

Ecosystems



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ABSTRACT

The WWQA Ecosystem Workstream is an open membership which aims to assess and improve water quality with a focus on freshwater restoration. WWQA Ecosystems has a long-term ambition to support restoration strategies combining socio-economic and biophysical evidence to drive the transition from heavily polluting activities towards those that relieve stress on the aquatic environment, whilst releasing economic growth. It aims to focus on water quality management in freshwater ecosystems and their catchments.

Through coordination of a Global Community of Practice the Ecosystems Workstream is supporting the development of sustainability-based large-scale and transboundary ecosystem management programmes, setting the agenda for existing and emerging policies and initiatives.



CONTACT

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Update on progress and key objectives

The WWQA Ecosystems Workstream was established in 2021 to support large-scale initiatives to prevent, halt and redress the destruction of our freshwater ecosystems, focusing initially on water quality management in lakes and their catchments. Key objectives for 2021-2022 include:

- Convene the WWQA Ecosystems Membership and review and synthesise their experiences on the challenges and benefits of lake restoration.
- Enhance coordination of action in the area of lake restoration and mobilization of policymakers.
- Raise awareness across sectors of the multiple benefits of effective sustainability-based restoration of freshwater ecosystems.

WWQA Ecosystems @ World Water Week

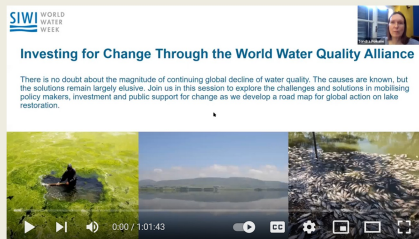


Figure 1. Screenshot of the first session on 24th August 2021.

- WWQA Ecosystems hosted two sessions at the 2021 SIWI World Water Week. The sessions titled *Investing for change through the World Water Quality Alliance* were held on 24th August 2021 and on 26th August 2021. Links to parallel sessions: <https://youtu.be/4jwrlPEU6w0> and <https://youtu.be/UKTGdGqk65Ak>
- The sessions were a first step in establishing a Global Community of Practice, with 254 registrations and contributions from active restoration programmes in Chile, North America, Europe, New Zealand, India, and Africa.
- The session was awarded the SIWI Gold Standard for Diversity.

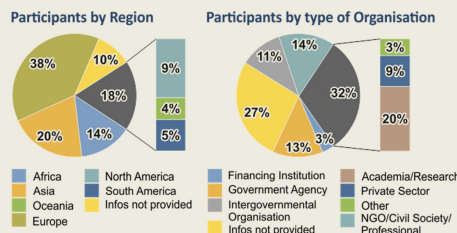


Chart 1. Analytics of participation.

The Global Community of Practice identified the following supporting activities to be delivered by WWQA Ecosystems:

- Building collaborations and sharing data to inform more effective ecosystem-based management.
- Fostering new partnerships to deliver better integration of policies and sectoral interests, and
- Creating enabling conditions for effective sustainable freshwater management investments, with an active role for the private sector.

Global survey of lake management in practice

WWQA Ecosystems through UNEP and JRC, conducted a global survey collating experiences of the lake restoration practitioner community, attracting >150 questionnaire returns with global coverage. Preliminary analyses indicate that:

- poor understanding of pressures and their effects was marked as one of the most important reasons behind failures in lake restoration, and,
- new pressures may call for new approaches to lake restoration, both in setting restoration targets and devising restoration strategies.

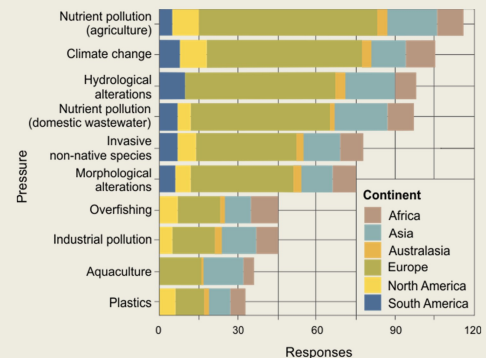


Chart 2. Responses from the lake management practitioner community indicating the global importance of pressures. Only responses indicating 'moderate' or 'severe' impacts of pressures are listed.

Future outlook

- Support the development of sustainability-based freshwater ecosystem management aligned with reporting on the UN SDGs (e.g., SDG 6.3.2)
 - Special Session planned at international Society of Limnology 2022 Conference, Berlin, Germany.
- Publish findings and synthesis of Global Survey of Lake Restoration in Practice
 - ISI publication and report scheduled summer 2022 led by JRC; and
 - White Paper scheduled end of summer 2022 led by IHE that will seek to:
 - set the agenda on global priorities,
 - support the delivery of new and existing policies/initiatives,
 - communicate priority actions and their timelines.

WWQA Core Group Membership

- European Commission - Joint Research Centre
- IHE Delft Institute for Water Education
- UK Centre for Ecology and Hydrology
- World Water Quality Alliance Coordination Team - UN Environment Programme
- UN Environment Programme GEMS/Water
- Wageningen University & Research
- World Bank Group
- Norwegian Institute for Water Management