Discussion Draft

Meeting Minutes of the Subcommittee on Disaster Reduction

24 July 2008, 8:00 a.m. to 4:15 p.m., National Science Foundation, Room 375

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

Dan Walker (OSTP)

Designated Representatives

BLM *Edwin Roberson*
Ronald Huntsinger
CDC *Mark Keim*
DHS Bruce Davis
DHS/FEMA Mike Buckley
David Maurstad
DHS/USCG *Steven Cohen*
DOD Al Johnson
DOE *Patricia Hoffman*
DOT *Cheryl McQueary*
EOP / OSTP *Dan Walker*
EDA *Audrey Clarke*
EPA *Peter Jutro*
FERC Berne Mosley
HUD *David Engel*
NASA Steve Ambrose
NGA *Stephen Homeyer*
NGB *Daniel Bochicchio*
NIH Allen Dearry
NIST William Grosshandler
Jack Hayes
NOAA Margaret Davidson
NSF Dennis Wenger
OPHS Sven Rodenbeck
State *Fernando Echavarria*
USACE *Barbara J. Sotirin*
Dimitra Syriopoulou
USAID *Sezin Tokar*
USDA *Melissa Simpson*
USFS Carlos Rodriguez-Franco
USGS David Applegate
Paula Gori

Other Attendees

AMS Bill Hooke
DOE Ann Sullins
DOT Sheila Duwadi
Tim Schmidt
EPA Stephen Clark
NASA Craig Dobson
NGA Renee Bousselaire
NGB James Engstrand
NOAA
Margaret McCalla
Nathalie Valette-Silver
John Gaynor
David Green
Chris Maier
Tom Karl
NSF Robert O'Connor
USFS Michael Hilbruner
USGS John Eichelberger
Secretariat Emily Wallace
Barbara Haines-Parmele

Agenda

08:00 Continental Breakfast
08:30 Welcome and Introductions
08:45 Opening Remarks and Charge to Group
09:00 Review Accomplishments
09:15 Keynote- Changes in Weather and Climate Extremes in a Changing Climate: New Disaster Reduction Imperatives
10:00 Break
10:15 Committee Objectives and Work Products
11:45 Wrap Up
12:00 Lunch
01:15 Keynote: Opportunities within Transition
02:00 Transition Strategy
03:00 Break
03:15 Synthesis and Discussion
04:00 Closing Remarks
04:15 Adjourn

Handouts

- Agenda
- Membership List
- SDR Charter
- CENR Presentation
- 2007 Annual Operating Plan

I. Call to Order and Introductions

Subcommittee on Disaster Reduction (SDR) Chair David Applegate (USGS) called the meeting to order at 8:35 a.m. by welcoming participants and thanking Dennis Wenger for providing the NSF as a venue for the retreat. Applegate also noted Dr. Whitney's departure from the group and announced the addition of Dennis Wenger (NSF) as the New Vice Chair for Science. It is unclear at this time the direction OSTP will take in appointing an NSTC liaison to the group.

II. Opening Remarks and Charge to the Group

Applegate opened the workshop by discussing the Subcommittee's responsibilities identified in the Charter, namely the Subcommittee's advisory role, and participating agencies. The SDR Charter specifically notes the Subcommittee's role in providing information and guidance to the President and the Administration to summarize relevant resources and scientific work within SDR agencies. Applegate asked the group to consider the guidance required for the next President.

Applegate identified the charge for the day as building a roadmap to determine the undertaking of the Subcommittee for the next year and a half. The roadmap should include a 2008/09 operation plan, transition strategy and outline for linking SDR efforts to the broader efforts in climate change.

Applegate concluded his opening remarks by reviewing the day's agenda and asking Margaret Davidson (NOAA) to review SDR accomplishments reminding the group that Gene Whitney (OSTP) always indicated that SDR was one of the more productive NSTC subcommittees. Applegate also indicated that the group would be asked to reflect on what has been done well over the past 2 years, who knows about it and what SDR wants to/should do within the next year and a half.

