

Scenario Analysis for World Water Quality Assessment



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ABSTRACT

The Scenario Analysis for World Water Quality Assessment workstream is part of a broader scenarios workstream, which links to the "Baseline Assessment" workstream and aims to develop fast-tracked or 'light' water quality scenarios.

The workstream will organise and facilitate a consultation process structured around two workshops to kick-start the scenario analysis that will be part of the World Water Quality Assessment.

CONTACT

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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 modeler 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)

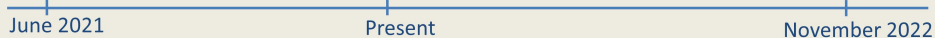
WORKSHOP 2

- 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



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