Discussion Draft

Meeting Minutes of the Subcommittee on Disaster Reduction

6 April 2011, 10:00 a.m. to 12:00 p.m., White House Conference Center Lincoln Room

Italics indicate absent members. "T" indicate members participating via teleconference.

Officers

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

NSTC Liaison

Tamara Dickinson (OSTP)

Designated Representatives

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

Other Attendees

BLM William Ypsilantis
DOE Patrick Willging
DOT Phil Yen
EPA Alona Bachi (AAAS)
Brendan Doyle
Marcy Rockman (AAAS)
FEMA Alyssa Newton
HHS Rob Tosatto
NASA Michael Goodman
NIST Eric Letvin
Marc Levitan
NOAA Nell Codner
Jenifer Rhoades
NSF Greg Anderson
Jacqueline Mezsaros
USFS Everett Hinkley
Secretariat Ross Faith

Agenda

10:00 Welcome and Introductions
10:05 Approval of March Meeting Minutes
10:10 Presentation: Disaster in Japan
11:00 Report from the Chair
11:10 Report from the NSTC Liaison
11:20 Report out from the ISDR Regional Platform Meeting
11:25 Presentation: Medical Reserve Corps
11:55 Close and Next Actions

Handouts

- Agenda
- Draft March Meeting Minutes
- Mainstreaming Disaster Risk Reduction in Asia (April 15 meeting agenda)
- NRC Earthquake Report Announcement
- Regional Platform Communiqué: Lines of Action to Strengthen Disaster Risk Reduction in the Americas
- U.S. Statement delivered at the ISDR Regional Platform meeting

I. Call to Order and Introductions

Subcommittee on Disaster Reduction (SDR) Chair David Applegate (USGS) called the meeting to order at 10:04 a.m. and the participants introduced themselves.

II. Approval of March Meeting Minutes

The March Meeting Minutes were approved with no changes or corrections.

III. Presentation: Disaster in Japan

David Applegate serves as the Senior Science Advisor for Geological Hazards at the U.S. Geological Survey. He spoke to the SDR about the recent earthquake in Japan and its implications for the U.S. related to three key areas: hazard assessment, preparedness, and early warning. Jenifer Rhoades serves as the Tsunami Program Manager at NOAA's National Weather Service. She also highlighted implications for preparedness in the U.S. while explaining how the tsunami unfolded in Japan.

Japan is undoubtedly one of most earthquake-prepared countries in the world and by several measures is the field's leading pioneer. In recent decades, it has made substantial investments and significant progress in advancing and implementing earthquake-resistant building codes. Loss of human life directly resulting from the magnitude 9.0 earthquake that occurred on March 11th off the Honshu coast was low given the severity of the shaking to which buildings in Sendai, Tokyo, and other cities were subjected. Applegate noted that current estimates place those losses in the 100s. Building codes are fundamentally about life safety, and in this respect, Japan's investment in them over the years saved an untold number of lives that would have been otherwise lost on March 11th. Structural damage to buildings was significant and repairs will certainly carry a heavy price tag, but while deferring to his colleagues from the National Institute of Standards and Technology, Applegate noted his understanding that there had been no major building collapses as a result of shaking.

A striking element of the disaster is that the Honshu earthquake was the fourth largest in recorded history, yet the earthquake hazard itself is not the central, compelling element of the disaster narrative. Rather, the tsunami it generated has resulted in a death toll that continues to climb into the tens of thousands and, when business disruptions are factored in, economic losses that may exceed $1 trillion, making this cascade of events by far the world's most costly disaster to date. Damage to the Honshu region's critical infrastructure and industries are disrupting supply-chains on a global scale, and the release of radiation from the Fukushima Daiichi nuclear power plant remains an ongoing problem. Moreover, while the fault zone stress off the coast of Honshu has been relieved by the March 11th event, other adjacent fault zones have likely been loaded as a result of it. The magnitude 9.0 earthquake that occurred off of Sumatra on December 26, 2004, was followed in March 2005 by a major 8.6 earthquake in an adjacent fault zone. In Japan, there is now concern that the adjoining fault near Tokyo has been loaded in a similar manner.

The scope of loss in Japan, especially tragic given the country's robust track record of preparedness, is nevertheless providing a teachable moment for the global and U.S. disaster communities. Learning from this event and applying the lessons it offers will be an important effort for all in the months and years ahead. Applegate reported that there is strong interest from the White House Office of Science and Technology Policy (OSTP) to charge the SDR with mining these lessons to better prepare for earthquake and tsunami hazards in the U.S. Over the coming weeks, the SDR will be seeking volunteers to participate in a working group focused on addressing that challenge.

