



MARRAKECH  
COP22|2016|CMP12  
UN CLIMATE CHANGE CONFERENCE

Exposé de

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**المكتب الدولي للمياه**

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**RESEAU INTERNATIONAL DES ORGANISMES DE BASSIN**

**INTERNATIONAL NETWORK OF BASIN ORGANIZATIONS**

**Red Internacional de Organismos de Cuenca**

**الشبكة الدولية لهيئات الأحواض**

**WE** MUST  
CAN  
WILL



Lima-Paris Action Agenda

WATER AND ADAPTATION  
TO THE EFFECTS OF CLIMATE CHANGE  
Global Climate Action Agenda



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# INTERNATIONAL NETWORK OF BASIN ORGANIZATIONS

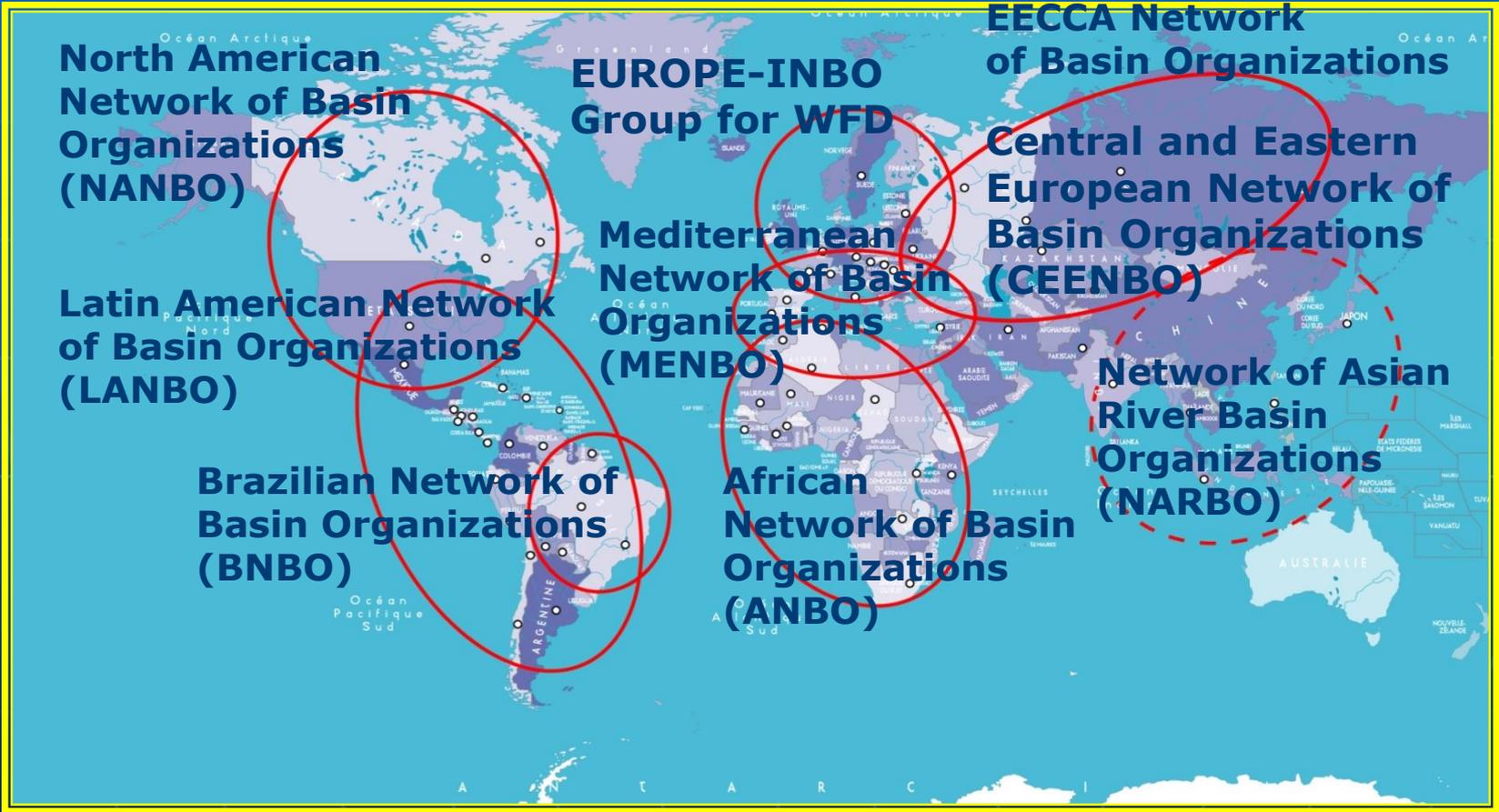
Created in 1994 to facilitate operational exchanges between BO



