

# **ECE Convention on transboundary waters**

## **Second International Conference**

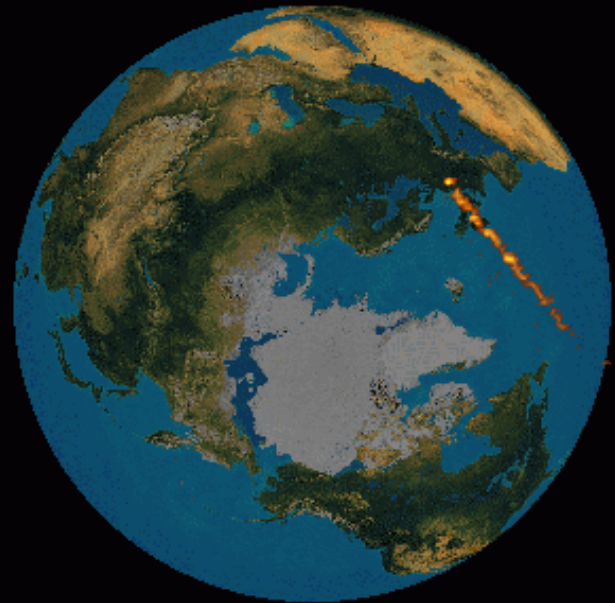
### **Poland, 21-24 April 2002**

**Presentation by Prof. Torkil Jønch-Clausen**  
**Chair of Technical Committee**  
**Global Water Partnership**

## **”Integrated management of water in river basins”**

- 1. Integrated Water Resources Management (IWRM): why and what**
- 2. IWRM and IRBM: the difference!**
- 3. Activities and role of GWP, including the IWRM ToolBox**

# Why IWRM?



# The Hague, March 2000:

- Meeting basic needs
  - Securing the food supply
  - Protecting ecosystems
- by
- Sharing water resources
  - Managing risks
  - Valuing water
  - Governing water wisely

**(Ministerial Declaration  
The Hague March 2000)**



# Bonn, December 2001:

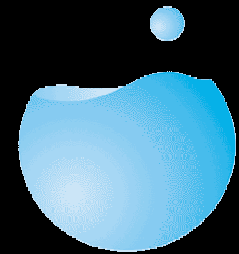
## The three main priorities:

Governance - financing - capacity

## The five “Bonn Keys”:

1. Water security needs of the **poor**
2. **Decentralisation**: the local level is where national policy meets community needs.
3. Better water outreach through new **partnerships**.
4. Harmony with nature and neighbours: the **water basin level**
5. The essential key: better water **governance**

# Towards Kyoto, March 2003:



World Water Council  
3rd World Water Forum

## Dialogue on water, food and environment

- *balancing water for food and for nature!?*

## Dialogue on water and climate

- *translating IPCC to water!*

## High level Panel on financing

- *why falling private investments?*

## Dialogue on effective water governance

- *engaging the politicians!*

## Initiative on water and poverty

- *to name some ....!*



**The starting point: the problem!**



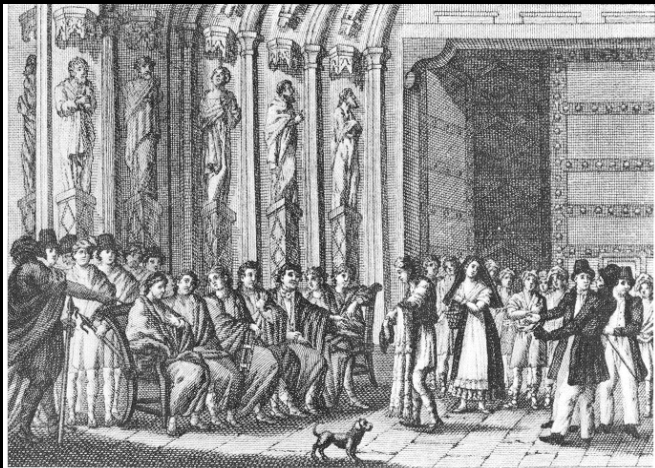
# The problem: Traditional Supply Management

- Focus on **technical** solutions
  - Isolated projects:
    - *Irrigation and drainage*
    - *Water and sanitation*
    - *Flood control*
    - *Hydropower*
    - *Industry*
- by **fragmented**, sub-sectoral authorities
- **Supply fix**, rather than demand management
  - Little attention to **environmental and social** impacts



**Towards a solution:**

# **Integrated Water Resources Management (IWRM)**



Valencia's Water Court, engraved by Tomas Rocafort, 1831. The judges use a bench rather than chairs.



