

EBC Climate Change Program Building Resilient Facilities through Emergency Preparedness and Resilience Planning

Friday, April 26, 2019

GZA | Norwood, Massachusetts

AGENDA

8:00 a.m.	 Welcome, Program Overview and What you will Learn Samuel Bell, Vice Chair, EBC Climate Change & Air Committee Program Co-Chair & Moderator Senior Hazard Mitigation Specialist, GZA
8:20 a.m.	 An Overview of the Rhode Island Alliance for Business Resilience Armand Randolph, Public Information Officer Rhode Island Emergency Management Agency
8:45 a.m.	 Extreme Weather & Rising Risk – How Engineered Resilience Pays Off Paul Pettinicchio, Operations Engineering Manager, FM Global Insurance
9:10 a.m.	 Designing for Climate Resilience Erik Hansen, Chief Sustainability Officer, Wynn Resorts
9:45 a.m.	Networking Break
10:15 a.m.	 Risk Reduction for Small Businesses in Rhode Island Gabrielle McGrath, Senior Scientist / Senior Project Manager, RPS
10:45 a.m.	 Building Business Resiliency for the Whole Community: MIT as a Case Study Suzanne Blake, Manager, MIT Emergency Management Administrative Director, MIT EMS
11:15 a.m.	Panel Discussion
	Moderator: Sam Bell, GZA
	Panelists: • Suzanne Blake, MIT • Erik Hansen, Wynn Resorts • Gabrielle McGrath, RPS • Paul Pettinicchio, FM Global Insurance • Armand Randolph, RIEMA

PROGRAM CO-CHAIRS

Kelly Knee, Executive Director RPS Ocean Science 55 Village Square Drive, South Kingstown, RI 02879 (401) 789-6224 | kelly.knee@rpsgroup.com

Kelly has a broad engineering and scientific background and has specialized in both coastal hazard analysis and scientific data management. Over her 15 years at RPS she has completed numerous coastal flooding and mapping related projects for both engineering and educational purposes. She has performed coastal risk assessments, including sea level rise, storm surge, wave, seiche, rainfall, and tsunami effects, for many major industrial facilities including nuclear power stations, LNG plants, and onshore coastal wind farms. In addition to her focus on coastal issues, Ms. Knee has also has more than 12 years of experience in GIS, modeling, software development, ocean observing, and data management and communication (DMAC). She currently manages numerous complex data management, distribution, and visualization projects for NOAA, the USACE, and NROC. Prior to joining RPS (formerly ASA) in 2004 she used a Fulbright Fellowship to study the impacts of sea level rise and storm surge flooding in the country of Mauritius by integrating GIS and systems engineering models

Kelly has a B.S. in Environmental Engineering and an M.S. in Water Resources Engineering from Tufts University.

Samuel Bell, CFM, Senior Resiliency Planner GZA GeoEnvironmental, Inc. 249 Vanderbilt Avenue, Norwood, MA 02062 (781) 278-3847 | samuel.bell@gza.com

Sam Bell is a Senior Resiliency Planner who has spent the last 12 years working with local communities and states around the country to prevent natural and climate-related hazards from becoming disasters. He serves as the Planning Leader for GZA's Natural Hazard Risk Management practice group. In this role, Sam leads teams in assisting GZA clients with natural hazard and climate adaptation planning, risk assessments, risk communication, community education and outreach, and in preparing actionable hazard mitigation and climate adaptation measures designed to make communities more resilient. Most recently Sam led teams that successfully developed Natural Hazard Mitigation and Community Resilience Plans for Somerset and Milford in Massachusetts, and Stratford, Old Saybrook and Westport in Connecticut. He also assists several public and private entities in New England in: 1) conducting flood vulnerability assessments; 2) preparing flood mitigation/climate adaptation solutions; and 3) preparing flood emergency response plans based on FM Global requirements.

Prior to joining GZA, Mr. Bell served as a Hazard Mitigation Grant and Planning Team Lead from 2007 to 2011 for the Federal Emergency Management Agency (FEMA). At FEMA, Sam provided disaster recovery support and natural hazard mitigation assistance to states throughout the Northeast and Midwest. He worked with State Emergency Management Agencies and Departments of Environmental Protection to identify strategies and natural hazard mitigation solutions to protect residences and critical facilities from incurring damages from future natural hazard events. From 2011 to early 2014, Mr. Bell assisted FEMA in revising risk evaluation and program effectiveness tools used to evaluate the effectiveness and eligibility of hazard mitigation assistance (HMA) projects including critical facilities and infrastructure. These tools included the FEMA Benefit-Cost Analysis (BCA) Tool Version 5.0 and a pioneering streamlined riverine flood loss avoidance study methodology used to evaluate the effectiveness of flood mitigation after completion. Sam also served as one of four Senior HMA Trainers providing grants management and BCA trainings throughout the United States.

