



A World of Water: Reimagining Resilience.

MIT Water Summit • November 11-13, 2020

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MIT Water Summit 2020
November 11-13

AGENDA
Wednesday, November 11

Schedule in Eastern Time (ET)

- 10:00 AM Introduction + orientation talk: Rebecca Farnum
- 10:15 AM **Keynote:** Emma Robbins
- 11:15 AM *Break + open Zoom room*
- 11:20 AM **Panel:** Decentralized water systems
- 12:20 PM *Break + open Zoom room*
- 12:30 PM **Panel:** Health and WASH
- 1:30 PM *Break + open Zoom room*
- 2:00 PM **Virtual networking session**
- 3:00 PM Day one closing remarks



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Thursday, November 12

Schedule in Eastern Time (ET)

- 10:00 AM Day two welcome + **Keynote**: Uma Lele
- 11:05 AM *Break + open Zoom room*
- 11:15 AM **Panel**: Effective management of water and energy trade-offs for growing populations
- 12:15 PM *Break + open Zoom room*
- 12:30 PM Start-up flash pitch session
- 12:45 PM *Break + open Zoom room*
- 1:00 PM **Panel**: Towards food security and equality through water management
- 2:00 PM *Break + open Zoom room*
- 2:15 PM **Virtual networking session**
- 3:15 PM Day two closing remarks
- 4:00 PM **MIT Water Innovation Prize** Kick-off



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Friday, November 13

Schedule in Eastern Time (ET)

- 10:00 AM Day three welcome + pre-recorded talk by Henk Ovink
- 10:15 AM **Panel:** Using Data to Drive Decisions
- 11:15 AM *Break + open Zoom room*
- 11:30 AM **Keynote:** Kaveh Madani
- 12:30 PM *Break + open Zoom room*
- 12:45 PM **Panel:** Disaster resilience
- 1:45PM *Break + open Zoom room*
- 2:00 PM **Presentation:** Andrew Young
- 2:30 PM *Break + open Zoom room*
- 2:40 PM **Presentation:** Newsha Ajami
- 3:10 PM Closing remarks



KEYNOTE SPEAKERS

Emma Robbins

Director, Navajo Water Project; Diné artist, activist, and environmentalist



Emma Robbins is a Diné artist, activist, and environmentalist with a passion for empowering Indigenous women. As Director of the Navajo Water Project, part of the DigDeep Right to Water Project, she is working to create infrastructure that brings clean running water to the one in three Navajo families without it. Through her artwork, she strives to raise awareness about the lack of clean water in Native American nations. Robbins is also a 2020 Aspen

Institute Healthy Communities Fellow and has been interviewed by news sources such as the BBC, NBC, NPR, Democracy Now! about the COVID-19 crisis.

KEYNOTE SPEAKERS

Uma Lele

President Elect, IAAE; Former Senior Advisor, World Bank



Dr. Uma Lele, President Elect of the International Association of Agricultural Economists (IAAE), is an international policy expert. As a former senior advisor at the World Bank, she is focused on shaping public policy with empirical evidence. With five decades of research, operational, analytical and evaluative experience with numerous international organizations including CGIAR, the Food and Agriculture Organization (FAO), Global Water Partnership,

University of Nebraska's Water for Food Institute, the United Nations Forum on Forests (UNFF), and many others, she has written and spoken on her expertise in growing agricultural markets, rural development, natural resource management, public health and more.



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KEYNOTE SPEAKERS

Kaveh Madani

Henry Hart Rice Senior Fellow, MacMillan Center for International and Area Studies at Yale University; Former Deputy Head, Department of Environment in Iran



Dr. Kaveh Madani, an environmental scientist, educator, and activist, interfaces science, policy, and society, focused on human-natural systems and raising awareness and community around complex environmental issues. Madani, dubbed “Iran’s Expat Eco-warrior” by international media, has served as the Deputy Vice President of Iran in his position as the Deputy Head of Iran’s Department of Environment, the Vice President of the UN Environment Assembly

Bureau, and the Chief of Iran’s Department of Environment’s International Affairs and Conventions Center. His work has gained international attention for its incorporation of game theory and decision analysis into solutions for water resource management and conflict-resolution and the use of cross-disciplinary approaches to guide policy-making for challenges across water, food, energy, and climate sectors.



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PANELS

Decentralized water systems

In an era of growing population, increasing water stress, and aging infrastructure, providing reliable, equitable access to clean water is of paramount importance. In this panel, we showcase decentralization strategies that have been adopted in both rural and urban regions to address this challenge, which includes integrating natural systems, water recycling, fog harvesting, and more. We will highlight the lessons learned from these communities and their distributed systems, as well as explore synergies between models for rural and urban settings.