International  
Network  
Of Basin  
Organizations

Permanent  
Technical  
Secretariat  
PARIS-FRANCE

## INBO's REGIONAL NETWORKS



**188 FULL MEMBERS or PERMANENT OBSERVERS  
in 82 COUNTRIES**



# Paris Pact on water and adaptation to climate change in the basins of rivers, lakes and aquifers

We, representatives of governments, international organizations, donors, national and transboundary basin organizations of rivers, lakes or aquifers, local authorities, of the civil society and companies, support the integration of fresh water into the Global Climate Action Agenda, especially for initiating or strengthening necessary adaptation actions in the basins of rivers, lakes, aquifers, large wetlands as well as coastal areas.

### GENERAL STATEMENT

Climate change is already affecting and will increasingly affect the quantity and quality of freshwater and aquatic ecosystems, especially through the intensity and greater frequency of extreme hydrological events, such as floods and droughts, as well as the increase in ocean level, which threaten security, economic and social development and the environment.

We recognize that adaptation actions should be undertaken without delay to minimize the impacts of climate change on the populations' health and safety, on economic development and the environment, considering the importance of the protection of water-related ecosystems.

**The basins are natural areas where water flows on the surface and in the subsoil: they are the relevant territories for organizing water resources management.**

In order to ensure more effectiveness, these actions to adapt to climate change should thus be implemented at the level of river, lake and aquifer basins, through a joint, participative, integrated and sustainable water resources management.

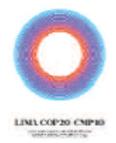
### We should act quickly before it is too late!

To that end, mobilizing new and increasing funding dedicated to climate change adaptation in basins is essential. Therefore, new basin organizations and existing ones should be financed and strengthened to facilitate the cooperation, coordination and exchange of information, dialogue, consultation and prevention of conflicts between stakeholders and to enhance the implementation of adaptation measures and the sharing of benefits on the basin scale,

We encourage donors to support prior assessments and actions for adaptation to climate change in basins,

Local authorities and communities, economic sectors and the civil society should be better associated and involved in basin management, including in the definition and implementation of adaptation measures.

Cooperation and exchange should increase between the institutions involved, especially among the basin organizations at the global and regional levels in order to facilitate the transfer of experience and know-how on best practices in basin management and adaptation to climate change.



vCOP22

Paris Pact



[www.inbo-news.org](http://www.inbo-news.org)  
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**357 SIGNATORIES!!**





# Paris Pact on water and adaptation to climate change in basins



## **RECOMMENDED ACTIONS:**

### **1) Reinforce capacity development and knowledge,**

Establish risk warning and water information systems in a context of uncertainty.

### **2) Adapt basin management planning to climate change,**

Better controlling water demand and developing a more efficient and sustainable use of water resources (including groundwater) - Enhance the services of water-related ecosystems

### **3) Reinforce governance,**

Create new basin organizations and reinforce existing ones

Support mechanisms for the involvement of the stakeholders in basin management,

### **4) Ensure adequate financing.**

Establish investment program and sustainable financing mechanisms

**We do not have to reinvent the wheel to act quickly!**

**Did you sign it?**

# Basin fundamentals

***Basins are the natural territories in which water flows – on the soil or in the sub-soil – and are independent of the national or administrative boundaries or limits crossed***

**THE BASIN CONCEPT CAN BE USED TO DELIMIT THE RECHARGE AREAS AND THE AREAS WHERE WATER FLOWS IN:**

- Rivers
- Lakes
- Aquifers
- Estuaries and coastal zones



• ...

