



HAZARDS AHEAD! All Hands on Deck!

We know from the trends in disaster losses and climate risks, there are hazards ahead. The idiom "all hands on deck" means everyone's help is needed. This usually speeds up completion of a large task, too. Or more hands to lift a heavy load. "On deck" also means battle ready, prepared to work. Calling all hands to work on a common objective means all skills, all disciplines, all backgrounds, an urgency that calls us to work together. These themes are apropos to hazard mitigation in 2014, illustrated by the subject matter in this Symposium agenda, both by the presentations and the discussions following. We plan to comply with formal definition of a symposium: a social gathering at which there is free interchange of ideas. Welcome, all.

Wednesday, June 25, 2014

4:00 – 4:15 p.m. Registration

CENTENNIAL FOYER

4:15 - 4:45 p.m. Welcome

CENTENNIAL E

Overview of the Natural Hazards Mitigation Association

Edward A. Thomas, President, NHMA Alessandra Jerolleman, Executive Director, NHMA

Overview of the Symposium Theme, by Co-Chairs:

Lincoln Walther, Planning Director., CSA Ocean Sciences Inc. J. Barry Hokanson, Urban Planning Consultant

4:15 - 6:15

CENTENNIAL E

WEBINAR

Keynote Address:

The Elected Official and Hazard Mitigation **Keynote Speaker:**

Linda Langston, President, National Association of Counties

In addition to her NACO leadership position, Linda Langston is also County Supervisor for Linn County, Iowa, and has been a leader in various hazard mitigation issues. The county is the home of Cedar Rapids, widely cited for its innovative resilience and recovery strategies after an unprecedented 2008 flood of the city center, including major Linn County facilities. Upon election to NACO's presidency, Ms. Langston initiated a bold and ambitious program of resiliency, mitigation, strength and sustainability - all oriented to betterment in our nation's 3,079 counties. She will enlighten us about the many initiatives and programs focused on sustainability, infrastructure, and building resilient, vibrant, thriving counties. She will also explain the importance of the practitioner to the elected official. Ms. Langston will share with us answers to questions such as why did she become involved in hazard mitigation and climate adaptation? What advice would she give to local practitioners as ways to cultivate and sustain their interest in hazard mitigation and climate change?

6:15 - 7:00 p.m.

LOBBY COURT

Joint Reception with Researchers

7:30 - 9:00 p.m.

Offsite casual dinner with update from FEMA and NOAA leadership

Thursday, June 26, 2014

7:15 – 8:15 a.m. Continental Breakfast

CENTENNIAL FOYER

7:15 – 8:15 a.m.. Informal Meeting Time for NHMA Committees

CENTENNIAL E

BREAKFAST ROUNDTABLE #1

What They Didn't Tell You: Transitioning from academia to hazard mitigation

practitioner

BREAKFAST ROUNDTABLE #2

Climate Adaptation: Atmospheric Science meets

Hazard Practitioner

8:15 - 9:45 a.m.

CENTENNIAL E

WEBINAR

Plenary:

Resilient Cities at the Cutting Edge

Moderator: Lincoln Walther, CSA Ocean Sciences, Inc.

Speakers:

Jeff Hebert, Exec. Dir., New Orleans Redevelopment Authority Grant Ervin, Sustainability Manager, City of Pittsburgh Micah Hilt, Planner, San Francisco Earthquake Safety Implementation Program

Is city resiliency a measurable reality or an attitude? Against what risks must one "bounce back?" Mitigating risks takes many forms. A development company, the Grosvenor Group, ranked Pittsburgh number five, worldwide. San Francisco is on the Rockefeller list, as is New Orleans, both survivors of major disasters and yet continued vulnerability. Pittsburgh did well on a scale that measures "ability to accommodate change in areas such as governance, technical capacity and planning systems." San Francisco is touted for its core of financial institutions and high-tech industrial might. New Orleans is change oriented since Hurricane Katrina. This session asks representatives of these three cities:

- 1. How did your city become interested in sustainability and mitigation, and what difference has it made?
- 2. What are the best ways a mitigation practitioner can cultivate and sustain the interest of the elected official in these aspects of resiliency and risk management?
- 3. What are the most important lessons you have learned about making your community resilient and sustainable?

9:45 - 10:00 a.m. Break

CENTENNIAL FOYER

10:00 -11:15 a.m.

CENTENNIAL E

WEBINAR

Integrating Hazards in Local Planning Efforts

Moderator: Darrin Punchard, MWH Global

Speakers:

Kasey Jacobs, Partnership and Outreach Coordinator, Caribbean Landscape Conservation Cooperative

Charles Latini, Jr., L&G Planning, and President of the American Planning Association, New Jersey Chapter (APA-NJ)

Is community sustainability always in sync with hazard planning objectives? Are there ever competing agendas? Are we doing our best to integrate?

In order to truly increase the resiliency of communities to all hazards, mitigation and adaptation strategies must be integrated throughout the local planning framework – that is, the collection of plans, policies, codes, programs and other instruments that guide community development or redevelopment. This session will share practical examples and best practices for achieving such integration in a holistic manner that not only reduces future disaster risk, but also effectively supports other social, economic, and environmental objectives.

10:00 -11:15 a.m.

SPRUCE

WEBINAR

Understanding Catastrophe Insurance

Moderator: Bruce Patton, California Earthquake Authority Speakers:

Janiele Maffei, California Earthquake Authority Shana Ackerman, California Earthquake Authority Kirsten Orwig, Swiss Re

Presenters will discuss the insurance issues that natural catastrophes present. This will be a high-level overview of various insurance programs that exist to cover natural catastrophes, how insurance and reinsurance cover and price these perils. The panel will also discuss how mitigation and insurance can work together to facilitate a more rapid recovery to affected communities.

11:15 a.m. - 12:30 p.m.

CENTENNIAL E WEBINAR

Tips, Hints & Tricks for Successful Grant **Programs**

Moderator: Erin Capps, H2O Partners

Annie Mack Vest, Oklahoma State Hazard Mitigation Officer Adele Balmer, Florida Division of Emergency Management

This session will feature information on how some great mitigation programs from around the nation take advantage of available mitigation grant funding resources. Hear what they have to say about outreach, technical assistance, streamlining and more!

