

## BHR OPEN DAY FOR WATER INDUSTRY

On 12<sup>th</sup> July, BHR Group opened its doors to various key stakeholders in the water and wastewater industry. These included water companies, engineering consultants, pump suppliers and the Department for International Trade. The day was an opportunity to showcase what we do and the benefits that physical model studies bring to a design.



Guests from Southern Water, Mott MacDonald, Royal Haskoning, Atkins and more, visited BHR Group's Fluid Engineering Centre to find out about the benefits and challenges of physical modelling. The day comprised presentations, panel discussions and a tour of BHR's test facility, to see physical scale models in action.

### Making the Most of your Model

BHR's Richard Brewis started the event with an informative presentation on the process of physical modelling and the benefits a physical model study can bring to a project. He explained how key considerations, such as scale, boundary conditions, air entrainment and solids transport are crucial to making the most of your model and how BHR expertise can be invaluable at the early planning stages prior to the model build. He also touched upon the comparison between physical models and CFD.

### What Works Best for Clients?

Our expert panel comprised BHR's Sarah Fairhurst and Dr Waldo Rosales, alongside Sarah Jones of Mott MacDonald and Ragnar Grenar from Bedford Pumps. The lively panel debate looked at the importance of modelling as well as stressing the significance of having this take place early in the project timeline. Comparison of the benefits of both physical modelling and CFD was also discussed looking at where each method would be most appropriate. Many factors impact the decision to model or not, and the challenge is often to manage the budgetary constraints of the project.

### Test Facility Tour

The most informative part of the day was the opportunity to tour around the BHR Group Test facility and see a number of models in action. These included various pumping stations, both large and small, as well as a comparison of two similar models, one with and one without modifications. This enabled guests to see firsthand the vast improvements modelling can make to station operation, and the large cost savings that can be made over the station operating lifetime.

Visitors were also able to see three of our other large models in operation: an interception sewage reception facility, a storm water transfer tunnel and a dam spillway. These models demonstrated BHR's capabilities in large scale modelling and across the range of projects from urban flood control to remote river management. Guests were able to ask our engineers about these models and learn about the processes involved in physical model studies.

### Some comments from our guests:

"...excellent facilities and professionals of very high quality."

"Most enjoyable and enlightening day. We need to address .....standards/specifications and timing of modelling works as early as possible, and ensure sufficient budget allowance. It would be good to have budget estimates for inlet works and pump stations."

"Fantastic staff, who left a great impression. Very friendly, very knowledgeable."