

INTRODUCTION

Mainstreaming Lakes in the Global Water Agenda

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*Walter Rast, Chair
ILEC Scientific Committee*



***“ALL THE WATER ON EARTH
IS ALL THE WATER THERE IS....”***

UNITED NATIONS:

***1/3 of Earth's population
current lives under
conditions of 'water
scarcity'.....***

***Number will increase to 2/3
of all people by 2025.....***

***IF present water use trends
continue***



Observation: *Our ability to develop water resources has advanced significantly on global scale.....BUT our ability to manage them for sustainable use has lagged far behind, particularly in view of increasing water needs globally....*



Why Lakes?

- **Major surface freshwater sources:** *~1% of water on Earth surface is liquid freshwater; >90% exists in natural & manmade lakes, wetlands; accessibility → high resource values;*
- **Accommodate greater range of beneficial water uses (ecosystem services)** *than other freshwater sources;*
- **Major hydrologic 'stability' function:** *Predicted changes in climate change-related precipitation patterns*
 - → → *“water storage” function during water scarcity (droughts) & excesses (floods).*



LAKES LARGELY IGNORED IN GLOBAL WATER ARENA

- *Rio Declaration (largest chapter – freshwater);*
- *Mar Del Plata;*
- *Dublin Conference on Water and Environment;*
- *World Water Vision;*
- *IWRM - River basins as basis for management efforts;*
- *UN Convention on Law of Non-Navigational Uses of International Watercourses - does not consider lake unique characteristics;*
- *UNECE Convention on Protection and Use of Transboundary Watercourses and International Lakes – lacks practical advice regarding lake management needs;*
- *UN Millennium Summit (MGDs);*
- ***UN Sustainable Development Summit - first time lake needs identified;***
(SDG 6.6 – “by 2020 protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes)”





'Lentic' water bodies:

DEFINING LAKE FEATURES

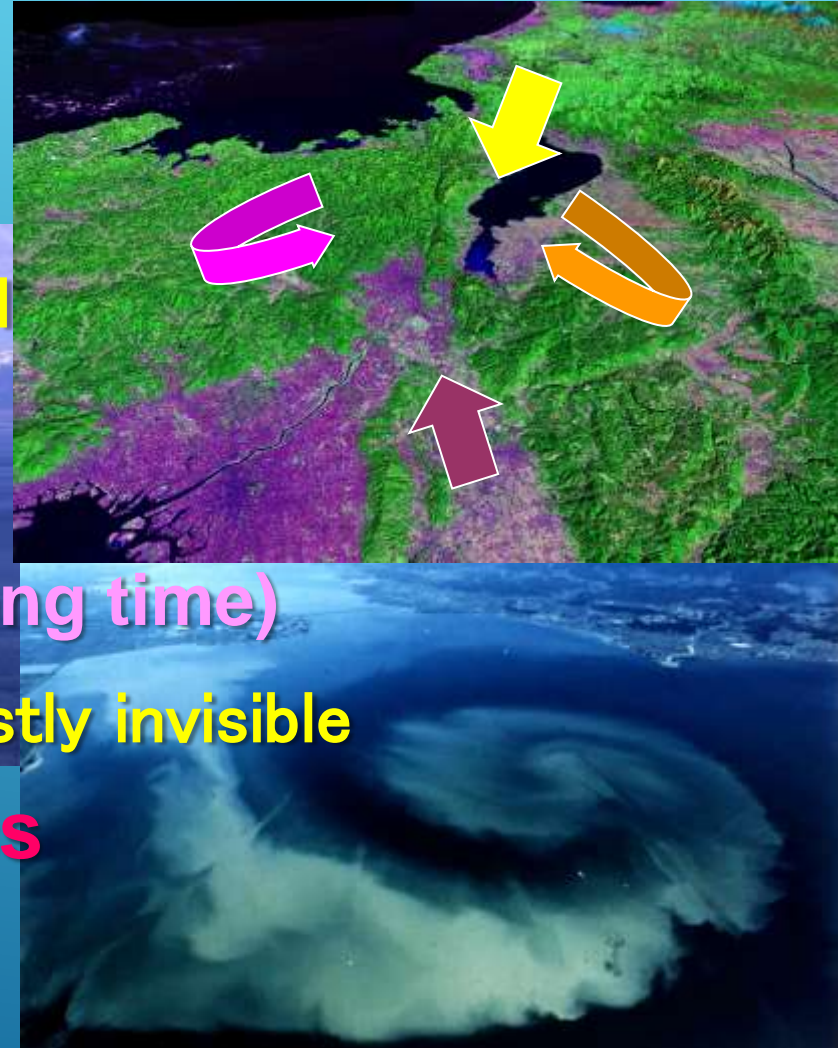
Three major defining features:

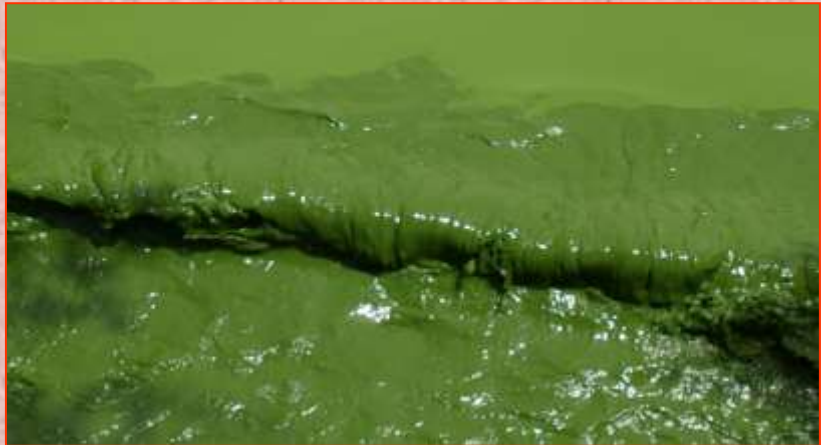
- Integrating nature: "Mixing pot"; 'mirror' of cumulative effects of human activities in drainage basin;
- Long water retention time: Degradation takes long time to become visible and to solve)
- Complex dynamics: Non-linear responses; what we put IN not necessarily what we get OUT



Lentic Water Features

- **Integrating Nature**
(Everything comes together)
 - 1. Issues are mostly inseparable
- **Long Retention Time**
(Problems remain long, and finding solutions also takes long time)
 - 2. Changes are gradual and mostly invisible
- **Complex Response Dynamics**
(Everything affects everything else in water)
 - 3. Often unpredictable and uncontrollable