Applegate focused in on three main areas where Japan's experience might inform efforts in the U.S. First, hazard assessment mapping needs to be continually improved. The fault zone off of Honshu was thought to be segmented and incapable of rupturing over a long distance; that assessment has proven to be incorrect in light of the great distance over which the fault ruptured on March 11th. While fault zones off

the Alaskan Coast have demonstrated their ability to generate earthquakes greater than 9.0 (e.g., Prince William Sound, M 9.2, 1964), there is currently an active debate over whether the Cascadia Subduction Zone off of the Pacific Northwest Coast is capable of generating a similarly massive earthquake. If anything, the mistaken general consensus of the scale of the earthquake hazard off of Honshu is reason enough to revisit and continually advance earthquake hazard assessments in the U.S.

Second, public readiness in the U.S. as well as increased adoption and enforcement of building codes at the local level fall under the rubric of preparedness for which the example of Japan is instructive. Applegate noted that the number of participants who had registered for the April 28th Great Central U.S. ShakeOut quickly increased from 930,000 before Japan's earthquake to over 1.7 million following it. There is also the corollary responsibility to research how structures in Japan performed during the earthquake and improve building codes based on those findings.

Third, while Japan's earthquake early warning system proved effective in generating an alert 30 seconds after the origin of the March 11th event, the U.S. still lacks such a system. A research effort for developing one is currently underway in California but is subject to FY12 budget cuts.

Rhoades stated that the U.S. made significant investments in its tsunami detection and warning systems in reaction to the December 26, 2004 Indian Ocean Tsunami. Today, the U.S. Tsunami Warning System includes the Pacific Tsunami Warning Center, which has forecasting responsibility for Hawaii, all U.S. interests in the Pacific other than the U.S. West Coast, most countries in the Pacific and around its rim, and interim responsibilities for the Indian Ocean, most of the Caribbean, and the South China Sea. The West Coast and Alaska Tsunami Warning Center has responsibility for California, Oregon, Washington, Alaska, Canada, Puerto Rico and the Virgin Islands.

Investments over the past six years have reduced the time needed for U.S. tsunami forecasters to issue "products" (e.g., warnings, advisories, watches, and information statements) from 15 minutes in 2004 to six minutes today for tsunamis generated in the areas of U.S. forecasting responsibility. Outside of these areas, as was the case with the Honshu earthquake, the speed of U.S. forecasting has improved from 26 minutes to an average of 15 minutes over the same time period. Japan issued its own tsunami warning three minutes after the earthquake began. The Pacific Tsunami Warning Center followed that warning with a product of its own nine minutes after origin. Such strides in forecasting have been made possible by the addition, since 2005, of 33 DART buoys throughout the Atlantic and Pacific Oceans, the Gulf of Mexico, and the Caribbean. Before 2005, the number of U.S. DART buoys numbered only six. U.S. tsunami forecasting capabilities also rely on 164 coastal sea level gauges maintained by NOAA's National Ocean Service.

Investments since 2004 have also increased community tsunami preparedness and partnership on mitigation. In 2004, NOAA's TsunamiReady program had only 11 recognized and participating communities. Today, that number stands at 83. In terms of mitigation, the National Tsunami Hazard Mitigation Program (NTHMP) has proven to be a successful state and federal partnership. Run by NOAA, the program involves several partners, including the USGS, FEMA, and all 29 coastal states and territories. Work still remains to harmonize tsunami evacuation signage and maps, which are different around the country and would benefit from more consistency. Rhoades noted the NTHMP will be fine in terms of FY12 funding, but the situation for FY13 remains uncertain.

IV. Report out from the ISDR Regional Platform Meeting for the Americas

Nick Suntzeff (State) reported that just weeks before the Regional Platform meeting (March 15-17, Mexico), the United Kingdom's Department for International Development (DFID) released a report ranking the efficacy of more than 40 UN agencies in which the International Strategy for Disaster Reduction was ranked second to last. Suntzeff pointed out that the ISDR is not a "boots-on-the-ground"

agency focused on implementation, but rather an organization that tries to coordinate different international stakeholders across sectors. However, it is currently piloting an initiative focused on reducing disaster risk in Nepal as something of a test case for spurring action. A significant portion of the meeting was spent discussing climate change adaptation. Suntzeff also noted that the Caribbean countries made a strong showing of unity at the meeting, voicing concern in particular about hurricanes and tsunamis, and expressing a desire to gain more access to data products put out by the United States. The communiqué produced by the Regional Platform representatives as well as the statement delivered by the U.S. at the meeting were included in SDR Members' meeting packets.

