



We envision a just and equitable world where knowledge is applied to ensure that humans live in harmony with nature.

Natural Hazards Center Advisory Committee Meeting

National Academies of Sciences, Medicine, and Engineering
500 5th Street NW, Washington, DC 20001, Room 101

December 19, 2019

8:30 a.m. to Noon p.m. ET

Attendees:

David Applegate, U.S. Geological Survey
Lauren Alexander Augustine, Gulf Research Program of the National Academies of Sciences, Engineering, and Medicine
Jason Averill, National Institute of Standards and Technology
Debra Ballen, Insurance Institute for Business & Home Safety
Chad Berginnis, Association of State Floodplain Managers
Leremy Colf, U.S. Department of Health and Human Services
Chris Emrich*, University of Central Florida
Michael Grimm, Federal Emergency Management Agency
Thomas Hughes, National Hazard Mitigation Association
Mark Roupas*, U.S. Army Corps of Engineers
Nick Shufro, Federal Emergency Management Agency
Wendy Walsh*, Federal Emergency Management Agency
Lori Peek, Natural Hazards Center
Jennifer Tobin, Natural Hazards Center
**On Zoom conference call.*

Agenda Topics for Discussion

Briefing and Discussion Regarding Natural Hazards Workshop and Researchers Meeting

- *By The Numbers 2019: Workshop and Researchers Meeting Attendance
- *2020 Idea Generation - Topics, Sessions, and Speakers
- *Review 2020 Workshop Theme
- *Advice for the 45th Workshop - Celebrations and Reflections
- *Feedback and Advice - Registration Fairness and Demand

Feedback on Ongoing and New Initiatives at the Center

- *NSF Clearinghouse Grant - Program Officer Transition
- *New Initiatives
- *Discuss the Third Assessment Launch Meeting



Meeting Notes

Welcome:

Lori welcomed everyone to the meeting and thanked the Advisory Committee members for their service to the Natural Hazards Center and to the broader hazards and disaster community.

Self-Introductions:

We did a brief round of self-introductions and offered an extra welcome to Jason Averill and Tom Hughes. This was both of their first meeting as newly appointed Advisory Committee members.

Meeting Objectives:

After the self-introductions, Lori reviewed the Meeting Objectives as listed on the agenda. Our goal, as always, is to receive feedback and suggestions from the Advisory Committee regarding how we can improve our function as the nation's clearinghouse for the societal dimensions of disasters. Lori emphasized that we welcome feedback from the Advisory Committee "24-7"—anytime, not just in the context of these meetings. She again expressed gratitude for the words of wisdom shared by the committee.

This specific meeting was organized to receive feedback and suggestions on the organization and structure of the 2020 Workshop and other ongoing initiatives at the Center. We were also eager to receive updates from the federal agencies and our other partners so we can fulfill our information sharing purpose through the Center.

2020 Workshop Discussion:

We began this discussion by reviewing registration numbers for the last several Workshops and Researchers Meetings in Colorado. The Advisory Committee raised several questions and offered comments and suggestions for moving forward.

Leremy: Are you going to be able to handle the last-minute registrants?

Debra: What about the ratio of academics to practitioners?

Lori: Cost for practitioners is an issue for that balance. Also, NSF guided us to open registration.

Lauren: Have had success getting local participants through shortening time commitment. Maybe you should consider that.

Wendy: Reached out to NEMA and IAEM for recruiting participants. Might be able to share info and ideas for how to meet their needs too. Also, academics are both researchers and teachers. Teachers who are adjuncts might be both academics and practitioners. Might need to expand this category.

Chris: Students might register as academics but could end up being practitioners.



Nick: Maybe provide listening sessions with conference calling with some sessions.

Leremy: Academics want to present their research so practitioners can use it. Maybe implementation partnership should be required as part of session proposals.

Chad: Are we sure we understand the root cause? Cost or interest? Used to use the WS for a planning session for ASFPM. Practitioners split 50/50 on whether they love it or hate it.

Tom: IAEM, NEMA, ASFPM conferences all are occurring, need approval, and practitioners might be maxed out with priority attendance. NHMA used to have a Thursday day for practitioners, but that was too long. Increase networking options so that practitioners can actually meet academics.

Lauren: What do we want to achieve? Likes the idea of a teleconferencing option.