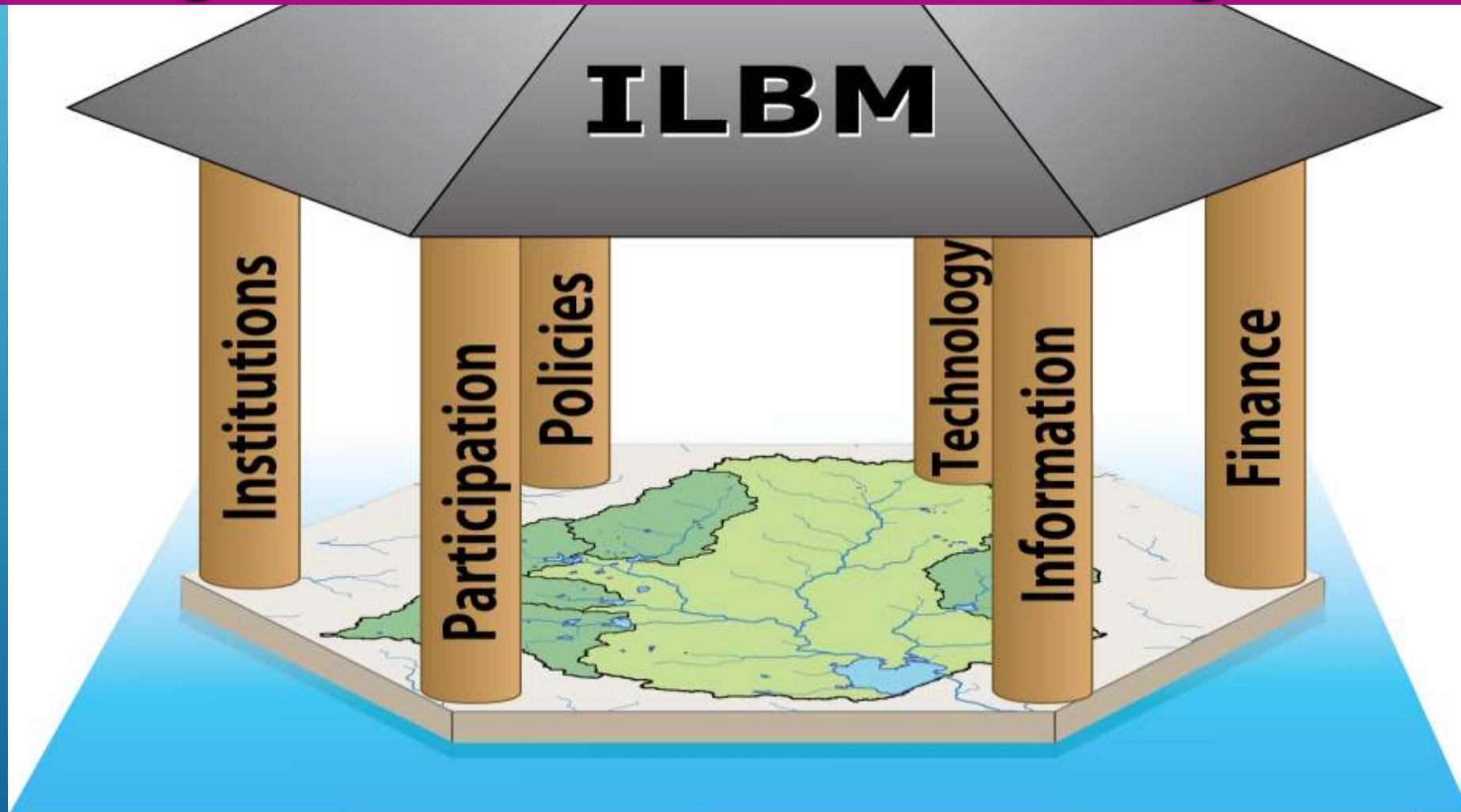


Integrated Lake Basin Management (ILBM)

"ILBM is an approach for achieving sustainable management of lakes and reservoirs through gradual, continuous and holistic improvement of basin governance, including sustained efforts for integration of (1) Institutional responsibilities; (2) Policy directions; (3) Stakeholder participation; (4) Scientific and traditional knowledge; (5) Technological possibilities; and (6) Funding prospects and constraints."



Integrated Lake Basin Management



Conceptual Overview of ILBM Governance Framework

Mainstreaming Lakes and Other Lentic Water Systems

- **ILEC & UNEP**: Elevate global/national recognition & understanding of unique features of lakes, basins & resources, and associated scientific & management challenges;
- **GOAL**: Provide global-scale platform/basis for developing management plans/activities for lentic water systems at national level
- **(WHAT; WHY; HOW; WHO);**



Key Messages in Mainstreaming Lakes Statement

- *Lake stresses from throughout basin and beyond & virtually all economic sectors → major management challenges; Also major component for achieving SDG goals 2,6,7,8,11,13 & 15;*
- *BUT comprehensive management framework for lakes = major missing link in Global Water Agenda; also weak link in International Water Resource Management (IWRM) and*
- *International River Basin Management (IRBM) arenas.*



Key Messages in Mainstreaming Lakes Statement

- *ILEC & UNEP (+UN & international agencies, NGOs) support Mainstreaming Lakes in national environmental policy frameworks; also consistent with 'Build Back Better' concept directed toward post-COVID19 era;*
- *National mainstreaming actions can benefit from ILBM lessons learned in different regions (e.g, South/Southeast Asia; East Africa; Latin America); Challenges/results vary between countries, but all cases encompass gradual learning process assessing state of lake basin governance & how to strengthen over long term.*



Required Policy Actions

- 1) *Promote global-level actions to mainstream lakes as key freshwater components in national strategic policies and programs;*
- 2) *Develop collaborative, interacting global platform for cross-fertilization & sharing of experiences/lessons learned, including replicating successful lake basin management at national level;*
- 3) *Develop collaborative global platform for adopting ILBM principles at national level for gradual/incremental/sustained improvement of governance of lakes, their basins & ecosystem services, as complement to IWRM.*

Mainstreaming Lakes in the Global Water Agenda

***Integrated Lake Basin Management (ILBM)
Experiences on the National Level....***

