of the Subcommittee on Disaster Reduction

5 January 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) (T)
Dennis Wenger (NSF)

OSTP 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/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 *William Grosshandler*
NOAA Margaret Davidson (T)
Laura Furgione
NPS Marcy Rockman
NSF Dennis Wenger
OPHS *Sven Rodenbeck*
State *Nicholas Suntzeff*
Fernando Echavarria
USACE *Steven Cary*
Dimitra Syriopoulou
USAID Sezin Tokar
USDA *TBD*
USFS *Carlos Rodriguez-Franco*
USGS David Applegate
USNRC Brian Sheron

Other Attendees

DHS Mary Ellen Hynes
EPA Brendan Doyle
FEMA Doug Bellomo
Mark Crowell
Rachel Sears
Homeland Security Inst.
Stacy Okutani
NASA Michael Goodman
Frank Lindsay
NIST Marc Levitan
NSF Gregory Anderson
Kishor Mehta
NOAA Nell Codner
Maria Honeycutt (T)
Tracy Rouleau
State Andrew Reynolds
USACE Jeffrey Arnold
Andrew Bruzewicz
USGS Bob Bewley
Bob Hainley
Tim Cohn
USNRC Brett Rini
Secretariat Ross Faith
Barbara Haines-Parmele
Bret Schothorst
FEMA Contractors:
David Divoky (T)
Will Thomas

Agenda

10:00 Welcome and Introductions
10:05 Discussion on OSTP Priorities for Disaster Resilience
10:35 Report from the Co-Chairs and Approval of Minutes
10:55 Report from the OSTP Liaison
11:05 Presentation: The Impact of Climate Change on the National Flood Insurance Program
11:55 Close and Next Actions

Handouts

- Agenda
- Draft December Meeting Minutes
- Letter from the Co-chairs Seeking Agency Support for SDR

I. Welcome and Introductions

Subcommittee on Disaster Reduction (SDR) Co-Chair David Applegate (USGS) called the meeting to order at 10:00 a.m., and participants introduced themselves.

Applegate noted that the presentation scheduled to be given on that day by a representative of FERC's Office of Electric Reliability had been canceled. Efforts are currently underway to reschedule the presentation for the SDR's March meeting.

II. Discussion on OSTP Priorities for Disaster Resilience

Tammy Dickinson (OSTP) introduced Steve Fetter (OSTP), who spoke to the SDR about the Office of Science and Technology Policy's priorities for disaster resilience for the coming year. Fetter has been at OSTP since 2009 and is currently the Acting Associate Director for OSTP's Energy and Environment Division. Before taking on this role, he was the OSTP Assistant Director At-large. Fetter came to OSTP from the University of Maryland School of Public Policy, where he was a dean from 2005-2009 and a member of the faculty since 1988. In addition to his experience in academia, he also has a strong background in national security issues and sits on numerous S&T-related committees and boards of directors.

Fetter started his discussion by reiterating the point he made at a June 2011 meeting with the SDR Co-chairs that the close linkages between disaster resilience and national security behooved the SDR and National Security Staff to build a strong relationship. Fetter noted that while the National Security Staff is typically focused on coordinating operational responses to disasters when they occur, he nevertheless thought that the staff members would have insights from their experiences that could inform the science and technology R&D agenda for disaster preparedness and reduction.

Heading up the disaster reduction portfolio on the National Security Staff is Richard Reed, who serves as the Special Assistant to the President for Homeland Security and Senior Director for Resilience Policy. Reed helped to lead U.S. efforts in responding to the Fukushima Daiichi Nuclear Power Plant accident as well as the Deepwater Horizon oil spill. Brian Sheron (USNRC) commented that an after action report on Fukushima had just been completed by the U.S. Nuclear Regulatory Commission (USNRC). Fetter stated that when he reviewed a draft of that report approximately six months ago, he had noticed R&D and S&T needs related to the actual or potential release of radioactive material, such as atmospheric modeling, which fall outside the scope of the USNRC. He recommended that the SDR may be a good vehicle to coordinate these more indirect but still important research aspects.

Fetter further noted that Brian Kamoie, who serves as the White House Senior Director for Preparedness Policy under Reed would also be a good resource for collaboration with the SDR.