***Conjunctive uses and management of water systems should be organized on the scale at which these natural systems occur – and are used for human activities - at the basin level.***

**All kinds of water**  
**Are taken jointly into consideration**



- \* **surface waters**
- \* **groundwater**



- \* **transitional water**
- \* **coastal waters...**

What do we consider as a *Basin* ?

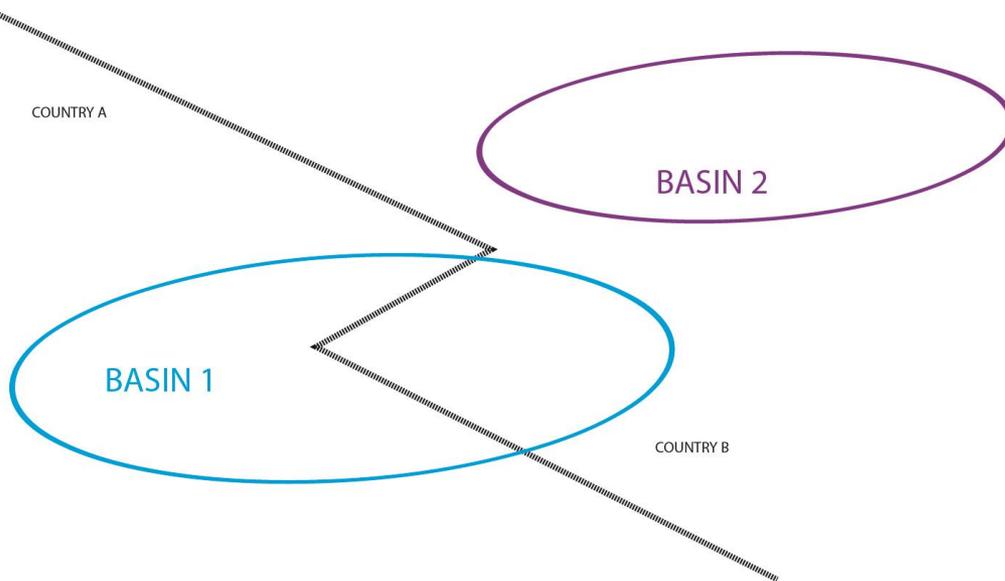
For the purpose of the working group  
the concept includes all

**SURFACE** and



**Groundwater**

# Basin governance



LOCAL

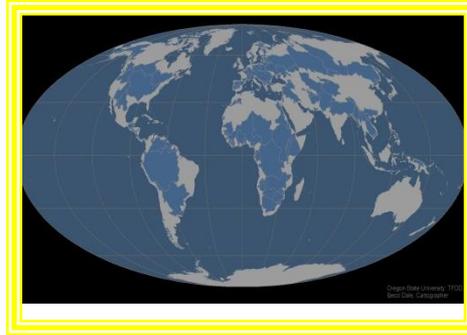
NATIONAL

TRANSBOUNDARY

***The geographic extent of a basin will determine the mix of actors for management activities: local, national and/or international organizations.***



