



XVII

# World Water Congress

International Water Resources Association (IWRA)

*Foundations for Global Water Security and Resilience:  
Knowledge, Technology and Policy*

11 - 15 May 2020

EXCO, Daegu, Republic of Korea

Hosted by



Daegu  
Metropolitan City



Korea Water  
Resources Association



Korea Water  
Resources Corporation

Supported by



Ministry of Environment



DAEGU  
METROPOLITAN CITY



KOREA WATER  
RESOURCES ASSOCIATION



Korea Water  
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## Welcome Messages



**Gabriel Eckstein**  
 President of the International  
 Water Resources Association

The triennial World Water Congresses of the International Water Resources Association (IWRA) have served as critical milestones in global, regional, and national water science and policy developments for more than 45 years. The event provides researchers and decision-makers space and opportunity to share experiences and developments, articulate new needs and objectives, and engage in lively discussions that will positively impact our world. From May 11-15, 2020, in conjunction with Daegu Metropolitan City, Korea Water Resources Association, K-water, and Ministry of Environment, IWRA will welcome delegates to the XVII World Water Congress in Daegu, Republic of Korea.

The theme for the Congress – *Foundations for Global Water Security and Resilience: Knowledge, Technology and Policy* – was conceptualized in the post-2015 implementation phase of the United Nations 2030 Agenda for Sustainable Development. As a result, the Congress agenda will be shaped by key global events leading up to the 9th World Water Forum in Dakar, Senegal, in 2021.

The Congress will serve as a bridge between these important events, and will engage with scientific, engineering, legal, financial, social, cultural, policy, and political aspects of SDG implementation by the public and private sectors as well as by civil society.

Since its creation in 1971, IWRA has been a global thought leader on water resources management. It has spearheaded numerous initiatives on smart water management, water pollution, integrated water management, and other efforts. In Daegu, IWRA will continue its commitment to bring together knowledge and policy makers working in the water sphere, and to further enhance water resources management around the world. Accordingly, I invite you to join us at the IWRA XVII World Water Congress, become engaged in this important milestone, and help us strengthen the foundations for global water security. I look forward to welcoming you to Daegu, Republic of Korea, in May 2020!



**Kyung Soo Jun**  
 President of the Korea Water  
 Resources Association

On behalf of the Korea Water Resources Association (KWRA), it is my great pleasure to express sincere welcome to IWRA's XVII World Water Congress, which will be held in Daegu, Korea from May 11th to 15th, 2020.

The Congress will be held with the central theme "*Foundations for Global Water Security and Resilience: Knowledge, Technology and Policy*", highlighting the role of water in sustainable and resilient development. Essential for life and fundamental for social development, water is foundational to sustaining the world. Sustainable development requires not only resources, but also changes that must occur at various levels, and these changes require resilience. The key to sustainable and resilient water management lies in innovative technologies as well as social changes implemented by water policies. Consequently, the solutions require contributions from different sectors and disciplines. In this regard, I hope that IWRA's XVII World Water Congress will act as a platform to share our visions, knowledge, and experiences across all aspects of sustainable water development and management.

Founded in 1967, KWRA has been promoting the scientific knowledge and leading the policy-making for water resources management in Korea. In doing so, close cooperation with international communities has always been one of the top priorities. KWRA, in collaboration with International Water Resources Association, will make every effort for IWRA's XVII World Water Congress to be successful.

We cordially welcome all participants, convinced that the outcomes of the Congress will be fruitful and an important step to continue creating innovative approaches towards sustainable water development and management.

Participants in this Congress will also be pleased to enjoy Daegu and its vicinities where historic spirit of Korea lives on. Beautiful weather in May and warm hospitality will also welcome you. Thank you.



**Kwon Young-jin**  
 Mayor of Daegu  
 Metropolitan City

I'm very honored to announce that IWRA's XVII World Water Congress will be held in Daegu, Republic of Korea, from May 11-15, 2020. Daegu has deep interest in global water issues and water industry development since the city's successful hosting of the 7th World Water Forum in 2015.

