

UKWP-DBT Water Resilience Showcase

15:00 – 18:00, 28 June 2023 07:00 – 10:00, 30 June 2023 Arup, 8 Fitzroy St, London W1T 4BJ and online

Content Brochure

The UK Water Partnership and the UK Department for Business and Trade have organised a Water Resilience Showcase event to disseminate knowledge about the UK Capability on Water Resilience. The event is to be held twice on different times to accommodate attendance based on different time zones.

The following companies are expected to provide presentations to illustrate the UK industry's capability on different themes within Water Resilience. Here you can a brief introduction to the speakers, the themes they are listed for and contact details to reach them directly.

Please refer any questions to contact@theukwaterpartnership.org

About The UK Water Partnership

The Partnership was established in 2015 to provide a strategic vision for the development and growth of the UK water industry.

It brings together a diverse water sector and related organisations in a single coherent alliance, promoting mutual understanding, cooperation and coordination.

Together with our members, we support research excellence, promote collaborative innovation and drive economic growth in the UK water economy.

Our core aims are:

Identify key strategic water challenges and establish pathways and funding mechanisms to stimulate a step change in action.

Create national water partnerships with the UK Governments and their agencies, businesses and the research community to address our national water challenges and global water responsibility.

Provide a platform to identify and promote overseas our UK water services, research and technologies to increase our share of the \$500 billion global water market and to foster international partnerships.



The UK Water Partnership

https://www.theukwaterpartnership.org/

contact@theukwaterpartnership.org



For over 75 years, Arup has been recognised for its vision, talent and tenacity.

Dedicated to sustainable development, the firm is a collective of 18,000 designers, advisors and experts working across 140 countries. Founded to be both humane and excellent, we collaborate with our clients and partners using imagination, technology and rigour to shape a better world.

Arup's primary goal is to develop a truly sustainable built environment. This means that in all our work, we aim to identify a balance between the needs of a growing world population and the finite capacity and health of our planet.

For over seven decades Arup has been at the forefront of the most ambitious and challenging design and engineering. To align ourselves with UN's Sustainability Development Goals and deliver our company-wide sustainability objectives by using our skills and influence to improve the built environment and to maintain the integrity and quality of the natural and cultural environments.

We are an independent firm, owned in trust by our members. We choose work where we can make a positive difference in the world.

Relevant Sites

- The City Water Resilience Approach - Arup

Featured in Themes: Planning for Resilience, Planning under Uncertainty, Managing Resilient Systems, Disaster Management.

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www.arup.com





Martin Shouler is an experienced engineering consultant working in water supply, drainage, wastewater engineering, and surface water management. Working across infrastructure and building engineering, Martin leads Arup's Water Business in London and was recently Arup's Global Environmental Services Engineering skills leader. With over 26 years' experience in the Water Sector, he has been involved in a wide range of major projects. Martin has managed complex project in the UK and overseas as well as providing focussed advisory

services for a range of public and private organisations.

wastewater projects, including water supply, sanitation, sewerage, water conservation and efficiency, water quality, water treatment, wastewater engineering, SuDS and infrastructure services. His recent work for WRG 2030 brought together specialists in various sectors such as agriculture, industrial and municipal to identify and promote demand management good practice water globally. Martin has undertaken a number of market review for technology and professional services and recently supported a trade delegation to the Singapore International Water Week.

His expertise covers the spectrum of water and



Martin Shouler



Siraj Tahir

Martin.shouler@arup.com

Siraj has extensive technical and policy development experience in Integrated Water and Flood Risk Management, as well as experience of undertaking technical due diligence and supporting adoption of innovation in the water sector.

Siraj Tahir is an Environmental Engineer specializing in Flood Early Warning Systems, Flood Risk Management, Technology and Innovation Support, Urban Water Management, and Urban Planning & Regeneration. His current area of focus is on Water and Circular Economy and technology & innovation in water sector. In his previous work at Environment Agency he advised local Authorities and Central Government on regeneration planning for areas at risk of flooding and developers on suitable design measures to manage flood risks.

Siraj.tahir@arup.com







Mervick Salamat



Adrian Marsden

Mervick is a member of Arup Young Water Professionals and is involved in various municipal water and wastewater projects in the Philippines. She has a vast experience in process design and project execution of treatment plants with focus in surface water treatment and reclaimed water.

Often involved in early concept designs, she specializes in optioneering and process improvements that align to the attainment of UN Sustainable Development Goals.

Mervick-Ann.Salamat@arup.com

Adrian is Arup's South East Asia Water Leader. He holds a master's degree in Civil Engineering and has over 20 years experience in the procurement, planning, audit, design, contract administration and commissioning of multi-disciplinary projects; with focus on water, wastewater treatment and sewerage schemes. He helps to lead Arup's infrastructure business in the Philippines and the water business in South East Asia, where he is responsible for delivering large high value projects.

