

World Water Quality Alliance – Work Plan 2021 -2022

The United Nations Environment Programme which provides for the Alliance Coordination in collaboration with the European Commission’s Joint Research Centre (JRC) hosted the Second Global Workshop of the World Water Quality Alliance (WWQA) in Ispra, Italy (16-18 Sep. 2019) which saw the official launch of the Alliance. Following the inception meeting of the World Water Quality Assessment in November 2018, which established a community of practice (the Alliance) with the strong desire to raise the global profile of ambient freshwater quality, this meeting set out to substantiate the various workflows (commonly referred to as workstreams) such as thematic commitments, expert groups, the baseline World Water Quality Assessment and the Alliance’s general working structure and principles. The first work plan covering the period 2019 – 2021 saw progress on the workstreams despite challenges resulting from the pandemic restriction. A number of activities especially those involving travel had to be adapted for virtual circumstances or canceled/postponed. One such example was the 2nd annual global meeting originally scheduled to take place in Windhoek, Namibia but had to be cancelled and successfully held as a virtual meeting held over two half days in January 2021. Some other cancelled and or postponed activities are reflected in this updated work plan.

Based on the recent call for WWQA Workstream Proposals and Seed Funding Applications launched in the December 2020- January 2021 period, existing workstreams have also updated their annual commitments and proposed milestones and new workstreams have been submitted and approved¹ as part of the 2021-2022 work plan. These commitments and proposed milestones have been and continue to be subject to targeted follow up and can be found in summary in the following tables:

Alliance: Strategic Advisory Committee (SAC) and Technical Advisory Committee (TAC)

FEB-MAR 2021	The SAC and TAC will review and approve existing workstreams for continued implementation and new workstreams for implementation.
Q3/4 2021	Coordination Team to organize at least one committee meeting to review progress of work implementation and plan for the next global meeting
Q4 2021	Next Global Meeting

Committee Chairs and co-chairs:

- Joint Research Centre | European Commission (JRC) – SAC Chair
- African Ministers’ Council on Water (AMCOW) - SAC Co-chair
- International Water Management Institute (IWMI) – TAC Chair
- University College Cork (UCC) - TAC Co-chair
- UN Environment Programme (UNEP) – WWQA Coordination Team Function
- Swiss Agency for Development and Cooperation (SDC) – Donor/Observer

¹ This was the first WWQA call for workstream (existing and new) proposals. Using a set of five criteria, all proposals went through a comprehensive evaluation process by the SAC (providing strategic guidance and prioritization) and TAC (providing technical and scientific review and guidance). 6 new workstreams were approved for implementation and 8 old workstreams were approved for continued implementation based on updated objectives, milestones, and deliverables.

All workstreams (old and new) and proposed deliverables and milestones outlined below are based on evaluated and approved proposals. Deliverables and milestones delivery is indicative and will be confirmed as legal instruments are set up where relevant.

Africa Use Cases

a) Scoping different approaches for the stakeholder engagement and co-design process for the Lake Victoria and Volta Basin Use Cases

Lake Victoria stakeholder engagement	
Q2 2021	Virtual workshops to identify additional in-country stakeholders.
Q2 2021	Discussions with WWQA partners to promote and develop collaborative efforts
Q2/3 2021	Discussions on the root causes for the lack of data sharing and identify potential solutions
Q3/4 2021	In-country workshops (depending on Covid-19 travel restrictions) to enhance the stakeholder engagement going forward
Q3/4 2021	Identify process for acquiring in situ data with a better spatial and temporal spread.
Q1 2022	Reporting of outcomes and recommendations
Volta Basin stakeholder engagement	
Q2 2021	Evaluation of the original process that led to the delay and gap in the planned co-design process.
Q2 2021	Discussions with WWQA partners to promote and develop collaborative efforts
Q3 2021	Establish a comprehensive network of stakeholders focusing on a bottom-up and integrated approach.
Q3/4 2021	Online meetings to solicit interest and explore collaboration through a process of developing trust; followed by in-country workshops (depending on travel related to Covid-19) to initiate the most promising approach of stakeholder engagement going forward.
Q3/4 2021	Discussions on the root causes for the lack of data sharing and to identify potential solutions.
Q3/4 2021	Identify process of identifying key data providers and process of negotiating data sharing agreements
(Q1 2022)	Reporting of outcomes and recommendations
Data Management at Lake Victoria and Volta Basin	
Q2 2021 – Q1 2022	Data management will be undertaken as and when data is received throughout the entire project horizon

Lead implementing organization:

- The UMVOTO Foundation

Implementing partners:

- Umvoto Africa (Pty) Ltd
- The Institute for Environmental and Sanitation Studies (IESS)
- University of Ghana
- Eurecat (Advisor from the Social Engagement Platform)
- Joint Research Centre (JRC) (Advisor from the Social Engagement Platform)
- UN Environment Programme (UNEP)

b) Water Quality Challenges in Urban Environments – Scaling of the Cape Town Use Case Groundwater Management Methodology

Q2 2021	Assessment of the state of the Lotus River Canal
Q2 2021	Map flow and contaminant contributions to the Lotus Canal
Q4 2021	Model of potential surface water/groundwater interactions
Q2-4 2021	Identification of civil societies/public stakeholders and local artists willing to participate
Q2-4 2021	Workshops with community, art and science stakeholders
Q1 2022	Rehabilitation plan for the Lotus Canal

Lead implementing organization:

- The UMVOTO Foundation

Implementing partners:

- Umvoto Africa (Pty) Ltd
- The Site-Specific Land and Nature Art Collective (NPO)
- Stellenbosch University
- Women are Medicine
- Activation Hub
- UN Environment Programme (UNEP)

Other partners to be involved:

- Deltares for support in the modelling and design of the Lotus Canal rehabilitation (to be confirmed)
- Social Engagement Platform to support the stakeholder engagement process (confirmed).

Baseline World Water Quality Assessment, and GlobeWQ STI Platform development

Baseline World Water Quality Assessment	
Q1 2021	Collect feedback on the First Global Display of a Water Quality Baseline (WWQA 2021) from a) the author team, b) the participants of virtual Bochum meeting Sept 2020 not contributing to the Annex and c) WWQA at large
Q1 2021	Collect possible feedback from UNEA-5 part one
Q1–Q2 2021	Strengthening links (e.g., groundwater) and possible extension of the network (e.g. in-situ data holders beyond GEMS)
Q1–Q4 2021	Improvement of the triangulation approach (together with proposed workstreams on GlobeWQ and Use Cases)
Q1–Q4 2021	Preparation of the scenario process (together with the proposed new workstream on scenario assessment)
Q3 2021	Update of the Baseline Assessment (in-situ meeting planned for Sept 2021)
Q4 2021	Submission of the updated Baseline Assessment for UNEA-5 part two
GlobeWQ platform development	
Q2 2021	Ingestion of key in-situ data, remote sensing data and model outputs to the platform
Q3 2021	Lake Victoria / Elbe river stakeholder workshop, introducing the current version of the platform, finalization of demand analysis
Q4 2021	Working prototype of the GlobeWQ web portal

Lead implementing organization:

- Helmholtz-Centre for Environmental Research-UFZ GmbH

Implementing partners:

- Deltares
- The Netherlands
- Wageningen University, The Netherlands
- International Institute for Applied Systems Analysis (IIASA), Austria
- EOMAP
- Ruhr-University Bochum, Germany
- The Umvoto Foundation, South Africa
- International Centre for Water Resource and Global Change (ICWRGC)
- Ruhr-University Bochum, Germany
- UNEP GEMS/Water Data Centre (GWDC)

Capacity Development Consortium

Q1 2021	Agreed ToR and membership Criteria for the Consortium
Q4 2021	Pilot web-based platform showcasing capacity building (CD) products & activities
Q4 2021	Production of WWQA / UNEP GEMS/Water Capacity development leaflet

Lead implementing organization:

- UNEP GEMS/Water Capacity Development Centre

Implementing partners:

- University College Cork (UCC) – GEMS/Water Capacity Development Centre (CDC)
- UN Environment Programme - UNEP GEMS/Water Global Programme Coordination Unit
- International Centre for Water Resources and Global Change, at Federal Institute of Hydrology, Germany, GEMS/Water Data Centre (DC) – GEMStat
- Members of the Consortium that sign an MoU with UNEP to provide capacity development in conjunction with UNEP GEMS/Water.

Ecosystems

Q1-Q2 2021	Virtual Workshop of WWQA members and other key practitioners and network partners to produce Terms of Reference and report outlining future work and events.
Q3 - 2021	WWQA Ecosystems Session at World Water Week 2021
Q4 2021	Knowledge-sharing platform exploring links with the World Environment Situation Room
Q1 2022	WWQA Ecosystems Theory of Change

Lead implementing organization:

- IHE-Delft and Centre for Ecology and Hydrology (CEH)

Implementing partners:

- The World Bank
- Joint Research Centre

- Helmholtz Centre for Environmental Research (UFZ)
- International Water Management Institute (IWMI)
- UN Environment Programme (UNEP)
- United Nations University Institute for Water, Environment and Health (UNU-INWEH)
- The African Centre for Aquatic Research and Education (ACARE)
- The International Institute for Sustainable Development (IISD)
- Conservation International