Recognized as Korea's water hub, Daegu city continues to forge global partnership in efforts to solve global water challenges by annually hosting the Korea International Water Week and World Water Cities Forum. We are also developing the Korea Water Cluster which is the core infrastructure for sustainable and innovative water technology development.

Water shortage caused by climate change, population growth and rapid urbanization is not just a problem of a single city, region or country but it is a problem of all humankind. Therefore, it is very meaningful to have IWRA's XVII World Water Congress under the theme of "*Foundations for Global Water Security and Resilience: Knowledge, Technology and Policy*". For five days, water experts, institutions, public and private sector and citizens will share know-how and expertise in

solving water problems and overcoming water crisis. It will give participants a great opportunity to share experiences, promote discussion, and present new knowledge, research results and new developments regarding effective water resource management and equitable water supply.

I firmly believe that the Congress will create a concrete, dynamic and fruitful results to make a real impact on water resource management around the world. I'd like to seek your support and active participation in IWRA's XVII World Water Congress. I look forward to welcoming you to Daegu, Republic of Korea in 2020!



**Lee, Hak-Soo**  
 President &  
 CEO of K-water

I would like to express my gratitude for your keen interest in IWRA's XVII World Water Congress, an international event aims to solve global water problems which will be hosted in Daegu, the water-centered city of the Republic of Korea.

Recently, the importance of water security and resilience has been growing as demand for water has dramatically increased due to complex issues such as drought caused by global warming, population growth, economic development and the urbanization of developing countries. In particular, a severe regional imbalance of water resources exists due to the disproportion between freshwater (accounts for only 0.7 percent of the Earth's water resources) and precipitation which is mostly concentrated in the areas where less than a third of the world's population lives. Water and Energy (UN World Water Development Report-2014) predicts that 40 percent of the world's population will suffer from severe water shortages in 2025. This crisis is calling on us to take a more integrated view of dealing with water management and promote international cooperation.

K-water, a co-host organization of IWRA's XVII World Water Congress, is promoting joint research with the Asia Water Council (AWC) and the UNESCO International Centre for Water Security and Sustainable Management (i-WSSM) on international policies for securing water security and sustainable growth. K-water, as the chair of the AWC, Asia's largest water consultative body, has not only been leading the way in solving global water issues but also conducting a number of technology exchanges with foreign water organizations as well.

During IWRA's XVII World Water Congress, K-water will share the collaborated research outcomes, successful policies, technologies and know-how accumulated over the past 50 years, and contribute to finding practical measures for both developing and underdeveloped countries. In addition, we will inherit and develop the outcomes produced by IWRA's XVII World Water Congress into the 2nd Asia International Water Week which will be held in Indonesia October, 2020 to contribute to securing global water security and sustainable growth beyond Asia.

Through this Congress, we look forward to bringing various ways of cooperation from water stakeholders around the world to come up with a more reasonable and balanced solutions to the water problems. Lastly, I sincerely appreciate all the hard work and devotion that is required for this meaningful event to be successful.

## International Water Resources Association (IWRA)

IWRA is a global knowledge network of water experts who are passionate about protecting the world's water resources. Established in 1971, it is a non-profit, non-governmental, educational organisation. IWRA acts as a global forum, bridging disciplines and geographies to connect professionals, students, institutions and corporations.

### History of World Water Congress



## IWRA's XVII World Water Congress

The XVII congress is hosted by Daegu Metropolitan City, Korean Water Resources Association, K-water and supported by Ministry of Environment, and it will focus on the overarching theme of "Foundations for Global Water Security and Resilience: Knowledge, Technology and Policy."

