









### **About the Symposium**

Currently more than 900 million people worldwide lack access to clean drinking water and 2.4 billion lack basic sanitation. Water demand is increasing at a rate faster than population growth, and the United Nations estimates that in 2025 an estimated 5 billion of the world's 8 billion people will live in areas where water is scarce. Increasing populations, expanding food production and industrialization, and high living standards will continue to drive up demand for water over the course of this century. All while freshwater overuse and increasing rates of pollution are threatening existing water quality and public health. This situation is likely to worsen under a changing global climate system that will see increasing incidence of droughts and shifting rainfall patterns across the globe.

Developing regions like the Caribbean are likely to be disproportionately impacted given their degree of exposure and sensitivity to climatic shocks and underlying challenges in the management, storage, and delivery of existing freshwater resources. Increased incidences of droughts and hurricanes are already exacerbating water scarcity across the region, posing significant threats to human health and well-being and the productivity of key sectors such as tourism and agriculture. Many regional water utilities suffer from aging equipment and water supply infrastructure, high rates of non-revenue water, limited financial resources, and high energy and operating costs.

Addressing existing issues confronting the regional water sector, such as challenges regarding the storage, treatment, and distribution of available water resources, is therefore key to adapting the Caribbean to future climatic changes and in achieving Sustainable Development Goal (SDG) 6 on Water and several other related SDGs. Water is also critical for successful climate change mitigation given its importance to energy security. Conservation is thus an extremely important priority area given the ongoing and impending threats posed to freshwater resources from human activities and environmental change. Growing demands for water are compounded by changes in ecological systems' functions, increasingly caused by changes in climate and habitat degradation. There is an urgent need to identify opportunities for advancing conservation efforts in the regional water sector that can offer sustainable and innovative solutions that are culturally relevant, affordable, and accessible.





Whilst discussions around water conservation and wastewater management and reuse are not new to the Caribbean, there is a noticeable gap between research and development in these areas and their translation to the policy domain. This second **Caribbean Science Symposium on Water** provides an opportunity to bridge that gap by bringing the two sides together. The Symposium will bring together representatives from the research, development, economic, legislative and policy communities to share and discuss ideas on ongoing scientific studies, initiatives, innovations, and best practices related to enhancing water conservation and management in the Caribbean.

The Symposium is designed not only to be an opportunity to share research outputs but importantly provide interactive opportunities to bridge the gap between scientific outputs and policy formulation, and be an arena for exploring the practical and policy implications of these outputs. We are interested in presentations that cover a variety of best practices and innovations spanning the public, private and NGO sectors. These include, but are not limited to, new innovations in nature-based solutions, citizen science, and digital transformations such as the use of AI technology, Big Data and ICTs to improve water management and delivery. The event seeks to attract high-quality scientific, research, technical and exploratory papers that can offer useful insights on key challenges impacting the access, management, utilisation, and sustainability of water resources across the region and potential solutions.





# **Symposium Themes**

The overarching theme of the Symposium is "Conservation and Innovation: Changing the Regional Water Paradigm". This encompasses a broad range of subject areas and disciplines. It includes questions such as:

- What are the main challenges for water conservation in the Caribbean and how do these differ across countries and sectors?
- How will climate change affect water conservation efforts in the Caribbean and how can we prepare for these impending threats?
- Are there examples of best practices in the Caribbean or elsewhere that can help inform future conservation efforts in the region?
- Can the application of ICT and Big data tools and technological innovation improve research and its application in water conservation?
- Can citizen science enhance efforts in water conservation?

- In what ways will other health, ecological or economic shocks impact the regional water sector under a changing climate?
- Is research meeting the needs of policy makers and other water sector stakeholders?
- How are we bridging the Science-Policy divide to enhance the preservation of existing freshwater resources and improve wastewater management?
- How can we strengthen partnerships between academia, policymakers, private and third sector – to develop and deliver innovative and sustainable water conservation solutions?
- How can we enhance the inclusion of youth, rural households and other minority groups in water conservation efforts?





# **Symposium Format**

The format of the event is designed to promote dialogue across disciplines and to provide opportunities to explore complementary or diverse perspectives, practices and opinions around the theme of the Symposium. The Symposium will be held virtually featuring a blend of presentations, interactive and networking sessions. These will include:

**Moderated Presentation Sessions:** Grouped by theme, authors will have 10 minutes to present the highlights of their paper, followed by an opportunity to answer questions from the audience.

**Roundtable Discussions:** A panel drawn from authors will be invited to share the relevance of their work and to answer questions put to them by the moderator and the audience. The selection will be based on a review of the papers submitted.

**Policy Forum:** A moderated, interactive session to bridge the Science-Policy divide that surfaces and examines the policy dimensions and implications of the papers presented and discussions, asks how key outcomes address the SDGs and the water security challenges facing the Caribbean and how they can be communicated to different audiences.

**Poster Presentations:** These presentations will feature innovative research and other innovations by researchers and practitioners working at the intersections of conservation, wastewater management and IWRM.







#### When

Week of March 20th - 24th, 2023



#### Where

In the Caribbean



### Who

The Symposium is open to persons from a broad cross-section of disciplines and interests.

Disciplines and interests including but not limited to the social sciences, human health, environment and natural resources management, economics, applied science and technology, agriculture, engineering, and humanities, or basically anyone who is active or has an interest in the management of water in the broadest sense.

The Symposium will be of interest to early career persons and professionals, policy experts, those working in regional and international environmental agencies, financial institutions, government and non-governmental organisations, development agencies, education, health, and academia.

### **Submission Process**

Deadline for submission of abstract for papers – August 22, 2022

Notification of acceptance of abstract – September 5, 2022

Deadline for submission of full paper or draft poster – December 5, 2022

**Abstracts: 500 words** 

(Refer to Online Submission Form: <a href="https://forms.gle/c1snBuAUWK1xb3BX7">https://forms.gle/c1snBuAUWK1xb3BX7</a>)

Full Paper: 5,000 words maximum, inclusive of references