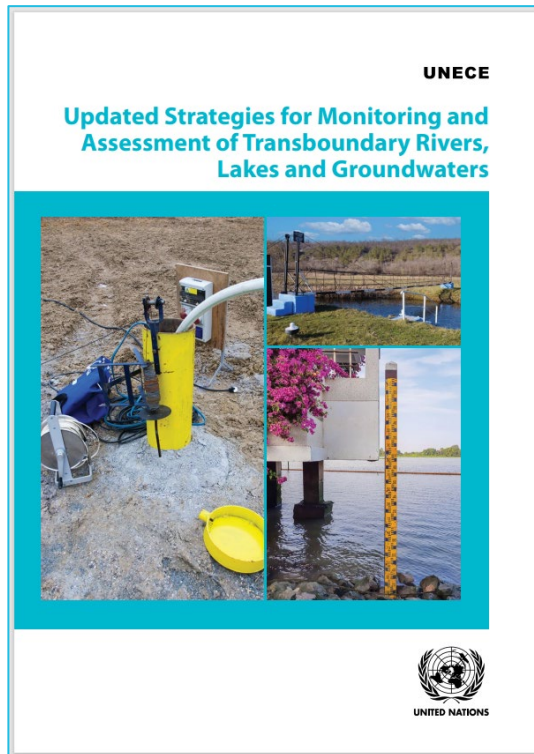


18th meeting of the Working Group on Monitoring and Assessment, 17-18 October 2023

# Item 6 b: Updated Strategies for Monitoring and Assessment of Transboundary Rivers, Lakes and Groundwaters

Anna-Stiina Heiskanen (Finland), WGMA Co-Chair

# Updated Strategies for Monitoring and Assessment of Transboundary Rivers, Lakes and Groundwaters (2023)



ARABIC  
and  
SPANISH  
upcoming



Link: <http://bit.ly/3X5banz>

# Guidelines on monitoring and assessment under the Water Convention

1996

- Guidelines on M&A of Transboundary Rivers
- Guidelines on M&A of Transboundary Groundwaters

2000

- Guidelines on M&A of Transboundary Rivers
- Guidelines on M&A of Transboundary Groundwaters