Mike: I agree. Size was great. Posters on 2 nights was great. Sessions were great. I don't think we really need to change anything.

Chad: When you add up all of the other categories that are non-academic, it is about half and half. Maybe we don't have a problem.

Lauren: There are a lot of researchers presenting to practitioners and not the other way around.

Nick: Numbers and surge. How do you increase quality of interactions? Maybe a call-in tactical approach. In the past, you said that if there is a room for jobs for people to meet. Maybe do the same for practitioners. Tactical way of increasing interactions.

Debra: The numbers are lacking representation from Non-Profit and Private sectors. This voice does not get enough attention. Missed opportunity for these people helping to broadcast this knowledge that is generated by the academics. This is clearly succeeding as an academic conference. But be clear about what it is.

Lori: We are grappling with the climate footprint as well.

Mike: I think you are being fair. Make deadlines hard.

Chad: The balance piece is a fabric of the Workshop. Get call for abstracts out to practitioner communities. Also, balance of academic/practitioner posters.

Dave: Participation remotely. Put in pressure/release valves. Expand jobs session to have a practitioner session too.

Jason: We encounter this problem. Put it in the rules and people have to listen to them.

Lauren: If your goal is about the balance, maybe an option is to have different sectors for each day. When you invite people to shape it, it might get to the people you say you want to reach.

Leremy: Could be a problem if academics only attend academic days, etc.



Wendy: To facilitate convergence and networking, we started to play with the organization/facilitation by FEMA region. Invited one representative from each region to strengthen the networks within their own communities. We may even have people sit together so people group by proximity where they work.

Advisory Committee Workshop Suggestions—Handout Discussion:

Leremy: Look at past Tweets to see what interested people most.

Tom: Please add Tribal to “local” category.

Nick: Promises made, promises broken. Think Maria. Trend where people are saying 2 years later, where is the funding?

Chris:

1. CDBG-MIT program – A much looser opportunity to get scarce mitigation \$\$ into play. Still, the focus is only on LMI populations rather than a larger definition of vulnerable populations.
2. Vulnerability Bearers – Who bears the burden of disasters? How do we assist these people (before, during, and after disasters)
3. Freeing hazard loss and assistance data. NFIP is just the first step in releasing data to everyone. Once academics can get a hold of this data and work together with practitioners we can solve many WICKED problems.

Debra: The challenges of spending money to improve bricks and mortar. It’s a process that starts at the top, but it has to meet in the middle to be done effectively. Without practitioners understanding how to do this, it’s not going to happen.

Nick: It takes two hands to shake.

Wendy: Promises made, promises broken. Do people know how to spend money? Do researchers know how to work with practitioners? Bridget Bean, FEMA has offered to do a workshop, also Katherine Fox did a workshop on BRIC. I am interested in innovation... prototyping to address product and process for creating resilience.

Tom: Hoping we would have someone from the local disasters...floods...Nebraska state director and how they are managing funding. FEMA doesn’t restore to whole. Disaster Recovery Act of 2018 is huge. FEMA Risk Rating 2.0.

Have a place for practitioners to put down products such as a CBDG handbook in addition to posters.

Concurrent panel session—How universities can assist after a disaster? Land-use planning, students, field experience.

NHMA standpoint: Showcase interactive curriculum. No cost for locals to go through training.



NOTE for Jen: Separate research practice highlights and posters to differentiate products being created by practice, policy, academics. Have boxes to check for academic/practitioner/policy.

Mike: Implementation for strategy team, real life examples, mitigation exercises, DRRA, Risk Rating in context of NFIP transformation. Binary to graduated data methodology with maps too. Modern NFIP. FEMA risk management workshop.

Keynote recommendation: Doug Mackenzie-Mohr, Environmental Psychologist and author of *Fostering Sustainable Behavior: An Introduction to Community-Based Social Marketing*. He is an academic that associates with governments around the world and brings the social sciences into programs. Great speaker; focused on moving research to action.

Jason: Report on functional recovery, NHERP. How do communities recover in a functional way? Utilities may not be fully involved in the workshop. Also, non-structural components. Building envelope. Whole area of functional recovery deserves more attention. Report comes out on June 30, 2020. R&D needs for resilience. Howard (his boss) is in charge of that. Wants a session to collect comminutes R&D interest.

David: Maybe even a townhall.

Jason: Use technologies for townhall.