***IWRM is the key to good water governance!***



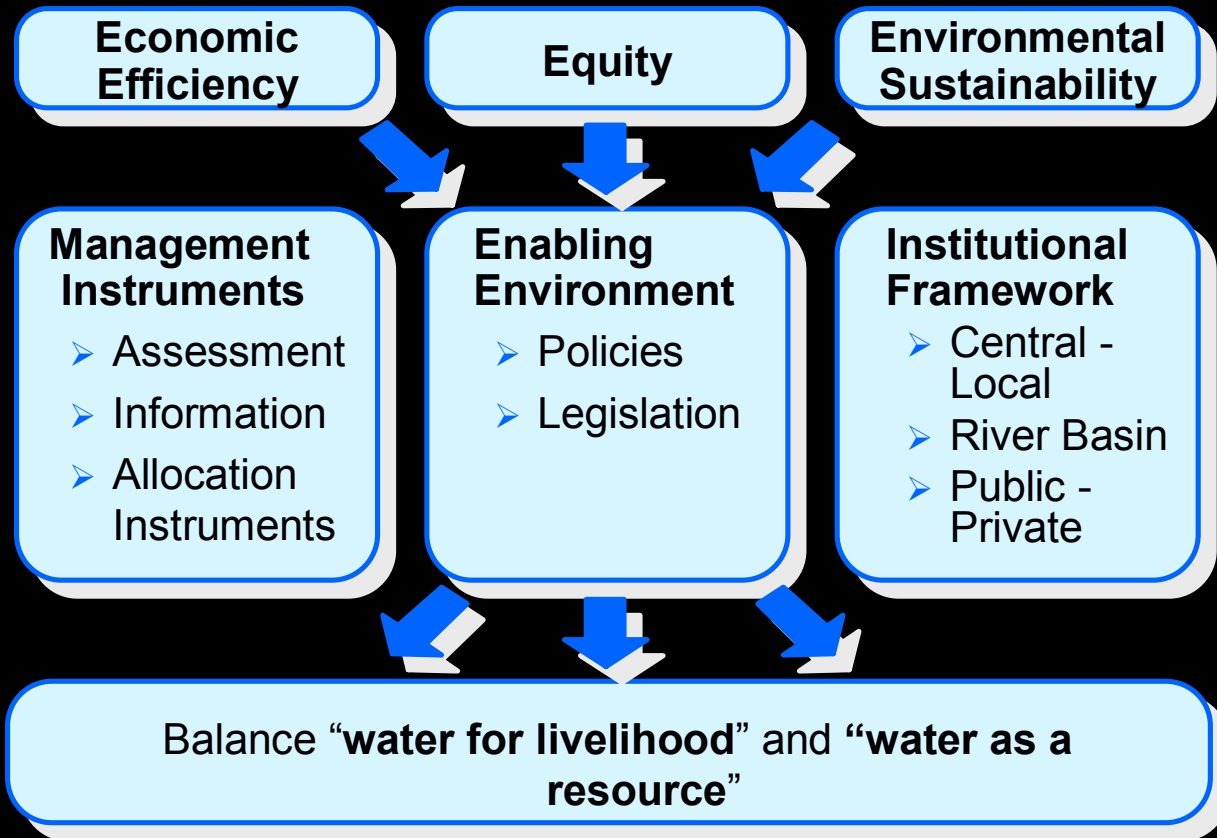
# Integrated Water Resources Management (IWRM)

**“IWRM is a process which promotes the co-ordinated development and management of water, land and related resources, in order to maximise the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems”**