III. Review Accomplishments

Margaret Davidson (NOAA) introduced the "Post-it" exercise and asked participants to respond to the following questions on color coded post its: 1) What do you think has worked well over the past two years as SDR strives to implement the Grand Challenges; 2) Has your agency been briefed on the Grand Challenges internally? At what level? What other outreach avenues have you found successful?; 3) What would you like to see SDR accomplish in 2008/09? Results of the exercise are summarized in the table below:

What do you think has worked well over the past two years as SDR strives to implement the Grand Challenges?	**Has your agency been briefed internally on the Grand Challenges? At what level? What other outreach avenues have you found successful?**	**What would you like to see SDR accomplish in 2008/2009?**
Thoroughness of process to produce Grand Challenges	Not a briefing but a folder review of the Grand Challenges was provided for reading and review.	Push through Next Big Disaster document before the next big disaster.
Beautiful Grand Challenges product	Yes, a briefing has been done with the Director and Deputy Director. Has their support with direct impact on agency program development.	Hurricane preparedness/mitigation strategies.
Good Interaction between agencies that don't usually talk to each other.	Documents and information has been circulated and briefings completed at a division level.	It would be good to have sessions with scientists at the bench level from multiple agencies to catalyze emerging research areas (e.g. does new technology pose a threat to the nation?)
Bringing together all the US Government agencies among disaster reduction.	Briefings have been done for our agency head, deputies and department personnel. With reference to natural resources impacts and feedback associated with climate change and how to manage in the face of uncertainty.	Follow through on implementation plans, briefings to new administrators and leadership including how SDR can provide a mechanism for coordination and program reviews.
Development and definition of agencies activities before Disasters Reduction.	SDR does not have a high level of exposure in my agency but should present their mission/objectives at the GEOINT Conference.	Elevate natural hazards reduction as a priority of the federal government.