Adrian has worked closely with clients and colleagues to understand project needs and respond to challenges. His experience includes advising board-level decision making therefore he ensures that outputs reflect the needs of project stakeholders.

Adrian.Marsden@arup.com





World-class Leading Expertise in Underground Infrastructure Engineering.

Downley Consultants Ltd is a specialist engineering consultancy combining market knowledge and engineering expertise focused on underground utility pipeline infrastructure management: wastewater, gas and water. Our team of leading experts in this field provides our Clients worldwide with the best available knowledge and experience to provide innovative professional solutions to underground infrastructure network problems. The company has a proud record of total Client satisfaction over 30 years and we aim always to maintain the high levels of professional experience that our Clients have come to expect.

Downley provides the engineering aspects of Asset Management – investigation, condition assessment and rehabilitation – to solve problems innovatively and cost-effectively at minimum risk based on extensive knowledge and experience. Our expertise lies in investigating, evaluating, designing and specifying underground pipe renovation, replacement and rehabilitation schemes and supervising the installation; and in economic assessment of renovation options.

Condition Assessment is the key stage – the evaluation and analysis of the outputs from desk studies and field survey to assess the condition of the assets investigated. This establishes their current and future serviceability levels and forms a platform for the full renovation and Asset Management strategy development and implementation.

Featured in Themes: Managing Resilient Systems

info@downley.com



Downley Consultants

www.downley.com







Tom Sangster

Tom Sangster is a professionally qualified Civil Engineer with 35 years' experience in geotechnical engineering and underground pipe networks and is Managing Director of Downley Consultants, an internationally renowned consulting engineer specialising in trenchless technology projects. Mr. Sangster gained a Bachelor's degree in Civil Engineering at the University of Surrey in 1978 and became a chartered civil engineer in 1983. He also holds an MBA from a leading UK business school. His early career was spent in design of water supply and wastewater systems and in geotechnical and foundations contracting. He also gained senior sales and marketing experience with companies manufacturing products for civil engineering applications.

He has undertaken and managed many water and sewer pipe inspection, condition assessment and rehabilitation projects throughout the world. His experience in underground infrastructure encompasses innovative installation, assessment and rehabilitation and in developing strategies for managing rehabilitation programmes including QA and risk management. He is a recognised internationally as an expert in this field. Tom is based in Geneva, Switzerland and is a former Chairman of the UKSTT Technical & Education Committee and a past President of the Swiss Society for Trenchless Technology, CHSTT.

tom.sangster@downley.com





Earth Change, part of the Land and Water Group, are pioneering an innovative habitat restoration approach that we call Sustainable Self-Financing Enhanced Habitat Creation which optimises the natural capital of old problem land. We partner with the landowner to realise more revenue from their land over 50-80 years with little or no investment on their part.

Our Nature-based Solutions involve us taking land which can't be developed or farmed, transforming them into high value ecosystems by the beneficial reuse of soil and sediment backed by the science of leading academics in their field. We finance this by land husbandry/offset incentives thereby creating a circular economy model in everything we do.

At the heart of our solutions are mechanical innovations from Land and Water such as the Saltmarsh Restoration Drag-box which allow us to deliver projects more effectively and efficiently.

The main aim of the Saltmarsh Restoration Drag-Box (SRDB) is to develop a new method to encourage the beneficial reuse of 'local provenance' by dredging harbours across the UK to restore saltmarshes and help combat the current loss of these highly valuable habitats. This approach will lend itself to the creation of a circular economy.

Featured in Themes: Nature Based Solutions

Earth Change
https://www.earthchange.co.uk/



Tom Godfrey

Managing Director of Earth Change, he has operated at CEO/Board levels for the last 22 years. He has spent his career marketing, selling, and delivering new, purpose-driven concepts and programmes to different local marketplaces on a global basis, that involve public, private and third sectors delivering commercial and community benefit to all.







HR Wallingford





Juan Gutiérrez Andrés

Changes in our climate mean that water will become scarcer in many places, increasingly volatile in others, but no less vital. Our ability to build sustainable communities, industries and infrastructure will become more challenging.

Understanding the movement, changing behaviour and influence of water in the natural and built environment is essential to our future well-being.

Drawing on our unique capabilities in science, technology and engineering, we invest in knowledge to deliver insight and innovation. We harness research, intelligent data and the power of our collective expertise to design smarter, more resilient solutions to address future challenges and opportunities in, on and near water.

As independent experts, we aspire to being the global leaders in how to live and work sustainably with water.

