

7th JSWA/EWA/WEF Specialty Conference Program

DAY1 Tuesday 15th Nov 2022

10:00 Opening and welcome address: Mayor of Sendai city (TBC), Johannes Lohaus (EWA), WEF (TBD), Masahiro Takahashi (JSWA)

Moderator: Raymond Erpelding (EWA)

10:40-12:05 **Session 1-1: Resiliency for climate change and more**

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

Techno-economic evaluation of extreme water and wastewater decentralization
Diego Rosso, University of California, Irvine, 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: WEF(TBD)

13:05-14:08 **Session 2-1: Innovative solutions for clean water and sanitation**

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)

14:23-15:26 **Session 3-1: Transform and build back better**

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: WEF(TBD)

15:41-16:23 **Session 4: Smart water strategies**

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

The future of digital flood warning systems and environmental protection
– Smart high-resolution solutions for small scale catchments
Andre Niemann, University of Duisburg-Essen, DE

DAY2 Wednesday, 16th Nov 2022

Moderator: Karl-Heinz Brandt (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

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

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

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

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
Sudhir Murthy, RESbonds International Corporation, 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: WEF(TBD)

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

Public relations campaign to raise awareness about preparation for and using of sewer connectable portaloos (Hamakko toilet) during disasters
Yuji Koizumi, City of Yokohama, JP

Moderator: Harsha Ratnaweera (EWA)

15:16-16:39

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 countermeasures 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

16:40 Closing address: WEF(TBD), Shuhei Okuno (JSWA)