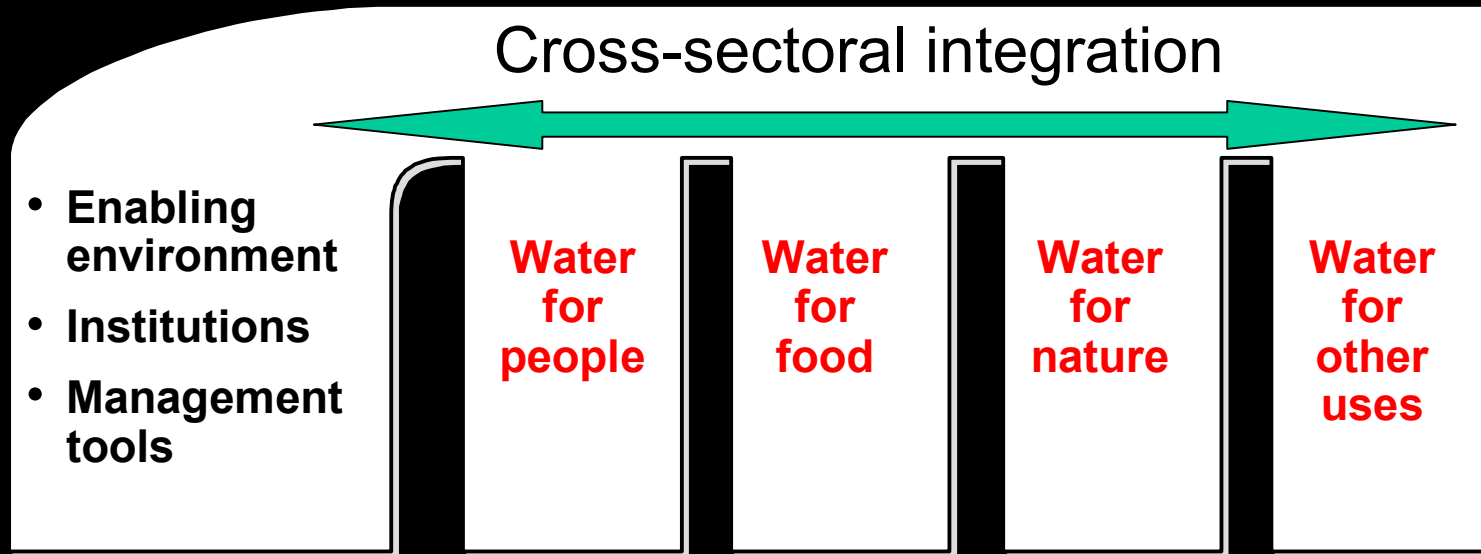
***(Global Water Partnership, Technical Committee).***