Turning his remarks to topics more directly related to his portfolio at OSTP's Energy and Environment Division, Fetter highlighted climate change adaptation and Earth observations as two of OSTP's main priorities for the coming year. Fetter noted that past reluctance to push the climate change adaptation agenda – owing to concerns that doing so might re-cast perceptions of climate change mitigation efforts as less important – had given way to viewpoints that the two approaches were not mutually exclusive, but can and should be advanced in tandem. He added, moreover, that climate change adaptation may, in fact, be less politically charged in the future, since adaptation centers on reducing vulnerability to hazards caused in large part by severe weather, and because it makes sense to improve disaster resilience regardless of whether the climate is changing and whether humans are responsible for that change.

Fetter encouraged the SDR to coordinate with two closely related climate change adaptation efforts. The first effort is the White House Interagency Climate Change Adaptation Task Force, co-chaired by Fetter himself, Jane Lubchenco (NOAA), and Nancy Sutley (CEQ). Fetter stated that although the task force

has been working with the Federal agencies on their own climate change adaptation plans, it is primarily focused on practical measures at the community level, and in that vein, has been engaging with state and local governments to facilitate the inclusion of climate change adaptation into resilience planning at those levels. The task force has not been particularly focused on the R&D end of the spectrum, however, and Fetter identified that as an aspect where the SDR might provide input and expertise.

The second adaptation effort identified by Fetter was for the SDR to help inform and advance the research agenda set forth in the U.S. Global Change Research Program's draft Strategic Plan for 2012-2021, which is scheduled to be released in early 2012. As currently written, the draft plan sets out four goals, which are:

Goal 1: Advance Science: Advance scientific knowledge of the integrated natural and human components of the Earth system.
Goal 2: Inform Decisions: Provide the scientific basis to inform, and enable timely decisions on adaptation and mitigation.
Goal 3: Sustained Assessments: Build sustained assessment capacity that improves the nation's ability to understand, anticipate, and respond to global change impacts and vulnerabilities.
Goal 4: Communicate and Educate: Advance communications and education to broaden public understanding of global change, and empower the workforce of the future.

The USGCRP's climate change adaptation effort is led by Ann Bartuska, who serves as the U.S. Department of Agriculture's Undersecretary of Research, Education, and Economics as well as USDA's Chief Scientist. Bartuska is also the Vice Chair for Adaptation Science of the NSTC Subcommittee on Global Change Research. Fetter recommended that the SDR invite her to an upcoming SDR meeting to give a presentation or lead a discussion on climate change adaptation. The USGCRP has only just recently identified these high-level goals in the strategic plan, and because an adaptation research agenda is still a relatively novel concept, the USGCRP is still trying to clarify what that research agenda should be and how the effort should be coordinated amongst the Federal agencies. Fetter stated that the significant overlap of this research agenda with the SDR's mandate would seem to provide an opportunity for coordination with the SDR.

OSTP's second major priority area for the coming year related to disaster resilience is Earth observations. In 2011, OSTP formed a congressionally-directed National Earth Observation (NEO) Task Force for the purpose of developing a ten-year National Strategy for Earth Observations that would be updated every three years. That effort is being led by Peter Colohan (OSTP) in conjunction with the Federal agencies that operate space-based and in situ Earth observation systems as well as Federal users of Earth observations information, data, and products. Fetter stated that although no concrete initiatives have been set into motion at this point, there is presently under development a draft document laying out how this strategy will be written and how the needs will be defined. The strategy will divide the needs by societal benefit area, one of which will be disasters.

The current course of action is to ask all the Committee on Environment, Natural Resources, and Sustainability (CENRS) subcommittees, including the SDR, to take on one of the societal benefit areas. The SDR will be asked to help determine needs for disaster information and then identify the highest priorities amongst those needs to inform plans for future U.S. investments in Earth observation systems. Fetter mentioned for example that land monitoring is currently a hot topic due to replacement of the Landsat satellites, and that the SDR would be asked to assist OSTP to determine: 1) what data related to disasters is needed from the replacement satellite system(s), and 2) how those capabilities can be incorporated in an efficient way across all the societal benefit areas. The end goal is to select for investment systems that can deliver the highest priority data across all societal benefit areas.

Applegate highlighted that the SDR has had a good track record of collaborating with both the U.S. Group on Earth Observations (USGEO) and the USGCRP. Past collaborations between the SDR and USGEO include jointly authoring the reports: *Improved Observations for Disaster Reduction: Near-Term Opportunity Plan* (2006), *Tsunami Risk Reduction for the United States: A Framework for Action* (2005), and others.

