

NIST Disaster Resilience Fellows

10 October 2014

The Disaster Resilience Fellows are nationally recognized leaders in their field of expertise and brings a breadth and depth of knowledge and experience to advance the Framework and Panel. They will provide support over a one year period through participation in workshops, meetings, and development activities for the Framework and DRSP. Their exceptional expertise in areas critical to community disaster resilience is expected to lead to substantial contributions. They are a highly valued addition to the Community Resilience team at NIST.

Community Resilience Planning

Chris Poland, Chris D Poland Consulting Engineer, is a world renowned authority on earthquake engineering and a leader of community disaster resilience planning. His passion for vibrant, sustainable, and healthy communities drives his focus on community resilience based on his 40 years of experience in consulting engineering, standards development, and the development of resilience plans. He is a member of the Board of Directors for SPUR, co-chairs their Resilient City Initiative and led the publication of “The Disaster Resilient City”. He is a member of the National Academy of Engineering, the past Chair of the Advisory Committee to the National Earthquake Hazards Reduction Program, served as chair of the American Society of Civil Engineers Seismic Rehabilitation of Existing Buildings Standards Committee completing both ASCE 31 and ASCE 41, standards for the evaluation and rehabilitation of existing buildings that are used worldwide.

Electrical Power Infrastructure

Stuart McCafferty, GridIntellect, provides innovative technology vision for a variety of industries based on 30 years of experience. He developed the first Smart Grid Maturity Model and scoring tool for the first DOE Smart Grid project; the 7 Principle Characteristics remain the primary tool to evaluate a grid’s “smartness”. He was Program Manager on NIST’s Smart Grid Interoperability Panel (SGIP) for 4 years, managing a diverse team of standards development, testing and certification, architecture, and cyber security experts. The project received the Project Management Institute’s 2013 International Distinguished Project Award. He was the lead Subject Matter Expert for the City of Huntington Beach’s California Local Energy Assurance Planning (CaLEAP) project, providing resiliency planning support. He also chairs the MicroGrid Resiliency Community of Practice for Energy Huntsville.

Erich Gunther, EnerNex, and his team are active in developing energy system resiliency strategies through multiple projects for utilities, Fortune 500 companies, municipalities, and non-profit institutions. In 2013 he was retained by the New York New Jersey Super Bowl Host Committee and PSE&G to provide independent engineering consulting support to ensure that the power systems performed under a range of contingencies, including storms and emergency scenarios. Mr. Gunther and his team recently completed a study for the California Local Energy Assurance Program (CaLEAP) where a variety of scenarios, architectures and potential implementation technologies were evaluated to ensure energy system resilience of cities during a large scale catastrophic event such as a flood, wildfire, or earthquake. His team also developed methods to ensure that a Fortune 10 technology company campus maintained business continuity through a layered system of energy resiliency methodologies.

Transportation Infrastructure

Joseph Englot, HNTB, is the National Director of Infrastructure Security. He has more than 40 years of experience in the design and management of transportation infrastructure projects. Mr.

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Englot oversees projects to retrofit bridges, tunnels, and transit facilities against the effects of natural hazards and structural deterioration. As Chief Structural Engineer and Assistant Chief Engineer for Design at the Port Authority of New York & New Jersey, Mr. Englot led all multi-disciplinary engineering and architectural design, including facilities and infrastructure systems for subways, monorails, airports, ports, tunnels, roads, and bridges. He also directed damage assessment and disaster recovery projects for the 2001 destruction of the World Trade Center and the 1993 bombing of the World Trade Center. Significant projects included ferry terminals at Battery Park, monorail and light rail systems to airports, Lincoln Tunnel rehabilitation, George Washington Bridge maintenance and repair, and Howland Hook container terminal expansion and berth deepening.

Theodore Zoli, HNTB, is the Technical Director of HNTB's nationwide bridge practice. Mr. Zoli has led the design of many award-winning bridges throughout the US and abroad. Mr. Zoli's work has been informed by his research into bridge safety and reliability with a focus on the design of structural systems against member loss and structural behavior under unforeseen extreme events. He leads HNTB's infrastructure security practice and has developed innovative protective measures for some of our nation's largest and most important bridges. Mr. Zoli has received national recognition for his work in bridges including the Engineering News Record Award of Excellence in 2012, the industry's most prestigious honor. In September 2009, Mr. Zoli was made a MacArthur Fellow by the John D. and Catherine T. MacArthur Foundation. This prestigious award was granted for major technological advances to protect transportation infrastructure and for his innovative designs.

Water Infrastructure

Kevin M. Morley, Ph.D., AWWA, is the Security & Preparedness Program Manager for the American Water Works Association (AWWA). He works closely with a variety of organizations to advance the security and preparedness of national critical infrastructure. Dr. Morley conducted research assessing the resilience of the water sector through the development of the Utility Resilience Index (URI). He has facilitated the expansion of mutual aid and assistance via the Water/Wastewater Agency Response Network (WARN) initiative and the development of water sector standards: ANSI/AWWA G430: Security Practices for Operations and Management, ANSI/AWWA G440: Emergency Preparedness, and ANSI/AWWA J100 Risk and Resilience of Water and Wastewater Systems.

Donald Ballantyne, PE, Ballantyne Consulting LLC, is a national leader over the last three decades on seismic performance of water and wastewater systems. He has an extensive experience in applied research and assessment of the resilience of water and wastewater systems. He has provided significant expertise and leadership to the ANSI/AWWA J100 standard on Risk and Resilience of Water and Wastewater Systems, water supply systems for fire suppression and drinking, the Water and Wastewater Committee for the Oregon Resilience Plan, conducted seismic resilience assessments, and developed mitigation plans for 75 utilities. He is a past chair of the ASCE Technical Council on Lifeline Earthquake Engineering Executive Committee, and a past director of the Earthquake Engineering Institute. He has conducted post-earthquake studies for 13 earthquakes in the US and abroad, focusing on water and wastewater systems.

Societal Dimensions of Disasters

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Liesel A. Ritchie, University of Colorado Natural Hazards Center, is Assistant Director for Research and a research professor in the University of Colorado Boulder Institute of Behavioral Science and Environmental Studies Program. Dr. Ritchie has studied the *Exxon Valdez* and *BP Deepwater Horizon* oil spills; Hurricane Katrina; and earthquakes in Haiti and New Zealand. She has experience conducting field work in rural and urban settings. Since 2006, Dr. Ritchie has focused on vulnerability and resilience measurement for institutions such as community-based organizations. She also conducts research on how measures of “community capital” (i.e., built, natural, social, economic, human, cultural, and political) are related to disaster resilience. Dr. Ritchie has published extensively in journals such as *Natural Hazards, Society and Natural Resources, Contexts, Earthquake Spectra, American Behavioral Scientist*, and *Sociological Inquiry*.

Emergency Planning and Response

Jay Wilson, Hazard Mitigation Program Coordinator for Clackamas County, is the Chair of the Oregon Seismic Safety Policy Advisory Commission (OSSPAC) and participates in the Oregon Governor’s Resilience Plan Implementation Task Force. He leads development and implementation of risk management, hazard mitigation and recovery plans for flood, earthquake, wildfire, volcano, and tsunami hazards, and climate change impacts. Mr. Wilson participated as a local emergency management practitioner on an EERI reconnaissance team for the Tohoku, Japan Tsunami disaster. He has provided invited testimony to the US House Science Committee on the Tsunami Warning and Education Act. As a FEMA Disaster Reservist Branch Chief, he supported Hazard Mitigation Programs and was an earthquake policy analyst for Berkeley and Oakland, CA.