Sezin Tokar (USAID) invited SDR members to contact her if they wanted to participate in a meeting focused on disaster risk reduction in Asia—and more specifically Nepal—scheduled to be held on April 15th in Washington, D.C.

V. Presentation: Medical Reserve Corps

A U.S. Public Health Service officer since 1988, CAPT Robert Tosatto directs the Civilian Volunteer Medical Reserve Corps. He also serves as an advisor to the Surgeon General and the Assistant Secretary of Health. CAPT Tosatto spoke to the SDR about the Medical Reserve Corps at the recommendation of subcommittee member Dr. Mark Keim (CDC).

The Medical Reserve Corps (MRC) is an initiative run out of the Office of the Surgeon General with a mission to engage volunteers to strengthen public health, emergency response and community resilience. Formed in 2002—in response to the realization that effective systems were not in place around the Nation to coordinate the type of mass volunteerism witnessed in the days and weeks following the September 11th terrorist attacks —the MRC, over the past decade, has helped to build a nationwide network of local public health, medical, and administrative volunteers committed to reducing disaster risk in their communities. At the federal level, the MRC program is principally an umbrella organization, providing technical expertise, guidance, and support to local MRC chapters, of which there are currently 941 across the country. MRC chapters exist in all 50 states and several U.S. territories, encompassing approximately 210,000 volunteers in all.

MRC chapters, also known as "units," are organized and function primarily at the local level: at heart, the MRC program is community-based. Participating jurisdictions structure their MRC units in ways that best fit local needs and desires. They tend to be run out of local health departments, although in some jurisdictions a local hospital, emergency management agency, or fire department will serve as the parent organization, also known as the "housing organization" in MRC parlance. Texas has one MRC unit for the entire state, but most units tend to cover one or perhaps a few adjoining counties.

All MRC units conduct baseline training with support from the federal MRC program in core competencies such as incident command and psychological first aid, but actual training at the local level for volunteers varies somewhat from unit to unit. Essential for all MRC units from a pragmatic standpoint, however, is that a champion exists at the local level with the means to support and operate the unit through his or her organization, be it a public health department, local hospital, etc. Approximately 80 percent of MRC leaders are paid employees of the sponsoring or "housing" organization, but for the majority, serving as a MRC lead is just one of the many hats they tend to wear. Most are half-time, quarter-time, or less in their MRC leadership duties.

MRC units are not standalone. They augment existing resources and existing public health, medical, and emergency management agencies and partners. They are not intended to supplant paid professionals, but to help and assist them. The key point for the MRC is to make sure that the volunteers are managed appropriately – through recruitment, screening, credential verification, and training. The MRC program partners with external organizations and in particular has an excellent and very complementary

relationship with the Red Cross. Tosatto explained that Red Cross shelters are primarily for mostly healthy people. Many times if someone in the shelter needs treatment beyond basic first aid, the shelter will send that person to a local emergency room or clinic. However, if an emergency medical system breaks down, as was the case with Katrina, having the ability to deliver more advanced medical care in shelters is important. The MRC system can play a helpful role in this respect by bringing enhanced medical care to shelters during a disaster.

Beyond emergency response, MRC units often play an important role in the general promotion of public health, and this aspect of the MRC program is increasingly important at a time when public health budgets are declining around the nation. A recent survey conducted by the National Association of County and City Health Officials found that approximately 20 percent of the local health department workforce had been lost nationwide during the last two years. As the majority of local public health departments have only an average of 15 employees and budgets under $1 million, these lost employees represent a significant blow to the public health system.

Against this backdrop of declining budgets, Tosatto emphasized the MRC concept's importance and utility by citing an example of an H1N1 vaccination campaign carried out by the Rhode Island chapter. When the Rhode Island Department of Health decided that it would use its ration of H1N1 vaccine to vaccinate all school children in the state, it quickly encountered obstacles with actually administering the drug. With its regular contractor and several others whom it asked unable to implement the mass vaccination campaign, the health department turned to the state's MRC unit. The unit accepted and over six weeks vaccinated 84.7 percent of all public and private school children in the state. That figure is remarkable when compared with a national average of just 30 percent of school children vaccinated. Beyond vaccinations, the H1N1 outbreak last year was a watershed event for public health in general, and for the MRC program as well. MRC units around the country participated in over 3,000 events involving more than 50,000 MRC volunteers in response to H1N1.