In 2009, the USGCRP reached out to the SDR for nominations of authors and editors to the international group of experts then beginning the process of writing the Intergovernmental Panel on Climate Change (IPCC) Special Report on Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation (SREX). In 2011, the SDR assisted USGCRP with the U.S. Government review of the draft report. Applegate noted that this would be a great way to continue that interface. He also stated that it had been particularly encouraging to see the National Security Council (NSC) renew its focus over the past few years on resilience writ large, including natural disasters. He stated that the SDR welcomes continued engagement with the NSC, USGCRP, and the effort to develop a National Strategy for Earth Observations.

Frank Lindsay (NASA) stated that NASA relies on international partnerships for access to a significant amount of Earth observations data, and he inquired whether the National Strategy for Earth Observations presently under development would be aligned with international research efforts on disasters and climate change. Fetter stated that current U.S. efforts are fairly advanced in terms of being aligned with the work of other countries. He added that USGEO serves as the vehicle for determining U.S. positions for international meetings of the Group on Earth Observations (GEO).

Lindsay inquired further as to how the National Strategy for Earth Observations would strike a balance between collecting data for the purpose of informing decision making versus data geared toward the advancement of research. Fetter stated that the U.S. is only in the early stages of thinking about what the Earth observations research agenda will look like, but that one item that has been mentioned is to use models that incorporate human as well as physical systems, such as those overlapping at the energy-water nexus. By way of example, Fetter highlighted the 2003 European heat wave, which raised temperatures in rivers and lakes, from which several nuclear power plants drew water, to levels that exceeded plant operating licenses. The increased water temperatures resulted in several nuclear reactors being shut down in Europe, particularly in France, during a period of peak demand for electricity to run air conditioning. This vulnerability was not fully appreciated before that summer and took many people by surprise. Fetter then pointed to projections for future climate regimes, and emphasized the need for models to help identify additional vulnerabilities associated with rising temperatures, increased demand for electricity for air conditioning, and increased demands for water.

Andrew Reynolds (State) asked if the U.S. position internationally is sufficiently focused on the adaptation aspect of climate. He also inquired whether the U.S. has the funds available to replace outdated Earth observations satellites, and if not, could international partners contribute enough funding to make up the difference.

Fetter stated that the Administration had greatly elevated the subject of climate change adaptation in recent years. He added that while in no way had the Administration given up on climate change mitigation efforts, the reality is that because a substantial degree of climate change is already locked in, such as the definitive rise in sea level, for example, the U.S. will have to learn to better adapt to climate change.

Regarding U.S. investments in Earth observations satellites, Fetter stated that budgetary restrictions will be a real challenge going forward, and that the U.S. alone cannot afford everything that is on the drawing table, especially because the cost of these systems is escalating. Fetter underscored that the present

budgetary environment will intensify the need for the U.S. to identify which measurements and data streams are the most important in order to ensure that any new satellite systems are designed and built to achieve those priorities. He also stated that the U.S. will have to work closely with international partners to secure access to data and information from their current and planned systems to fill present and upcoming U.S. gaps. He further pointed out that in situ networks like river and stream gauges provide critical Earth observations data and should not be neglected from a budget perspective.

As the discussion drew to a close, Paul Lewis (NGA) added that he was currently engaged in a project focused on the determining how accurately emissions from large CO_2 producers can be measured, which will be an important consideration in monitoring, verifying, and enforcing any future international environmental treaties. The specific goals are to determine how accurately the U.S. can measure CO_2, determine the feasibility of specific satellite systems, and make recommendations for systems that can provide policy makers with high quality quantitative information.

III. Presentation: The Impact of Climate Change on the National Flood Insurance Program

Applegate introduced Mark Crowell (FEMA), who serves as a geologist for the Federal Emergency Management Agency (FEMA) where he focuses mainly on long-term coastal erosion and coastal flooding issues. Crowell spoke to the SDR about a FEMA-funded study described in the report *The Impact of Climate Change on the National Flood Insurance Program*, which has not been released to the public yet.