Sam earned a Master of Arts in Urban and Environmental Policy and Planning from Tufts University and a Bachelor Environmental Design in Planning from the University of Colorado-Boulder.

SPEAKERS

Suzanne Blake, CEM, Manager, MIT Emergency Management
Administrative Director, MIT EMS
Massachusetts Institute of Technology
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Suzanne is a Certified Emergency Manager (CEM) with more than 17 years of experience. She got her start working on post-September 11th projects in Washington, DC before moving to Wilmington, NC, where she served as the University of North Carolina Wilmington's first Emergency Manager. At UNCW, she was able to build the emergency management program from the ground up and also managed several hurricanes that affected the campus during her tenure. Prior to coming to MIT in 2015, Suzanne worked with higher education institutions across the country as the Higher Education Specialist for Witt O'Brien's, an emergency management consulting firm run by James Lee Witt, the Director of FEMA under the Clinton Administration. Her focus in that role was on developing and improving emergency management and business continuity programs at more than 50 higher education institutions nationwide. At MIT, Suzanne manages all aspects of MIT's emergency management program in coordination with her amazing team, representatives from across campus, and MIT's senior leadership. She also serves as the Administrative Director for MIT EMS, MIT's student-run ambulance service. In addition, she has received the Certificate from the Business Continuity Institute (BCI), has completed the FEMA National Emergency Management Executive Academy, and is a graduate of MIT's Leader to Leader program. She received her bachelor's degree from Georgetown University in English/Writing, where she served as an EMT for the student-run EMS service, and her master's of environmental management degree from Duke University, where she focused her studies on climate resiliency in coastal areas. She also holds a certificate in Community Preparedness and Disaster Management from UNC Chapel Hill.

Erik Hansen, Chief Sustainability Officer

Wynn Resorts 3131 Las Vegas Boulevard South, Las Vegas, NV 89109 (702) 770-2935 | erik.hansen@wynnlasvegas.com

Erik Hansen serves as the first Chief Sustainability Officer for Wynn Resorts where he is responsible for the development of the company's global sustainability strategy and energy procurement goals. Originally serving as Director of Energy Procurement for Wynn Resorts since 2016, Hansen has been instrumental in instituting several large-scale sustainability and renewable energy projects that have moved Wynn Resorts into a leadership position in environmental stewardship. Most notable have been the negotiation, build, and opening of the 160-acre 20 MW Wynn Solar Facility; management of Wynn Las Vegas' shift to the open energy market; and the creation of an energy supply plan that integrates the first micro grid to be implemented at an individual resort at the Encore Boston Harbor property.

Hansen has more than 25 years of experience and is a current member of the Nevada Governor's Committee on Energy Choice. He began his career in the energy industry at NV Energy where he spent more than 10 years in various capacities including power trading, transmission policy and contracts, business development, and project leadership. Before joining Wynn Resorts, Hansen served as Vice President at EnergySource, where he represented a broad base of Nevada's largest energy customers across industries including mining, gaming, data centers, utilities, and technology.

Gabrielle McGrath, Senior Scientist / Senior Project Manager

RPS

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Gabrielle G. McGrath is a Senior Scientist and Senior Project Manager for RPS in South Kingstown, RI specializing in oil spill response planning and oil and chemical trajectory and fate modelling. She is an experienced senior leader with over 22 years of dedicated service in the United States Coast Guard (USCG). Combining her Bachelor of Science degree in Marine Environmental Sciences from the U.S. Coast Guard Academy and her Master of Science degree in Physical Oceanography from the University of Rhode Island Graduate School of Oceanography with her experience in response operations and planning, Incident Command System training, and exercise development, Ms. McGrath offers an extraordinary blend of skills. Her use of oceanographic science in real-world operations to model oil spills and hazardous material releases and to predict the drift and deterioration of icebergs provides a unique perspective. She is a gualified Coast Guard Pollution Responder and Federal On-Scene Coordinator's Representative who led hundreds of pollution cases including vessel collisions, sunken vessels, pipeline ruptures, and train derailments. She acted as Operations Section Chief for the security response in San Francisco to the September 11th terrorist attacks, as Planning Section Chief for the Deepwater Horizon spill at Incident Command Post Mobile, and as Incident Commander and Operations Section Chief for the internationallyrecognized sunken shipwreck case off San Francisco, the SS JACOB LUCKENBACH. She also served as the Commanding Officer of the USCG International Ice Patrol. Ms. McGrath provides unique experience in the Area Contingency Planning process. As a Coast Guard officer, she acted as the Co-Chair of the Central Coast Area Committee in California for four years and as the Plymouth to Salisbury, Massachusetts Area Committee for two years. She also served as the Assistant Co-Chair of the San Francisco Bay and Delta Area Committee and the North Coast Area Committee in California for four years. In her duties, Ms. McGrath developed and published complete revisions of each of these ACPs during her time in the role. Ms. McGrath is also an experienced Project Manager. She served in the role of Lead Coordinator for the Coast Guard's waterside security efforts for the 2004 Democratic National Convention in Boston, MA, successfully mobilizing over 1,000 Coast Guard personnel to the Boston area for the event. Ms. McGrath holds many Incident Command System certifications, including Type 1 Planning Section Chief, Type 2 Operations Section Chief, and Type 3 Incident Commander. Well-versed in all U.S. and international pollution regulations, including Natural Resource Damage Assessments, she is also a certified Coast Guard and Federal Emergency Management Agency (FEMA) Incident Command System Instructor for over 17 years. Ms. McGrath completed certifications with the Coast Guard, FEMA, and the Homeland Security Exercise and Evaluation Program (HSEEP) for exercise development and design. Ms. McGrath published and presented numerous papers for the International Oil Spill Conference dating back to 2003.

