







**UNITAR Global Water Academy** 

## **SIDE EVENT**

at the High-Level Political Forum 2024

# Pathways to Resilience: **Advancing Solutions for Global Freshwater Quality**



16 July (EST)

O The Westin New York Grand Central 🌢 Madison Ballroom: Ground Floor

#### Aim

This High-level Political Forum (HLPF) side event will explore the multilateral and environmental drivers that exacerbate the deterioration of the quality of global freshwaters. Inequitable access to clean freshwater is a major contributor to poverty. Here, we offer innovative scientific, technological, natural, and governance solutions to improve the resilience of freshwater systems.

#### Background

This side event will explore the multilateral and environmental drivers that exacerbate the deterioration of the quality of global freshwaters. Inequitable access to clean freshwater is a major contributor to poverty. Here, we present innovative solutions encompassing science, technology, nature, and governance to bolster freshwater resilience.

Vulnerable groups, particularly women and girls, bear the brunt of water insecurity. Environmental crises such as climate change, industrial pollution, and extreme climatic events compound the challenge of degrading water quality worldwide. Effective management demands not only an understanding of these drivers but also actionable solutions, including enhanced monitoring, refined management of our freshwater resources, transboundary governance, and policy refinement aligning with SDG 6 targets.

In this HLPF side event, UNITAR's Global Water Academy (UGWA) offers scientific, technological, natural, and governance solutions to improve the resilience of freshwater systems, such as machine learning and artificial intelligence to maintain water quality, empowering women and providing education for children to safeguard water supplies, and develop policies around water cooperation across stakeholders and sectors. We further identify sustainable alternative solutions, including the use of ultraviolet radiation, advanced oxidation processes, and nanotechnology applied to water purification and water treatment, desalination, and recycling. Furthermore, we highlight the importance of building international networks to improve water quality education, capacity building, and fostering resource-sharing across disciplines and political boundaries to respond to the freshwater crisis.

### Join us!