### Overview

<b>Title</b>	IWRA's XVII World Water Congress
<b>Theme</b>	Foundations for Global Water Security and Resilience: Knowledge, Technology and Policy
<b>Date</b>	11-15 May 2020
<b>Venue</b>	EXCO, Daegu, Republic of Korea
<b>Scale</b>	More than 1,300 water experts and professionals from all over the world
<b>Hosted by</b>	Daegu Metropolitan City, Korea Water Resources Association (KWRA), K-water
<b>Supported by</b>	Ministry of Environment
<b>Contents of events</b>	<ul style="list-style-type: none"> <li>- <b>Sessions:</b> Keynote Speeches, High-level Panels, Parallel Sessions, Poster Sessions, Special Sessions, IWRA Awards Ceremony</li> <li>- <b>Official events and banquets:</b> Opening and Closing Ceremonies, Congress Welcome Reception, Congress Gala Dinner</li> <li>- <b>Exhibitions:</b> Booth exhibition by organisations and institutions related to water industry</li> <li>- <b>Social Programme:</b> Field visit, cultural and historical tour programme</li> </ul>



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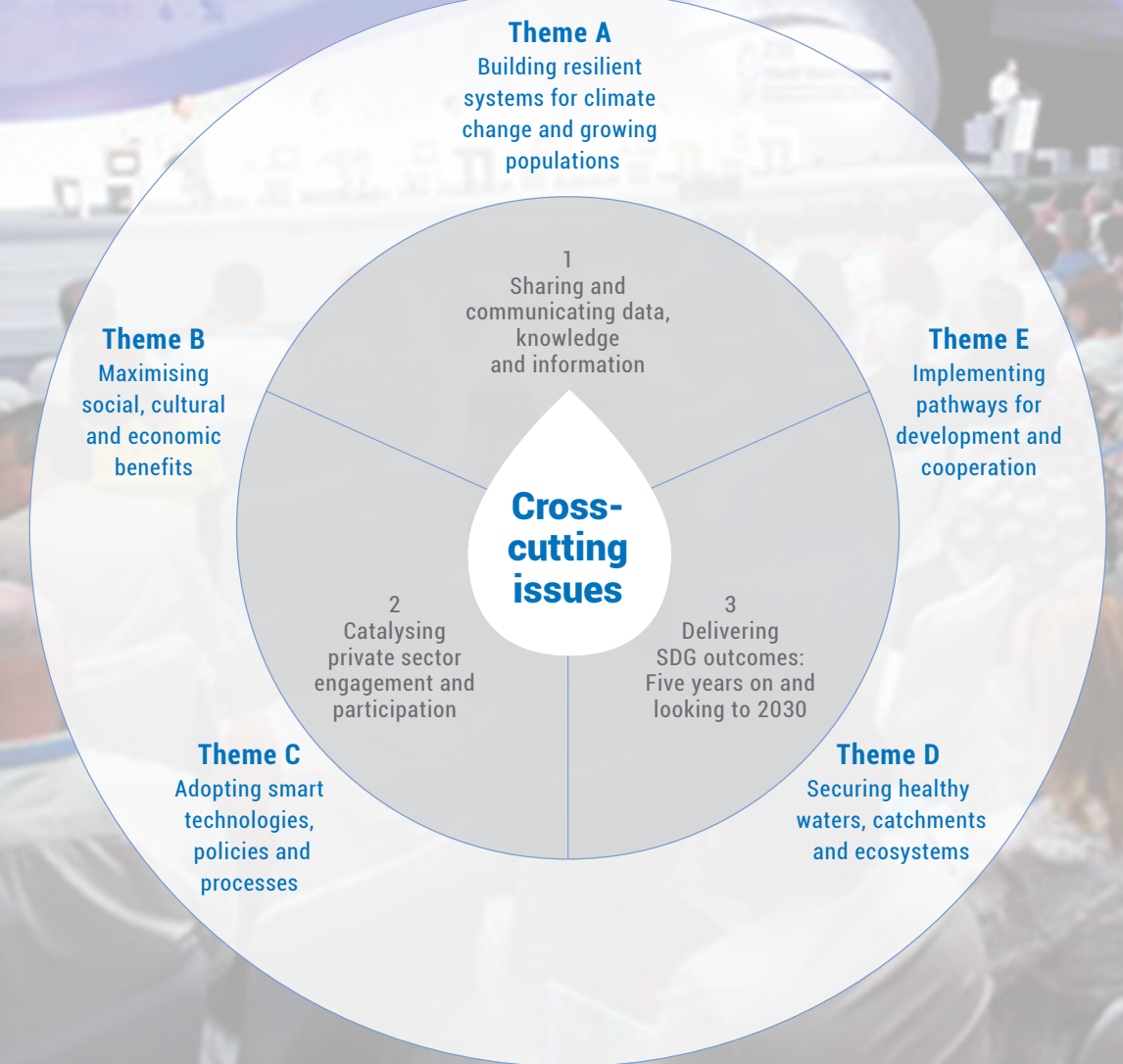
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## Congress Themes and Issues