11:15 a.m. - 12:30 p.m.

SPRUCE

WEBINAR

Making Community Growth and Development a Hazard-Friendly Process

Moderator: Molly Mowery, Wildfire Planning International Speakers:

Tareq Wafaie, Clarion Associates, Denver Gene Henry, Hillsborough County, FL

This will be a discussion of hazard policies, tools and resources that land use planners can employ when making community growth, development and redevelopment/post-disaster decisions. This session will share key insights into the hazard mitigation process, including the importance of better communication and coordination, tips for having positive relationships with the development community, and how hazards can best be addressed while still planning for community growth.

12:30 - 1:30 p.m. LUNCH

CENTENNIAL FOYER

1:30 - 2:45 p.m.

Improving Local Hazard Mitigation Planning

CENTENNIAL E WEBINAR

Moderator: Darrin Punchard, MWH Global

Speakers:

Erin Capps, H2O Partners, and Co-Chair of NHMA Hazard Mitigation Planning Committee

Rebecca Joyce, Central Shenandoah Planning Dist. Commission Nathan Slaughter, Atkins

More than a decade has passed since the implementation of the US Disaster Mitigation Act of 2000 and to date more than 28,000 communities have adopted federally-approved hazard mitigation plans. In recent years FEMA has prepared updates to its national guidance for plan reviewers and plan developers, and many communities are in the midst of preparing a third generation of local hazard mitigation plans. This roundtable discussion will focus on the successes and failures of these plans to achieve long-term risk reduction, with an emphasis on the challenges and opportunities facing local practitioners to create more meaningful and effective

1:30 - 2:45 p.m.

SPRUCE

WEBINAR

Communicating: Reaching the Public

Moderator: Kevin Nelson, US Environmental Protection Agency Speakers:

Adam Crowe, Virginia Commonwealth University

Rebecca Williams, Joplin, MO

Genevieve Williams, Joplin, MO

This session will explore how communities have used new and traditional communication resources for reaching out to the public to disseminate information before, during, and after disasters. Rebecca and Genevieve Williams created Joplin Tornado Info, a website and Facebook page that has become a model for social-media engagement. They have written a resource guide for communities that need to communicate with its population related to natural hazards. Adam Crowe is a researcher and author studying social media and its use during disasters. He will provide an analysis of efforts that have been undertaken thus far, and describe ways that this trend will go.

2:45 - 4:00 p.m.

CENTENNIAL E WEBINAR

Mitigation in Short and Long Term Recovery: **Colorado and Vermont Case Studies**

Moderator: Jeff Brislawn, AMEC

Speakers:

Nezette Rydell, National Weather Service

Steve Boand, Colorado Office of Emergency Management, Mitigation and Recovery Section

The Honorable Tara Schoedinger, Mayor, Jamestown, CO Joshua Schwartz, Mad River Valley (VT) Planning District

Mike Kline, Vermont Rivers Program

This session will discuss how mitigation opportunities and funding opportunities are being leveraged in the post disaster environment over the short and long term in the wake of devastating flooding in Vermont (2011) and Colorado (2013). The panel discussion will begin with a presentation on the meteorological aspects of the events. Panelists will be sharing lessons learned and opportunities in the post disaster environment that promote long term community resiliency in the recovery process.

State and Federal Assistance Programs for **Practitioners**

Moderator: Kevin Nelson, US EPA

Speakers:

Julie Baxter, US Federal Emergency Mgt. Agency, Region 8 Adele Balmer, Florida Division of Emergency Management

This session will present representatives from US EPA, FEMA and the State of Florida to describe and discuss national and state programs that focus on hazard mitigation. These speakers will provide the following: an overview of EPA's technical assistance work geared toward better planning and outcome oriented results to achieve environmental benefits, an explanation of the collaboration between EPA and FEMA to better serve communities with assistance that meets their needs, a review of FEMA's efforts to help cities and town mitigate hazards including a regional perspective, and finally an overview of how the State of Florida is working diligently to prepare its populous to face mitigation needs.

4:00 - 4:15 p.m. Break

CENTENNIAL FOYER

4:15 - 5:30 p.m.

CENTENNIAL E WEBINAR

Learning from Peer Community Networks

Moderator: Tim Lovell, Tulsa, OK, Tulsa Partners, Inc Speakers:

Brett KenCairn, Boulder, CO, Rockefeller Foundation Resilience Challenge Cohort

Molly Mowery, Denver, CO, Fire Adapted Communities Learning Network

Bill Robinson, Tulsa, OK, CRS Users Group

Terri Turner, Augusta, GA, Resilient Neighbors Network

This session will provide a brief overview of four peer community networks, where communities share knowledge and experience

with one another on specific issues; where community representatives support one another in these endeavors; and where network participants sometime provide feedback to other parties on national policy and best practices. Session attendees will then have an open discussion of how such networks operate, whether they are scalable, and the effectiveness of such networks in mutual support, knowledge sharing and best practice replication.

4:15 - 5:30 p.m.

SPRUCE

WEBINAR

Legal/Legislative Issues Update

Moderator: Ed Thomas

Speakers:

Jim Mullen, Consultant, past president of the National Emergency Management Association

Windell Curole, South Lafourche Levee District, Louisiana Rachel Sears, FEMA's Federal Insurance & Mitigation Administration

This will be an interactive panel which will begin by surveying the participants as to topics concerning the law and hazard mitigation, and climate adaptation they wish to discuss. Potential areas for discussion include:

Homeowners Flood Insurance Affordability Act

US Supreme Court's decision in Koontz v. St Johns River Water Management District potential impact on hazard mitigation/ climate adaptation/wetlands protection

Limitations on immunity and other impacts of the US Supreme Court Arkansas Game and Fish case on hazard mitigation, climate adaptation and the protection of wetlands

Noteworthy mitigation/adaptation legal cases from 2013 & 2014

5:30 - 5:45 p.m.

