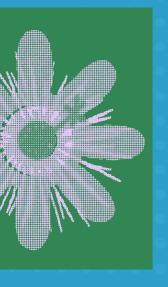
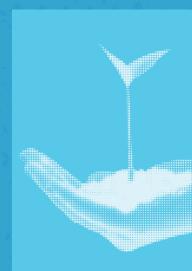
ILEC INTERNATIONAL WEBINAR

"Climate Change Impacts on Lakes and Their Basins: Assessments and Observations from Lake Biwa, the Yodo River Basin, and a Global Perspective"



JUNE 23 2025 14:00-17:00 JST



- · To explore action agendas inspired by the establishment of World Lake Day
- To share knowledge and experiences from Lake Biwa, the Yodo River, and Osaka Bay with a global audience
- To facilitate integrated discussions on disaster prevention, environmental conservation, and water resource management
- To contribute to discussions at the upcoming the 20th World Lake Conference





Date: June 23, 2025 14:00-17:00 JST

Format: Zoom

14:00-14:05 - Welcome Remarks

Dr. Kazuhiko Takemoto (President, International Lake Environment Committee Foundation (ILEC))

14:05–14:25 – Opening Keynote Lecture

Dr. Kenzo Hiroki (Professor, National Graduate Institute for Policy Studies)

"The Significance of World Lake Day and the Future of Lake Conservation and Development"

Part I: Hydrological Assessments

14:25-15:05 - Presenter I

Prof. Kenji Tanaka (Kyoto University, Disaster Prevention Research Institute)

"Historical Changes and Future Projections of Hydrological Environments of the World's Major Watersheds"

This talk uses the SiBUC land surface model and ISIMIP data to assess both historical and future changes in the global water cycle across major river basins. Drawing on experiments 3a and 3b, it highlights how land use developments and climate scenarios influence trends in water availability, based on multi-model simulations and long-term watershed comparisons.

15:05-15:20 - Discussant I

Ms. Marie Bourbon (Associate Expert, GEMS/Water Early Warning and Assessment Division United Nations Environment Programme)

"UNEP's Global Environment Monitoring System (GEMS) and its relevance to freshwater assessment and sustainable lake"

Lake protection and restoration are gaining increasing prominence within the UN Agenda. As UNEP's flagship programme for water quality monitoring, GEMS/Water addresses the critical need for water quality data to inform an integrated and sustainable lake management. UNEP's scope of activities includes enhancing knowledge through capacity development and cross-sectoral collaboration to better protect and restore lakes, and supporting countries in embedding lake restoration into national policies and sustainable development planning.

15:20-15:35 - Discussant II

Mr. Takashi Kaji (Water Resources Team 2, Water Resources Group, Global Environment Department, Japan International Cooperation Agency (JICA)

"Case Studies and Recommendations from Integrated River Basin Management Projects Based on JICA's Cluster Program Strategy"

Through its cluster initiative "Practical Integrated Water Resources Management to Solve Local Water Issues," JICA supports sustainable water use by strengthening stakeholder consensus-building in various countries. This presentation will introduce key case studies and share insights on water governance and enhancing adaptive management.

Part II: Ecosystem Changes

15:35-16:15 - Presenter II

Dr. Machiko Nishino (Former Professor, Biwako Seikei Sport College)

"Recent changes in biodiversity of the ancient Lake Biwa, based on long-term ecological data."

This talk explores habitat deterioration and biodiversity loss in Lake Biwa, due to water level control, urbanization pressure, invasion of alien species and warming trends.

16:15-16:25 - Discussant III

Dr. Kanako Ishikawa (Senior Scientist, Lake Biwa Environmental Research Institute)

"Monitoring Ecosystem Change to Build Sustainable Lakescapes — Case Studies from Lake Biwa, Japan and Lake Tana, Ethiopia "

This talk highlights long-term monitoring of Lakes Biwa and Tana, showing ecological impacts such as oxygen depletion, invasive weeds, and biodiversity loss. It also introduces integrated management tools combining monitoring, remote sensing, and community input.

16:25-16:35 - Discussant IV

Dr. David Hamilton (Professor, Griffith University/Australian River Institute)

"The 20th World Lake Conference as a platform to raise the global profile of lake issues and unify scientific, community, and policy voices."

Part III: Panel Discussion

16:35–17:00 – Panel Discussion & Closing

Facilitator: **Dr. Masahisa Nakamura** (ILEC)

Open dialogue among speakers, discussants, and participants.

Focus advancing collaborative actions for lakes and freshwater ecosystems under climate change.

Panel Members:

- All Presenters
- Dr. Keiko Wada (Lake Biwa-Yodo River Water Environmental Research

Institute; Deputy Director General, Kyoto University, Disaster

Prevention Research Institute; Specially Appointed Professor)

- Associate Prof. Keisuke Sato (Ritsumeikan University)