Nick: Sendai Framework 5 years old. What is happening with respect to STG's?

Also, a lot of info is technical. His office is responsible for general leadership and management. Have a workshop on building soft skills and teach people how to work at an organization.

David: DRRA and many other big game changing developments. Moving from conceptual change to how is this actually going to play out? Science in the post disaster environment. Amazing article in *Nature* about ethics in disaster research (nod to Lori). How it gets injected into the EM environment. How it is coordinated, how NSF engages in this arena, lots going on in the health side around this too. EEW is huge for USGS.

Keynote:

Kelvin Droegemeier and Maria Honeycutt, co-chairs on Resilience, White House Office of Science and Technology Policy.

David Alexander, Senior Science Advisor for Resilience, Disasters, and Emergency Management
US Department of Homeland Security

Concurrent sessions: How science engages in post disaster environment, many voices brought up liability issues and how to actively engage in that arena.

Wendy: David Alexander, DHS

Keynote: RISE Marla, Cecilio at Penn State connecting university infrastructure to resilience and sustainability. Interesting keynote or panel.



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Andrea Davis, Director of Crisis Management and Business Continuity for the Walt Disney Company

Yoko Akama, Sara Pink authors of book, *Uncertainty and Possibility*. Possible keynote or plenary.
Frank Barrett, author of *Yes to the Mess: Surprising Leadership Lessons from Jazz*.

Need to integrate art into the learning that is happening in the WS.

Dr. Dave Fetterman, author of *Foundations of Empowerment Evaluation*. Communities assess what is already going on and everybody has a voice and moves forward in action. Panel, WS, interesting approach.

Debra: Two discrete streams—the workshop and what you do the rest of the time. Can the theme of the workshop be the theme for the NHC for the year? How has our understanding of disaster mitigation, risk, preparedness, communication, protection changed in the last decade? 2020 may be more interesting than 45th anniversary. Series of themes that get us to the 50th anniversary of the workshop. Frame it about more than what people do for a week in July.

Quote the students. Climate change space really includes the High School students as well. Make their voices more visible.

Lauren: Loves K-12 K-20 idea. Starting now and building over the next five years. Building the workforce in an environment of literacy.

BRIC Program would be timely to have something stated about what it is.

2 topics:

1. Intense wildfire season, new temporal dimensions, where it is happening, land-use changes and how it is contributing. Power shut off. So many layers about new normal. How do you balance that with steady flooding? Hot and dry, wet and soggy. How to deal with multiple extremes at one time.
2. Urban flooding. This issue is ubiquitous. It's about federal resources coming down and local resources coming up and meeting in the middle. This is the poster child for this. This is exacerbated by actions at the local level. FEMA has no jurisdiction on local storm water management, but this is a growing issue and brings in the local non-profit and private sectors. Covers all of the audience dimensions.

Chad: Temporal part of wildfires is important. "Unending hazard paradigm." Places where events are continuous. Flood insurance problem where you can't get it when a flood is in progress. Events used to be single and done. FEMA is responding constantly. ASFP Foundation Report. From the practitioner side, very little agreement on where and how to address this. Convergence of academic, policy, practitioner communities.

Debra: This maps back to "how have things change in the past decade?" This is a perfect example of what we are dealing with today that we weren't a decade ago.



Chad: Can plan for 1-2 inches, but 4 inches, we are not prepared for that. Sea-level rise and climate change. All studies are pointing to that it is happening more rapidly than we thought and it is worse than we thought.

Finally, we are considering the social in policy and practice.

Finance and insurance. What does that mean in California, for the private sector, with flooding?

Lauren: On climate, how rapidly things are changing. Balance problem, this is might be where real estate developers really have a voice. A flood in a city is easy for people to understand.

Chad: Pam Williams, Build Strong Coalition. Lead NGO organization bird-dogging.

Nick: 50th NFIP work at the NHC, Risk 2.0

Speakers: Roy Wright (maybe paired with Chad)

Mike: Also wants to reinforce urban flooding. NFIP, Risk Rating.

David Maurstad, FEMA with Steve Fitzgerald

Tom: Tribal needs to be included. Mitigation measures...but what about retreat? Acceptable use of property. Annie Vest, NHMA— Former State Hazard Mitigation Officer for Oklahoma.