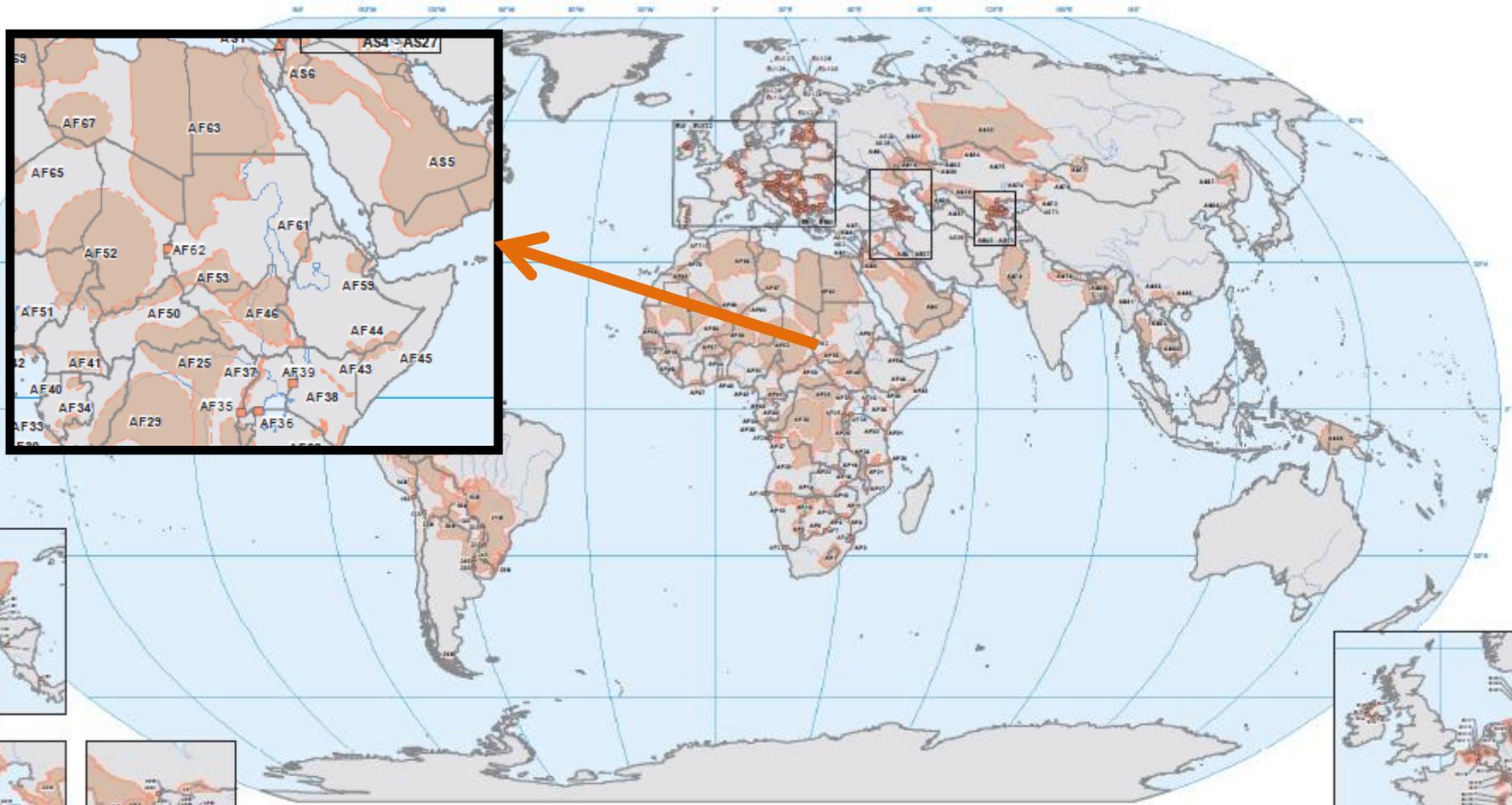
# TWO HUNDRED AND SEVENTY SIX RIVERS 156 LAKES AND HUNDREDS OF AQUIFERS ARE TRANSBOUNDARY ONES



## *Transboundary basins per continent.*

|                         |  |            | <i>Pourcentage<br/>du territoire</i> |
|-------------------------|--|------------|--------------------------------------|
| <i>Afrique</i>          |  | <b>59</b>  | <b>62 %</b>                          |
| <i>Asie</i>             |  | <b>57</b>  | <b>39 %</b>                          |
| <i>Europe</i>           |  | <b>69</b>  | <b>54 %</b>                          |
| <i>Amerique du Nord</i> |  | <b>40</b>  | <b>35 %</b>                          |
| <i>Amerique du Sud</i>  |  | <b>38</b>  | <b>60 %</b>                          |
| <b>TOTAL</b>            |  | <b>276</b> | <b>45 %</b>                          |