Other examples of past MRC activities have included: providing free medical and dental screenings in Texas; free medical care to rural communities in Alabama and to the uninsured in Minnesota; meningococcal vaccinations for university students; and health care assistance following Haiti's earthquake for repatriated Americans and Haitian Nationals flown to Florida hospitals for treatment. At the national level the MRC program is working with the White House and the First Lady on the "Let's Move" initiative, which has the mission of solving the problem of childhood obesity within a generation. It also is encouraging MRC volunteers to promote the President's Active Lifestyle Challenge within their communities. Additionally, the MRC is involved at the federal and local levels in the National Level Exercise 2011.

Tosatto explained that challenges certainly remain to improving the MRC system. One critical area is extending legal protection to all 210,000 volunteers, to the almost 60,000 participating nurses, and in particular, to the 15,000 volunteer physicians. There is no across the board legal protection for MRC volunteers—it is a patchwork of protections. Sometimes local public health departments will extend protection to volunteers by deeming them public health employees for purposes of tort claims protection and workers compensation, but Tosatto explained that this approach was the "gold standard" within the MRC system. Tosatto noted that he continues to work on solutions to the challenge.

VI. Report from the Chair

Forgoing his report from the chair earlier in the meeting, Applegate took the closing minutes of the meeting to advise SDR Members that following the meeting he would be electronically circulating the presumptive final draft of the U.S. contribution to the Hyogo Framework for Action Monitor for any last comments. Comments should be sent to the SDR Secretariat by April 22nd. The document will then be passed to the State Department for revision/concurrence before being uploaded to the ISDR's website.

Applegate also reported that the National Research Council had recently released a report that includes a 20-year road map for increasing U.S. resilience to earthquakes. An announcement of the release including further details was provided for Members in their meeting packets.

Michael Goodman (NASA) reported that NASA will likely be issuing a call for research proposals related to improving the transfer of satellite and airborne capabilities and data to end user organizations. Possible areas of research include improving data collection and transfer related to floods, landslides, earthquakes, tsunamis, and technological disasters. Goodman expected that NASA would be seeking to partner with other federal agencies in the effort. One stipulation is that each proposal must include collaboration with an end user organization.

VII. Report from the NSTC Liaison

Tammy Dickenson (OSTP) passed on her report from the NSTC liaison, noting that the issues which she intended to raise had already been covered in other portions of the meeting.

VIII. Adjournment

The meeting adjourned at 12:11 p.m.

IX. Future Meetings

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

Thursday, May 5, 2011	*Thursday, August 4, 2011	Thursday, November 3, 2011
Thursday, June 2, 2011	Thursday, September 1, 2011	Thursday, December 1, 2011
Thursday, July 7, 2011	Thursday, October 6, 2011	

*Subject to cancellation

X. 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).

XI. Contact Information

SDR Leadership

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

Secretariat

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

XII. Summary of April Actions

Action	Lead	By When
Send comments on the U.S. submission for the UN International Strategy for Disaster Reduction's Hyogo Framework for Action Monitor to (ross.faith@mantech.com).	SDR Members	April 22
Contact the SDR Secretariat (ross.faith@mantech.com) if you are interested in participating in a working group that will be drafting a lessons learned report covering the earthquakes and tsunami in Japan, New Zealand, Chile, and Haiti.	SDR Members and Federal colleagues	ASAP
Contact Dave (applegate@usgs.gov) or Ross (ross.faith@mantech.com) for information on how to tie into the National Level Exercise 2011 calendar of events.	SDR Members and Federal colleagues	ASAP
Send Sezin Tokar (stokar@usaid.gov) your ".gov" e-mail address to receive USG-only updates from USAID on global disaster response activities.	SDR Members and Federal colleagues	Standing
Contact Ross (ross.faith@mantech.com) to receive copies of the Grand Challenges for Disaster Reduction Implementation Plan packets or CD.	SDR Members	Standing
Let Dave (applegate@usgs.gov) or Ross (ross.faith@mantech.com) know how you use the implementation plans, including when you link to the plans from your agency websites. Send Ross or Dave additional distribution suggestions, including relevant contact information.	SDR Members	Standing