Leremy: Laws. People were very interested in this topic last year. Involvement in disasters, liability, what FEMA does and does not do. Need for practitioners, researchers, etc. When can you use money for different things? Pandemic and all-hazards preparedness advancing innovation act, CMS (Medicaid and Medicare services) preparedness rules: 17 new facility types that need to develop plans that didn't before. November is the deadline for developing evidence-based effective plan. Continuity of operations planning. PRA, IRB, etc. National library of medicine, Dr2 program, etc.

Data. Lots of requests. Interested in mapping out by state, cost, etc. Flood most common. Trade-off between prevalence versus consequence.

Keynote: Illya Azaroff, designing disaster resilient homes. Architect. Requires homes to be built under 200K. Plans have to be open source. Can be modified to adapt to local hazards, but requires those to open source also. Robots?

What are new flood plains and how do they work? Need the discuss of why we need to flood plains, how can we use GIS, etc.?

Concurrent panels: Team Rubicon, medical response teams, doctors without borders. What do they do? How do they make decisions?

Economic emergency support functions, EDA within commerce. SBA, how do they get involved?

Can we compare the same types of disasters in the US and internationally?



The health affects of smoke inhalation from wildfires, health implications of power shutoffs, (data is showing that very few health consequences). Sheltering?

Gregory Sunshine, Legal Analyst, Public Health Law Program Centers for Disease Control and Prevention. Did study of every legal claim that has come up against medical providers in disaster. Found there has never been a medical provider found guilty.

Chris: Casey Suzak, Hazard Mortality Thesis. Free the data.

NHC Status Discussion:

Chad: What do you see in 2020/2021 in terms of capacity? Library? What do you foresee as potential hurdles on the horizon? Anticipated issues we can help with?

Nick: How can we be informed about what is going on? Such as webinars? Send out email to advisory committee.

Debra: Active Hope is an organizing principle around everything we are doing. We developed a 2-year plan based on everything we were already doing, but organized around a principle. Take a theme and flow everything into that. Then pivot to say “What is our future and how is it better than the past?” Plan for the future in a way that the plan becomes bigger and better.

Mike: Agree. This is what they are doing at the NFIP. Know what to do and to stop doing. Usually when we are stretched too thin, it is because you are doing too much.

Tom: Hope is not a plan, but failure is not an option.

Chad: What is the status of the NHC Library and Observer?

Lori: Wanda retired, but online database is still live. Over 60,000 pieces. Observer started in 1976, but NSF said that a print newsletter is no longer what the community needs.

Chad: Observer had the known quantity from a practitioner community. Maybe even the titles of the new products are the problem as they all include “research.” There is so much information these days, that what we need is someone to give it value. There is relevancy in the communication we are using for the policy and practitioner sides.

Wendy: Can help support and distribute NHC news through FEMA Higher Education newsletter which has 75K subscribers. National Emergency Training Library...should converge in all of these ways to leverage all that we all do. Be more strategic in how we are connecting across groups.

3rd Assessment Discussion:

Chad: There is a science and discipline to every hazard, even in mitigation. I have a lean to First Assessment approach where we go through each hazard and then focus on where we are. It can't just be all-hazards and expect to solve the problem, and we can't completely be single hazard either.



Tom: 33 hazard profiles now, why did they pick 12?

Mike: Flood hazard map to flood risk data transition. How do we go from hazard identification to risk management? National Risk Index Measure

Nick: Roy used to talk about not contemplating the problem. We need to look at actionable data. Help inform decision makers. Where is the risk and how do you manage it? Critical to be more actionable.

Dave: Risk is what matters to people... "science for a risky world." Other aspect is one step further...mainstreaming. Climate adaptation, sustainability, in the new normal.

Jason: Workshop, strategic plan, 50th anniversary, confluence of opportunity. If we look at fire problem in the 1973 President Nixon's report *America Burning* out of which many lives have been saved in wildfires.

With this assessment, start with some goals...reduce losses by half, number of people who die by half, build around goals and map out "how-to." It can frame future legislation if properly and thoroughly assessed.

Chad: From risk to resilience by the hazard. A lot of researchers really interested in the mitigation and resilience side. We will lose communities if we don't implement research on adaptation and resilience.

Chris: Procedural equity, Vulnerability Bearers, need to know about zone, impacts, social vulnerabilities, community resilience. National index is coming out, but we need the narrative about how we go about identifying these things and why does it matter? How do we get from A to Z? Not A to D.