Friends of Groundwater

Q2/3 2021	Portal ICT development outputs: website, reference database and GIS portal (milestones: design, software requirements specifications, prototypes, testing).
Q4 2021	Portal content (milestones: draft, final, implementation)
Q4 2021	Guidelines (milestones: framework, draft, final, layout, printing)
Q4 2021	Contribution to the WWDR2022
Q4 2021	Optional: contribution to the Review of Groundwater Quality Monitoring Networks
Q4 2021	Optional: Webinar and a video on global groundwater quality assessment

Lead implementing organization:

- International Groundwater Resources Assessment Centre (IGRAC)

Core Implementing partners:

- German Federal Institute for Geosciences and Natural Resources (BGR)
- International Association of Hydrogeologists (IAH)
- International Groundwater Resources Assessment Centre (IGRAC)
- International Water Management Institute (IWMI)
- Swiss Federal Institute of Aquatic Science and Technology (EAWAG)
- Trinity College Dublin
- UMVOTO
- The World Bank
- United Nations University Institute for Water, Environment and Health (UNU-INWEH)
- Institute of Engineering Hydrology and Water Resources Management (Ruhr-University Bochum)

Other Partners:

- Int. Water Management Institute (IWMI) and GRIPP, Not-for-Profit,
- KWR Water Research Institute, international research company
- The Aquaya Institute, international research company
- The World Bank, international development bank
- UNESCO-IHP, UN Agency
- UNU-INWEH, UN Agency
- British Geological Survey (BGS), governmental organisation
- Federal Institute for Geosciences and Natural Resources (BGR), Germany
- National Centre for Groundwater Research and Training, Australia, government organisation
- Swiss Federal Institute of Aquatic Science and Technology (EAWAG), Switzerland, governmental organisation
- UMVOTO, South Africa, consulting company
- Flinders University, Australia
- University, Ruhr-Universität Bochum (RUB), Germany

- University, School of Environment, Southern University of Science and Technology (SUSTech), China University, Trinity College Dublin
- The University of Dublin (TCD), Ireland
- University, University of Fada N'Gourma (UFDG), Burkina Faso
- University of KwaZulu Natal, (UKZN), South Africa, University
- University of New South Wales (UNSW), Australia, University
- University of Nevada, Las Vegas, USA, University
- University of Rhode Island, (URI), USA, University
- University, University of Florida (UFL), USA; University

Plastics

Q2 2021	Workshop on plastics in freshwater
Q2 2021	Launch of the report on guidelines towards harmonization of methodologies for monitoring plastics in rivers and lakes.
Q4 2021	Presentation of the guidelines at virtual conferences
Q4 2021	International project proposal, e.g., for Water Security in Africa (WASA)
Q4 2021	Putting the guidelines into practice by conceptualizing and preparing transdisciplinary case studies in three different catchments

Lead implementing organization:

- Helmholtz Centre for Environmental Research (UFZ)

Implementing partners:

- German Environment Agency – Umweltbundesamt (UBA)
- International Water Management Institute (IWMI)
- Wageningen University & Research (WUR)
- The United Nations University Institute for Integrated Management of Material Fluxes and of Resources (UNU-FLORES)
- UN Environment Programme (UNEP)

Social Engagement Platform

Q2 2021	Creation of Municipal recruitment leaflet.
Q2 2021	Recruitment of first lead municipalities
Q4 2021	An open-source Best Practice Repository (BPR) will be established on a suitable Digital Social Platform
Q2 2022	Lead municipalities to recruit national and regional municipal partners.

Lead implementing organization:

- Eurecat, and Water Europe

Implementing partners:

- Joint Research Centre (JRC), European Commission DG
- UN Environment Programme (UNEP)
- Swiss Agency for Development and Cooperation (SDC)
- World Bank
- World Economic Forum

- The Women for Water Partnership
- University of South Florida
- Green Tech Current
- African Ministers Council on Water (AMCOW)
- World Wildlife Fund (WWF)
- Alliance for Water Stewardship
- The European Youth Water Parliament

Private Sector Engagement

Q1 2021	Scoping meeting towards conceptualizing private sector engagement in water quality and development mainstreaming (engagement in the solution space of technology and social innovation in the Agenda 2030)
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Lead implementing organization:

- Swiss Agency for Development and Cooperation (SDC)

Implementing partners:

- Joint Research Centre (JRC), European Commission DG
- UN Environment Programme (UNEP)
- World Bank
- Alliance for Water Stewardship
- International Water Management Institute (IWMI)
- Carbon Disclosure Project (CDP)
- WWF
- Eurecat

WaterForCE

Q2 2021	WP1 participants Workshop
Q2 2021	Workshop of water quality remote sensing working group
Q2 2021	Workshop of in situ data networks for satellite calibration and validation working group
Q1 2021	Workshop of modelling and data assimilation working group
Q3 2023	Workshop to test the Water- ForCE Roadmap
Q2 2021	International Stakeholder Workshop
Q3 2023	Water-ForCE final workshop

Lead implementing organization:

- University of Stirling

Implementing partners:

- Tartu Ulikool
- Stichting Dotspace
- Isardsat SI
- Antea Belgium
- Plymouth Marine Laboratory
- Forschungsverbund Berlin Ev
- Institutul National De Cercetare-Dezvoltare Pentru Geologie Si Geoecologie Marina

- Institute Of Communication And Computer Systems
- Stichting Ihe Delft Institute For Water Education
- Eesti Maaulikool
- Institutul National De Cercertare Dezvoltare Pentru Stiinte Biologice Ra
- Vrije Universiteit Brussel
- 3edata Ingenieria Ambiental SI
- Consiglio Nazionale Delle Ricerche
- Vlaamse Instelling Voor Technologisch Onderzoek N.V
- Universitaet Fuer Bodenkultur Wien
- Centro De Investigacion Ecologica Y Aplicaciones Forestales
- Sinergise Laboratorij Za Geografskeinformacijske Sisteme Doo
- Water Insight

Youth Action

Q1 2021	Core group of youth organizations formed + wider engagement network mapped
Q2 2021	Jointly refined action plan (ready)
Q4 2021	Theory of change for better water quality worldwide
Q4 2021	Draft proposal for a World Water Festival
Q1 -Q4 2021	Input to other workstreams under the WWQA
Q1/2 2022	First World Water Festival led by youth

Lead implementing organization:

- Wetskills Foundation (Stichting Wetskills)
- European Youth Parliament for Water - Solidarity Water Europe

Implementing partners:

- Water Youth Network
- ISW-SWE International Secrétariat for Water/ Solidarity Water Europe
- Young Water Professionals – IWA various chapters
- Central Asian Youth for Water

Scenarios workstream

a) Global Scenarios Ecosystem Health

Q1 2021 – Q1 2022	Commonly agreed definitions WRT scenario set up
	Intermediate results of socio-economic drivers corresponding to the various scenarios
	Global scenario maps of nutrient pollution
	Global scenario maps of toxic stress
	Documentation/Presentation of results

Lead implementing organization:

- Stichting Deltares

Implementing partners:

- Netherlands Environmental Assessment Agency (PBL)- Government entity
- University of Utrecht (UU): University

b) Scenario Analysis for World Water Quality Assessment

Q1 2021 – Q1 2022	Fast-tracked or 'light' water quality scenarios developed.
	Two scenario workshops organised and delivered.
	A database with key inputs to run the water quality models
	Documentation on analysis and assessment methods
	Proposal for funding actual water quality scenarios as follow up of the fast-tracked or 'light' scenarios
	Scientific community paper submitted on the translation of scenarios for the use within large-scale water quality modelling, highlighting what is available and what is still missing and required
Scientific high-impact paper submitted on future global water quality.	

Lead implementing organization:

- Wageningen University

Implementing partners:

- Ruhr-University Bochum, Germany
- Helmholtz-Centre for Environmental Research-UFZ GmbH
- Netherlands Environmental Assessment Agency (PBL)

Citizen Science - Citizen Data for SDG Indicator 6.3.2 - One way to fill the Data Void

Q1 2021	A Citizen/Ministry monitoring programme co-designed using information
Q1 2021	Capacity building of citizens and Ministry staff through a training workshop
Q2 2021	Data collection review
Q1 2022	Data collection completed
Q1 2022	Project summary report

Lead implementing organization:

- EarthWatch Europe

Implementing partners:

- Ministry of Water, Irrigation and Energy of Ethiopia

Towards a Pan-African Water Quality Program (PAWaQ)

Q2 2021	Report: Status quo on water quality monitoring in Africa
Q3 2021	Report – with key pollution sources and impact and present initiatives for management of water quality in Africa
Q2 2021	Report – Innovations for water quality monitoring in Africa.
Q3 2021	Report – Framework for the Pan-African Water Quality Programme (final report)

Lead implementing organization:

- International Water Management Institute (IWMI)

Implementing partners:

- University College Cork (Ireland)
- AMCOW