# IWRM Components

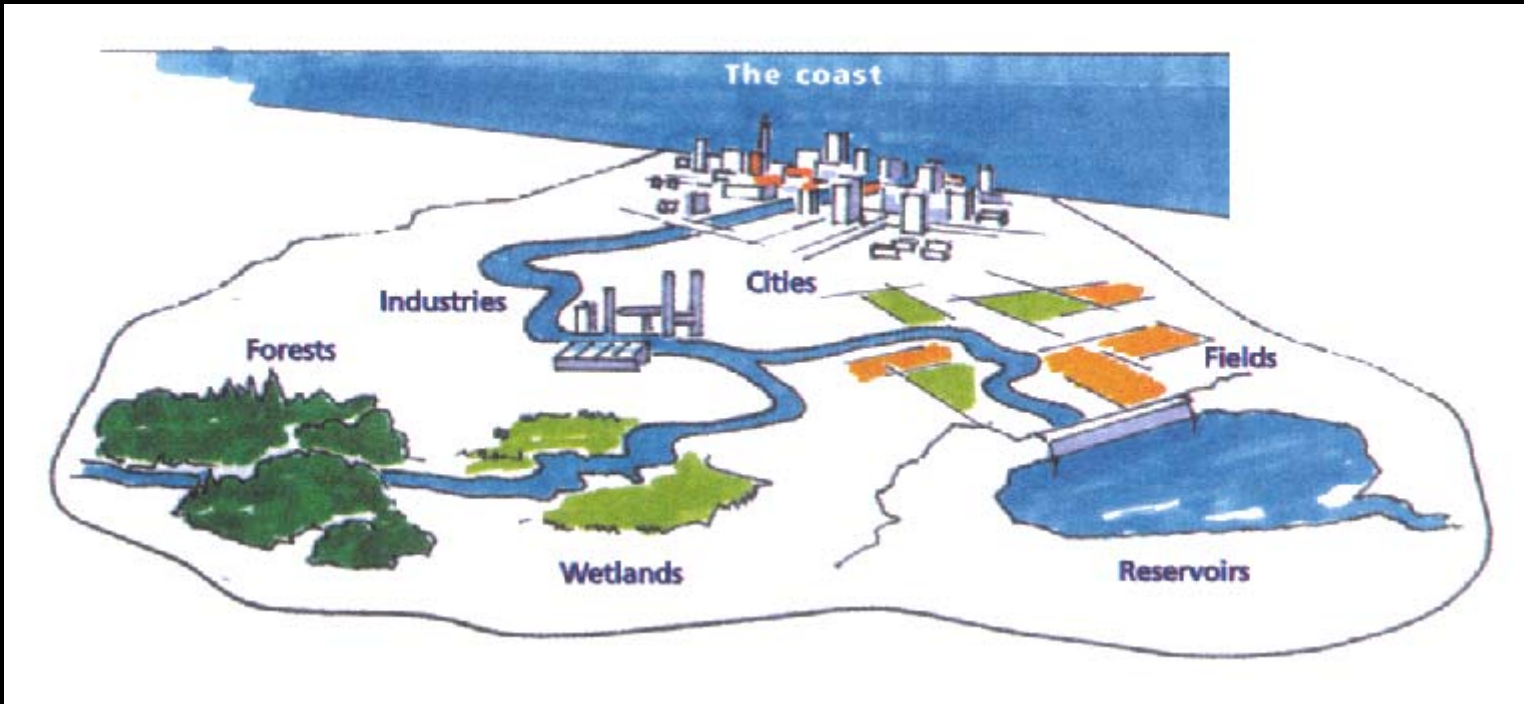


**The three “E”s**  
**The three “pillars” of IWRM**

# Managing competing uses: Integrated Water Resources Management



# What makes water special to manage?



**Manage water in the context of the river basin/aquifer!**

# The foundation of IWRM: Still the Dublin principles (1992)!

- *basis for water chapter of Agenda 21 (Rio 1992)*



**First principle:**  
***Water as a finite and vulnerable resource to  
be managed holistically***

- **Recognising the hydrological cycle**
  - *the river basin/aquifer as the natural management unit*
  
- **Upstream-downstream user relations**
  - *"we all live downstream"!*

***10 years later European law (Water Framework Directive)!***

## The second principle: *A participatory approach*



- **Participation:**
  - *Participation is more than consultation!*
- **Many forms of participation**
  - *Direct management; market processes etc.*
- **Governments' role:**
  - *Setting the rules of the game, not playing all positions!*

*The principle of subsidiarity:  
Manage water at the lowest appropriate level!*

*With the Aarhus Convention: European law!*

# The third principle: *Women's role*

- **Collect and safeguard water**
  - *are responsible for the health of the family*
  - *are the majority of third world farm labour*

***but are***

- **Less influential than men in decision- making**
  - *difficult to change: culture, religion, tradition*

***Wide gap between rhetoric and action!***

***...Europe's London Protocol!?***





# The fourth principle: *Water is an economic good (1)*

- **Water is not free!**
  - *somebody does pay!*

## **Opportunity cost concept:**

- *when scarce, water has a value in alternative use*
- **Value and charges are two different things**
  - *the **value** of water is essential for allocation*
  - *the **price** of water is essential for cost recovery/feasibility*

*For 10 years: the most difficult, misunderstood and controversial principle of water management!*

# The fourth principle:

## *Water is an economic good (2)*

- **Economic instruments: essential tools for demand management**
  - *regulating behaviour: conserve and save!*
  - *service levels <-> affordability/willingness-to-pay*
  - *market as the regulator!? (e.g. Australia, Chile)*
- **Transparent subsidies for the poor**
  - *many countries will need subsidies far into the century!*