Featured in Themes: Digital tools for Resilience, Disaster Management

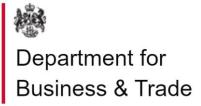
Juan Gutierrez is a professional civil engineer and business developer, with over 20-year experience spanning hydrodynamic computational modelling for water and gas networks, physical hydraulic modelling and motorway design. Juan is an expert modeller and user of Innovyze modelling tools such as InfoWorks ICM, InfoAsset and InfoWorks WSPro. Over the years, Juan has contributed, managed and led large technical teams to successfully deliver a wide range of complex modelling projects.

Juan has worked on site in places such as Bangladesh, Canada, Chile, Greater China and HK SAR, Ecuador, El Salvador, Honduras, Italy, Malaysia, Spain, Tajikistan, Thailand, UAE and United Kingdom. Juan has also extensive international track record in planning, organising and implementing sought-after training courses and seminars on urban drainage and hydraulic modelling.

Since 2011 Juan has successfully worked on HR Wallingford's Innovyze Software Sales Operations, leading Hong Kong and Thailand markets since 2018 and from 2020 he is in charge of the international promotion of HR Wallingford Digital Twin portfolio (SimOn Gas and SimOn Water).

j.gutierrez-andres@hrwallingford.com





Introducing Mott MacDonald

Our purpose is to improve society by considering social outcomes in everything we do, relentlessly focusing on excellence and digital innovation, transforming our clients' businesses, our communities and employee opportunities.

We:

- solve social, environmental and economic challenges
- help governments and businesses plan, deliver and sustain their strategic goals
- respond to humanitarian and natural emergencies

Around the world, our engineering, development and management specialists are pushing boundaries to make positive differences for our clients and their customers: combining digital technology and sector insights to transform delivery and outcomes; tackling climate change by cutting carbon and developing resilience; and making sure projects are socially inclusive: we know from experience that inclusive projects deliver the best results for everyone, our clients too.

We're aware of the lasting and potentially far-reaching impacts of our work, which encompasses new infrastructure for transport, energy, water and the built environment, improvements to existing systems, and education, health and social development projects – all enriching daily life for users. For every project, we provide the blend of talent needed to create the right result: appropriate, reliable, cost- and resource-efficient, safe and swift to deliver and operate. Engineering. Management. Development.

Featured in Themes: Managing Water Scarcity, Nature Based Solutions.

water@mottmac.com

Richard is a technical Director with 40 years of wide ranging experience in water and wastewater at all stages of the project cycle. He has led planning and feasibility studies worldwide, involving demand modelling, investment planning, financial modelling, and costing. His technical expertise covers water supply, pump stations, networks, pipelines, hydraulics, wastewater and economic analysis.

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Mott MacDonald www.mottmac.com



Richard Noakes







An official spinout company of The University of Manchester's Water Resource Group. Nexsys Analytics specialises in the development and application of water resources management and planning methods and tools, and builds bespoke software tools to enable advanced analysis and stakeholder interaction.

NexSys Analytics

www.linkedin.com/company/nexsys-analytics

Featured in Themes: Planning for Resilience.

Professor Julien Harou is Chair in Water Engineering since 2013. Previously he was a lecturer at University College London. He has a PhD from the University of California Davis in water resources engineering and economics and an Master's degree from Cornell University.

Julien's group contributes globally leading research in water resources planning and management, waterenergy-food systems, and environmental management software. He served as research director of the \$10M UKRI-funded FutureDAMS global challenge research project. This led to the creation of the www.waterstrategy.org and www.nexus-strategy.org design portals. He lead the NERC Water Stewardship Portal project and was a coinvestigator of NERC's UMFULA project. Recently his group worked with IUCN on the German-funded WISE-UP climate change adaptation project, the NSF-Belmont funded Jordan water security project, the EU SmartH20 project on smart metering and dynamic pricing, EPSRC Transforming water scarcity through trade project, and the EPSRC Adaptation and Resilience to climate change project. His group co-built the analytical engines behind the Water Resources of the South East, and Water Resources East regional infrastructure investment planning projects, and is a contributor to TNC's Hydropower by Design approach and WWF's Connected and Flowing initiative.



Julien Harou



Department for Business & Trade



The UK Centre for Ecology & Hydrology is an independent, not-for-profit research institute carrying out excellent environmental science with impact. Our 500 scientists work to understand the environment, how it sustains life, and the human impact on it. We provide the data and insights that governments, businesses and researchers need to create a productive, resilient and healthy environment. Scientific curiosity, integrity and transparency are at the heart of how we work. Our hydrological experts develop state-of-the-art flood forecasting models and methods for long-term flood prediction that are used by stakeholders across the UK and internationally to help predict, prevent and manage the impacts of floods.