Cannot live under a litany of despair.

Advisory Committee Written Workshop Suggestions:

Prompt: *Think broadly about the hazards landscape, please identify 1-2 projects, initiatives, pieces of legislations, disaster events, etc. that seem especially important to highlight as part of the 2020 Natural Hazards Workshop.*

Suggestions:

1. Mike Grimm
 - NMIS implementation – federal, state, local, private
 - Ex: Wasatch Front in Region 8 (fix the bricks, NHERI, BRIC/grants/ORRA, codes)
 - NAS/NHC/MACO/FEMA coordinated project, TBD
2. Leremy Colf
 - Legal- Pandemic & All-Hazards Preparedness Advancing Innovation Act (PAHAAIA)
 - 21st Century Curse – DR2
 - Data- CMS Preparedness Rule- new floodplain definitions and implementation

3. Jason Averill
 - DRRA → particularly the 6% mitigation funds program
 - SRST – R&D needs outreach
 - Functional Recovery (NIST/FEMA requirement in NEHRP reauthorization) connect to infrastructure
4. Nick Shufro
 - Long-term funding – promises made, promises broken – what is happening with committed funding long-term?
 - Tying in work being done and emerging trends being seen (e.g. UNCC reports on temperature)
5. David Applegate
 - DRRA implementation – potential game changer for mitigation investment
 - Science in the post-disaster environment – how universities can assist in the event and knowledge for future events. Access and coordination integration into the EOC (Wasatch – fix the bricks, NMIS implementation, innovative prototyping, Impact 360, FEMA risk rating 2.0, DRR curriculum)
6. Debra Ballen
 - What a decade it has been 2010-2020
 - How have hazards changed?
 - How has our perception changed? (e.g. social media?)
 - What do we need to do for 2020's? (physical & financial protection, preparation)
 - Climate Risk/Adaptation → the rise of the next generation
7. Chad Berginnis
 - Trend: incorporation of social considerations into hazard mitigation
 - Trend: finance and insurance in high hazard areas (wildfire, flood)
 - Trend: the un-ending hazard paradigm (flood that doesn't stop, wildfire?)
 - Trend: urban flooding?
 - Trend: acceleration in SLP climate change impacts to communities, states, gov.
8. Lauren Alexander Augustine
 - Something about the intense change in wildfire “season” combined with record flooding – how to deal with multiple extremes at one time.
 - Urban flooding- combos of the dual local, public, private – perfect topic for conference

Prompt: Now in thinking about your own organization, is there a project, program, or initiative that you are eager to highlight at the 2020 Workshop? If so, please share below.

1. Mike Grimm
 - NFIP Transformation (Risk Rate 2.0, “Modern, Risk based NFIP”, shift from binary maps to graduate risk)
2. Leremy Colf
 - Health effects of smoke (new data sources/ Disaster Prevalence & Effect), Flood Mitigation ROI, disaster protection, sheltering, hurricane compensation,
3. Jason Averill
 - Hurricane Maria Investigation
4. Nick Shufro
 - Program specific knowledge (e.g. natural hazards) vs. general management & leadership development – how do you become a leading practitioner, leading organizations

- effectively, transparently and with purpose?
5. David Applegate
EEW is a large-scale social experiment, learning a great deal and big expectation challenges and complex interface among federal, state, local and private sector
 6. Chad Berginnis
ASFPM's Certified Floodplain Manager Program, Floodproofing Technologies (Nat'l Flood Barrier Testing and Certification)
 7. Lauren Alexander Augustine
GRP programming around EnCore (Enhancing Community Resilience); urban flooding with Chad B.

Prompts:

Contributor Suggestions? Keynote? Plenaries

1. Leremy Colf—Illya Azaroff, Legal framework of disasters (Stafford Act, Disaster supplement, etc.), new flood definitions & implications, economic consequences (FEMA, Commerce, SBA), medical reform teams (WHO, MSF, IMF)
2. Jason Averill—Maria Honeycutt, Assistant Director for Natural Disaster Resilience, White House Office of Science and Technology Policy, Eric Letvin (FEMA) Jack Mestáros (NSF), Judith Mitrani-Reiser (NIST)
3. David Applegate—Kelvin Droegemeier (via Maria Honeycutt, SRST), Lori's *Nature* article on ethics during disaster response, emerging questions in post-disaster science
4. Debra Ballen—Ray Wright (IBHS)
5. Lauren Alexander Augustine—urban flooding, Chad B. and Roy W.
6. Nick Shufro—Roy Wright, one of the catastrophic risk
7. Chad Berginnis—Pam Williams, Build Strong Coalition ED
8. Lauren Alexander Augustine—Baton Rouge – FEMA, LA State, county; or Houston – FEMA, Harris city, state, neighboring (Sam Brody)?