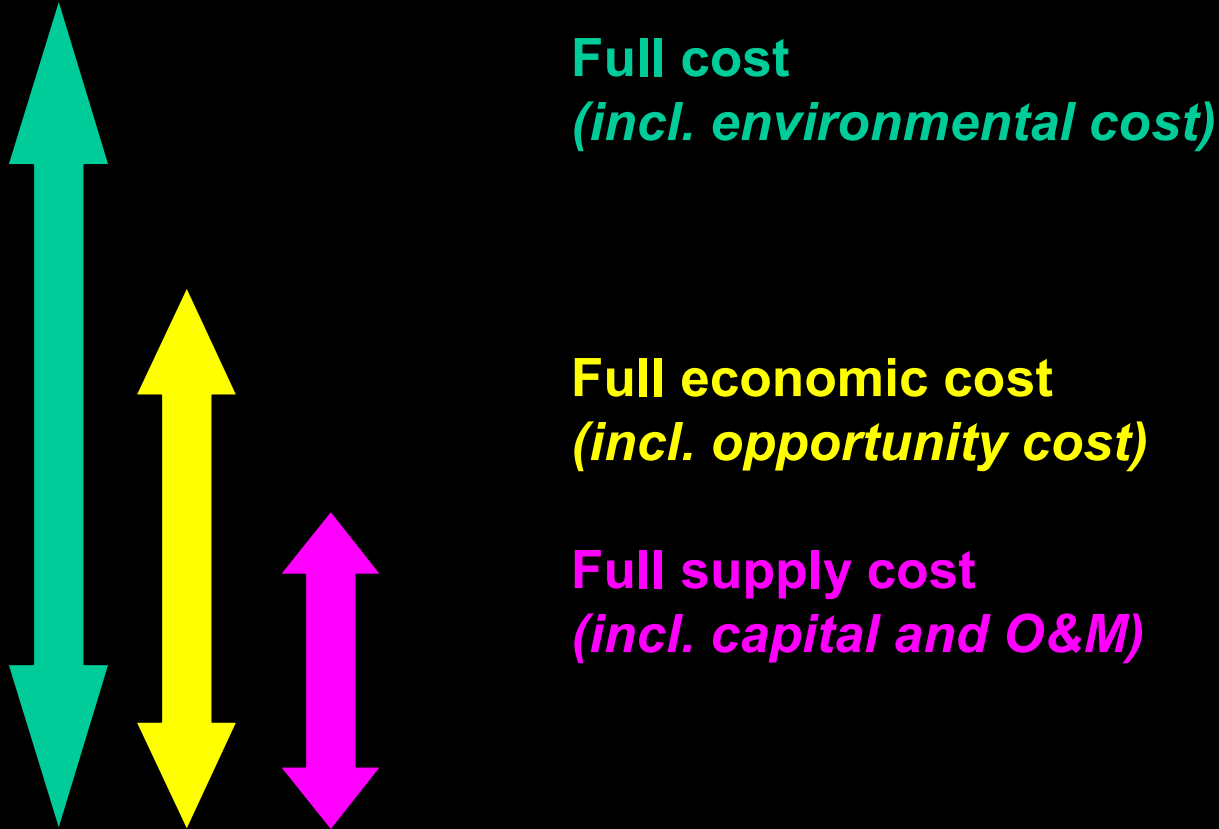
**Some basic principles:**

*"users pay"*

*"polluters pay"*

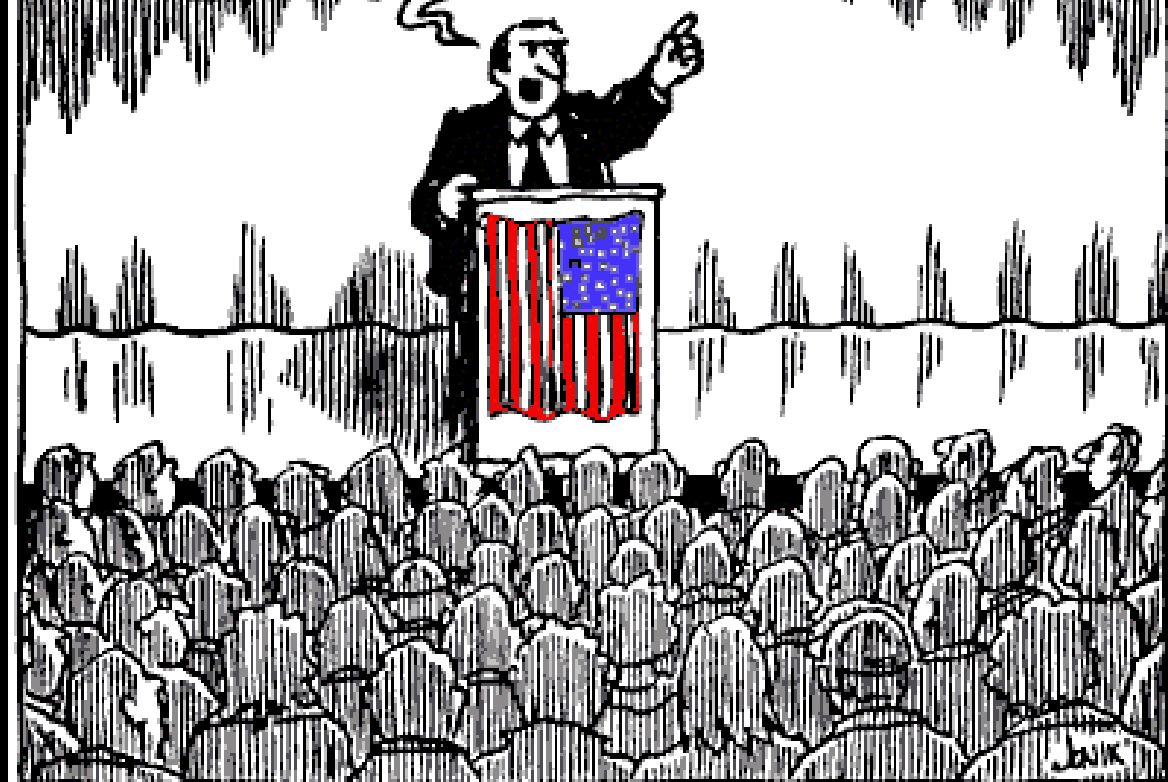
*"subsidize the good and tax the bad"*

# Water: cost components



**CAMPAIGN 2012\***

IF ELECTED, I GUARANTEE  
EVERYONE AFFORDABLE AIR  
AND AFFORDABLE WATER!