Dr Steve Cole will be presenting examples of our recent work in West Africa and India, however we are also working in Australia, South East Asia and South America. We are keen to develop relationships with potential funders and partners, and would be happy to share more details of our international work after this showcase event.

Relevant sites:

- Hydrometeorological services: https://www.ceh.ac.uk/international-hydrometeorological-services
- Water industry: www.ceh.ac.uk/sector/water/water-undustry

UK Centre for Ecology and Hydrology

https://www.ceh.ac.uk/

Featured in Themes: Flood Management

https://www.ceh.ac.uk/about-us/contact-us







Dr. Steven Cole



Charlie Stratford

Dr Steven Cole is a Principal Scientist and heads the Hydrological Forecasting group at the UK Centre for Ecology & Hydrology (UKCEH) that delivers operational flood forecasting tools and the UK industry-standard Flood Estimation Handbook methods. He is a specialist in developing and applying hydrological and flood impact models for national-scale applications and helped develop the 25-year UK Flood Hydrology Roadmap. He is currently leads the 'Flood Hazard Impact Model India' (Weather and Climate Science for Services Partnership, 2019-23), and leads tasks under the Natural Environment Research Council (NERC) National Capability Programmes: Hydro-JULES (2018-27) and International Science for Net Zero Plus (2022-26).

scole@ceh.ac.uk

Charlie's research background is in wetland hydro-ecology, and he was a member of the hydro-ecology and wetlands group at the Centre for Ecology & Hydrology (CEH), now UKCEH, for 15 years.

In 2016, Charlie was awarded a Knowledge Exchange Fellowship by the Natural Environment Research Council, to support regional-scale policy and decision makers in including natural capital and ecosystem services in their processes.

Since 2017 he leads UKCEH's engagement with the water sector, working at the interface between research, policy and application. In 2022, Charlie was appointed UKCEH Head of Research and Business Development.

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Water Research Centre (WRc)

www.wrcgroup.com

Water Research Centre Ltd. (WRc), part of the RSK Group, is a provider of consultancy, technical services, accreditation schemes, research, innovation and training to the global Water, Waste, Environment & Gas sectors. Building on an international legacy stretching back almost a century, we bring a shared purpose of discovering and delivering new and exciting sustainable solutions that enable our clients to meet the challenges of the future. Whether you are a multi-national corporate, a regulated utility company, a government department, a contractor or an independent technology developer or supplier, our team will work with you to deliver exceptional service and create valued solutions for your needs. Our dedicated, skilled staff deliver end-to-end processes and work with clients through to the realisation of benefit and beyond. Ranging from inpipe condition surveys to microbial source tracking, the results delivered are trusted by regulators, companies and supply chains to be credible and robust. Continuously we innovate and support research and development to help our clients meet future needs of the industries in which we operate. We champion knowledge transfer through training course provision (WRc Academy), or collaborative project delivery (WRc Portfolio). Find out more or get in touch at www.wrcgroup.com

Featured in Themes: Water Quality, Managing Resilient Systems.

CServices@wrcgroup.com







Austen Buck



Justine Leadbetter

WRc. He has held numerous positions in the water industry over the last 15 years, always with a focus on microbiology and water safety planning. He currently leads WRc's Microbiology Team and leads and supports on international and national projects with water suppliers, government departments and regulators regarding microbiological monitoring, risk assessment, management and control, and water safety planning. He holds a PhD in Public Health and Environmental Microbiology and has co-authored publications on virus and bacteriophage removal through membrane bioreactor technologies. Austen is a Chartered Scientist with the British Science Council, a corporate member of the Institute of Water (IWater), and an area committee member and mentor within IWater.

Austen is a Principal Consultant of Microbiology at

Austen.Buck@wrcgroup.com

Justine is a highly motivated Senior Consultant and PRINCE2 Practitioner accredited project manager leading the Leakage & Water Resources team at WRc. Her technical knowledge in data, GIS and process design combined with experience in stakeholder engagement allows her to successfully contribute to and lead technical projects. Justine uses her excellent communication skills and strong organisation and planning to ensure projects meet clients' needs. Her problem solving and facilitation experience allows for emerging risks to be mitigated and all solutions to be evaluated with project goals in mind. Justine has experience delivering projects for a range of UK and international water clients, with diverse drivers such as innovation, technical evaluation and process design. Through project management, Justine has experienced a broad range of aspects of the water industry working with regulated companies, governments, and regulators. Her experience covering the impact of climate change on water quality alongside leakage strategy reviews and the differentiation between real and apparent losses provides the ability to view leakage and water resources holistically.

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