2002/2003

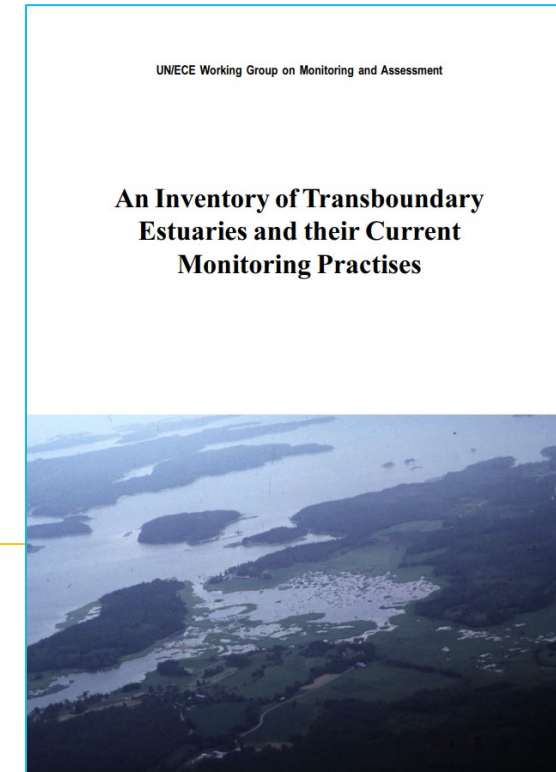
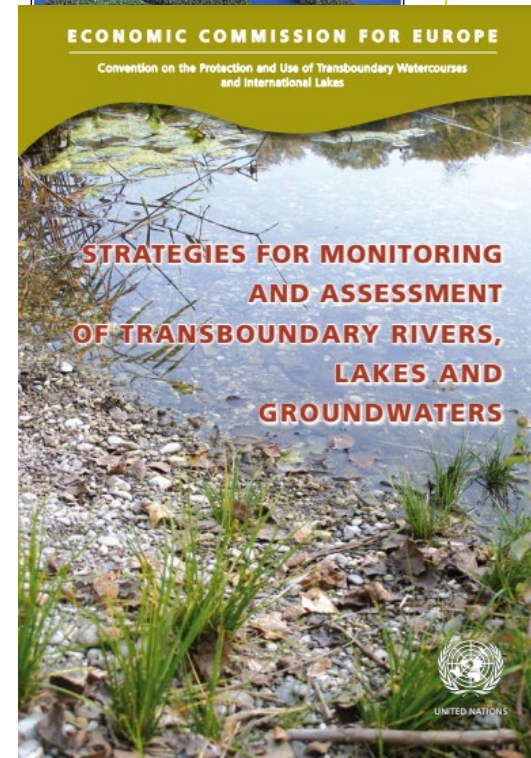
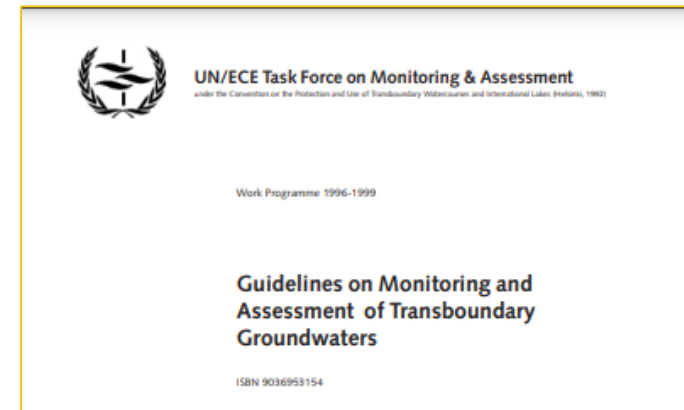
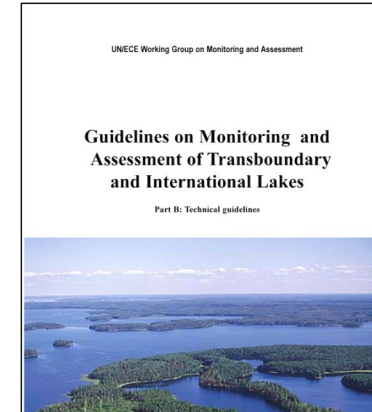
- Guidelines on M&A of Transboundary and International Lakes
  - Part A: Strategy Document
  - Part B: Technical Guidelines

2006

- Strategies for Monitoring and Assessment of Transboundary Rivers, Lakes and Groundwaters

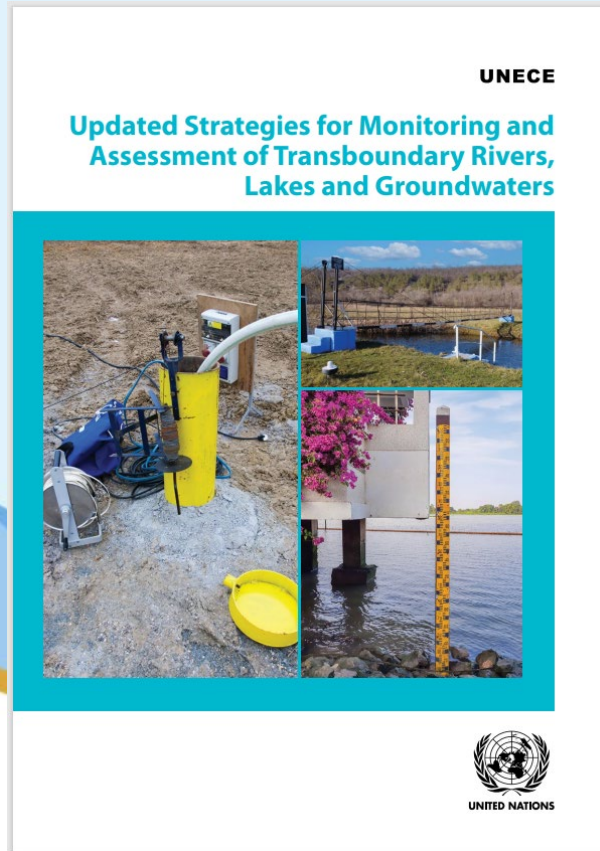
2023

- Updated Strategies for Monitoring and Assessment of Transboundary Rivers, Lakes and Groundwaters (2023)





# Updated Strategies for Monitoring and Assessment of Transboundary Rivers, Lakes and Groundwaters (2023)



**Key principles and approaches** to monitoring and assessing transboundary waters.

Supports the preparation of **policy actions** at local, national and transboundary levels.