The study is rooted in the 2007 report *CLIMATE CHANGE: Financial Risks to Federal and Private Insurers in Coming Decades Are Potentially Significant*, in which the Government Accountability Office (GAO) recommended that FEMA analyze the potential long-term implications of climate change for the National Flood Insurance Program (NFIP). Subsequent to that recommendation, FEMA contracted with AECOM, in partnership with Michael Baker Jr., Inc. and Deloitte Consulting, LLP, to conduct an independent study on the topic and present their findings and recommendations to FEMA. AECOM and its partners completed a version of the report for FEMA's review in July of 2011. Crowell stated that FEMA hopes to release the final version of the report in the coming months. He stated that the report is intended to inform ongoing dialogue as to whether FEMA should incorporate into the NFIP the effects of climate change based on the current scientific data and understanding. To inform that dialogue, the report lays out an analysis of the potential long-term implications of climate change on the NFIP, including those that may result from changes in precipitation patterns, frequency and intensity of coastal storms, and sea levels. Crowell emphasized that the report is not, however, intended to prescribe or endorse specific technical solutions for implementing changes to the NFIP. He noted a further caveat that the results of the study should be used for generalized national-scale purposes only, and should not be interpreted as plausible projections at the local or county level, because of the inherent variability introduced by the methodology, nor used as a basis for local adaptation planning or local engineering decisions.

The NFIP is designed to provide the availability of flood insurance to property owners who live in communities which participate in the NFIP. In order for a community to participate, it must adopt minimum floodplain management requirements and practices that are designed to reduce the risk of flooding of structures located in floodplain areas. These practices include both siting standards and structural building standards that are intended to reduce the risk of flood impacts. The key science and engineering components of the NFIP are flood insurance studies and flood insurance rate maps. Crowell noted that conducting a climate change study was important within the context of the NFIP because the program has approximately 5.6 million existing policies which cover roughly 1.2 trillion dollars in assets.

As currently structured, the NFIP does not directly consider climate change in determining flood insurance rates, but on an indirect basis does consider the two aspects of sea level rise and coastal erosion. The community rating system (CRS) is a program component of the NFIP which provides financial

incentives for implementing practices beyond the minimum NFIP floodplain management standard. The CRS gives credits toward communities that build above minimum floodplain management requirements and that have long-term, erosion-based set-backs. Additionally, the latest version of the coastal construction manual now includes a new section on sea level rise.

Crowell stated that the objectives of the study were to quantify the impacts of climate change on the location and extent of the U.S. floodplains, as well as the relationship between the elevation of insured properties and the 100-year base flood elevations. Crowell mentioned that the researchers used a probabilistic approach for riverine analysis and a different probabilistic approach for the coastal analysis involving both fixed and receding shoreline scenarios.

The main technical findings of the report, which encompass both the riverine and coastal analyses, are as follows:

- Special Flood Hazard Areas (SFHA), both riverine and coastal, may grow by about 40 to 45 percent by 2100;
- The total population within 100-year floodplain areas will increase through 2100 by about 130 to 155 percent;
- Based on the changes in floodplain areas and changes in population demographics, the total number of policy holders participating in the NFIP is estimated to grow by about 80 to 100 percent through the year 2100; and
- The average premium per policy will increase by about 10-70 percent in current dollars because of the increase in flooding caused by climate change.

In addition, the report includes 11 technical recommendations, which are listed below as they appear in section 6.2 of the current draft.

1) Progress made by the scientific community in climate change science should be monitored on a regular basis and the current climate study should be updated or a new study should be conducted every five years. This would greatly improve the reliability of the predictions for short- and longer-term estimates of the impact of climate change on the NFIP.
2) To improve the accuracy of the economic analyses similar to the one conducted for the current climate study, NFIP data collection should be expanded to include:
    - Accurate geospatial placement of policies and claims;
    - National inventory of geospatial locations of structures;
    - Elevation certificates linked to the National Flood Hazard Layer (NFHL) as well as policy and claim data;
    - Improvements in elevation data; and
    - Data regarding the distribution of property and of property values across floodplains.
3) A coordination group consisting of representatives from several Federal agencies (e.g., FEMA, EPA, USGS, NOAA, USACE, USBR, etc.) that share an interest in flood forecasting, mitigation, and loss estimation should be created and entrusted with the responsibility to create a broad framework for conducting future climate change studies from the perspective of the NFIP. Such a framework may include, but not be limited to: 1) acceptable, realistic scenarios of anticipated impacts and exposure levels; and 2) technical approaches, data sources, degrees of error, and assumptions that may be acceptable. It should be noted that while the technical approach of a climate study conducted from the perspective of the NFIP is likely to be probabilistic in nature (the NFIP relies on probabilistic flood risk data), the actual probabilistic approach can differ (e.g., Monte Carlo method, Bayesian modeling) depending on the scope and intended use of a study.
4) The present study could be used as a basis to divide the country into several different regions for more detailed regional studies. Such divisions may be based on the forecast increases in the SFHA, population, number of policies, and cost of structures for short-term impacts (i.e., epoch

2020). The median and 75 percentiles could be used to analyze the potential risk that the NFIP may be subjected to.