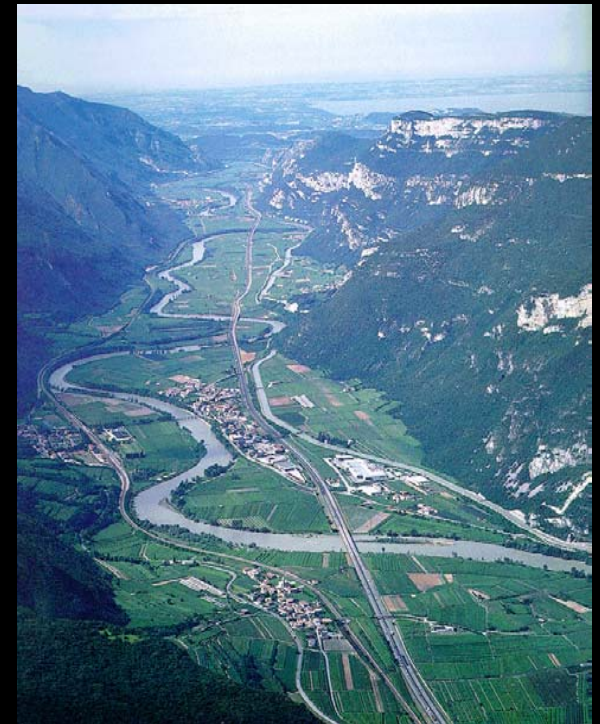
# Understanding IWRM

What to “integrate”?  
What is the “I” in IWRM?



# Natural system integration

Freshwater	↔	Coastal zone*
Land	↔	Water
“Green water”	↔	“Blue water”
Surface water	↔	Groundwater
Quantity	↔	Quality
Upstream	↔	Downstream



\* ... elaborated already by UNEP

# Human system integration

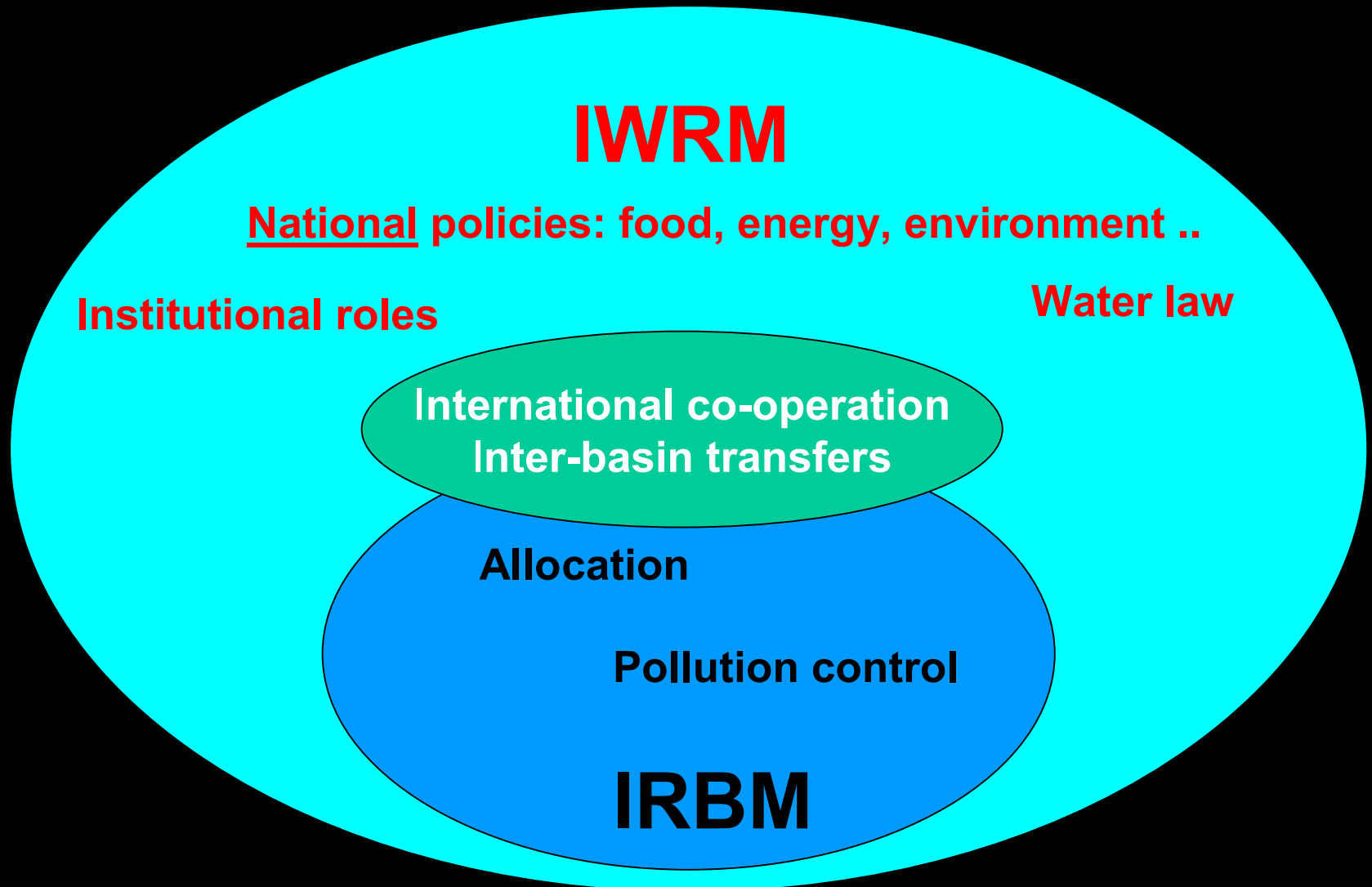
## Mainstreaming of water resources in national policies