**Step-by-step approaches and strategies** for the development of monitoring, assessment and data sharing building on **global experience**.

Takes into account **technological developments**.

Link: <http://bit.ly/3X5banz>

# Updated Strategies: key aspects

- Joint monitoring brings substantial benefits to countries
- Ultimate goal of monitoring is to provide information necessary for planning and decision-making at local, national and transboundary levels
- Basin approach to be considered when developing a monitoring system

Figure 1: Driving forces–Pressures–State–Impact–Responses (DPSIR) framework

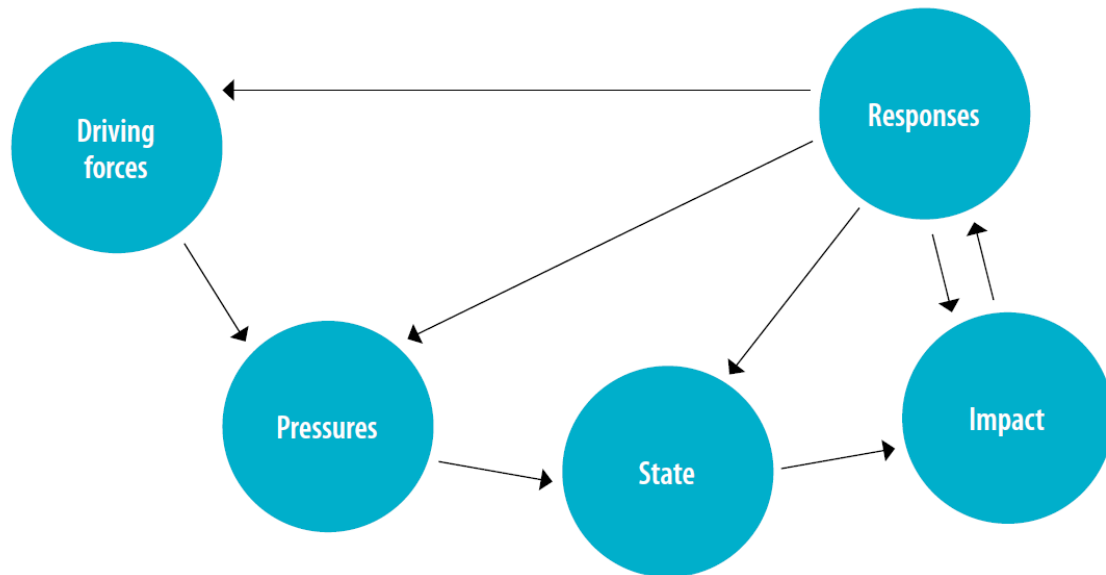
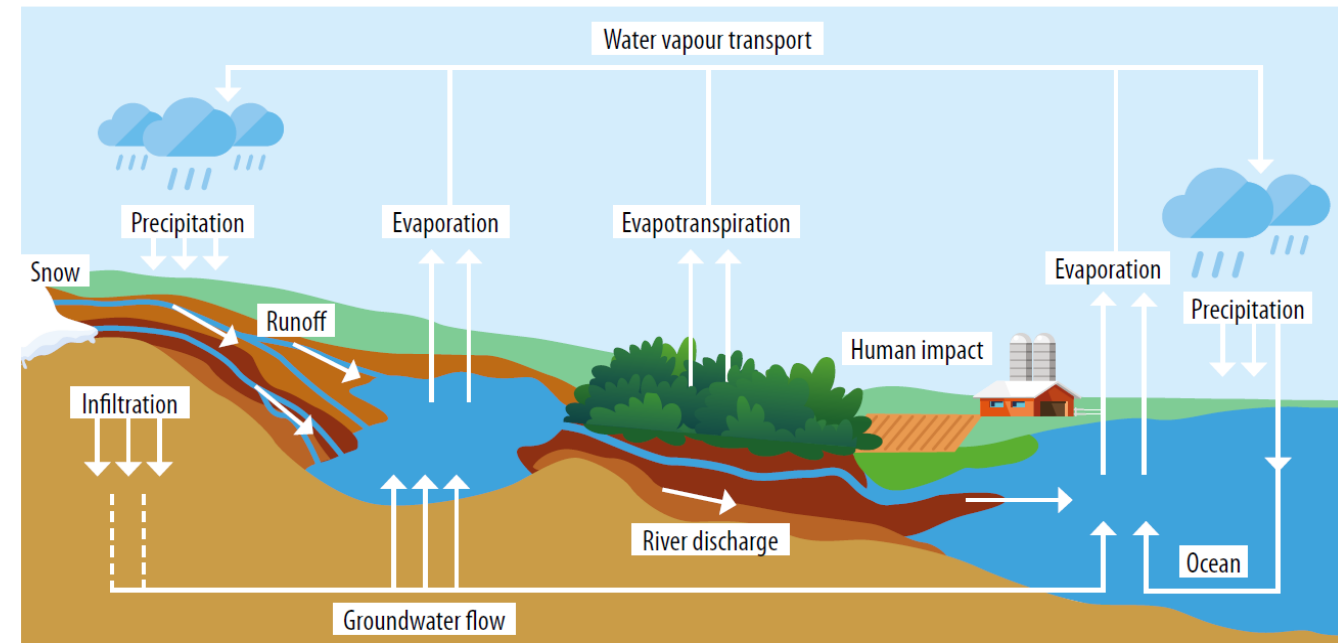


