

# 7th JSWA/EWA/WEF Specialty Conference Program

## DAY1 Tuesday 15th Nov 2022

10:00 Opening and welcome address: Kazuko Kori (Mayor of Sendai city), Masahiro Takahashi (JSWA), Johannes Lohaus (EWA), Jamie Eichenberger (WEF),

Moderator: Raymond Erpelding (EWA)

### Session 1-1: Resiliency for climate change and more

10:40-12:05

Comprehensive flood control in Tokyo wastewater: progress and future  
Hayato Mori, Tokyo Metropolitan Government, JP

Techno-economic evaluation of extreme water and wastewater decentralization  
Manel Garrido-Baserba, inCTRL Solutions, US

Resilient, water-wise Fukuoka – a journey from 1978 to the present  
Hironori Yashima, Road & Sewerage Bureau, Fukuoka City, JP

Resiliency, reliability and sustainability: climate change and Austin's 100-year water plan  
Rajendra P. Bhattarai, Clean Water Strategies, US

Moderator: Bipin Pathak (WEF)

### Session 2-1: Innovative solutions for clean water and sanitation

13:05-14:08

Identification of process disruptions using hybrid sensors  
Harsha Ratnaweera, Norwegian University of Life sciences, NO

Chemicals management for stable wastewater treatment and risk control in effluent water quality in Japan  
Hiromasa Yamashita, Public Works Research Institute (PWRI), JP

Management tools and technologies for protection and restoration of groundwater against diffuse pollution in Denmark  
Bjørn Kaare Jensen, Geological survey of Denmark and Greenland, DK

Moderator: Gyokuyu Ri (JSWA)

### Session 3-1: Transform and build back better

14:23-15:26

Physical asset management of mechanical and electrical equipment of wastewater service in Osaka  
Koichi Teshima, The City of Osaka, JP

From wastewater treatment plant to power plant! From vision to reality!  
Torsten Frehman, Emschergenossenschaft/Liipperband, DE

Full renovation of the Tsuyuhashi water treatment plant and its contributions to the sustainable development of Nagoya city  
Hiroaki Kuroki, Nagoya City Waterworks & Sewerage Bureau, JP

Moderator: Harsha Ratnaweera (EWA)

### Session 4: Smart water strategies

15:41-16:23

Efficient operation of municipal Wastewater treatment plants by online control technology using ICT/AI  
Akihiro Yamamoto, Japan Sewage Works Agency, JP

Tomorrow's digital water management - perspectives on future data availability, data maintenance and data analysis as well as their targeted use to prevent flood damage and environmental pollution  
Andre Niemann, University of Duisburg-Essen, DE

**DAY2 Wednesday, 16th Nov 2022**

Moderator: Raymond Erpelding (EWA)

9:00-10:29

**Session 5: Lessons learned from real life disruptions**

Improvement of earthquake disaster resilience by asset management in Sendai city wastewater utility  
Tetsuya Mizutani, Sendai City Municipal Government, JP

Approach for Risk Assessment of Water Resource Recovery Plants  
Nora Pankow, Bundeswehr University Munich, DE

Research on emergency restoration of functional recovery at wastewater treatment plants damaged by natural disasters  
Manabu Matsuhashi, National Institute for Land and Infrastructure Management, JP

Lessons learned after the 2015 earthquake in Nepal  
Samendra Sherchan, Tulane University, US

Moderator: Toshiaki Yoshida (JSWA)

10:45-11:48

**Session 6: Innovative analysis and tool**

Investment needs in water and wastewater infrastructure and inevitability of horizontal and vertical solidarity in fulfilling SDG 6"  
Kovacs Karoly, Hungarian Water Association, HU

Beneficiary financing and digital twin technology for climate change adaptation and water systems resilience  
Bipin Pathak, DC Water, US

Development of a New Sewer pipe Rehabilitation Method which Enable Reduction of Flow Rates Inhibition during Construction and Increasing Flow Rate  
Tomonori Yamaji, SEKISUI CHEMICAL Co., Ltd., JP

Moderator: Fabio Tatano (EWA)

12:49-13:52

**Session 3-2: Transform and build back better**

Long-term plan for reconstruction of wastewater treatment plants  
Chikashi Nakaza, City of Yokohama, JP

How innovative global water utilities in Japan, Europe and the U.S. enhance workforce, community and climate resilience  
Ed McCormick, McCormick Strategic Water, US

Trends in energy production in sewage treatment plants and related research and development at PWRI  
Yuji Okayasu, Public Works Research Institute (PWRI), JP

Moderator: Rajendra P. Bhattarai (WEF)

14:07-15:10

**Session 2-2: Innovative solutions for clean water and sanitation**

Creation of a resilient future society for the prevalence of an infectious disease in the use of the wastewater-based information  
Tatsuo Omura, Tohoku University, JP

Comparative risk assessment for potentially contaminated sites (soil and groundwater): A regional methodology In Italy  
Fabio Tatano, University of Urbino "Carlo Bo", Italy, IT

Spread of Sewer Connectable Portable Toilets and public relations of how to use them  
Yuji Koizumi, City of Yokohama, JP

Moderator: Justin Waples (WEF)

15:25-16:49

**Session 1-2: Resiliency for climate change and more**

U.S. national approach to building disaster resilience of water and wastewater utilities  
David Goldbloom-Helzner, United States Environmental Protection Agency, US

Trends for advanced measures against frequent urban inundation in Japan  
Toshiaki Yoshida, National Institute for Land and Infrastructure Management (NILIM), JP

How can water utilities be more resilient? What are the tools of the trade?  
Ashwin Dhanasekar, The Water Research Foundation (WRF), US

Investigation of countermeasures on the influence of sea level rise due to climate change on sewerage  
Kengo Hashi, Japan Institute of Wastewater Engineering and Technology, JP

16:50 Closing address: WEF(TBD), Shuhei Okuno (JSWA)