Hill and other fora presentations via Grand Challenges.	Briefed at office director level, not a pro-forma briefing. SDR interfaces with offices interest in climate related extreme events.	Briefed department; put together accomplishments report for each of the GC areas; make more presentations at technical conferences.
Outreach – awareness through the promotion of the Grand Challenges.	My agency has not been formally briefed, but is aware of the effort and most recently was offered the chance to provide input to Dr. Sharon Hayes statement to the House on windstorm impacts.	I believe involvement from state and local representation among the member agencies should be the next step.
Making it through the OMB clearance for the Grand Challenge Implementation Plans.	Yes, at the Deputy Secretary level. Lights are on but dim.	Re-establishing Project Impact or a variation of it.
Getting Grand Challenges and Implementation plans through OSTP/OMB process.	I regularly highlight GC in various PowerPoint's to professional and scientific organizations.	Continue to share information.
Creation of the implementation plans was well organized.	Briefed to DUS and leadership council and received a positive and encouraging response.	Help coordinate cross government projects and activities.
Implementation plans	Challenges and plans briefed to Administrators and Councils within NOAA. SDR used to respond to GAO reports and recommendations to coordinate activities across agencies (i.e. Tsunami Preparedness).	Capitalize on previous work; emphasize contribution science can make to new administration officials.
Exceptional accomplishment in getting Grand Challenges out.	Was not involved in agency briefs but did mention GC to upper management of NOAA Research.	Nail down good, crisp recommendations for the next administration.
Development of Grand Challenges and Implementation Plans was a major effort and accomplishment. Need to get the word out.	Office has been briefed and in the process of briefing at the department level.	To remain impactful, highlight the nexus between climate, disaster, quality of life, economy, and national security.
Grand Challenges pamphlet	Yes, second in command has been briefed and was very well received; may have been used to help project agenda.	Ensure that the importance of the SDR is fully communicated to the presidential transition team(s). The transition will not majorly affect my agency's role with regard to the SDR.
Tangible products such as the Grand Challenges documents. Highlighting the impact of disasters on quality of life, economy, national security, and natural resources.	NOAA and NOS have been briefed at various levels. Briefing to the Research Council was especially good; there were lots of questions, comments and suggestions.	Be rewarded by the administration with the investment levels required to meet the Grand Challenges.
The preparation of the implementation plans give us the opportunity to work with various agency representatives in a small group.	Yes, the Director and Deputy Director were given a 1.5 hour briefing. They were very involved and supportive.	A climate change natural disaster report would be nice in 2008/2009.
The Grand Challenges is an exceptionally good report both in slick presentation and useful content.	NASA was not formally briefed but an informal presentation was given to the Earth Science Division. A brief to the Science Mission Directorate needs to occur. A brief to IGARRS occurred in July 2008 and the IDRC will be briefed in August 2008.	Reach out to the climate change community; increase interactions with academics roundtable.
The Grand Challenges leverage the latest technology to understand natural processes. By using visualization and modeling technology, SDR can help prevent natural disasters.	Deputy Undersecretary, SES members of the US Forest Service, Deputy Chief for Research and Development were briefed. The agency is highly supportive of the efforts of the SDR.	We must work towards increased collaboration among federal agencies facing the same disturbances and increase our vision to work more to mitigate disasters caused by climate change.
Generation of the Grand Challenges listings themselves and manner in which they are written. The only downside is that we face so many Grand Challenges.	Briefed DOI politicals and broadly distributed materials to groups including those preparing science strategy.	Develop/solidify "mutual agenda synergy" with CCSP or its successor.
Grand Challenges helped focus program and planning discussions.	No briefings. OSTP, in fact, has us extremely busy with Homeland Security S&T issues prior to the transition. Actually, our political appointee, Dr. Gray, is co-chair of the CENR so he may hear a little.	Climate change both red and blue candidates seem inclined to address aging flood control infrastructure levees and dams.
Implementation plans helped define unique roles and responsibilities.	No briefing, Dennis may have done something at NSF.	Follow up on current plans (e.g. Grand Challenges) to encourage agency responses. Link Grand Challenges to resilient communities' efforts.
SDR reviews and recommendations prompted agency responses at a high level.	Not to my knowledge but certainly a good thing to do.	Guidance/value of developing Hazard Resilient Indicators.
The monthly meetings and technical briefings have been excellent.	No SDR briefings within my agency's line office.	Restart the working groups.
Collaboration and enabling synergy	Briefing was made to Administrator in the Policy Office; response was luke warm.	We need to examine agency level research and development plans and do a more complete group analysis.
Process of developing hazard specific 4 pagers for Grand Challenges (used a committee of the top flood experts in the country).		The Grand Challenges should give monetary awards to universities for creative solutions to disaster reduction.
Keeping White House attentive to natural		Reaffirm and revitalize efforts to work with

hazard issues.		private sector (via PCAST/successor) and professional and scientific organizations.
Grand Challenges report and implementation plans have highlighted the critical need and have made people aware including Congress. Has helped us develop our research plan.		SDR should look into the impact of disasters (natural and man made) on food supply and the cross section of those in upcoming food disaster and energy crisis.
Congressional briefings have worked well.		SDR to include more on social science and economic impacts in addressing disaster risk reduction (e.g. how will DRR stay a high priority if the economy worsens?).
The Grand Challenges development and more specifically the focus brought to hazard mitigation.		Address disasters at man-made institutions (e.g. chemical and nuclear facilities).
The Grand Challenges documents and the sharing of information.		
Wind Hazard Reduction Implementation plan progress report. We did work together.		

Davidson thanked the participants for their comments and encouraged independent review of the post-its throughout the session.

IV. Keynote – Changes in Weather and Climate Extremes in a Changing Climate: New Disaster Reduction Imperatives: Tom Karl, NOAA

Margaret Davidson (NOAA) introduced Tom Karl, Director of the National Climatic Data Center (NCDC), as a true leader within NOAA and highly skilled expert in climate change.