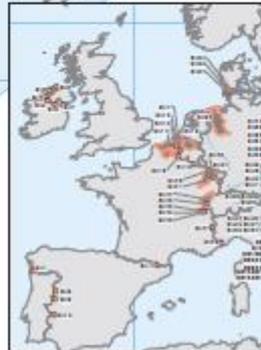
# Transboundary aquifers



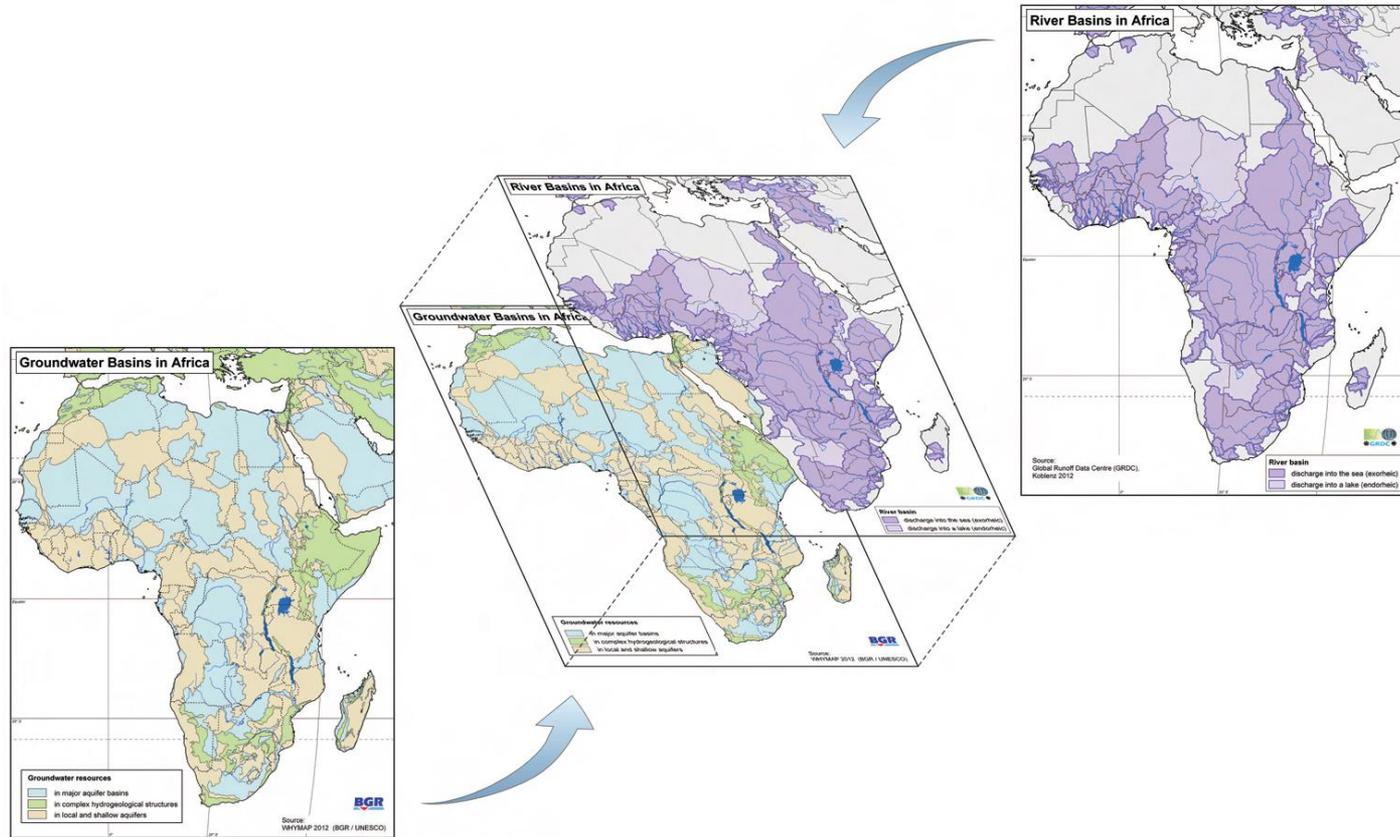
Scale 1 : 50 000 000

*Special Edition*

for the 6<sup>th</sup> World Water Forum, Marseille, March 2012



# Map of the River and Groundwater Basins of the World



Even if Area extent of surface basins and aquifers sometimes differs

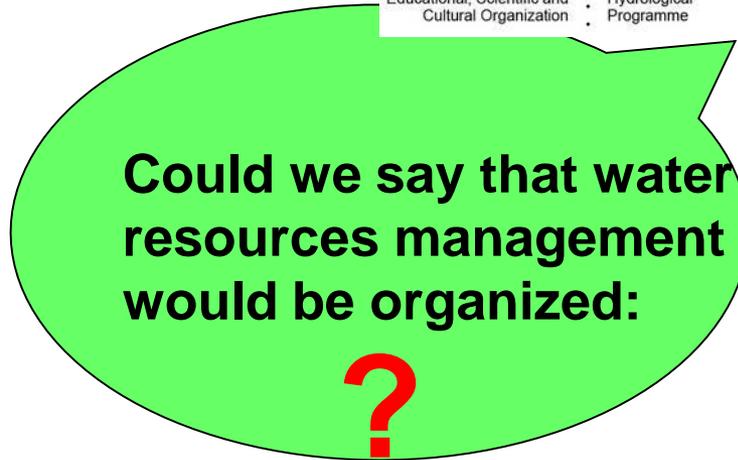


**A solution to face global changes?**

**IWRM:**

**Integrated Water Resources Management  
at rivers, lakes and aquifers**

**basins' level**



- 1) on the scale of local, national or transboundary basins of rivers, lakes and aquifers;**
- 2) with a joint management of surface and groundwaters,**
- 3) based on integrated information systems, allowing knowledge on resources and their uses, polluting pressures, ecosystems and their functioning, the follow-up of their evolutions and risk assessment.**
- 4) with a set of indicators to follow progresses and to facilitate comparisons,**



**Could we say that water resources management would be organized:**



- 5) based on management plans or master plans that define the medium and long-term objectives to be achieved: **“the share vision of the future”**;
- 6) through the development of Programs of Measures and multiyear priority investments;
- 7) with the mobilization of specific financial resources, “OECD 3T” ;  