- *economic policy*
- *food policy*
- *environment policy,*
- *health policy,*
- *energy policy*
- ..... to be elaborated by Stephen Lintner*

## Cross-sectoral integration

- *all major water use sectors*
- *Involving all stakeholders*

# IWRM and IRBM: Different but connected





# IRBM: Different scales

**Basin/aquifer as the basic management unit, but many scales:**

## **Local/national scale**

- from small catchments to major national basins (e.g. Spain, France, Poland etc.)

## **National/federal scale**

- in-country transboundary issues (e.g. Australia, US, Germany etc.)

**National government as mediator!**

## **International scale**

- between-country issues (e.g. Danube, Rhine etc.)

**Special structures - and preferably conventions (e.g. ECE)**

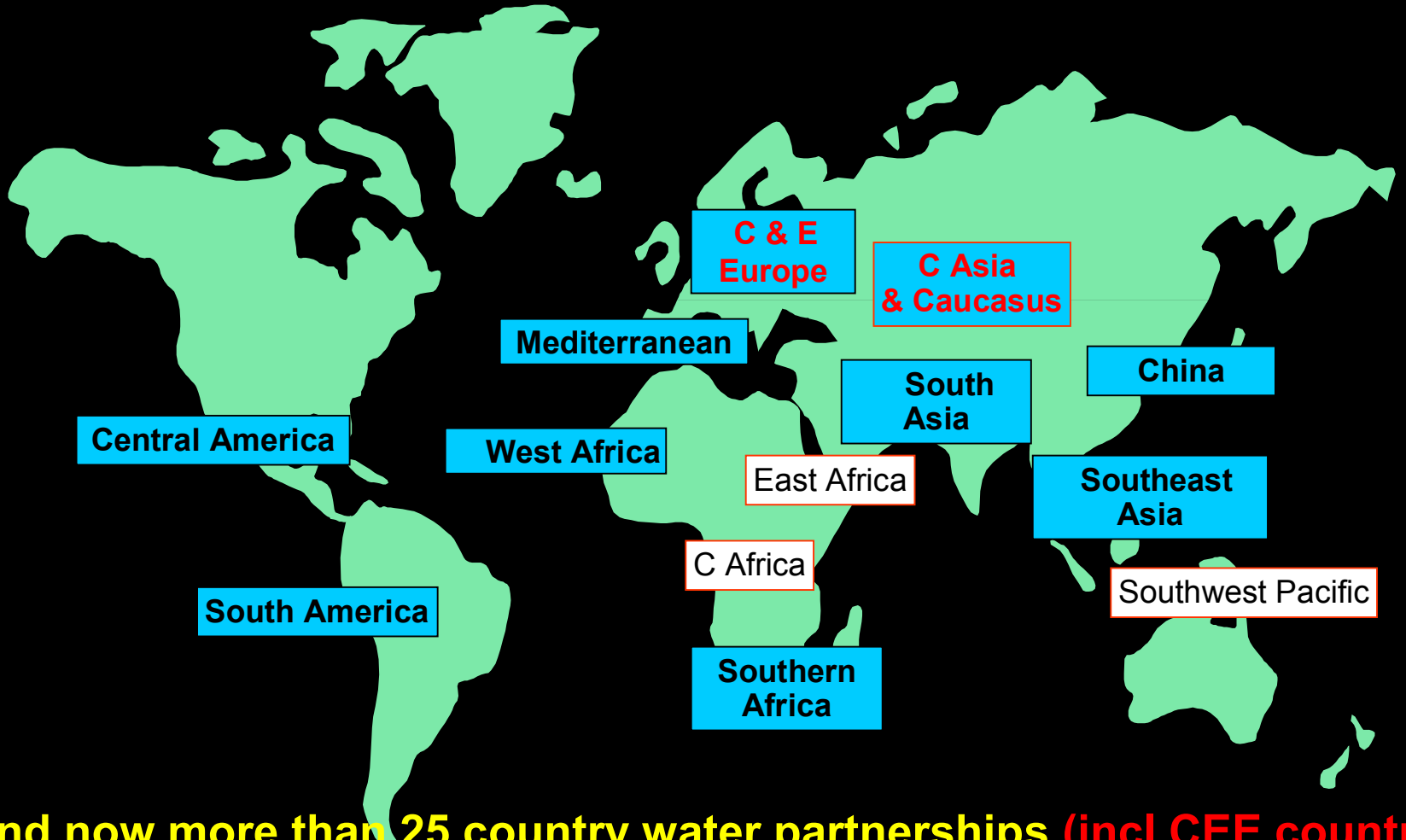
# **IWRM and the Global Water Partnership**