5) The population projections in this study not only drive impervious area, in turn affecting rainfall-runoff equations, but are also used in the economic analysis to drive expected losses. The IPCC scenario-derived population assessments were used in this study and were appropriate in the context of the scope, intended use, and GAO mandate for this study. However, any future regional detailed studies should consider using U.S.-derived demographic projections. Spatial variations in population growth rates should also be considered.
6) Regional studies may be performed by taking the existing, nationwide hydrologic projections from the current study and applying those projections to existing, detailed hydraulic modeling studies performed at a local scale. The analysis would more accurately assess the potential effects of climate change for specific reaches, rivers, or regions by using preexisting information from FISs in those regions. For example, the current study estimated a statistical distribution of future possible flood flows based on global climate model (GCM) projections of extreme climate indicators. In data-rich areas (in terms of the availability of USGS stream gage data from the study), an estimated future distribution of base flood discharges could be passed through existing, detailed HEC-RAS modeling studies to obtain base floodplain boundaries that reflect a more detailed understanding of how climate change and population growth would impact flooding along a specific river. This would give an improvement in precision with respect to the simplified assumptions used in the current study to relate flood discharges to the extents of flooding. In addition, uncertainty associated with the projections could be quantified by using projected discharges in HEC-RAS modeling studies to translate uncertainty in flood discharges to uncertainty in flood depth and in the extent of the SFHA. To further support regional analyses, the global circulation model results, such as projected daily rainfalls, may be processed using statistical downscaling or may be linked with a regional climate model (RCM) to provide more detailed projections within a given region. The result provides higher-resolution climate forcing that can be linked to hydrologic impact models to quantify flood risks.
7) Due to scope and intended use of the current study, the nation's coastlines were divided into only 13 sea level rise regions. It is recommended that future studies consider further subdividing each of these regions to remove some of the variability inherent to such broad regions. This should especially be considered for the regions in the Pacific Northwest and Northern California. Any such subdivision should consider both erosion and sea level rise. Erosion remains a critical issue and, due to the numerous factors that contribute to erosion rates, a localized approach is needed in order to produce improved estimates. Similarly, in coordination with experts from NOAA, USGS, and local coastal communities, a more detailed assessment should be performed to verify historical relative sea level rise rates on a local basis.
8) The large-scale regression analysis technique that was used as part of this study could be improved by coupling a macroscale hydrologic model such as the Variable Infiltration Capacity (VIC) model (available at http://www.hydro.washington.edu/Lettenmaier/Models/VIC/index.shtml) to the global climate model outputs. This would provide more accurate estimates of the impacts of climate change on flooding. It is anticipated that a land surface model such as VIC would greatly improve the ability to capture the major physical processes governing land-atmosphere interactions than regression modeling alone can do. In addition, land surface modeling would explicitly account for land cover, infiltration, snow, lakes, and rivers. Further improvement of the GCM results using statistical downscaling or dynamical downscaling with RCMs would support this effort by providing higher-quality precipitation data as an input to the VIC model.
9) A detailed assessment of variability should be performed as a part of any future study to capture the uncertainties associated with future projections. Such an assessment will increase the acceptability as well as the confidence level of the study projections. For example, an important

source of variability not assessed in the present study was the variation inherent to the USGS stream gage data that were used as the basis for the riverine regression analysis.

10) Future studies should consider investigating and documenting the possibilities and magnitudes of systematic errors associated with study approach, which could not be performed within the scope of the current study. Existing flood data from FEMA's Mapping Information Platform (MIP) may be used for such investigations. For example, MIP data may be used to determine the error associated with the linear slope assumption for riverine overbank flooding. Similarly, the limitations of the plane beach assumption should be evaluated: Coastal areas terminated by bluffs, for example, will not enlarge significantly, while areas terminated in very flat land could enlarge greatly.
11) Due to scope and intended use of the current study, it was assumed that change in affected population and structures will be proportional to change in SFHA. Population was taken to be uniformly distributed within the SFHAs and elsewhere across counties. The impact of non-uniform population distribution should be investigated in any future study or as a part of future improvement of the current study. This can be partly addressed by performing economic analyses at the Census block level rather than at the county level.