Karl began his presentation by providing an overview of the current state of climate change and disaster. According to Karl, Carbon Dioxide levels are rising 30% faster than predicted increasing ice melt and sea level rise. In North America, the phenomenon and direction of climate change is very likely to produce warmer extreme cold days and nights, and fewer frosts; warmer nights; more frequent heat waves and warm spells; and more frequent and intense heavy downpours through the 21st century. Increases in areas affected by drought are likely in the Southwest U.S., parts of Mexico and the Caribbean as are more intense hurricanes through the 21st century. No good projection exists on the frequency of tornados or other severe storms. Evidence suggests a substantial human contribution to these changes.

Karl concluded his presentation by presenting pathways forward in the areas of climate, impacts and adaptation. Physical climate recommendations include: assuring continued capability for documenting climate system evolution; determining the best climate models; improving regional climate change projections; understanding how the climate system responds to change; expanding global carbon emission scenarios; and monitoring/projecting extreme events. Impacts recommendations include: calculating thresholds; understanding multiple stresses in society and the environment; quantifying natural benefits such as the cleansing of air and water; assessing impacts on human health and well being; and determining the reversibility of impacts. Adaptation recommendations include: incorporating climate change in planning; better understanding the evolving nature of adaptation; determining unintended consequences such as forcing corn growth for food on more marginal land; and estimating costs and benefits of adaptation actions.

Bill Grosshandler (NIST) noted the dire situation in Mexico regarding climate change and the potential impact to U.S. border policy. He asked it made sense for SDR to include international climate change implications in discussion points and if desertification has been well studied. Karl indicated that parts of the Western Plains have been predominant in extreme droughts but not desertification. Regarding Mexico, authors from Mexico contributed to the Extremes Report. Mexico also participates in the GEO North American Drought Monitor which is published monthly. Karl noted that relations with Mexico continue to be built but that it takes years to fully form relationships with members of the international community including Mexico.

Margaret Davidson (NOAA) inquired about the secondary impacts of drought on aquifers. Karl stated that there is not enough good data to quantify an answer.

Paula Gori (USGS) suggested that instead of focusing on models and predictions why not accept the change and focus on secondary effects? Karl indicated that the scientific community will always try to address questions and make sense out of the data and vulnerability.

David Applegate (USGS) noted the extensive structure of the climate issue and asked where SDR could make a unique contribution. A gap in identifying and understanding community resilience indicators seems to exist. Karl noted the need to take the modeling data and add all community impacts such as transportation and energy.

Allen Dearry (NIH) indicated that the Climate Change Science Program (CCSP) in its new strategic plan is attempting to shift from the physical science to the social science focusing on impact, adaptation and mitigation strategies. He stressed that good research programs are needed to address implementation strategies and increase resiliency.

Sheila Duwadi (DOT) noted that their bridge inventory would allow for a national assessment of bridges. Margaret Davidson (NOAA) added the need for a levee inventory. Paula Gori (USGS) noted the continued need for scientific expertise in areas that haven't been addressed such as landslides. Social and physical scientists in these areas have yet to be involved in the climate arena. Allen Dearry (NIH) stated that OSTP is engaging other science agencies such as the Forest Service as part of CCSP in their shifting emphasis toward social science and decision support.

Margaret Davidson (NOAA) noted that the GAO recently "whacked" natural science agencies for not sufficiently including climate change in their mission responsibilities.

Bob O'Connor (NSF) stated that the issue of scale in integrating climate data and economic data is enormous and would require analysis at different scales. As a result, the SDR should focus on what information is most useful to the next administration and aggregate that information to identify areas of need.

Davidson (NOAA) noted that post-disaster rebuilding efforts often increase long term exposure. John Eichelberger (USGS) also noted that a large volcanic eruption or regional nuclear war could cause significant, short-term temperature decreases and changes in precipitation.

V. Committee Objectives and Work Products

David Applegate (USGS) asked the group to identify a beneficial disaster reduction role SDR can play in the climate arena.

Margaret Davidson (NOAA) noted that in the next administration there will likely be a substantial effort to reassess CCSP. SDR could play a role in keeping the momentum going while the reassessment takes place.