CENTENNIAL E

Closing, Next Steps, and Acknowledgements

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The Environmental Protection Agency, Office of Sustainable Communities



BIOGRAPHICAL SKETCHES: PRESENTERS AND MODERATORS

SHAWNA ACKERMAN is Chief Actuary of the California Earthquake Authority, which provides earthquake insurance to more than 800,000 California households. She plans and directs analyses and research relating to the CEA products and financial structures. She is a Fellow of the Casualty Actuarial Society (CAS) and a member of the American Academy of Actuaries (AAA). Ms. Ackerman currently serves on the CAS Board of Directors and is a member of the AAA Extreme Events committee and a member of the Casualty Committee of the Actuarial Standards Board. Prior to joining the CEA in 2010, she was a principal and consulting actuary for Pinnacle Actuarial Resources. She began her insurance career at the California Department of Insurance where she was responsible for evaluating ratemaking formulas and procedures for most property and casualty lines of insurance and providing expert witness testimony and other litigation support related to insurance reform in California via Proposition 103.

ADELE BALMER is the principal Environmental Specialist, Bureau of Mitigation, Florida Division of Emergency Management, and is the acting Environmental Liaison. She began her career with the FDEM after completing her master's degree in Biology from Auburn University. Bringing her knowledge of environmental policy, she has advanced the state's NEPA review capabilities. With a strong state EHP review and the new HMGP Programs Administration by States (PAS) pilot program in Florida, FEMA has awarded HMGP grants within eighteen days of the grant requests. Ms. Balmer also provides program and environmental knowledge to stakeholders around the state. She conducts workshops and webinars throughout the year and works to understand the needs and capabilities of each community. Visiting local governments, she assists sub-applicants/grantees from the development of a mitigation project through the completion. Ms. Balmer conducts additional outreach activities including a role as capstone presenter for UCF's Hazard Mitigation and Preparedness course.

JULIE BAXTER, AICP, CFM is the senior community planner in FEMA Region VIII's Mitigation Division. She manages the Region's mitigation planning program and provides technical assistance and training to tribal, state, and local governments. Her areas of expertise include hazard mitigation, emergency management, floodplain management, community wildfire protection planning, and public and stakeholder outreach. Ms. Baxter previously worked in the private sector as a project manager preparing multi-hazard mitigation plans at the state and local levels and as the communications specialist at the Natural Hazards Center at the University of Colorado at Boulder. Julie Baxter holds a master's degree in community and regional planning from the University of Oregon and a bachelor's degree in environmental policy from the University of Michigan.

STEVE BOAND is State Recovery Liaison for Colorado's Office of Emergency Management. His work focuses on disaster recovery problem solving at the interface of state and local government. He served as an elected official in Douglas County for over twenty years, including the Town of Castle Rock (Councilmember and Mayor), a County Commissioner, a Supervisor with the Douglas County Conservation District, and a special district board member. Mr. Boand holds a variety of certifications in emergency and disaster management including FEMA's Advanced Professional and Master Exercise Practitioner designations. He is also a certified Professional Continuity Practitioner. He served two Colorado Governors as a member of the Colorado Emergency Planning Commission representing local government interests. He also served on the Colorado's All-Hazards Advisory Committee representing Colorado counties. Mr. Boand worked for more than two decades as a water resources specialist for public and private water providers in the intermountain west, and was granted a number of expert designations in Colorado's water courts. Steve Boand holds a Master of Public Administration degree in disaster management and recently completed the Sloan School of Management (MIT) executive program in leadership and management.

JEFF BRISLAWN is AMEC's Hazard Mitigation and Emergency Management Program Lead and has over 21 years of experience in emergency management, GIS and mitigation planning work for state and federal governments, as well as technical assistance to local governments. Jeff's professional experience includes flood management plans, hazard mitigation plans,

emergency response and action plans, flood recovery plans, and facilitating training and exercises. Jeff has been the project manager on more than 20 hazard mitigation plans compliant with the Disaster Mitigation Act (DMA), as well as provided GIS-based risk analysis in support of more than 30 others. Jeff's background includes 12 years of state and federal experience including work for the Colorado Office of Emergency Management, Department of Local Affairs, and FEMA, specializing in hazards mapping and mitigation grant programs, flood and drought planning, and emergency operations, as well as assisting local governments with GIS implementations and disaster mitigation and recovery. Jeff holds a B.S. and M.S. in Geology and is a Certified Floodplain Manager.

ERIN CAPPS, is a licensed attorney at H2O Partners, Inc., with expertise in Stafford Act compliance and interpreting Title 44, Code of Federal Regulations. She also serves as Co-Chair of NHMA's Hazard Mitigation Planning Committee. As Vice President of Operations at H2O Partners, Ms. Capps oversees the development of FEMA Hazard Mitigation Assistance (HMA) plans and grants as well as Public Assistance (PA) recovery efforts and helps develop and manage Community Development Block Grants (CDBG). She works closely with cities, counties, regional groups, non-profits, states, and federal agencies with planning and recovery efforts to help build resilient communities. Her legal background has helped shape her understanding of compliance statutes and how they can be leveraged to maximize funding for various entities. With the Hazard Mitigation Planning Committee, Ms. Capps has created conference panels on the challenges of making mitigation matter and coauthored a white paper on how to improve mitigation planning. She has also conducted outreach and presentations for state and national groups on a variety of topics, including: No Adverse Impact, legal and policy issues surrounding floodplain management, higher standards for floodplain management, source water quality and protection, and FEMA assistance programs.

ADAM CROWE works with social media and emergency management. He develops planning, training, and exercise opportunities that improve the readiness of organizations to respond and recover from emergencies and disasters. He holds designations as a Certified Emergency Manager (CEM), Associate Business Continuity Professional (ABCP), and Master Exercise Practitioner (MEP). He has been a presenter at more than fifty conferences on how social media impacts emergency management and has written more than a dozen articles in professional journals. He is author of two books, Disasters 2.0: The Application of Social Media in Modern Emergency Management and Leadership in the Open: A New Paradigm in Emergency Management and will release A Futurist Guide to Emergency Management in 2015. Adam Crowe lives in Richmond, Virginia, with his wife, son, two dogs, and beta fish.

