



Workshop on Resilience of Navy Waterfront Facilities in a Changing Climate

APRIL 23 - 24, 2024 | ASCE HEADQUARTERS

DAY I – Tuesday, April 23, 2024		
<u>Time</u>	<u>Objective</u>	<u>Location / Notes</u>
7:30 AM – 5:00 PM	Registration	
7:30 AM – 8:30 AM	Light Breakfast	
8:30 AM – 10:00 AM	<p>Session 1: Introduction and Overview</p> <p>Welcome and Introduction Norma Jean Mattei, Ph.D. & Ming Liu, Ph.D.</p> <p>Plenary Keynote: Resilience Planning and Life-cycle Adaptation of Coastal Infrastructure in a Changing Climate Dan Frangopol, Ph.D., Lehigh University</p> <p>Findings from Workshop Part I: Extreme Design Loads Ming Liu, Ph.D.</p>	<p>10 minutes</p> <p>45 minutes</p> <p>35 minutes</p>
10:00 AM – 10:15 AM	Break	15 minutes
10:15 AM – 12:15 PM	<p>Session 2: Tools and Datasets for Site-Specific Resilience Planning</p> <p>Risk-Informed Design and Assessment for Extreme Wind Events Bruce Ellingwood, Ph.D., Colorado State University & Yue Li, Ph.D., Case Western Reserve University</p> <p>The 2022 Interagency Sea Level Rise Task Force Report and Dataset William Sweet, Ph.D., NOAA</p> <p>Coastal Flooding and Climate Resilience: a Multidisciplinary University Research Initiatives (MURI) Project sponsored by ONR Mark Merrifield, Ph.D., Scripps Institute of Oceanography, University of California San Diego</p> <p>Coastal Hazards System: National-Scale Framework for Quantifying Coastal Water Level and Wave Hazards Norberto Nadal-Caraballo, Ph.D., ERDC-CHL</p> <p>Developing Civil Engineering Centric Climate Data Products: The ASCE NOAA Partnership for Climate Resilience in Civil Engineering Practice Dan Walker, Ph.D., University of Maryland & EA Engineering</p>	<p>30 minutes</p> <p>30 minutes</p> <p>30 minutes</p> <p>15 minutes</p> <p>15 minutes</p>

DAY I – Tuesday, April 23, 2024 (continued)

<u>Time</u>	<u>Objective</u>	<u>Location / Notes</u>
12:15 PM – 2:00 PM	LUNCH & KEYNOTE	
	Grab a Plate	55 minutes
	Resilience of Coastal Communities Exposed to Tsunamis and Sea Level Rise due to Climate Change Mitsuyoshi Akiyama, Ph.D., Waseda University, Japan	50 minutes
2:00 PM – 3:30 PM	Session 3: Climate Resilience Planning	
	Operationalizing Climate Resilience R&D into DoD Missions and Policies Shubhra Misra, Ph.D., Office of the Secretary of Defense, OSD	30 minutes
	Linking Project and Community Resilience for Future Climate Conditions Therese McAllister, Ph.D., NIST	30 minutes
	Risk-Based Adaptation Assessments of 81st Readiness Division Facilities in Puerto Rico Mike Flood, WSP	30 minutes
3:30 PM – 3:45 PM	Break	15 minutes
3:45 PM – 5:00 PM	Session 4: Group Discussions (Breakouts)	1 hour 15 minutes
	(i) GD-A. Tools and Datasets for Resilience Planning and Design (ii) GD-B. Wind Speeds and Mooring Loads (iii) GD-C. Coastal Flood Modeling (iv) GD-D. Community Resilience Planning: Interdependent Infrastructure Systems under Multi-Hazards	
5:00 PM	END OF DAY	

DAY II – Wednesday, April 24, 2024

<u>Time</u>	<u>Objective</u>	<u>Location / Notes</u>
7:30 AM – 5:00 PM	Registration	
7:30 AM – 8:30 AM	Light Breakfast	
8:30 AM – 10:00 AM	<p align="center">Session 5: Climate Adaptation</p> <p>Climate Adaptable Near-Coast Structures: Bridges and Barriers Maria Garlock, Ph.D., Princeton University</p> <p>Integration of Catastrophe Modeling in Resilience Planning Paolo Bocchini, Ph.D., Lehigh University</p> <p>Corrosion in Aggressive Agreements, Structural Deterioration, and Climate Adaptation for Coastal Infrastructure Mark Stewart, Ph.D., University of Technology Sydney</p>	<p align="right">30 minutes</p> <p align="right">30 minutes</p> <p align="right">30 minutes</p>
10:00 AM – 10:15 AM	Break	15 minutes
10:15 AM – 11:15 AM	<p align="center">Session 6: Decision-Maker’s Perspective</p> <p>Resilience in Capital Improvement Projects at the Port of Los Angeles Adrienne Frederick Newbold, Port of Los Angeles</p> <p>Assessing Coastal Flood Exposure and Impacts for Resilience Planning Rear Admiral (ret). David Boone</p> <p>REEFENSE: Oyster-Reef Barriers as a Component of Nature-Based Approaches for Coastal Resilience Hani Nassif, Ph.D., Rutgers University</p>	<p align="right">30 minutes</p> <p align="right">15 minutes</p> <p align="right">15 minutes</p>
11:15 AM – 12:30 PM	<p align="center">Session 7: Group Discussions (Breakouts)</p> <p align="center">(i) GD-E: Owner’s Perspectives on Resilience Planning, Design, and Life-cycle Considerations</p> <p align="center">(ii) GD-F: Load Factors for Design of Piers and Wharfs</p> <p align="center">(iii) GD-G: Coastal Resilience Planning and Design</p> <p align="center">(iv) GD-H: Emerging Techniques in Resilience Planning and Design</p>	1 hour 15 minutes
12:30 PM – 2:00 PM	Lunch, Tour of ASCE Headquarters, and Networking	1 hour 30 minutes

DAY II – Wednesday, April 24, 2024 (continued)

2:00 PM – 3:30 PM	Session 8: Resilience Planning Practice	
	<p>Resilience Planning and Climate Adaptation Initiatives to Ensure Operational Capacity at USNA, Annapolis, MD to 2100 Tori Johnson & Sarah Mouring, Ph.D., USNA</p> <p>Assessing the Evolving US Hurricane Risk using RAFT: Application to Tyndall Air Force Base Karthik Balaguru, Ph.D., Pacific Northwest National Laboratory</p> <p>Briefs from Group Discussions (A – H) Timothy Petro, NAVFAC EXWC</p>	<p>30 minutes</p> <p>30 minutes</p> <p>30 minutes</p>
3:30 PM – 3:45 PM	Break	15 minutes
3:45 PM – 4:45 PM	<p>Session 9: Wrap Up</p> <p>NAVFAC Efforts on Climate Resilience Planning Speaker TBD</p> <p>Summary of Recommendations to UFCs from the Workshop Omar A. Jaradat, Ph.D., P.E., BC.PE, M.ASCE</p> <p>Closure Remarks NAVFAC-FSR Research Team</p>	<p>30 minutes</p> <p>15 minutes</p> <p>15 minutes</p>
4:45 PM	END OF DAY	