Scenario Analysis for World Water Quality Assessment

OBJECTIVE: organise two workshops to develop ‘light’ 1 water quality scenarios for the World Water Quality Assessment

1 ‘Light’ scenarios are first scenarios developed without funding, using available data and models, a pragmatic approach and a large amount of voluntary time from contributors

WORKSHOP 1
- 4 Afternoons June 2021, online
- 44 participants
- Aim: to develop storylines for and quantification of input variables for water quality models

Intermediate modeller meetings
- July & September 2021
- Aim: to decide on details for modelling exercise

Running water quality models
10 model groups run their large-scale water quality models
Outputs:
- Future water quality: 2030, 2050 and 2100
- Various variables: biological oxygen demand, nutrients (N&P), plastics, chemicals, arsenic, pathogens, chlorophyll-a
- Mostly rivers, arsenic for groundwater
- Scenarios contain socio-economic development (SSPs) and climate change (RCPs) (SSP1-RCP2.6 or 4.5, SSP2-RCP6.0, SSP5-RCP8.5)

WORKSHOP 2
- 15 and 16 February 2022, online
- Open for registration
- Aim: to develop storylines for water quality

Follow up meetings
- To develop the papers further
- Model intercomparison
- Scenarios for WWQ Assessment

Timeline
- June 2021
- Present
- November 2022

Outputs (completed and expected)
- Community built to develop scenarios
- Missing future data detected and approach for quantification of drivers developed
- Database with scenario input data for the water quality models
- First storylines developed for drivers and water quality
- Scenario chapter in the World Water Quality Assessment
- Draft setup for paper on scenario development
- Draft setup for paper on future water quality (far future and achievement of SDGs)
- First ideas on creating funding opportunities

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