



Deliverable 5.9

ESRs blog entry on training activity 4: Managing water in complex anthropogenic landscapes

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Managing water in complex anthropogenic landscapes

September 29, 2023



By Floran, Ilaria and Maud



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For the people arriving early on Monday, a pleasant ice-breaking event was organised: a BBQ at the RUB University. It was great to catch up, have some food and see the university. A nice and slow start to a week of activities in Bochum and surrounding areas.

Day 1: Tuesday 19/09

Tuesday was the kick-off of the INVENTWATER training event at the Ruhr Universität Bochum (RUB). The complexity of the Ruhrgebiet in Germany makes for the perfect backdrop to talk about the intricate challenges of managing water resources in anthropogenic landscapes.



Photos provided by the Ruhrverband

The day started with an introduction by our hosts at RUB: Martina Flörke, Hans Dürr, Karsten Rinke and Ilona Bärlund. Next, two experts of the Ruhrverband Yvonne Schneider and Fabian Netzel, provided a thought-provoking look at "Water quality (and quantity) and river basin management in the Ruhr catchment area".

"It was truly insightful to learn from experienced professionals in water management—lawyers, managers, frontline operators, and key decision-makers. The highlight was gaining first-hand perspectives from them, particularly during on-site visits." – Faluku

The morning concluded with a fascinating talk by Karsten Rinke on the 'Monitoring of inland waters,' shedding light on cutting-edge technologies that help us assess and safeguard aquatic ecosystems and simultaneously giving us a sneak peek into Wednesday's field trip.

'I enjoyed how Dr Karsten Rinke explained how to measure water physics and quality in lakes/reservoirs with a hands-on example in a Ruhrband authority reservoir. It was very interesting for me to know the pros and cons of some instruments/equipment and their accuracy. The resources needed for some field measurements/tasks were underestimated by me but now I have a better picture of resource/time consumption.' – Ricardo

After having lunch in the Mensa or the fully vegan canteen Rote Bete, it was time for the ESRs to present some of their work. Short flash talks were given on a highlight in our work and afterwards discussed. This session proved to be a remarkable platform for knowledge sharing and collaboration, as it allowed all of us to gain valuable insights into the diverse projects within the Inventwater program. It was a day filled with intellectual stimulation and camaraderie, setting a collaborative tone for the rest of the training event.

In the evening everyone's competitive side came out in 18 holes of 3D Blacklight mini golf. Winners were crowned, losses were accepted with pride, and overall fun was had throughout the evening.



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Day 2: Wednesday 20/09

On the second day, experts from Ruhrverband took us on a field trip to explore the water management infrastructure in the Ruhr River Basin, especially the impressive Möhne Dam, Möhnetalsperre. We had the unique opportunity to go on the reservoir and take measurements as well as delve into the inner workings of this dam and learn about its significance in the region's water management strategy and its Hydroelectric Power Station.



'I have seen a few dams, but I have never been into the control tunnels. It is an amazing experience to be inside this massive structure knowing there is millions of tons of water on the other side of this wall.' -Maud

Lastly, to complete the water cycle, a tour of the wastewater treatment plant in Möhnesee-Völlinghausen, led by Mr. Helle from Ruhrverband. This excursion provided valuable insights into the essential aspects of wastewater management and the innovative technologies employed to ensure environmental sustainability.

'Being a modeller, I seldom have the chance to do fieldwork. I enjoyed the boat experience and seeing how data comes to life and how much work there is behind the dataset we use. The entire experience was not only insightful but also incredibly enriching, reminding me of the importance of bridging the gap between theory and reality in our work.' -Ilaria



Day 3: Thursday 21/09

On Day 3, the day began with one-on-one talks with our supervisors, providing us with valuable guidance and insights tailored to our research projects. Later, we delved into the legal dimensions of water management through a lecture delivered by Lawyer Per Seeliger from Ertverband, sparking important discussions on the regulatory landscape governing water resources. Following this, Maria José Farre from ICRA led a captivating lecture on 'Disinfection by-products and drinking water quality in a context of Global Change,' which prompted insightful conversations about the challenges of ensuring clean and safe drinking water in an ever-changing world. In the afternoon, we went on a tour of the Drinkwater plant Wasserwerk Haltern site. Exploring the inner workings of this unique and vital facility involved in providing safe and reliable drinking water to the region.

In the evening, we had an organised dinner for everyone attending this week at a nice Italian restaurant. A time to leave work talk and have some time to enjoy other stories.

'The dinner at the restaurant San Marco in Bochum was great! I enjoyed talking with my colleagues and also with some supervisors – I found those little and "common" spaces great for my personal and professional development. Thanks a lot, to the organizers!' – Ricardo



Day 4: Friday 22/09

The fourth and final day of our training week always brings a fulfilled but unfortunate feeling, as we must say goodbye. We started our last group activity of the week in sub-groups to exchange ideas on our projects. Keeping in mind how they could support current and future water quality management around the world and the Ruhr catchment. Through our discussions, we tried to reflect on the improvement needed in terms of modelling and management on distinct levels. We concluded this session with a flash talk from each group. After lunch, everyone slowly got ready to go back to their respective home countries, with the happy thought that we will be meeting again in January!



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