“**Foundations for Global Water Security and Resilience:  
 Knowledge, Technology and Policy**”



## Call for **Abstracts**

The International Scientific Committee (ISC) welcomes papers for oral and posters sessions for IWRA's XVII World Water Congress, Daegu Republic of Korea, which will be presented during the main congress programme from 11-15 May 2020.

Experts, academics, water professionals, private sector practitioners, and civil society stakeholders, from all disciplines and perspectives – including natural and social sciences, engineering, agriculture, policy, economics, law, business, management and governance – who wish to present their work and experiences during the Congress, must submit an abstract. Abstract submission will be open from 13 March 2019 and close 31 July 2019. Abstract submission can only be submitted on-line through the official website ([www.worldwatercongress.com](http://www.worldwatercongress.com)).

### • **Submission Guideline**

Abstracts should clearly describe the research, analysis, project or investigation in maximum **350 words** in total, and include in summary form:

- (a) The purpose or thesis of the work
- (b) The key issue(s) or problem(s) addressed
- (c) The methodology or approach used
- (d) The results or conclusions derived from the project
- (e) Implications of the project relevant to congress themes

Abstracts must be prepared in English and cannot include graphs, charts, diagrams, images, references, or citations.

Once your abstract is accepted, you need to submit a full-paper **by 31 December 2019** (for both oral and poster presentations). The ISC will offer to peer review a strictly limited number of papers in cases where authors need peer review to obtain funding to attend the congress.

## Key dates to Remember

**13 March 2019** Call for Abstracts, Special Sessions and Side Events Opens

**31 July 2019** Deadline for Submission of Abstracts, Special Sessions and Side Events

**31 December 2019** Deadline for Submission of Full-papers

## Call for **Special Sessions**

A Special Session is a parallel session on the main congress programme, proposed to the International Scientific Committee (ISC) by an organisation or group of organisations. A Special Session must be aligned with one or more of the congress themes, and focus on a significant issue not explicitly covered by one of the official sub-themes, and/or highlighting an important collaborative programme or initiative. A special session must be of interest to a broad range of congress delegates, not just designed for project collaborators and stakeholders.

A special session normally comprises one 90 minute programme session\*, with the content and speakers (5-6 normally) being the responsibility of a particular institution or group of institutions (\*subject to programme space, two 90 minute sessions may be approved for exceptional programmes or initiatives).

### • **Submission Guideline**

A Special Session Proposal must be prepared in English and should clearly describe the proposed programme in under **1000 words** and include:

- i. Title and a short description of the session's topic and / or sub-theme (and alignment with which congress theme)
- ii. Name of nominating organisation(s)
- iii. Session objectives, justifications, and projected outcomes, aligned with the specified programme theme
- iv. How the session will be organised and by whom
- v. Presenter who is proposed to speak / present in the session (including who has already committed)
- vi. Description of financial and other resources that could be committed to realising the session

## Call for **Side Events**

A side event is a conference, workshop or meeting, organised and funded independently by an organisation outside of IWRA, which may be formally associated with the Congress for mutual interest and benefit. It should have a theme or purpose that is connected to the Congress themes, and take place immediately prior to, during, or following the main Congress programme.