Tom Karl (NOAA) suggested a climate change workshop to identify and assess risk, track change and develop a strategic plan spawning working groups within agencies. Workshop participants would include the federal sector, academia, local government officials, and the private sector.

Mike Buckley (FEMA) noted that State and Local Grant applicants are required to have an approved Hazard Mitigation Plan. The Hazard Mitigation Plan involves a risk assessment with mapping, analysis and planning tools. Metrics and incentives are built into the grant programs. Incentives could also be provided at the local level to encourage community action.

Davidson noted a recent forum held at the Heinz Center by academia and a private consortium of businesses to discuss an extreme events project of the Wharton Risk Management and Decision Processes Center in conjunction with the Insurance Information Institute. The report generated from this project, "*Managing Large-Scale Risks in a New Era of Catastrophes: Insuring, Mitigating and Financing Recovery from Natural Disasters in the United States*," proposed changes to the tax code as incentives to encourage community action. SDR has the ability to serve as a catalyst for provoking the necessary public discussions that will follow this report.

Tim Schmidt (DOT) suggested the creation of a risk mitigation kit for local governments to spark dialogue. Davidson noted that most counties, mayors, city councils and chambers of commerce have climate committees.

Paula Gori (USGS) suggested creation of a document noting the correlation between disaster mitigation and climate change. Dennis Wenger (NSF) noted that there was no real consensus at the Hazards Workshop on the correlation between disasters and climate. Pilke's presentation also suggested that there is no correlation. Margaret Davidson (NOAA) suggested that the No Regrets adaptation model be followed and reinforced with a disaster mitigation budget and a climate adaptation budget giving OMB a two for one.

Carlos Rodriguez-Franco (USFS) agreed noting that the National Climate Change Policy just finished their research plan for the next 10 years. Rodriguez-Franco suggested that SDR identify what each agency committed to in terms of climate to identify correlations.

James Engstrand (NGB) noted that the National Guard is required to look at all data sets for planning and emergency management. Paula Gori (USGS) noted that the CCSP SAP reports considered all data sets in their research identifying aspects of the known and unknown. Tom Karl (NOAA) concurred stating that the term "likely" was defined as a 75-90% and "very likely" a 90-99% probability of occurring.

Steve Clark (EPA) stressed that models are needed for risk assessment at the local level suggesting that SDR could bring attention to this need. Davidson noted that the National Academy assessment of CCSP called for a downscale of physical models to the local level but that they are years away from providing street level data. Applegate added that the computational capability to downscale must be available. Sven Rodenbeck (USPHS) stated that the public health sector is where climatologists were several years ago in the ability to make regional predictions/recommendations. Tim Schmidt (DOT) suggested that perhaps the granularity of the current data is good enough to make recommendations at the local level.

Margaret Davidson (NOAA) reminded the group not to minimize the importance of education and outreach. A bridge between the CCSP reports and the impact to community quality of life needs to be built. Nathalie Valette-Silver (NOAA) re-introduced the need for a workshop to revive the public/private sector partnership in this arena. Davidson suggested the pre-work to a workshop be an inventory of existing efforts, activities, and programs for disaster mitigation.

Bill Grosshandler (NIST) noted that many things are impacted by climate change suggesting that SDR build off the Multi-Hazard Mitigation Council Study to determine the impact of increased frequency of disasters.

David Applegate (USGS) suggested focusing on what is known by identifying current agency efforts and using a No Regrets option to inventory what is needed regarding mitigation. This progress report would enable agencies to highlight their current state. A mechanism could then be developed for SDR to reach out more broadly regarding implementation.

John Gaynor (NOAA) noted that there is no good handle on the cost of natural disasters beyond insured and reimbursed cost making risk difficult to perceive. A basis like cost is needed to measure risk and address this gap. When there is an event, assessment teams need structural engineers and social scientists to assess costs. Davidson stated that a lot of costs are born by the local government and not quantified. Dennis Wenger (NSF) noted that significant coordination among agencies would be required to develop the assessment teams. SDR may, however, be in the position to recommend how to coordinate the effort. Paula Gori (USGS) suggested looking at HAZUS as a model. Mike Buckley (FEMA) noted that cost-benefit analysis is required for Pre-Disaster Mitigation applications and could be used as a model.

