

# IAHR/IWA JOINT SPECIALIST GROUP ON OUTFALL SYSTEMS NEWSLETTER



## February 2024

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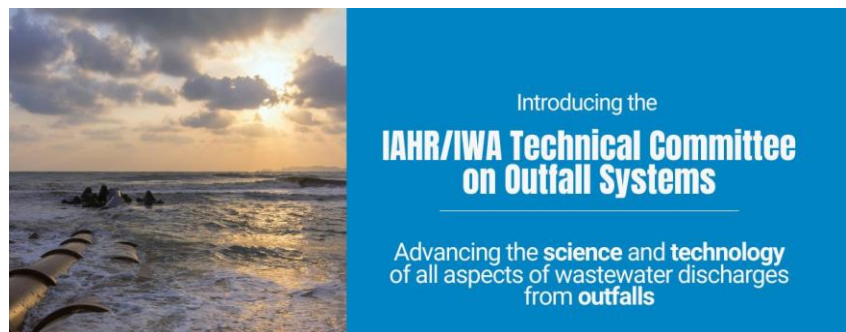
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## INTRO STORIES

### Expansion of scope for our Specialist Group

In October 2023, the leadership committee, in consultation with IWA and IAHR, agreed to rename the Specialist Group to the *IAHR/IWA Joint Committee on Outfall Systems*. This represents a significant step for our group through the removal of the word “marine”, therefore expanding the group’s scope to include all outfall systems, regardless of their location – ocean, estuary, river, creek or lake.

We are very excited to see where this expansion in scope and focus takes us over the coming years.



### Short course on Outfall Discharge Modelling and Analysis receives widespread recognition



A short course was organised in October/ November providing technical insights in the field of outfall discharge modelling and analysis.

The short course presented an introduction to design and modelling methods as well as the latest research relating to outfall systems and mixing of different effluent types in a range of diverse water bodies.

The course can be accessed and viewed at the following link.  
<https://www.iahr.org/index/detail/1189>

## FOREWORD BY THE VICE CHAIR

Dear members of the IAHR/IWA Joint Specialist Group on Outfall Systems,

A slightly belated welcome to 2024 and also to our refreshed specialist group. On behalf of Majid and myself we hope you find the articles in this newsletter of interest, and they encourage you to follow upcoming events and to get involved throughout the year.

Last year saw a series of online and in-person events ranging from the International Symposium on Outfall Systems (ISOS) held in Buenos Aires, through to very well received and widely recognised on-line webinars and short courses. Keeping this momentum flowing into the new year we have plans for further web-based events, commencing this February with a webinar on outfall studies from an Australian perspective. As part of longer term plans, we have also started looking at potential scheduling for the next ISOS.

Through all these activities we are very pleased to be able to include a more diverse array of practices and fields of study, which can now be realised by the expansion of the scope and focus in our specialist group. We now encompass all outfall systems, not just marine, so we can assist in the challenges and solutions relating to wastewater releases regardless of the water type presented by the receiving waterway.

We look forward to your continued support and involvement in 2024. As always, please do not hesitate to get in touch if you have any queries.

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## Webinar on Numerical Simulation of Effluent Discharge



In May, a webinar was delivered globally titled Numerical Simulation of Effluent Discharges.

The webinar briefly introduced many concepts relating to numerical modelling of wastewater releases including: the basic principles of numerical simulation, the application and configuration of outfalls, plus various methods of turbulence modelling. In addition, a case study using OpenFOAM was presented, with further discussion regarding potential improvements in numerical modelling.

The webinar can be accessed and viewed at the following link. <https://www.iahr.org/index/detail/930>

## ISOS 2023 brings together over 250 outfall specialists in Buenos Aires

The International Symposium on Outfall Systems (ISOS 2023) was successfully held in Buenos Aires from March 27 to March 29. Over 250 participants attended the conference, which was exceptional compared to previous ISOS events. Eight keynote speeches and 12 technical presentations were delivered as well as several panel discussions.



A very interesting and impressive site visit to local large diameter outfalls was also organised. Further information on this event can be accessed from the following link. <https://www.iahr.org/index/detail/1086>

## Special session at the 2023 IAHR Congress in Vienna

In addition to the ISOS 2023, the committee also organised a special session at the 2023 IAHR Congress that was held in Vienna in August. The session included six presentations and about 35 attendees covering experimental, numerical and analytical subjects as well as presentation of recent advances and research.

## NEWS OF FORTHCOMING EVENTS

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### Webinar in February 2024 – *a down under perspective*

Further to the success of the webinar in 2023, a similar event will be delivered this February, this time with a emphasis on case studies from Australia. As detailed below, Daniel Botelho and Ed Beling will both present on outfall projects that have recently been delivered.

#### Outfall Systems - Perceptions and Facts

Outfall systems often receive criticisms due to misguided public perceptions about their function, performance, and costs. In this talk we explore some examples in Australia and overseas where these perceptions are challenged by objectively looking at the services that a well designed and constructed outfall can provide. In doing so, we make a case for the role of outfalls in supporting the United Nations Sustainable Development Goals and highlight the importance of the IAHR-IWA Joint Leadership Committee on Outfall Systems in sharing the learnings, experiences and advancements in the different fields of science related to outfall systems.

#### Upper South Creek Advanced Water Recycling Centre Environmental Impact Statement

The Upper South Creek Advanced Water Recycling Centre will have the capacity to treat up to 70 megalitres of wastewater per day. Located in Western Sydney, the facility will supply wastewater services to 400,000 new dwellings in the rapidly growing Western Sydney Aerotropolis Growth Area. One important element of the project's Environmental Impact Statement (EIS) involved assessment of the potential impacts on the receiving waters of the Hawkesbury Nepean River. The presentation will provide an overview of the methodology and findings from this hydrodynamic and water quality impact assessment, including a focus on the modelling tools adopted, their application, and how key findings were presented.

### Call for proposals to host the next ISOS

The committee has recently advertised a call for proposals to host the next International Symposium on Outfall Systems. Any interested parties are invited to contact the committee chair and vice chair for further information.

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### Subscribe to Newsflash to stay up to date with news and events

You can subscribe to Newsflash at the following link:

<https://iahr.us10.list-manage.com/subscribe?u=6bd5ffb7b331170e6f49cfe50&id=0630757e87>

## BECOME A MEMBER

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The main objectives of the IAHR/IWA joint committee on outfall systems are to advance the science and technology of all aspects of wastewater discharges from outfalls and their design, to disseminate knowledge and to facilitate communication between the diverse groups of practitioners in the field.

**For IWA members**, who already have login details, please go to (<https://iwa-network.org/groups/iahr-iwa-joint-specialist-group-on-marine-outfall-systems/>) and simply click on “Join Group” button on the top right.

**For IAHR members**, who already have login details, please go to (<https://www.iahr.org/index/committe/16>) and simply click on the “Join this TC/WG” link on the left of the page.

**For new friends**, please register to join IWA or IAHR by visiting <https://iwa-connect.org/subscribe> or <https://www.iahr.org/individual-member/register-one>.

## WRITE TO THE SG

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The Newsletter is an opportunity to share information: points of view; policy developments; research; activities and events; worldwide. If you have an interesting project, comments, or are planning a conference or workshop, send it to us, including contact point for more information.

- **Majid Mohammadian**, Chair  
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- **Ed Beling**, Vice Chair  
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If you would like to present a webinar or have an interesting story you would like included in a future Newsletter, then get in contact with us.



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