Figure 2: Key elements of the hydrological cycle of a basin



# Updated Strategies: different purposes for water data

Water data and information management are essential for:

## **Sectorial water management**

- Ecosystem/ environment
- Drinking water supply
- Agriculture
- Energy
- Health
- Transportation

## **Integrated Water Resource Management**

- Local level
- Basin level
- National level
- Transboundary basins
- Regional level

## **Climate change adaptation and disaster risk reduction**

- Floods
- Shortages
- Drought

## **Decision making**

- Development of policies and legislation
- Assessment of policy impacts
- Surveillance of policy implementation

## **Reporting**

- Global
- Regional
- National statistics
- Specific Conventions

## **Specific decision taking**

- Operational management
- Territory management
- Emergency situations

## **Other water activities**

- Regulatory aspects
- Partners
- Public information

Source: Modified from INBO, 2018. *The Handbook on Water Information Systems Administration: Processing and Exploitation of Water-related Data*.

# Updated Strategies: Requirements for monitoring and assessment

## Legal basis

- Imperative: an adequate legal framework at national and basin level

## Institutional set-up

- National and transboundary
- Capacity development
- Quality control
- Data exchange

## Adequate funding

- Investment and operational costs
- Long-term commitment





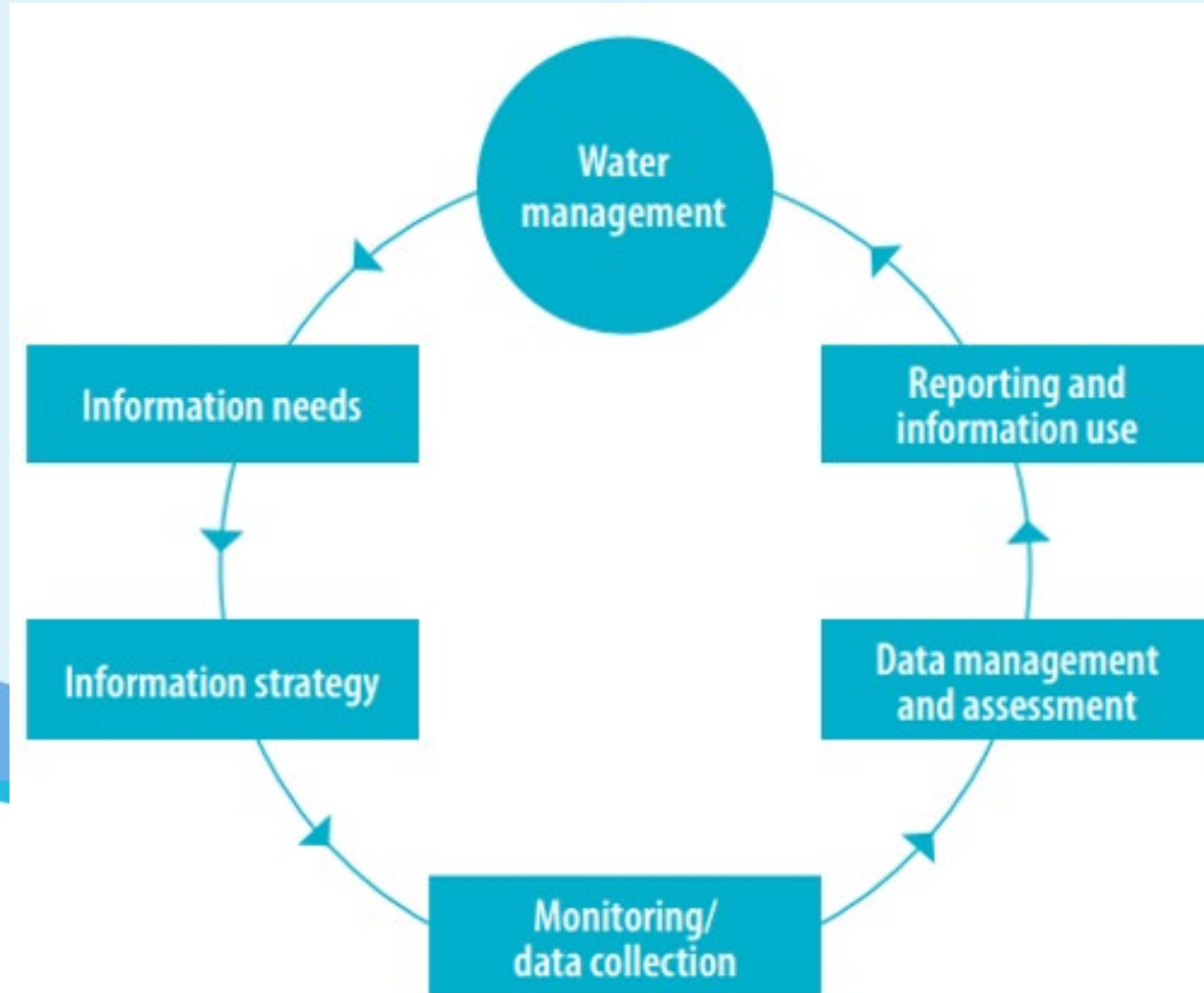
# Updated Strategies: Develop step-by-step approaches

- Do not try to do all at once
  - Build on existing elements
  - Prioritize efforts
- => Evaluate the situation and focus on the most pressing/urgent/essential
- Models (numerical, analytical or statistical) can provide support