The organisers of the XVII World Water Congress welcome proposals for side events to take place in conjunction with the Congress. Governmental, non-governmental, and inter-governmental organisations, as well as private sector organisations, who wish to organise a side event on relevant topics in conjunction with the Congress should contact IWRA Executive Office ([congress@iwra.org](mailto:congress@iwra.org)).

## Hub of Asia - Republic of Korea



Republic of Korea is located in North-east Asia and its neighbouring countries include Japan to the east and China to the west. Korea boasts more than 5,000 years of ancient history and 500 years of pre-modern history during the Joseon Dynasty. The country has achieved rapid industrialisation and economic growth in the 1960's to 1980's. Today, it stands as the 29th OECD member and is recognised as a democratic nation that protects the human rights of all citizens. The rich history, culture, and geographic diversity attract travellers from all over the world, with approximately 17 million foreign tourists visiting Korea annually. It is also the country of the "Korean Wave," or "K-Pop," which is a new and influential Korean popular music style, gaining popularity around the world. As hub of Asia, Korea has hosted many international events including the 1988 Seoul Olympic Games, the 2002 FIFA Football World Cup, the APEC Summit 2005, the G20 Seoul Summit 2010, the 2012 Seoul Nuclear Security Summit and PyeongChang 2018 Olympic Winter Games.

## Host city Daegu

**Green City, Daegu** Daegu Metropolitan City has pushed ahead with the Nakdong River and urban stream restoration project as part of its sustainable green city project. In addition, it has established the first national water industry cluster "Korea Water Cluster" since it successfully hosted the World Water Forum in 2015. Korea Water Cluster is located in the Daegu National Industrial Park on the area of 650,000m<sup>2</sup>. With an investment of USD 300 million, it will be equipped with water industry promotion facilities, demonstration facilities and industrial complex. Being in full operation from the second half of 2019, the Cluster will serve as a global water industry hub providing one-stop support for water technology R&D, certification and global market expansion, etc. Every year, Daegu city continues to forge global partnership in efforts to solve global water challenges by annually hosting the Korea International Water Week (KIWW) and World Water Cities Forum (WWCF).

**Global Smart City, Daegu** Daegu Metropolitan City selected 5 industries as future growth engines including Water, Energy, Smart City, Medical, and Futuristic Vehicles. As a global smart city, Daegu is leading technology and industry convergence and changing the structure of local economy from the existing manufacturing-oriented one to the future-oriented structure with an integrated business approach.

**City of Culture and Arts, Daegu** Daegu Metropolitan City is home to many popular writers, painters, and musicians. Their legacies are reflected in various festivals and creative local artists are taking over their work. The Daegu International Musical Festival, Daegu International Opera Festival and Daegu International Body Painting Festival are gaining reputation every year. Daegu city, being designated as an UNESCO Creative City of Music in 2017, has been established itself as a global city of culture and arts.



## Heritage Sites near Daegu

Daegu is the birthplace of traditional Korean culture whose origins go back millennia. The city's historical significance has received international attention from UNESCO, which has designated quite a few World Cultural Heritage Sites in Korea. Not only did Korean Buddhism and Confucianism originate here, but the region's quintessential Asian qualities have enthralled numerous visitors. World Water Congress participants will have the chance to explore the essence of traditional Korean culture in Daegu.

Also near Daegu, there are various UNESCO World Heritage sites such as Hahoe Village (Andong), Seokguram Grotto and Bulguksa Temple, Yangdong Village and Historic Area (Gyeongju), Haeinsa Temple Janggyeong Panjeon (the Depositories for the Tripitaka Koreana Woodblocks), as well as UNESCO Global Geoparks in Cheongsong so that you can enjoy Korea's natural beauty and culture along with the congress.





## Contact

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