

# Mainstreaming Lakes in the Global Water Agenda

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An estimated one-third of our global population currently lives under conditions of water scarcity. And that number is predicted to increase to two-thirds by 2025 if present water use trends continue. Accordingly, one observation leading us to talk about mainstreaming lakes in the global water agenda was the fact that humanity's ability to develop water resources, build dams, and transport water has advanced significantly. At the same time, however, our ability to manage our water systems for sustainable use has lagged behind against this background of increasing global water needs and a continually growing population. Approximately 1% of all the freshwater on the Earth's surface is in liquid form, with the vast majority (more than 90%) being contained in natural and manmade lakes, wetlands, and other bodies of standing water, otherwise known as lentic water systems. They provide a great range of beneficial water uses, but have been largely ignored in the global water arena. We use them for many purposes, such as drinking water supply, agricultural irrigation, livestock, fisheries, hydropower generation, recreation, and tourism. Some lakes also have religious, historical, or cultural significance, particularly for some indigenous peoples.

There are three unique defining features of lakes. The first is their integrating nature. A lake is like an enormous mixing pot, where things come into it from all sectors. To this end, it could be viewed as a mirror of the negative impacts of human activities in their surrounding watershed and even beyond, an example of the latter being deposition of atmospheric pollutants. The second is a long water retention time, which can result in lake problems taking a long time to become visible. Improvements resulting from activities undertaken to address these problems also can take a long time to become evident. And the third is that lakes exhibit complex and dynamic responses. Everything affects everything else in a lake. Issues are largely inseparable and, in terms of integrating nature, the changes are gradual and often unnoticed until they have become lake-wide problems. Further, because of their complex dynamics, changes in a lake are often unpredictable and uncontrollable.

Based on the seminal work of the International Lake Environmental Committee, Integrated Lake Basin Management (ILBM) is defined as an approach for achieving sustainable management of lakes and reservoirs through the gradual, continuous holistic improvement of basin governance. Governance improvement is the key in this management approach, including sustained efforts for integrating institutional responsibilities, policy directions, stakeholder participation, scientific and traditional knowledge, technology possibilities, and funding prospects and constraints.

ILEC and UNEP have collaborated in pursuing the goal of mainstreaming lakes into the global water agenda, particularly to elevate global and national recognition and understanding of the unique features of lakes, their basins and their life-supporting ecosystem services, and to address their management challenges. The ultimate goal of mainstreaming lakes is to develop a global platform to develop management plans and activities for the sustainable use of lakes and other lentic water systems. Comprehensive management framework for lakes is lacking, representing a major missing link in the global water agenda. A need for adequate supplies of freshwater is also a major component for achieving many

Sustainable Development Goals (SDGs), with a vast freshwater store existing in lakes and other lentic water systems. Therefore, we must promote global level actions to mainstream lakes as key freshwater components, particularly in national strategic policies and programs, thereby drawing attention to them and their many ecosystem services and the complex management challenges to their sustainable use. This will ultimately be manifested globally, but within the context of actions undertaken at the national level. We also have a need to develop a collaborative interacting global framework to help share lake basin management experiences and lessons learned as a means of facilitating the replication of successful national-level lake basin management programs in other countries. And finally, it is imperative to develop a collaborative platform for adopting ILBM principles at the national level as a means of improving the governance of lakes gradually, incrementally and sustainably.