Tom Karl (NOAA) mentioned that significant issues exist with the Worldwide Weather and Climate Events web page. All costs reported are economic provided through an agreement with insurance companies. Public health costs are not calculated.

Sven Rodenbeck (USPHS) asked how the Grand Challenges overlay with the National Response Plan which does not currently address mitigation. David Applegate (USGS) responded by indicating that the National Response plan will likely be revisited during the next administration.

VI. Wrap-up Morning Session

David Applegate (USGS) asked how the Grand Challenges could be mined for mitigation gaps and needs. Margaret Davidson (NOAA) suggested that agencies unofficially share their PART performance metrics, revisit internal targets and look for existing synergies. It was determined that USFS, NOAA, USGS, DOT, NIST, FEMA, and areas of DOE and FERC currently have hazard reduction performance metrics. Sven Rodenbeck (USPHS) noted that the public health arena is response oriented; the CDC thinks in terms of early warning but does not have hazard mitigation reduction goals.

Applegate asked the group to identify any additional SDR work products. Bill Grosshandler (NIST) suggested exploring the unintended consequences of energy policies. Nathalie Valette-Silver suggested an energy link to the food crisis.

John Gaynor (NOAA) asked about SDR's role in the National Research Council Study on Measuring Community Resiliency. Margaret Davidson (NOAA) indicated that if all funding is acquired, the study should be complete in draft form by next summer.

Al Johnson (DOD) noted that the Grand Challenges made recommendation regarding implementation; the subcommittee should determine if they are making a difference. Applegate noted that the FY 2009 budget had a few agency implementation related highlights but many are taking it on the chin in the disaster arena. From an agency planning standpoint, however, the profile of hazards has been raised.

Sheila Duwadi (DOT) asked the group to consider a report summarizing the projects and activities of agencies involved in the implementation plans.

Applegate concluded the morning session by reviewing the remainder of the agenda focusing on transition and recessing the group for lunch.

VII. Keynote: Opportunities within Transition – Bill Hooke, American Meteorological Society

Dave Applegate (USGS) introduced Bill Hooke, senior policy fellow at the American Meteorological Society and past SDR Chair, to discuss opportunities within transition.

Bill Hooke (AMS) began his presentation by presenting an environmental scan of the transition. Hooke noted that the world's reaction to the political disasters which have occurred within the current administration have not worked in the subcommittee's favor. The most favorable visibility with the

smallest amount of investment for the subcommittee is in the disaster arena. The level of disaster impact is increasing and thereby creating the opportunity to develop a suite of initiatives that address risk broadly.

Hooke suggested that to survive as an NSTC Subcommittee, the reduction of disasters needs to be emphasized, the record of accomplishment needs to be stressed and disasters need to be encompassed more broadly.

Hooke also recommended a continued push forward with the Grand Challenges focusing on hazard/disaster information; the understanding of natural processes; developing mitigation capacity; assessing resilience; and promoting risk-wise behavior to reduce actual losses. Keys to reducing risk, as suggested by Hooke, include accepting responsibility at all levels and learning from past experiences.

Reducing actual losses will require more attention to social science; a tie-in to practitioners and the private sector; fleshing out the international piece and making progress on policy. Opportunities the SDR could consider to reduce loss include: identifying adjustments to policy frameworks at the international, national, state and local level to foster resilience; identifying incentives and barriers to policy formulation and implementation; determining how scientists, practitioners, and communities' can better work together to put what is known about the natural and social causes of disasters into actual practice; and determining how one might measure the progress, success or value of such collaborative efforts among scientists, practitioners, and the public. Hooke states, however, that it would be difficult to address all these questions within the SDR. A mechanism is needed to build resources and reduce losses collaboratively at the community level using a structure similar to the Public Policy Partnership (PPP – 2000). Revitalizing PPP 2010 as a mechanism could emphasize the practice/reduction of actual losses, encourage broader collaboration; provide a more focused agenda and engage in follow-up.