WINDELL A. CUROLE is General Manager of the South Lafourche Levee District (SLLD) in Louisiana, a post he has held for the past 33 years overseeing hurricane and flood protection projects. He has worked to negotiate and administer cost share agreements and grants on federal, state, and local levels worth millions of dollars in several areas which include flood related, environmental and cultural activities. Mr. Curole's involvement in coastal activities has led him to serve on various committees and organizations including the Governor's Coastal Restoration and Conservation Advisory Commission (2002) - 2006) and currently the Coastal Protection and Restoration Authority. He was a member of the Lafourche Parish Coastal Zone Management Committee for over 13 years and was the CZM Administrator. In addition, he served as Chairman of the Management Conference for Barataria Terrebonne Estuary Program for seven years, is the current president of the Cheniere Hurricane Centennial, served as the Extension Service Sea Grant Agent for five years, and is a former president of the Chamber of Commerce of Lafourche and the Bayou Region. Mr. Curole currently serves as chairman of local groups overseeing floodplain mapping and floodplain insurance. He has authored historic papers about the Bayou Lafourche environment and SLLD. He is recipient of two awards from the National Hurricane Conference Award. Windell Curole holds a B.S. in Science of Biology and has received his teacher certification from Nicholls State University in Thibodaux, Louisiana. He is married to Julie Pellegrini Curole. He has one daughter, Alex Curole, and one son, Raine Curole.

MARGARET DAVIDSON is Acting Director, Office of Ocean and Coastal Resource Management, National Oceanic and Atmospheric Administration. Before joining NOAA, Margaret A. Davidson was executive director of the South Carolina Sea Grant Consortium from 1983 to 1995. She also served as special counsel and assistant attorney general for the Louisiana Department of Justice. An active participant in coastal resource management issues since 1978, Davidson holds a faculty appointment at the University of Charleston and serves on the adjunct faculties of Clemson University and the University of South Carolina. She has served on numerous local, state, and federal committees and has provided leadership for national professional societies. She has focused her professional work on environmentally sustainable aquaculture, mitigation of coastal hazards, and impacts of climate variability on coastal resources. Davidson served as the acting assistant administrator for NOAA's National Ocean Service from 2000 to 2002. Margaret Davidson holds a juris doctorate (J.D. degree) in natural resources law from Louisiana State University and a master's degree in marine policy and resource economics from the University of Rhode Island.

GRANT ERVIN is Sustainability Manager, City of Pittsburgh, Pennsylvania. Previously he was Regional Director for 10,000 Friends of Pennsylvania, a statewide smart growth and sustainable development advocacy organization; and as Public Policy Manager for Pittsburgh Community Reinvestment Group (PCRG). Mr. Erwin has over fifteen years of experience, intersecting the worlds of environmental, community and economic development and infrastructure policy to create innovative and sustainable solutions for local governments, community development organizations and state agencies. Grant Ervin holds a bachelor's degree in political science and history from Washington and Jefferson College and a master's in public and international affairs (MPIA) from the University of Pittsburgh.

JEFF HEBERT is the Executive Director of the New Orleans Redevelopment Authority (NORA). Under his leadership, NORA provides planning, financial support, and real estate for affordable housing and commercial corridor revitalization projects throughout the City. In addition, NORA is leading the city's efforts in the creative use of vacant land, including for stormwater management. Prior to joining NORA, Mr. Hebert served as the first-ever Director of Blight Policy and Neighborhood Revitalization for the City of New Orleans. In the aftermath of Hurricanes Katrina and Rita, he served as the Director of Community Planning for the Louisiana Recovery Authority, coordinating planning activities across affected areas and creating the Long Term Community Recovery program for the distribution of disaster CDBG-DR funds. Jeff Hebert is a graduate of New York University, where he received a Bachelor's degree in Urban Design and Architecture Studies and a Master's degree in City Planning from the Massachusetts Institute of Technology.

EUGENE HENRY, AICP, is Hazard Mitigation Manager for Hillsborough County Public Works Department in Florida. He is a Certified Floodplain Manager and a member of the American Institute of Certified Planners. He has practiced in public and private sectors since 1983 in a career that includes comprehensive planning, floodplain administration and emergency management. Mr. Henry's professional experience includes program administration in hazard mitigation and floodplain management, post-disaster redevelopment planning, permitting and construction, landuse allocation, capital improvements programming, facility management and large-scale developments. His emergency management experience includes a 911-addressing program, disaster-assessment teams and implementing components of a Comprehensive Emergency Management Plan. He has also assisted in establishing non-profit organizations such as the Florida Floodplain Managers Association and the Heartland Chapter of the Florida American Planning Association. Eugene Henry is the recipient of numerous awards and certificates from a variety of governmental agencies and private organizations.

MICAH HILT is a Planner working on San Francisco's Earthquake Safety Implementation Program (ESIP), a 30-year earthquake risk reduction program in the San Francisco City Administrator's Office. He also works under San Francisco's newly appointed Chief Resilience Officer, as part of the Rockefeller Foundation's 100 Resilient Cities initiative. In both roles Micah is focused on creating, maintaining, and promoting a data-driven policy environment directed at increasing the resilience San Francisco locally and regionally. Mr. Hilt also serves as the program's state and regional policy

coordinator. He serves as a member of the California League of Cities Environmental Quality Policy Committee, as an Advisory Board Member for Oakland's Bay Localize's "Map Your Future" project, and is a member of the Alice B. Toklas LGBT Democratic Club's executive board.

J. BARRY HOKANSON, AICP, has more than 45 years of urban planning experience with agencies in California, Texas, Kansas, Iowa and Illinois concerning environmental and development regulations, building codes, transportation planning, strategic planning, community development, economic development, stormwater management, and post-disaster recovery planning. Prior to work as a subcontractor in FEMA's recovery program for communities in Louisiana, Texas, Tennessee and New York (2005 to 2014), Mr. Hokanson held executive positions in regions such as Kansas City, Chicago and Dallas. He is active in organizations including the American Planning Association, Natural Hazard Mitigation Association, Urban and Regional Information Systems Association, and the Geospatial Information and Technology Association. In 2013 he was appointed to a committee of the Institute of Medicine, National Academy of Sciences, for Post-Disaster Recovery of a Community's Public Health, Medical and Social Services. He also serves as one of five authors preparing an APA guidebook on disaster recovery. He holds a master's degree in urban and regional planning from the University of Iowa.