Following the presentation, Crowell and the report's authors fielded questions from meeting participants. Crowell responded that the study did include all 50 states as well as U.S. territories. Wilbert Thomas (Michael Baker Jr., Inc.) noted that the study did not include any information related to NOAA precipitation frequency estimates, but rather, used as variables the IPCC projections for mean number of frost days, mean number of consecutive dry days, and maximum five-day rainfall.

David Divoky (AECOM) stated that the study as a general rule is based on median estimates, whereas the use of climatic and demographic projections in the lower and upper deciles or quartiles would have led to scenarios with "long tails", and for some regions an actual decrease in flooding hazard. Doug Bellomo (FEMA) added that the NFIP currently does not make any provision for changes in impervious areas or urbanization, which is part of the reason that there is tension between the NFIP's insurance pricing structure and the mitigation side of the program. Sandra Knight (FEMA) welcomed input on the report from the SDR. Subsequent to the meeting, SDR Co-chair David Applegate sent to SDR Members an action items email that included instructions for accessing the report and invited comments on it through January 19th.

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

Applegate encouraged SDR members to consider supporting the work of the SDR and its Secretariat by contributing funds from their agency.

Wenger reminded members that the SDR's International Working Group (IWG) will have a kick-off meeting on Wednesday, January 11th from 1:00 p.m. to 3:00 p.m. in the WHCC's Lincoln Room. Wenger and Sezin Tokar (USAID) will co-chair the working group, and its initial meeting will cover several topics, including consideration of a draft charter, the SDR's role as the U.S. National Platform for the UN International Strategy for Disaster Reduction (ISDR), and opportunities to advance international cooperation on disaster risk reduction related to the EU-U.S. dialogue on space cooperation as well as planning for the Rio+20 Conference on Sustainable Development that will be held in June.

The December meeting minutes were approved with no changes.

Applegate noted that the SDR's next meeting, on February 2nd, will have a thematic focus on disasters and social media.

V. Report from the OSTP Liaison

Tammy Dickinson (OSTP) stated that significant cuts to OSTP's FY2012 budget would impact the scope of activities supported by the office's staff. She also noted that the National Windstorm Impact Reduction Program (NWIRP) Biennial Reports to Congress for Fiscal Years 2007-2008 and 2009-2010 were currently being reviewed by OSTP's front office.

VI. Adjournment

The meeting adjourned at 11:49 a.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, 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
Thursday, May 3	Thursday, September 6	

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

**Subject to cancelation

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 Ross Faith (ross.faith@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
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Secretariat

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Bret Schothorst	703-388-0312	Bret.Schothorst@ManTech.com

X. Summary of January Actions

Action	Lead	By When
RSVP to the SDR Secretariat (ross.faith@mantech.com) for the January 11 SDR International Working Group meeting by noon on January 10.	SDR Members and Federal colleagues	Tuesday, January 10
Send comments on the report "The Impact of Climate Change on the National Flood Insurance Program" to the SDR Secretariat (ross.faith@mantech.com).	SDR Members and Federal colleagues	Thursday, January 19

Action	Lead	By When
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
Send names and contact information of nominees to the ROSES review panel should be sent to Michael Goodman (michael.goodman@nasa.gov) and Francis Lindsay (francis.lindsay-1@nasa.gov). The panel itself is likely to meet during January or February 2012 in Washington, DC.	SDR Members and Federal colleagues	ASAP
Contact Fernando Echavarria (echavarriafr@state.gov) to engage on the EU-U.S. Dialogue on Space Cooperation.	SDR Members and Federal colleagues	ASAP
Contact Tammy Dickinson (tdickinson@ostp.eop.gov) to pass along issues, concerns, and information from your agency to the White House Office of Science and Technology Policy	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	ASAP
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	ASAP
Contact the Secretariat (ross.faith@mantech.com) if you are interested in participating in the SDR Coastal Inundation Working Group.	SDR Members and Federal colleagues	Standing
Contact the Secretariat (ross.faith@mantech.com) if you are interested in participating in a task force 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	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 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