Dennis Wenger (NSF) noted that perhaps increased economic losses associated with disasters are the result of losses in the development battle as opposed to the learning curve. Wenger also noted that community resilience is very easy to do badly and very difficult to do well. On the international front, the UN 10 year plan designated a national platform group to oversee country participation. SDR is the U.S. national platform group for the International Strategy for Disaster Reduction **(**ISDR). SDR serves as a resource for the Department of State. During the transition, it would be beneficial to emphasize the international platform aspect of SDR.

Dave Applegate (USGS) indicated that the recent turnover at the Department of State is causing a challenge. Applegate will brief the State Department Science Advisor Nina Federon on this issue. The next ISDR annual report is due in September; members should expect a query for information.

Bill Hooke (AMS) noted that the topic for the October Disasters Roundtable is international disasters and the U.S. role.

Paula Gori stated that the SDR should think about re-entering the international arena. She is brining copies of the Grand Challenges to the August International Geological Congress in Oslo, Norway and the October Geological Society of America Conference in Houston, Texas. Steve Ambrose (NASA) will be presenting the Grand Challenges at the August International Disaster Reduction Conference in Davos, Switzerland.

Nathalie Valette-Silver recommended reviving the International Working Group.

Emily Wallace (Secretariat) asked how an NSTB type organization could be established for disasters. Bill Hooke (AMS) noted that an independent agency would need to be established with a range of seconded experts.

Bill Grosshandler (NIST) indicated that NIST has the authority to form an independent task force when lives are at risk such as in 9/11 and the Rhode Island nightclub fire.

Mike Buckley (FEMA) suggested tuning into what the Presidential candidates are promising in the first 100 days and identifying anything that can be offered on a silver platter.

Paula Gori (USGS) asked, excluding Katrina, if the US has reduced loss of life. Bill Hooke (AMS) cautioned that we can't exclude Katrina because we are trading a few small disasters for one big one.

Sven Rodenbeck (USPHS) noted that you can't focus only on death; other health impacts such as mental health have also increased. Margaret Davidson (NOAA) indicated that there are several metrics for the loss of life such as diminished quality of life. An accomplishments report could be framed in terms of what has been done and what can be done to reduce loss of life in the disaster arena. The cost versus frequency of disasters data is compelling.

VIII. Transition Strategy

Dave Applegate (USGS) asked what the SDR should have ready for the transition team in late October to explain what agencies do in disaster reduction; the value SDR brings to government, and the value of the agencies making up SDR.

Emily Wallace (Secretariat) suggested a media roundtable before the election. Margaret Davidson (NOAA) noted that the event could be co-sponsored with the Disasters Roundtable and the Institute for Business and Home Safety (IBHS). Applegate suggested linking the event to the congressional briefing with the Hazards Caucus scheduled for September.

Margaret Davidson (NOAA) recommended a re-mailing of the Grand Challenges to members of the Science Associations.

Paula Gori (USGS) suggested re-visiting the implementation plan matrices to identify who does what for disasters by agency as an informational piece lead. Bill Grosshandler (NIST) suggested that the matrices be accompanied by a compilation of success stories from each agency that highlights a community effort in disaster reduction.

Al Johnson (DOD) noted that DOD is in the response business not the mitigation business. Reduction should be tied to the cost of response. Benefit has to be realized in both contexts otherwise it will not resonate.

Davidson suggested a report outlining what has been done, why the administration should care and the identification of any low hanging fruit.

David Green (NOAA) recommended getting in touch with the media near term by providing a "go-to" guide on disasters. A companion document to the Grand Challenges could highlight the media's role in disaster reduction. Green also suggested partnering with the financial sector on cost avoidance. The U.S. has learned from the international arena how to avoid cost; we need to leverage that experience.