  - Use pilot projects for new topics





# Updated Strategies: Implementing monitoring programmes



# Updated Strategies: Annexes

1. Specific aspects of groundwater monitoring
2. Specific aspects of lake monitoring
3. Specific aspects of river monitoring
4. Specific aspects of monitoring in transitional waters
5. International programmes and information sources



# Updated Strategies: Added value

- Emphasizes requirements for sustainable monitoring & assessment:
  - Legal basis, institutional set-up & adequate funding
- Emphasizes participation of all stakeholders, gender inclusiveness, local and indigenous people, as well as the need for capacity development;
- Benefits of monitoring, assessment and data sharing
  - Essential for preparing policy actions to achieve stated goals and targets
  - Essential in building trust, facilitating cooperation and avoiding conflict;
  - Common basis for decision-making – local, national, and transboundary



# Updated Strategies: Thank you for your input!

- **Lead countries: Finland and Senegal**
- Special thanks to **the Netherlands** for providing lead expert support
- Expert inputs and review by:

	Albania;	North Macedonia;	Lake Chad Basin Commission;	INBO;
	Austria;	Romania;	Int. Sava River Basin Comm.;	IWMI;
	Azerbaijan;	Hungary;	CiC Plata;	IGRAC;
	Benin;	Peru;	ACTO;	INBO;
	Croatia;	Dominican Republic;	ICPDR;	WMO
	Georgia;	Uzbekistan;	UNEP;	SIC ICWC;
	Italy;	IWAC;	UNEP/MAP;	KazHYDEC Ltd.;
	Jordan;		UN ESCWA	NWP-Georgia;



# Thank you!

(please include your contact information)



WEB

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RESOURCES

<https://unece.org/environment-policy/water/monitoring-assessment-and-information-sharing-transboundary-basins>



WATER  
CONVENTION



UNECE