If possible based on the « polluter-pays » principle and « user-pays » systems;
- 8) with the participation in decision-making of the concerned Governmental Administrations and local Authorities, the representatives of different categories of users and associations for environmental protection or of public interest.



**International  
Office  
For Water  
PARIS-FRANCE**



**International  
Network  
Of Basin  
Organizations**

**In Europe,  
Riparian Countries in transboundary basins  
have created joint managing bodies  
.... sometime for decades.**

**Such International Commissions allow:**

- **better dialogue,**
- **exchanging useful information and warning,**
- **resolving potential conflicts,**
- **sharing benefits from better joint management and**
- **strengthening transboundary cooperation.**

**However, these institutions may be effective only  
if they have mandates clearly defining their tasks and responsibilities  
and if they have the necessary and sufficient human, technical and  
financial resources and their sustainability guaranteed.**

# IWRM

## INTEGRATED WATER RESOURCE MANAGEMENT

- OVERALL MEETING

- OF RATIONAL AND LEGITIMATE DEMANDS

Agriculture

Electricity

Domestic uses

Transports

Industry

Leisure- Tourism

Fish farming

Fishing

- WASTEWATER TREATMENT AND RECYCLING,

- CONSERVATION OF ECOSYSTEMS:

rivers, lakes, wetlands, aquifers, costal areas,

- RISK PREVENTION :