Paul Pettinicchio, Vice President, Operations Engineering Manager

FM Global Insurance P.O. Box 9102, 1175 Boston-Providence Turnpike, Norwood, MA 02062 (781) 440-8310 | paul.pettinicchio@fmglobal.com

Paul Pettinicchio serves as the Operations Engineering Manager for FM Global's Boston Operations. As Operations Engineering Manager, he is responsible for leading the operations engineering department toward achieving profitability and growth through continuous improvement of loss costs, efficiency of engineering services, and customer satisfaction. He is an experienced leader with 14 years of loss prevention engineering experience in the commercial and property insurance industry and has held a number of different roles within FM Global, including field and account engineering, and management. Paul Pettinicchio earned his Bachelors of Science degree in Mechanical Engineering from the University of Massachusetts at Amherst. FM Global's mission is to develop cost-effective insurance and risk-financing solutions, to minimize business interruption and financial impact if a loss does occur. These needs are met through customized programs that draw upon: State-of-the-art loss prevention engineering and research, Risk management skills and support services, Tailored risk-transfer capabilities, and Superior financial strength.

Armand Randolph, Public Information Officer Rhode Island Emergency Management Agency 645 New London Ave, Cranston, RI 02920 (401) 462-7183 | M (401) 641-8269 | armand.randolph@ema.ri.gov

Armand Randolph is the Public Information Officer and the Recovery Branch Chief at the RI Emergency Management Agency (RIEMA). Mr. Randolph's primary responsibility is to manage the External Affairs Section which includes emergency messaging for protection of life and safety, public relations and intergovernmental affairs, preparedness campaigns and media engagement. Secondary responsibility includes the development, activation and management RIEMA's new Recovery Branch, and the administration of disaster grants. Additional tasks include developing State and Local emergency plans, logistical and operation coordinate with stakeholders impacted by a disaster, and the integration of the National Disaster Recovery Framework within the State of RI.

Previous positions at RIEMA have included External Affairs Officer, Planning Section Chief, Operations Section Chief, Public Assistance Supervisor, Grants Management, and the State Hazard Mitigation Officer. His professional tenure at Rhode Island Emergency Management Agency is currently at 16 years.

In addition to his 9 to 5 profession, Armand earned the rank of Captain serving in the Rhode Island Air National Guard and the United States Airforce, with 16 years of service. As the Director of Logistics, Joint Force Headquarters, RI National Guard, he worked with Army and Air Force personnel to develop Standard Operating Procedures for base mobility, deployment control centers and base re-call process, and conducted readiness assessment of logistic activities of Air National units in RI. As the Deputy Director Joint Force Development, Doctrine and Training, Armand provided operational analysis, evaluation and training for Joint Force Headquarters staff, and directed the review and assessment of readiness plans and programs. Mr. Randoloph's position as the Traditional Commanders Activity Coordinator; Office of Defense Cooperation at the U.S. Embassy; Nassau, Bahamas encompassed planning, coordinating and managing symposiums, workshops and conferences between the Bahamian Government, the Federal Government, State agencies and private industry. He was instrumental in emerging training requirements and professional exchanges in the areas of emergency management, economic development, law enforcement, military affairs, cybercrime, port security, maritime law, and maritime officer boarding and pirating.

UPCOMING EBC PROGRAMS

April 30 – EBC & YPE ISO New England Site Visit & Tour
May 9 – Spotlight on Success: The 2018 Ascending Leaders Award Recipients Panel
May 17 – Climate Change Program: Regional Flood Pathways
May 20 – Ocean and Coastal Resources Committee Program Planning Meeting
May 23 – Evening Program: Climate Programs from the City of Boston and the Commonwealth
May 24 – Energy Resources Site Visit: MassCEC Wind Technology Testing Center
May 30 – Coastal Resources Program: Municipal Vulnerability Assessments for Coastal Communities
May 31 – Energy Resources Program: Carbon Capture & Sequestration
June 7 – Climate Adaptation Forum: Disruptive Climate, Disruptive Technologies
June 19 – EBC 26th Annual EBEE Awards and 29th Annual Meeting
July 16 – Climate Change and Air Committee Program Planning Luncheon