KASEY JACOBS is Partnership and Outreach Coordinator, Caribbean Landscape Conservation Cooperative. She is a climate change practitioner for a number of projects in Puerto Rico and the United States Virgin Islands. Currently she serves the Caribbean Landscape Conservation Cooperative working through an MOU with the Department of Natural and Environmental Resources to guide infrastructure agencies in completing vulnerability assessments and adaptation plans. Previously she served in the Puerto Rico Coastal Zone Management Program as a NOAA Coastal Management Fellow working to coordinate the Puerto Rico Coastal Adaptation Project - the island's first climate change vulnerability assessment. More recently, Ms. Jacobs worked to pilot the EPA's National Estuary Program's Climate Ready Estuary Guidebook in the San Juan Bay Estuary Program. Her graduate work included serving as a Climate Change Advisor for the Permanent Mission of Belize to the United Nations. For her master's thesis she conducted field research on institutions of climate change adaptation and disaster risk reduction in West Sumatra, Indonesia and interned for Mercy Corps Indonesia conducting a disaster management survey of 333 small businesses. She is an active member of both the American Planning Association and The Coastal Society. Kasey Jacobs has a master's degree (MESc) from the Yale School of Forestry and Environmental Studies.

ALESSANDRA JEROLLEMAN, PhD, CFM, is the founder and Executive Director of the Natural Hazard Mitigation Association (NHMA). Dr. Jerolleman is a Senior Emergency Management and Hazard Mitigation Planner for JEO Consulting Group Inc. She currently serves as one of the Tri-Chairs for the National Hazard Mitigation Collaborative Alliance, sits on the board of the Greater New Orleans Disaster Recovery Partnership, and serves the Executive Committee of the American Society of Public Administration's Section on Emergency and Crisis Management. Dr. Jerolleman has experience in the private, non-profit, and academic sectors, including: serving as a Program Specialist in the Gulf Coast with Save the Children USA, working on a resilience initiative for children's needs in emergencies; hazard mitigation planning; community education and outreach; development of collaborative networks, information sharing and education among practitioners. She is the co-author of a textbook, Natural Hazard Mitigation, as well the co-author of "What Has Been Done? Louisiana After Katrina," to be published in a forthcoming book. She completed her dissertation, "The Privatization of Hazard Mitigation: A Case Study of the Creation and Implementation of a Federal Program" at the University of New Orleans in 2013.

REBECCA JOYCE is a senior planner and program manager with Virginia's Central Shenandoah Planning District Commission (CSPDC). She has worked in the human services field for over30 years. For the past 16 years, Ms. Joyce has been employed at CSPDC as a flood mitigation program administrator, disaster preparedness educator and emergency management planner. She coordinates the Shenandoah Valley Project Impact and Staunton-Augusta-Waynesboro Community Emergency Response Team (CERT) programs for the Central Shenandoah Region. Rebecca Joyce holds

a Bachelors in English and Masters in Public Administration, both from James Madison University.

BRETT KENCAIRN is Senior Environmental Planner, Community Planning and Sustainability, City of Boulder, Colorado.. He has worked throughout the western US in community-based sustainable development, focusing particularly on natural resource-based and native communities. He has also worked in low carbon energy and "green jobs" sector development. He currently coordinates the city's Climate Commitment initiative in which Boulder is in the first cohort for Rockefeller Foundation's 100 Resilient Communities Challenge. Brett KenCairn holds degrees in business and planning from the University Oregon.

MIKE KLINE is the Vermont State Rivers Program Manager. He has been with the Department of Environmental Conservation for 25 years. He has developed a fluvial geomorphic approach to flood and erosion hazard mitigation, establishing stream equilibrium and connectivity standards for river corridor management, protection and restoration. Mr. Kline supervises a team of river scientists, engineers, and floodplain managers involved with assessing rivers statewide; regulating stream alterations and floodplain encroachments; and implementing river corridor plans. He is here in Broomfield this year representing Vermont as a charter member of the Resilient Neighbors Network that has been formed under the auspices of the NHMA to facilitate peer-to-peer learning and support in hazard mitigation and disaster recovery. Mike Kline received his Masters in River Ecology at the University of Colorado, Boulder in 1986.

LINDA LANGSTON is President of the National Association of Counties (NACO). She is also County Supervisor for Linn County, Iowa, and has been a leader in various hazard mitigation issues. The county is the home of Cedar Rapids, widely cited for its innovative resilience and recovery strategies after an unprecedented 2008 flood of the city center, including major Linn County facilities. Upon election to NACO's presidency, Ms. Langston initiated a bold and ambitious program of resiliency, mitigation, strength and sustainability – all oriented to betterment in our nation's 3,079 counties. Through the Resilient Counties initiative, NACO is working with counties and their stakeholders to bolster their ability to thrive amid changing physical, social, and economic conditions. NACO is advocating both longterm planning and immediate action to better prepare for and recover from both natural and man-made disasters such as hurricanes, wildfires and economic collapse. Linda Langston serves on NACO's Health Steering Committee, its Arts and Culture Commission, and the Women of NACO Leadership Network. In Iowa she holds positions with the East Central Iowa Council of Governments and the Linn County Public Health Board, and previously with the Housing Fund for Linn County. She is a member of the Disasters Roundtable for the National Academies of Science and of the National Advisory Council for FEMA.

CHARLES LATINI, Jr., PP, AICP is a professional land use planner based in New Jersey. Principal owner of L&G Planning, his main area of focus has been in the area of redevelopment where his practice utilizes best practices in education and outreach in order to build a constituency for better community planning and design decisions. His environmental planning background has allowed him to create plans that integrate innovative land development approaches with transportation planning with the aim at creating quality communities with strong sustainable economies. Charles is both a practitioner and public policy advocate having worked in both the public and private sectors. He is the current President of the American Planning Association – New Jersey Chapter where he has led the Chapter to several National awards. He also has initiated and taken part in several initiatives surrounding post Superstorm Sandy recovery including policy forums, roundtables, and the NJ Community Planning Assistance Program.

