

CALL TO ACTION

THE NEED TO MAINSTREAM LAKES, RESERVOIRS, WETLANDS AND OTHER LENTIC WATER SYSTEMS IN THE GLOBAL WATER AGENDA

Background and Objectives

- Water is the most encompassing global-scale integrator, connecting aquatic and terrestrial ecosystems and the atmosphere in a continuing cycle of use and replenishment. Indeed, adequate supplies of freshwater of suitable quality are an absolute requirement for all life and socio-economic development. However, less than one percent of all the freshwater on the Earth's surface is in liquid form, and more than 90% of this small fraction is stored in lakes and other lentic (impounded or static) water systems, including reservoirs, wetlands, marshes, flood plains, bogs, fens and mires (hereafter referred to collectively as lakes). These lentic water systems provide many life-supporting ecosystem services for sustainable human health and livelihoods, food production and economic development, while at the same time being essential habitats for a great variety of flora and fauna (ILEC 2005).
- Lakes and other lentic water systems exhibit a range of resource values, including providing irrigation water for agriculture, being a major food source (e.g., fish) particularly in developing countries, and supporting recreational activities (sports fishing, swimming, skiing, etc.). They also have cultural and religious significance in some countries. Accordingly, they are a major contributor to sustainable Human Water Security and Biodiversity (ILEC and UNEP 2016). Further, although the quantity and quality of both natural and man-made lakes are impacted as a result of human activities in their drainage basins, manmade lakes nevertheless also have a potentially important role as water storage systems for addressing the uncertainties associated with global climate change, including both water shortages and excesses
- In spite of their important role for human life and livelihoods, and the maintenance of aquatic ecosystems and their services, lakes remain a significant missing gap in global water discussions.
 - With few exceptions, lakes have been left out of the mainstream water agenda. Although the international community has been emphatically stressing the importance of open oceans, large marine ecosystems, regional seas, international rivers and aquifers through various global fora, it has somehow failed to recognize the importance of lakes, national or international, and their particular scientific assessment and management challenges;
 - Thus, despite past efforts to manage lakes and their resources to meet human and ecosystem needs, they remain very vulnerable to the impacts of human activities, with

their overall conditions continuing to deteriorate on a global scale, exhibiting serious threats to their human water security (sustainable water resources for human needs) and biodiversity values and many other lake-related ecosystem services;

- Highlighting the significant role of lakes on a global scale requires a solid strategy for integrated lake basin management for sustainable development encompassing sound policies, good governance and sustained investments (ILEC and UNEP 2016). The Integrated Lake Basin Management (ILBM) approach, with its focus on facilitating the sustainable use of lake-based ecosystem services, provides for comprehensive assessments that identify specific management issues and challenges, including policy, institutions, participation, information, technology and finances. This management platform considers the relevant challenges to lake-based ecosystem services, and provides for development of appropriate actions that take the related factors into consideration, thereby strengthening the governance of lakes and other lentic water systems to facilitate the sustainable and equitable use of their services and benefits. Relevant questions to be addressed include: *How can we ensure achievement of the required ILBM; Who should be involved; What are the logical steps for moving forward to achieve this goal; How long will it take; What will it cost;*
- The ILBM concept was developed through considerable international collaboration between multiple government ministries and international agencies and organizations. It evolved as an elaboration of the Lake Basin Management Initiative (LBMI), a Global Environment Facility (GEF)-funded global project implemented by ILEC and executed by the World Bank (ILEC 2005). The LBMI project was facilitated by multiple national and international organizations such as the United Nations Environment Programme (UNEP, United Nations Development Programme (UNDP), the Ramsar Convention, US Agency for International Development (USAID), World Bank, Living Lakes and OSEANALA (Friends of Lake Victoria). It has since been applied to facilitate improved participatory governance focusing on pursuit of sustainable ecosystem services directed to many lake basin communities and countries through international technical collaboration and financial programs of UNEP and the United Nations Education, Scientific and Cultural Organization (UNESCO) , as well as being utilized by the Japanese International Cooperation Agency (JICA) for human resources development and national and international strategic program development;
- These and other UN agencies and international organizations have highlighted the need for strong governance, effective monitoring and credible accountability within global water discussions as a fundamental requirement for assessing and tackling the complex management challenges facing lakes and other lentic water systems. ILBM provides a rational means of addressing these goals as well.

