



WORLD ENVIRONMENTAL & WATER RESOURCES CONGRESS

May 21-25, 2023 | Henderson, NV



Adapting to Climate Change Workshop Green Valley Ranch Resort Spa and Casino

| Wednesday, May 24 | |
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| Time (PST) | Function |
| 8:30 AM – 9:30 AM | <p><u>Opening Keynotes</u></p> <p>Chris Stone, P.E., F.NSPE, F.ASCE, LEED AP, Senior Principal, ClarkNexsen <i>Challenges & Climate Issues for the Engineering Community</i></p> <p>Ben DeAngelo, Deputy Director, NOAA Climate Program Office; Chair, Arctic Monitoring & Assessment Program Jainey Bavishi, Deputy NOAA Administrator <i>Building a Climate Ready Nation (VIRTUAL)</i></p> <p><u>Moderator</u> Walter Grayman, Ph.D., P.E., D.WRE, F.EWRI, M.ASCE</p> |
| Thursday, May 25 | |
| 8:00 AM – 8:10 AM | <p><u>Welcome</u></p> <p>Rob Traver, Ph.D., P.E., D.WRE, F.EWRI, F.ASCE</p> |
| 8:10 AM – 9:20 AM | <p>Panel I – <u>Framing Climate Challenges & Responses/Solutions</u></p> <p>Civil infrastructure design must be resilient and consistent with its setting. In changing climatic conditions, the designs must either allow for a progression from overdesign to right-design with increasing extremes or incorporate the capacity to be adapted periodically. Scalable solutions connecting local to regional scales add benefit as supply reliability and hazard mitigation increasingly overlap with increasing extremes and variability. The panel will focus on current approaches – what are our initial responses to these challenges and what are we not able to address?</p> |

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| | <p>Panel I (continued) Michael L. Anderson, Ph.D. California State Climatologist Rosanna LaPlante, P.E., M.ASCE, Engineering & Environmental Services Division Leader, Engineering & Construction, Washington Suburban Sanitary Commission Lewis Linker, CPB Modeling Coordinator, Chesapeake Bay Program Office, Environmental Protection Agency</p> <p><u>Moderator</u> Rob Traver, Ph.D., P.E., D.WRE, F.EWRI, F.ASCE</p> |
| 9:20 AM – 9:30 AM | Break |
| 9:30 AM – 10:40 AM | <p>Panel II – <u>Tools and Methods in Transition</u></p> <p>To include climate change in our designs and strategies requires updates to the tools we use. Examples to be discussed are Atlas 14/15, FEMA maps, resiliency, water infrastructure modeling and data sources. This panel will focus on tools and methods available to the profession today and discuss what ASCE–EWRI and our federal partners are working toward and the time horizon for them being available.</p> <p>Sandra Pavlovic, P.E., M.S., M.B.A., Technical Lead for Atlas 14 Projects, National Weather Service, NOAA John Ingargiola, Lead Physical Scientist, FEMA (Virtual) Mitch Heineman, CSO/SSO Management Discipline Leader, CDM Smith</p> <p><u>Moderator</u> Dr. Mari R. Tye, CEng MICE MASCE Co-Chair, ASCE INSPIRE Conference Committee Past Chair, ASCE Committee on Adaptation to a Changing Climate <i>Project Scientist II</i>, Climate and Global Dynamics Laboratory (CGD)</p> |
| 10:40 AM – 10:55 AM | <u>Break</u> |
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| 10:55 AM – 12:00 PM | <p><u>Concurrent Breakout Sessions</u></p> <p>Multiple breakouts under each of the two topics with a goal of around 15 participants in each breakout. Participants will be randomly assigned a breakout.</p> <p>A. Breakout – Climate Challenges & Responses/Solutions Facilitators – Saki Handa, Glenn Moglen, Julianne Miller, Marge Bedessem, and Andrew Earles</p> <p>Charge to participants:</p> <ul style="list-style-type: none"> • What other approaches are we using now that weren't discussed? • What approaches that we just heard about can be applied in our work? • What are the gaps and how are they being addressed or could be addressed. • What EWRI products need to be updated or created? <p>B. Breakout – Data and Tools – Atlas 14/15 Maps Facilitators – Tom Batrone, Rob Traver, Rob Montgomery, Sam Sarker, and Jason Bernagros</p> <p>Charge to participants:</p> <ul style="list-style-type: none"> • How can we use these new tools in addressing Climate Change? What guidance is needed to support their use? • What other tools are under development that weren't discussed? • What are the gaps and how are they being addressed or could be addressed • What EWRI products need to be updated or created? <p>Capture:</p> <ul style="list-style-type: none"> • Gaps • Resources • Specific Examples/Methods/Case Studies of what's working. |
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| 12:00 PM – 1:15 PM | <p><u>Sponsored Luncheon</u> (Villanova University & Desert Research Institute)</p> <p>Sean McKenna, DRI Executive Director of the Division of Hydrologic Sciences, <i>The Sharp End of the Stick: Southwestern U.S. Under a Changing Climate</i></p> <p><u>Moderator</u> Ben DeAngelo, Deputy Director, NOAA Climate Program Office; Chair, Arctic Monitoring & Assessment Program</p> |
| 1:15 PM – 1:45 PM | <p><u>Reports and Discussion of Breakouts</u></p> <p>Reporters from each breakout will provide a written summary of their group's discussions prior to lunch. During lunch a small group will examine these reports and prepare a brief presentation summarizing the findings in the two topic areas.</p> <p>A. Breakout A Summary – Shirley Clark B. Breakout B Summary – Walter Grayman</p> |
| 1:45 PM – 3:15 PM | <p><u>Panel III –Engineering innovation for Climate Adaptation - What is EWRI's Role in Advancing the Profession?</u></p> <p>A rapidly changing climate with disparate impacts of risks and resources across communities places enormous responsibility on the EWRI community. This panel will discuss areas where significant transformations of the profession are needed and feasible to respond to this challenge, e.g., methodologies, policies, practices, and tools. The panel will share case studies that illuminate key issues and point to promising future pathways. EWRI's role will be a central focus of the panel.</p> <p>Daniel Wright, Ph.D., A.M.ASCE, Associate Professor, University of Wisconsin, Madison (VIRTUAL) Brett Sanders, Ph.D., Professor, University of California, Irvine Barbara Chongtouna, P.E., M.ASCE, Mile High Flood District Shirley Clark, Ph.D., P.E., D.WRE, F.EWRI, M.ASCE, Professor, Environmental Engineering, PennState Harrisburg</p> <p><u>Moderator</u> Holly Piza, P.E., M.ASCE, Mile High Flood District</p> |
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| 3:15 PM – 4:00 PM | <p><u>Concurrent Breakout Sessions</u></p> <p>Charge:</p> <ul style="list-style-type: none"> • In developing the tools and knowledge base to support adaptation of our designs and policies to climate change: <ul style="list-style-type: none"> ○ What can and should EWRI be doing? ○ How can EWRI interact across ASCE's units and with other organizations? • What are YOU going to volunteer to lead in EWRI? <p>C. Breakout – Facilitators – Saki Handa and Rob Traver</p> <p>Capture:</p> <ul style="list-style-type: none"> • Gaps • Resources • Specific Examples/Methods/Case Studies of what's working |
| 4:00 PM – 4:30 PM | <u>Closing Remarks</u> - Shirley Clark & Panelists |