TIM LOVELL is Executive Director, Tulsa Partners, Inc., a position he has held since 2004. He was recruited by the City of Tulsa Project Impact office in May 2000, and helped create Tulsa Partners, Inc., a 501(c) (3) non-profit agency designed to support the building of safe and sustainable communities through the use of collaborative multi-sector partnerships. Mr. Lovell has participated in panel presentations and discussions around the country about the relationship between sustainability, climate adaptation and hazard mitigation. He was a founding Board Member of the Natural Hazard Mitigation Association (NHMA) and serves on its Hazard Mitigation and Climate Adaptation Committee. He participates as a contractor in the

continued development of the Resilient Neighbors Network. Mr. Lovell has a Master of Management degree in Nonprofit Administration and currently serves on Oklahoma's State Citizen Corps Council.

JANIELE MAFFEI is a registered California structural engineer who has worked in the earthquake engineering industry for over 30 years. Her experience includes the design of new building structures, and the evaluation and seismic strengthening of existing structures. She has extensive experience with post-earthquake insurance evaluations of single family residences. In her current position as Chief Mitigation Officer with the California Earthquake Authority, (CEA), Ms. Maffei is responsible for managing the CEA's activities that support mitigation against seismic risks of vulnerable residential structures in California. These activities include education and research efforts as well as the development of seismic strengthening incentive programs for California homeowners. The CEA is a privately funded, publicly managed risk pool that provides earthquake insurance coverage for residential property throughout California. Ms. Maffei also serves on the Board of Directors of the Natural Hazard Mitigation Association, NHMA.

MOLLY MOWERY, AICP, is President and Owner of Wildfire Planning International, a private consulting firm dedicated to creating resilient and fire adapted communities. She works closely with organizations and communities across the country, including the USDA Forest Service, The Nature Conservancy, and the Watershed Research and Training Center to coordinate the Fire Adapted Communities Learning Network. Ms. Mowery's previous experience includes national program management, land use planning, and hazard mitigation positions throughout the United States and United Kingdom. She is a past board member for the Canadian non-profit association, Partners in Protection, and holds active memberships with the American Planning Association, the Natural Hazard Mitigation Association, and the International Association of Wildland Fire. She has presented and published internationally. Molly Mowery holds a Bachelor of Arts from Naropa University and a Master in City Planning from the Massachusetts Institute of Technology.

JIM MULLEN is a private consultant and sole proprietor of Emergency Management Northwest Consulting based in Seattle. He served as Director of the Washington State Emergency Management Division for 8 years, retiring in 2013. Previously he was Director of Emergency Management for the City of Seattle for 12 years. Mr. Mullen carried out a number of innovations and operational improvements in both Seattle and the state agency. One innovation at the state level, Map Your Neighborhood, has since been adopted in other states and internationally. Another state initiative boosted collaborations with the private sector. Mr. Mullen also fostered two new functions: one for logistics planning and the addition of an exercise and training section. He put special emphasis on recovery and long term post disaster considerations, culminating in 2012 with the Evergreen Quake Exercise Series, a program in which time and planning was divided among logistics planning, response, and introducing a concept of "Resilient Washington." The series also prompted both a two-state agreement and a set of cross-border activities tested with Canada agencies. Mr. Mullen promoted greater attention to supply chains. Innovations with the City of Seattle included a "Project Impact" strategy selected by FEMA and honored by the International Association of Emergency Managers (IAEM), including pre-disaster mitigation. Mr. Mullen was also recognized for achievements by the International Association of Emergency Managers, IAEM. Jim Mullen served as President of the National Emergency Management Association (NEMA) in 2011 - 2012.

KEVIN NELSON, AICP, is a senior policy analyst for the U. S. Environmental Protection Agency's Office of Sustainable Communities. The Office focuses on smart growth issues of local, regional and national significance. To accomplish this, the EPA collaborates with a network of environmental, land use, transportation, open space, design and community-based organizations to highlight best practices and extol the environmental benefits of smart growth development. Mr. Nelson focuses removing barriers to smart growth implementation. This is primarily accomplished through managing the office's technical assistance, including assistance to communities that are impacted by climate change and are looking for solutions and best practices for sustainability.

KIRSTEN ORWIG is an Atmospheric Perils Specialist at Swiss Re, where she leads atmospheric hazards risk assessment modeling and outreach. Previously she was Senior Scientist at CPP, Inc., a wind engineering consulting firm in Fort Collins, Colorado, where she focused on tornado risk assessment and modeling winds in complex terrain. At Texas Tech University she was an NSF IGERT Fellow and a researcher studying thunderstorm, tornado and hurricane winds. She also served as a Systems Integration Analyst at the National Renewable Energy Laboratory in Golden, Colorado, providing statistical and meteorological expertise to more efficiently integrate wind and solar power onto the nation's electrical grid. Kirsten Orwig holds an M.S. degree in Atmospheric Science and a PhD in Wind Science and Engineering from Texas Tech University

BRUCE PATTON joined the California Earthquake Authority in October of 2011 as its Director of Policy, Research & Special Projects where he supports, and manages, leading scientific research with a particular emphasis on seismic hazards, structural mitigation and preparedness. Prior to joining the CEA, Mr. Patton served as an attorney with the California Department of Insurance for almost 18 years. He handled various lines of insurance including homeowners, private passenger automobile, workers compensation and earthquake. After the Northridge earthquake in 1994 much of his focus involved insurance issues that arose from that event including insurers' restrictions on homeowners' writings as well as earthquake rate filings seeking large rate increases and coverage restrictions. Mr. Patton handled the first rate hearing involving the use of computer models to determine earthquake rates. The hearing involved extensive expert witness testimony from engineers, earth scientists and other experts. The litigated cases he handled for the Department resulted in hundreds of millions of dollars awarded to California policyholders. While at the Department his focus continued to involve insurance issues that arose with catastrophes including the wildland urban interface and climate change. He sat on the California Earthquake Authority's Governing Board as the Commissioner's designee for 10 years, and was also the chair of the Earthquake Study Group for the National Association of Insurance Commissioners.

DARRIN PUNCHARD, AICP, CFM, is a principal consultant with MWH Global, serving as the Americas region leader for risk and resiliency services. He is an urban planner and floodplain manager who has spent his entire career working with local communities to become more resilient to disaster. He has nearly 20 years of experience in hazard mitigation planning with specialized expertise in risk assessment, benefit-cost analysis, and the development of actionable mitigation and adaptation strategies to include structural and non-structural measures for risk reduction. Mr. Punchard prepared some of the nation's first federally-approved hazard mitigation plans following passage of the Disaster Mitigation Act of 2000 and to date has assisted more than 500 communities in similar planning efforts. His public service career includes serving as the State Hazard Mitigation Officer for North Carolina, and as a state and local hazard mitigation planner in Florida. Darrin Punchard holds a Master of Arts in Urban and Regional Planning from the University of Florida and a Bachelor of Arts in Marine Affairs from the University of Rhode Island.