Key Messages

Moving the Lake Mainstreaming Effort forward requires international and national-level cooperation and collaboration encompassing the following:

- ***International Support for Mainstreaming Lakes and Other Lentic Water Systems:***

Multiple international organizations (e.g., UNEP; UNESCO's International Hydrology Programme (IHP) and World Water Assessment Programme (WWAP); UNDP; World Bank; GEF; Sustainable Water Future Programme; Living Lakes) have stated their support for mainstreaming lakes and other lentic water systems into the global water agenda, including the following observations:

- ***Promoting Efforts to Mainstream Lakes at the International Level:***

- Providing lake mainstreaming inputs to related initiatives such as the World Water Forum and the Conference of the Parties to the United Nations Framework Convention on Climate Change;
- Linking with UN, advisory bodies and other relevant partners to collaborate in lobbying for the sustained monitoring, accurate assessment and strengthening of governance of lakes and other lentic water systems on a global scale;
- Promoting global-level discussions on lakes and other lentic water systems at a high political level, including mainstreaming and dissemination of targets to national governments, UN agencies and other lake stakeholders;

- ***Promoting Efforts to Mainstream Lakes at the National and International Levels:***

- The global case studies in different regions of the world, particularly in South East Asia, South Asia, East Africa and Latin America have clearly demonstrated the value of the ILBM approach for individual lake basins and communities, and in country-level Water Resources Management Plans, Strategies and Policies. Although the challenges and level of successes vary from country to country, all cases encompassed a gradual learning process regarding assessment of the state of lake basin governance, and how to strengthen these elements through the ILBM process, including identifying key drivers, emerging trends, challenges and possible policies to address sustainability challenges facing lakes and other lentic water systems at both the national and international level.

- Accordingly, it is important to explore options for usefully replicating these efforts in a practical manner for other lake basins and countries around the world, including through developing synergies, joint programs and complementary strategies, as well as sharing lake assessment and management experiences on a national and international level with global-scale mechanisms such as the United Nations Environment Assembly (UNEA), World Water Forum (WWF), Ramsar Convention, and World Lake Conferences. To this end, assessment and management of lakes shared by more than one country provide a forum for transboundary cooperation and facilitation of the shared benefits of the associated ecosystem services to basin stakeholders.

Relevant Global Avenues for Mainstreaming Lakes

Mainstreaming lakes into the global water agenda is a task requiring the concerted and sustained attention of all involved lake basin stakeholders. Therefore, in addition to actions at the governmental and intergovernmental level, other relevant avenues for mainstreaming lakes and other lentic water systems within the global water arena can include, among others, UNESCO's International Hydrological Programme (UNESCO-IHP) and World Water Assessment Programme (WWAP), Global Lakes Assessment Programme of the Sustainable Water Future Programme (SWFP), World Water Council (WWC), Global Water Partnership (GWP), International Institute for Applied Systems Analysis (IIASA), International Association of Hydrological Sciences (IAHS), International Association for Hydro-Engineering and Research (IAHR), International Water Resources Association (IWRA), and International Water Association (IWA). The goal of mainstreaming lakes also will continue to be pursued in such global fora as WWC's 9th World Water Forum (2019; Dakar, Senegal) and ILEC's 18th World Lake Conference (2020; Guanajuato, Mexico).

Supporting Documents

ILEC. 2005 Managing Lakes and Their Basins for Sustainable Use: A Report for Lake Basin Managers and Stakeholders. International Lake Environment Committee Foundation, Kusatsu, Japan. 146 p.

ILEC and UNEP. 2016. Transboundary Lakes and Reservoirs: Status and Trends. United Nations Environment Programme (UNEP), Nairobi, Kenya. 109 p.