Bruce Davis (DHS) noted that resurrecting the matrix and identifying agencies by role could be both a blessing and a curse. Agencies could be asked to do more without dedicated funding. A better approach would be to identify existing activities within each agency highlighted with a success story. Use the term "engaged" in area "x" as opposed to responsibility and/or authority.

Margaret Davison (NOAA) also suggested placing the matrices on the SDR website. She also asked if there was interest in reactivating the PPP-2000 as suggested by Bill Hooke. Al Johnson (DOD) indicated that there would likely be greater opportunity after the election to revive the partnership and host a media event. In response, Davidson suggested having key group discussions with the Partnership beginning in October followed by a media roundtable after the election. Bill Hooke (AMS) offered to convene the media roundtable and suggested the inclusion of the Institute for Business and Home Safety (IBHS).

To conclude the transition strategy discussion, David Applegate (USGS) requested SDR members to let he and Emily Wallace (Secretariat) know of organizations putting together transition documents so a Grand Challenges packet and letter can be mailed. He also requested the identification of professional venues where the Grand Challenges can be briefed.

IX. Synthesis and Discussion

David Applegate (USGS) synthesized the day's discussion by identifying the following five primary components of the SDR 2008/2009 roadmap:

1. A Grand Challenge accompaniment document highlighting how agencies are working to meet the Grand Challenges emphasizing collaboration and identifying opportunities that could be seized to further enhance them. Include matrices of participating agencies and their areas of engagement.
2. A transition document linking the Climate Change Science Program (CCSP) 3.3 product with Grand Challenge #3: Develop Hazard Mitigation Strategies and Technologies as a means of identifying hazard mitigation strategies applicable to climate.
3. A media roundtable in partnership with external colleagues such as the Hazards Caucus and Disasters Roundtable. Identify scientific associations already engaged in transition and ask them to include the Grand Challenges as part of their efforts.
4. Support and contribution to the National Research Council Study on Measuring Community Resiliency. Consider a planning workshop (PPP 2010) focused on reducing losses.
5. The next big disasters document.

In the near term, Applegate noted completion of the data call for the UN International Strategy for Disaster Reduction (ISDR) regarding early warning.

Concluding the summary, Applegate asked the group to identify any additional opportunities.

Bill Grosshandler (NIST) asked the group to consider risk reduction due to terrorism and the expansion of post incident interaction from technological disasters.

John Gaynor (NOAA) suggested analysis of the NTSB approach for post-disaster assessments recommending completion of a cost estimate and discussion forum.

Paula Gori (USGS) recommended a best practices review of what is currently being done in the area of post-disaster assessment taking into account the Post Earthquake Investment Plan (EERI); the NSF Rapid Response teams; and the Forest Service Bear teams.

Dennis Wenger (NSF) suggested expansion of the SDR International Platform beginning with a presentation from ISDR.

Renee Bousselaire recommended branching out to the private sector to leverage technologies citing the use of Google Technology for Scaling as an example.

X. Closing Remarks

David Applegate (USGS) closed the retreat by thanking everyone for their engagement in the creation of a roadmap for responsiveness to a new administration.

Applegate noted that the SDR will not meet in August. The September meeting agenda will include discussion on the revival of working groups.

XI. Summary of Actions

Action	Lead	By When
ISDR Early Warning Data Call	SDR Members	September 2008
Contact Emily (ewallace@grs-solutions.com) with knowledge of scientific associations compiling transition documents and professional venues for Grand Challenges outreach opportunities.	SDR Members	Ongoing
Circulate original Grand Challenge implementation matrices with GC designations capacity by hazard for review and revision as input to the Grand Challenges companion document.	Secretariat	September 2008
Draft a transition document linking CCSP 3.3 adaptations with GC #3 Mitigation opportunities.	SDR Members	Late Fall 2008
Reprise the media roundtable	SDR Members	Late Fall 2008
Complete a Post-Disaster Assessment Team Best Practices Analysis and identify opportunities to leverage the private sector	SDR Members	Early 2009