BILL ROBISON, PE, CFM, is Lead Engineer, Stormwater Project Coordination, City of Tulsa, Oklahoma, Engineering Services. During his tenure at the city, he has been responsible for design, review, and construction of numerous drainage projects. Mr. Robison is also project manager for Tulsa's FEMA grant application programs, FEMA Cooperating Technical Partner Program, the Hazard Mitigation Program and is the city's coordinator for FEMA's Community Rating System. He is also responsible for coordination and prioritization of the City's Stormwater capital improvement projects and oversight of the City's floodplain mapping. Mr. Robison is Past Chair of the Oklahoma Floodplain Managers Association (OFMA) and has served as Chair, Vice-Chair, Representative for OFMA Region 2 and Mapping Committee Chair. Bill Robison holds a B.S. in Civil Engineering from Oklahoma State University.

NEZETTE RYDELL is Meteorologist-in-Charge (MIC) at the National Weather Service (NWS) Forecast Office in Boulder, Colorado. She leads the office of 23 meteorologists and support staff serving northeast and north central Colorado as well as the Center Weather Service Unit at the FAA Air Route Traffic Control Center in Longmont, Colorado. Ms. Rydell has extensive experience in NWS operations and warning and preparedness

activities including severe weather, flash flooding, and tropical cyclone operations. She previously worked as a Forecaster and Service Hydrologist in Austin/San Antonio, as the Warning and Coordination Meteorologist in Honolulu and the MIC in Brownsville, Texas. She has done work with the World Meteorological Organization in disaster preparedness and with USAID efforts in tsunami education and preparedness. Ms. Rydell is involved with education and mitigation efforts for weather hazards and works closely with state and county emergency planners and responders in the areas of weather threats, tropical cyclone impacts, fire weather support and multi-cultural messaging in warning and preparedness..Nezette Rydell holds a Bachelor of Science Degree in Meteorology from Texas A&M University and a Masters in Computer Information Systems from Nova Southeastern University.

TARA SCHOEDINGER is Mayor of Jamestown, Colorado, located 12 miles northwest of Boulder. She has worked in the information technology industry for over 20 years as a software engineer and project manager. In addition to her professional career, Ms. Schoedinger has served on the all-volunteer Jamestown Town Board since 2004 and as Mayor since 2010, and was recently re-elected for a third 2-year term. She serves on the town's Drinking Water and Fire/EMS Committees. Since the September 2013 flood, her role as Mayor has become full-time and includes the town's flood recovery efforts. She has lived in Jamestown for 14 years. Tara Schoedinger received her B.S. in Business at the University of Colorado in 1993.

JOSHUA SCHWARTZ is Executive Director of the Mad River Valley Planning District (MRVPD), a unique three-town planning entity developed in 1985 by the towns of Fayston, Waitsfield, Warren, and Sugarbush Resort to carry out a program of planning for the Valley directed toward its physical, social, economic, fiscal, environmental, cultural and aesthetic well-being. Mr. Schwartz played a key role in the quick partnerships that formed among local, state and federal agencies in the aftermath of Tropical Storm Irene, which devastated homes, businesses and farmland along the Mad River corridor. His focus on enhancing resilience and identifying alternatives to floodplain farming led to the development of multiple partnerships, such as the EPA Smart Growth implementation assistance project: Planning for Flood Recovery and Long-Term Resilience in Vermont and a Stockholm Resilience Centre case study on the valley. He received the 2012 Professional Planner of the Year Award from the Northern New England Chapter of the American Planning Association. Joshua Schwartz holds a Masters in Urban and Regional Planning from Virginia Polytechnic Institute and State University.

RACHEL SEARS is Senior Policy Advisor for FEMA's Federal Insurance and Mitigation Administration (FIMA). In this role she provides policy advice and senior level decision support to the FIMA Administrator and the Deputy Administrators for Insurance and Mitigation. She has also worked in the Floodplain Management Branch where she supported NFIP community enrollment, eligibility and compliance activities and served as the program manager for the Community Assistance Program – State Support Services Element (CAP-SSSE) Grant Program. She has worked multiple disasters in the National Response Coordination Center and has been deployed to disaster field offices and assignments in Florida, Mississippi and Iowa. Ms. Sears is a member of the NFIP Reform Working Group, a team tasked with exploring policy reform options for the NFIP. Rachel Sears has a B.S. in Environment Sciences from Shepherd University and a Masters of Public Policy from George Mason University. She is currently pursuing a Ph.D. at George Mason University. Her research interests include population vulnerability to natural hazards and the valuation of natural hazard mitigation strategies.

Nathan Slaughter, AICP, CFM, is a certified professional planner and floodplain manager with an extensive background in emergency management and hazard mitigation planning. For the past 12 years, he has worked for Atkins as a project manager, lead planner, and task manager in the development of hazard mitigation plans and disaster recovery plans for local and state government clients across the county. He also provides professional technical planning expertise to FEMA to assist with the implementation of Risk MAP and other initiatives. He has delivered training and technical assistance to local governments across the country on preparing local hazard mitigation plans. Nathan Slaughter is a graduate of the University of Southern Mississippi with a degree in Community in Regional Planning.