Panelists:

- Paula Kehoe , Director of Water Resources, San Francisco Public Utilities Commission (SFPUC)
- Gaston Kremer, Field and Impact Manager, World-Transforming Technologies
- Jamila Bargach, Co-founder and Executive Director, Dar Si Hmad
- Korneel Rabaey, Professor, Department of Biotechnology at Ghent University, CTO of CAPTURE

Health and water, sanitation, and hygiene

According to UNICEF, 663 million people are without access to clean drinking water, and 2.4 billion people lack access to improved sanitation. Providing sustainable management of water, sanitation, and hygiene has important ramifications for improving health, equity, access to education, and more. For many with adequate sanitation, the COVID-19 pandemic has prompted a greater awareness of access to adequate sanitation. But for many others who lack access, the pandemic only exacerbates existing health threats that they may face. This panel will investigate the role of WASH systems in community health, with an emphasis on identifying the historic obstacles to equitable access and solutions for the future.

Panelists:

- Patrick Moriarty, CEO, IRC
- Caroline Delaire, Deputy Director for Technology and Innovation, The Aquaya Institute
- Daniel Oporto, Regional Director for Latin America, Water for People
- Daniele Lantagne, Associate Professor in Civil and Environmental Engineering, Tufts University



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Effective management of water and energy trade-offs for growing populations

As urban areas continue to grow, cities face a variety of competing environmental, economic, and social demands. The water-energy nexus highlights interactions between these demands: LA's distributed water system, for instance, promoted urban sprawl that has increased transportation-related energy expenditure. This panel will highlight solutions and strategies to effectively manage resources in cities around the world, exploring how the relationship between water access and energy use creates both challenges and opportunities for urban planners.

Panelists:

- Newsha Ajami, Director of Urban Water Policy, Water in the West at Stanford University
- Dr. Hani Sewilam, Professor of Hydrology and Water Resources Management at the RWTH Aachen University, Managing Director of the UNESCO Chair in Hydrological Changes and Water Resources Management at the RWTH Aachen
- Amanda Brock, President, Solaris Midstream Holdings

Towards food security and equality through water management

The FAO estimates that the world needs to produce 60% more food by 2050. Although the organization states that there will most likely be sufficient water and land to do so, this is not without challenges like increasing water scarcity, over-exploitation of resources, urbanizing populations, and a lack of gender equity in agriculture. This panel will explore the important scales and transitions of water management and irrigation in pursuit of a food secure future that supports equality among growers.

Panelists:

- Samir Ibrahim, CEO and Co-founder, SunCulture
- Nicole Lefore, Director, Feed the Future Innovation Lab for Small Scale Irrigation
- Melvyn Kay, Technical writer/editor and water management consultant
- Martín Pasman, President, Valmont Industries of Argentina



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Using data to drive decisions

Credible and clear water quality data is a necessity for ensuring human and ecosystem health, and there has been an increasing emphasis on improving water quality monitoring and aptly visualizing data over the last few decades, driven by the digital revolution. But how is water quality monitoring working, and what are the barriers to its improved use for decision-makers? In this panel, explore what the digital revolution has enabled us to do with water quality monitoring, and more importantly, what having accurate water quality data can do to improve systems and policy-making.

Panelists:

- Patrick Moriarty, CEO, IRC
- Caroline Delaire, Deputy Director for Technology and Innovation, The Aquaya Institute
- Daniel Oporto, Regional Director for Latin America, Water for People
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Disaster resilience

Sea levels are rising, the earth is heating, and extreme weather events are becoming more frequent and more extreme. By bringing together experts focused on predictive tools and response systems, this panel seeks to find climate resilient solutions and create connections between modeling and techniques and those affected by natural disasters, under the uncertainty and pressure of a changing climate. We will look to understand how we might become proactive and not reactive to shifting climate trends and disasters.

Panelists:

- David Groves, Codirector, RAND Climate Resilience Center at RAND Corporation
- Pamela Silva, Mechanical and public health engineer, MIT D-Lab Design Workshop facilitator
- Chris Funk, Director, Climate Hazards Center at UCSB
- Anita van Breda, Senior Director, Environment and Disaster Management at WWF



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Presented to you by MIT Water Club

MIT Water is the premier network for water research and innovation at MIT. Our mission is to bring together creative, passionate, and motivated individuals to explore ways by which research, innovation, and policy can help solve the most pressing challenges in the water sector. We organize conferences, lectures, research showcases, outreach events, and entrepreneurship competitions throughout the year.

The *MIT Water Summit* is a three-day conference hosted annually by the MIT Water Club, bringing together global leaders and professionals across diverse sectors in a virtual format this year.

2020 Summit Leadership

Laura Chen, *Summit Director*
Chun Man Chow, *Panel lead*
Grace Connors, *Panel lead*
Shawnee Traylor, *Panel lead*
Cathy Zhang, *Panel lead*
Nicolette Bugher, *Director of Networking*
Nasr Sattar, *Networking team*
Andrew Bouma

The Summit team would like to express their gratitude to all those consulted in the planning process for their contributions to this year's programming.