- Erosion

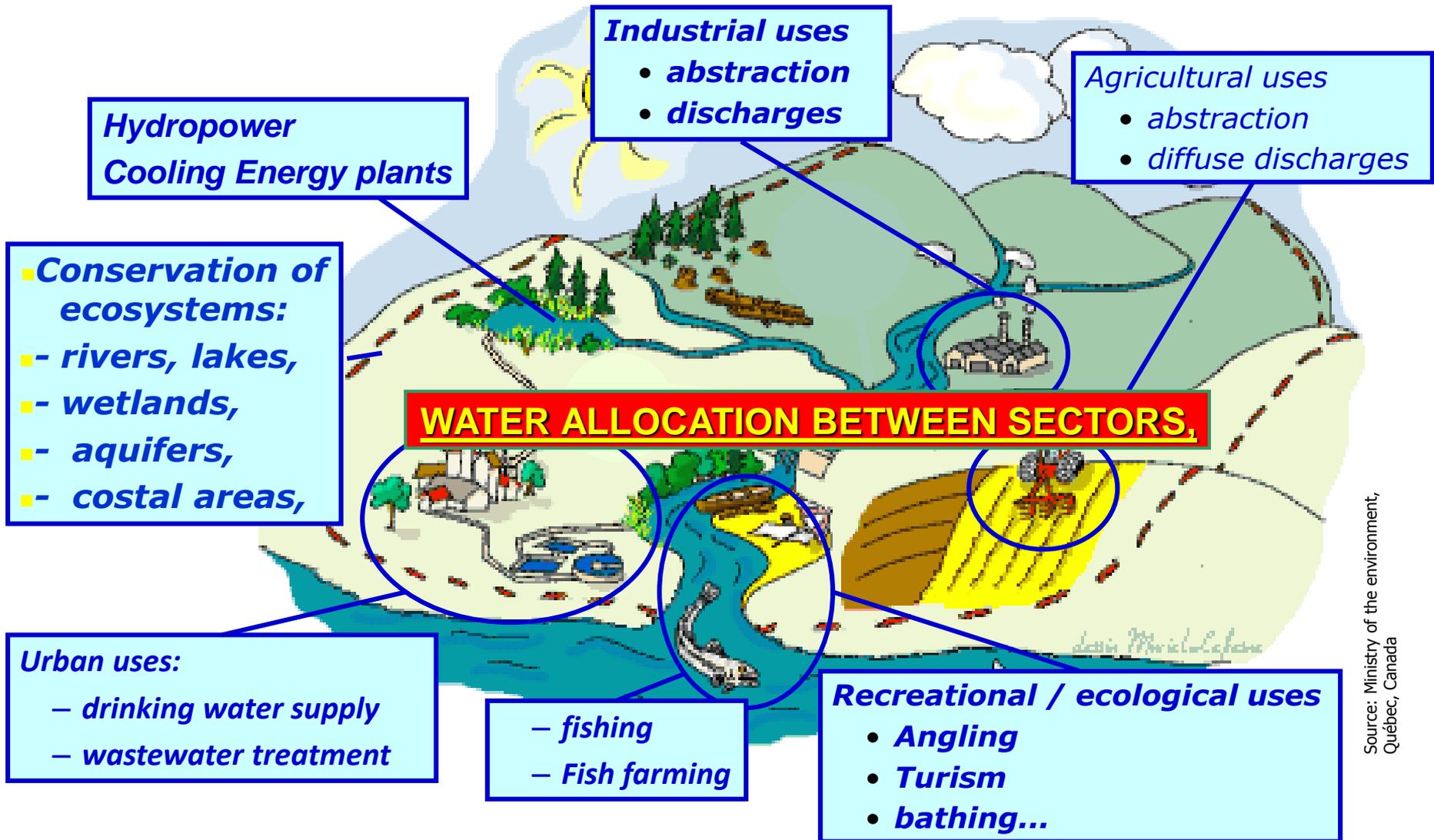
- Drought

- Floods



# IWRM CONCERNS

## ALL MAJOR WATER USES





# Conflicts

requirements collected from each point of view



Designing a program through **dialogue**



Reaching **agreement** with an ambitious program





If we cannot measure, we cannot manage!!