ED THOMAS is a floodplain manager and disaster response and recovery specialist, who is also an attorney. His primary concern is the prevention of misery to disaster victims, the public purse, and to the environment. Hazard mitigation and climate adaptation through the law is his chosen method of accomplishing this goal. Attorney Thomas is the President of the Natural Hazard Mitigation Association; and an elected member of both the Fellows of the American Bar Association Foundation; and the Council of the State and Local Government Section of the American Bar Association. He is also the Chair of the Hazards Sub-Committee of the Land Use Planning and Zoning Committee, of the ABA. In addition, he serves on the Advisory Committee of the Natural Hazards Center of the University of Colorado; and is an active member of the American Planning Association, the American Society of Adaptation Professionals, the Association of State Wetland Managers and the American Geophysical Union. During his 35-year career with HUD and FEMA, he worked on about two hundred disasters and emergencies, serving as the President's on scene representative, the Federal Coordinating Officer, dozens of times. Attorney Thomas is a frequent lecturer on emergency management issues, especially the constitutional and legal aspects of floodplain regulations. He has authored dozens of publications and articles on various disaster related issues. Ed Thomas is a graduate of Fordham College and a magna cum laude graduate of the New England School of Law, in Boston. He manages a private practice of law, Edward A. Thomas Esq., LLC, and lives with his wife in the floodplain of beautiful Marina Bay in Quincy, Massachusetts.

TERRI TURNER, AICP, CFM, is Development Administrator, Floodplain Manager and Hazard Mitigation Specialist, Planning and Development Department, Augusta, Georgia. She has worked for Augusta City/County government for over 20 years. Before her government service, she spent 16 years designing the same type of projects she now reviews in her role with the City of Augusta. Terri spends countless hours writing for national publications and touring the nation as a local government expert on community planning initiatives such as green infrastructure, sound floodplain management, the need for hazard mitigation, promoting community sustainability and resiliency and climate adaptation. She participates with NHMA as Augusta's representative in the Resilient Neighbors Network. Ms. Turner serves on the Board of Directors of the Association of State Floodplain Managers (ASFPM) and is beginning her third term as its Region 4 Director. She is also the ASFPM No Adverse Impact (NAI) Committee Co-Chair. Her signature tag on her work email sums up her personal mission, "Today may I do my job so well, that I don't have to dread the storms of tomorrow; instead may I be able to dance for joy in the rain!"

ANNIE MACK VEST is State Hazard Mitigation Officer at the Oklahoma Department of Emergency Management. Originally from Nebraska, she worked in the Hazard Mitigation Section at Nebraska Emergency Management Agency. In 2011, she moved to Oklahoma and began working for Oklahoma Emergency Management as a Hazard Mitigation Specialist. She spent a brief period as a private sector consultant for hazard mitigation at the local level where she assisted local municipalities and schools in completing hazard mitigation plans and identifying sound mitigation measures. As the State Hazard Mitigation Officer, Mr. Vest is responsible for implementation of FEMA Hazard Mitigation Assistance programs in the State of Oklahoma. She continues to encourage mitigation at all levels in order to reduce loss of life and property caused by natural hazards. Annie

Mack Vest holds a bachelor's degree in Psychology and Emergency and Disaster Management from Northwest Missouri State University and a dual master's degree in Executive Management for the Public Sector and in Adult & Community Education.

TAREQ WAFAIE, AICP, is a planner with Clarion Associates' Denver office where he works with clients in government and private sector businesses. His professional experience includes land use and zoning code development, natural hazard mitigation planning, urban renewal, comprehensive planning, sustainable code development and GIS analyses. He is a frequent speaker on land use issues associated with wildfire and other hazards. Mr. Wafaie works with client projects across the nation updating development codes and developing strategies and implementation measures to address natural hazards, sustainability, infill, redevelopment and other emerging planning issues. He is a member of the American Planning Association and the American Institute of Certified Planners, and currently serves as the APA Colorado Chapter Professional Development Officer. He holds a Master's degree in urban and regional planning from the University of Colorado at Denver.

LINCOLN WALTHER, FAICP, is Planning Manager at CSA Ocean Sciences, Inc. He has been an urban planner for 40+ years; however, for the past 15 he has focused his efforts in hazard planning. He works with local governments throughout the Southeast on issues related to flooding, surge, wind, sea level rise, and wildfire. He has served as FAPA's representative on the Florida State Hazard Mitigation Planning Advisory Team since 2004, and is a board member of the Natural Hazard Mitigation Association. He has been engaged with the Gulf of Mexico Alliance, Coastal Community Resilience subcommittee that focuses on issues associated with resiliency, sustainability, and climate adaptation.

GENEVIEVE WILLIAMS is a Social Media and Web Marketing Strategist, and has worked in marketing and advertising for the past 8 years. She is the creator and project manager of Joplin Tornado Info, a Mashable Award finalist and is a Google AdWords Certified Professional. Ms. Williams is the founder and owner of YNW—Your Net Working, a convergent media marketing agency. She studied alternative energy at Crowder College and participated in three DOE Solar Decathlons and the 2008 North American Solar Challenge. She is currently a journalism student at Missouri State University.

REBECCA WILLIAMS is the managing administrator of Joplin Tornado Info, an interactive grassroots disaster recovery Facebook community that became a major communication source and resource directory in the aftermath of the 2011 EF5 Joplin tornado. She is co-author of The Use of Social Media for Disaster Recovery a field guide currently in revision. She has presented lessons learned in Joplin and the disaster info model, pioneered with her daughter Genevieve at conferences including the National Association of Government Web Professionals, St. Louis University Sustainability Conference, Institute of Medicine and Quad Cities Disaster Readiness Conference. Ms. Williams has worked as a crisis intervention specialist, psychiatric nurse, home health and labor-delivery nurse and she has experience in radio, television and cable television broadcasting, sales, copywriting, public relations and voice-over work. She is a seventh generation Ozarkian and community activist, dedicated to promoting disaster recovery social media infrastructure preparedness. Rebecca Williams holds an Associate of Science degree in nursing from Missouri Southern State University.



The Natural Hazard Mitigation Association (NHMA) promotes hazard mitigation, climate adaptation and the reduction of risk. This is accomplished through: the creation of a forum for the "Whole Community" to share their ideas and experiences; development of a thoughtful and unified voice for hazard mitigation and climate adaptation in the public marketplace for ideas; promotion of greater awareness of the social, economic and environmental component of safe and sustainable development; creation of more equitable, safe and sustainable programs which both benefit the community as a whole. We seek to protect the property and rights of all, with a special emphasis on protecting the most vulnerable populations in our communities.

Membership is open to anyone interested in supporting the goal of reducing disaster losses including climate change and mitigation managers, experts, professionals, students, government officials, community activists, academics, and others who are working in the field of hazard mitigation & climate adaptation.