Concurrent Panel Session?

1. Leremy Colf—disaster agency perspectives, USVI- development of mitigation plan, compare differences in U.S and international response. What is a “disaster death?”
2. David Applegate—liability issues for scientists during disaster
3. Debra Ballen—How to move federal post-disaster \$\$ toward better rebuilding, bricks & mortar and health and safety
4. Chad Berginnis—DRRA Implementation; Network, AK community relocation; trends in state investments in mitigation; urban flood plan; land use for hazards loss reduction
5. Lauren Alexander Augustine— The GRP would see value in having a session about our upcoming, sizable program we are developing called EnCoRe (Enhancing Community Resilience). EnCoRe is a community-based, community partnerships, resilience program/grants program for 15-30 communities in the Gulf Region and on the Outer Continental Shelf of the US. It brings in many of the issues we discussed this morning—big data, community engagement, multi-sectoral engagement, federal-state-local-government, NGOs, etc. around issues of resilience.

Poster Presenter?

1. David Applegate—NVEWS implementation



2. Chad Berginnis—would love to circle around with ASFPM’s flood science center and would love to contribute to practice highlights

Other suggestions, ideas?

1. Mike Grimm—community based social marketing, Dr. Doug McKenzie Mohr
2. Jason Averill—I like this idea of the video conference option to broaden accessibility – even if just for a subset of the information
3. Nick Shufro—SDG- UNISDR, 2015-2020 five years, then Sendai Framework 2015-2030
4. Debra Ballen—50 years for Workshop, 5 year planning to big event, 46...47...etc.

Other Updates:

NSF Program Officer Transition: Robin Dillon-Merrill served as our program officer for the NSF Clearinghouse grant for the last two years. Several of you worked with her to make transfers from your agencies to the Clearinghouse grant—thank you so much for that. Robin has now returned to Georgetown, however, so we have a new program officer.

Walt Peacock is the new program director for Humans, Disasters, and the Built Environment at NSF. However, Lori and Walt have a conflict of interest (COI) due to their service together as Co-PI’s on a grant and their co-publishing. As such, Walt cannot serve as the program director for the Clearinghouse grant. Jacqueline Meszaros, also in CMMI in the Engineering directorate, is the new program director.

Advisory Committee Terms of Service: Several advisory committee members have served the Center over the years, but their terms of service are coming to an end. Lori and Jennifer will be in touch this spring about this.

Gratitude and Adjourn:

We closed with final comments and updates from the Advisory Committee. Lori and Jen thanked everyone again for their service and generosity with their time and wisdom.

Noon. Meeting Adjourned



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Natural Hazards Center Advisory Committee - December 2019

Name	Representing
William Anderson	Transportation Research Board of the National Academies of Sciences, Engineering, and Medicine
David Applegate	U.S. Geological Survey
Lauren Alexander Augustine	Gulf Research Program of the National Academies of Sciences, Engineering, and Medicine
Jason Averill	National Institute of Standards and Technology
Debra Ballen	Insurance Institute for Business & Home Safety
Chad Berginnis	Association of State Floodplain Managers
Michael Cohen	Renaissance Re
Leremy Colf	U.S. Department of Health and Human Services
Aram Dobalian	U.S. Department of Veterans Affairs
Chris Emrich	University of Central Florida
Thomas Hughes	Natural Hazard Mitigation Association
Michael Grimm	Federal Emergency Management Agency
Samantha Medlock	Select Committee on the Climate Crisis at U.S. House of Representatives
Russ Paulsen	UsAgainstAlzheimer's
Sally Phillips	U.S. Department of Health and Human Services
Roger Pulwarty	National Oceanic and Atmospheric Administration
Mark Roupas	U.S. Army Corps of Engineers
Nick Shufro	Federal Emergency Management Agency
Wendy Walsh	Federal Emergency Management Agency
Amy Wolkin	Centers for Disease Control and Prevention