## DIALOGUE



## INFORMATION



### Resources

- Surface water (Rivers –Lakes)
- Groundwater
- Wetlands



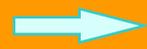
### Uses



### Seasonal variations



### Geographic locations



### Economical informations

- Quantity
- Quality
- Ecology
- Requirements
- Abstractions
- Discharges
  - Flowrates
  - Pollution

- Frequencies

- G.I.S

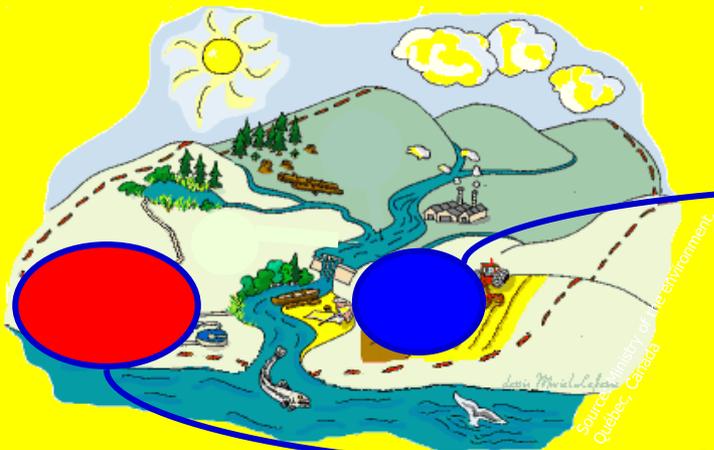
- Cost, budget...

# water resources management should be organized:



2000

*Description  
of the initial situation*

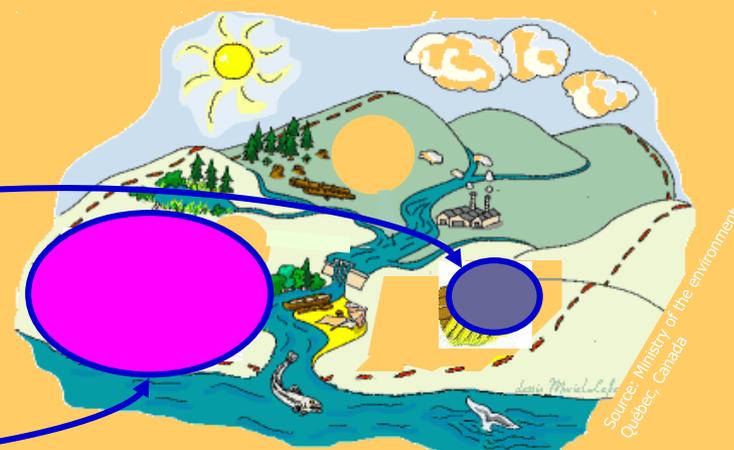


Focus on economic aspects:

- estimate the economic "weight" of water uses and services
- assess the level of recovery of costs of water services

2025

*Baseline scenario:  
projection for 2025*



Baseline scenario:

- appraisal of evolutions of uses, pressures...
- identification of potential gaps in water status with GES

based on management plans or master plans

that define the medium and long-term objectives to be achieved;

**As adaptation actions will take several decades  
before having a visible and significant effect**



water resources management should be organized:



the mobilization of specific financial resources,

## VARIOUS COMPLEMENTARY SYSTEMS FOR COST RECOVERY: THE 3x" T"

### TAXES:

\* Paid to the GENERAL STATE BUDGET:

- General taxes or penal fines
- New ecological tax.

\* Water-related CHARGES:

- National water charges – transiting through "Special Accounts of the Treasury"
- Basin water charges – levied by the Water Agency

### TARIFFS OF COMMUNITY SERVICES:

- Price of raw water – levied by big developers
- Price of drinking water – levied by the municipalities or water suppliers

TRANSFERTS: International aid or from other economical sectors.

**MERCI DE VOTRE ATTENTION!**  
**THANK YOU FOR YOUR ATTENTION!**

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