# Global Water Partnership



... is an international network to promote and facilitate integrated water resources management

# GWP today



- and now more than 25 country water partnerships (incl. CEE countries)
- and area (sub-basin) water partnerships coming up (incl. Bulgaria)

# A hierarchy of Partnerships

global level



regional level



country level



catchment level

(getting to the real stakeholders!)

# GWP in Europe

**Regional partnerships** in Central & Eastern Europe, and in Central Asia & Caucasus

**Country Water Partnerships/Country Clubs** established or being established in 10 CEE countries, and **area water partnerships** starting in Bulgaria

**Co-sponsors** and main supporters of GWP include: UK, Sweden, Netherlands, Denmark

**Other** supporting countries include Switzerland, Norway, France, Spain - and the EC

**GWP Resource Centres** in UK (HR Wallingford), Denmark (DHI Water & Environment). Spain (CEDEX) expected to join

# Bringing people together

## “Water is everybody’s business!”

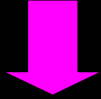
<p>Across sectors &amp; disciplines</p> <p>Across institutional roles</p>	Hydrology	Water Supply	Sanitation	Agriculture	Environment	Industry	Energy	Economic Planning	Social planning	etc.....
Central Government	<p><b>GWP - a platform for alliance building</b></p>									
Decentral authorities										
Basin entities										
Academia										
Civil society										
etc...										

*... supporting stakeholder involvement - and hence WFD and Aarhus*

# GWP activities

1. Partnerships

2. Alliances and co-ordination



3. Promoting IWRM

- *the IWRM ToolBox*
- *the Governance Dialogue*

4. Supporting actions and programmes

- *the Associated Programmes*





**Example of a GWP activity:**

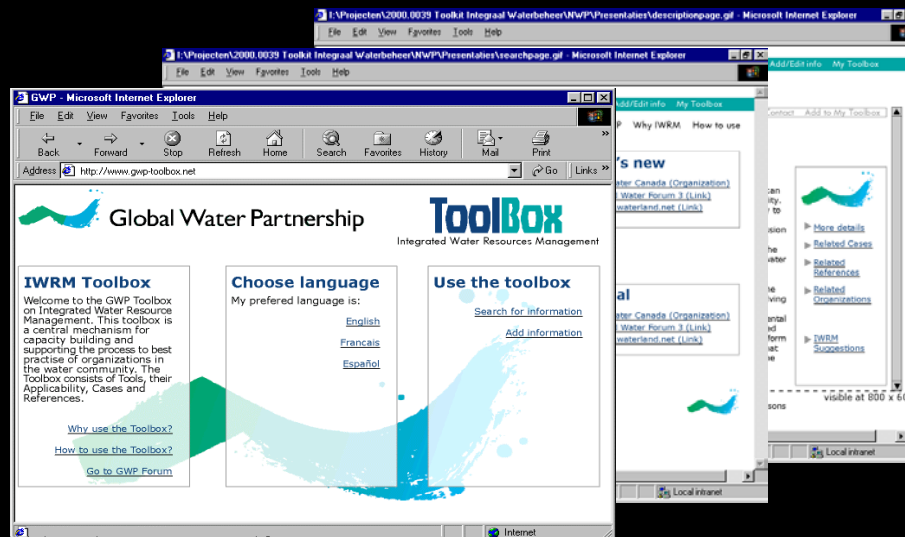


**(launched in Bonn in December 2001)**



# The ToolBox on IWRM

- Translating IWRM theory to **practical tools**
- Providing **concrete examples** of IWRM in practice (cases!)



# What is a tool?

## C. Management instruments

- C1. Water resources
- C2. Plans for IWRM
- C3. Demand management
- C4. Social change
- C5. Conflict resolution
- C6. Regulatory instruments
- C7. Economic instruments
- C8. Information management

## B. Institutional roles

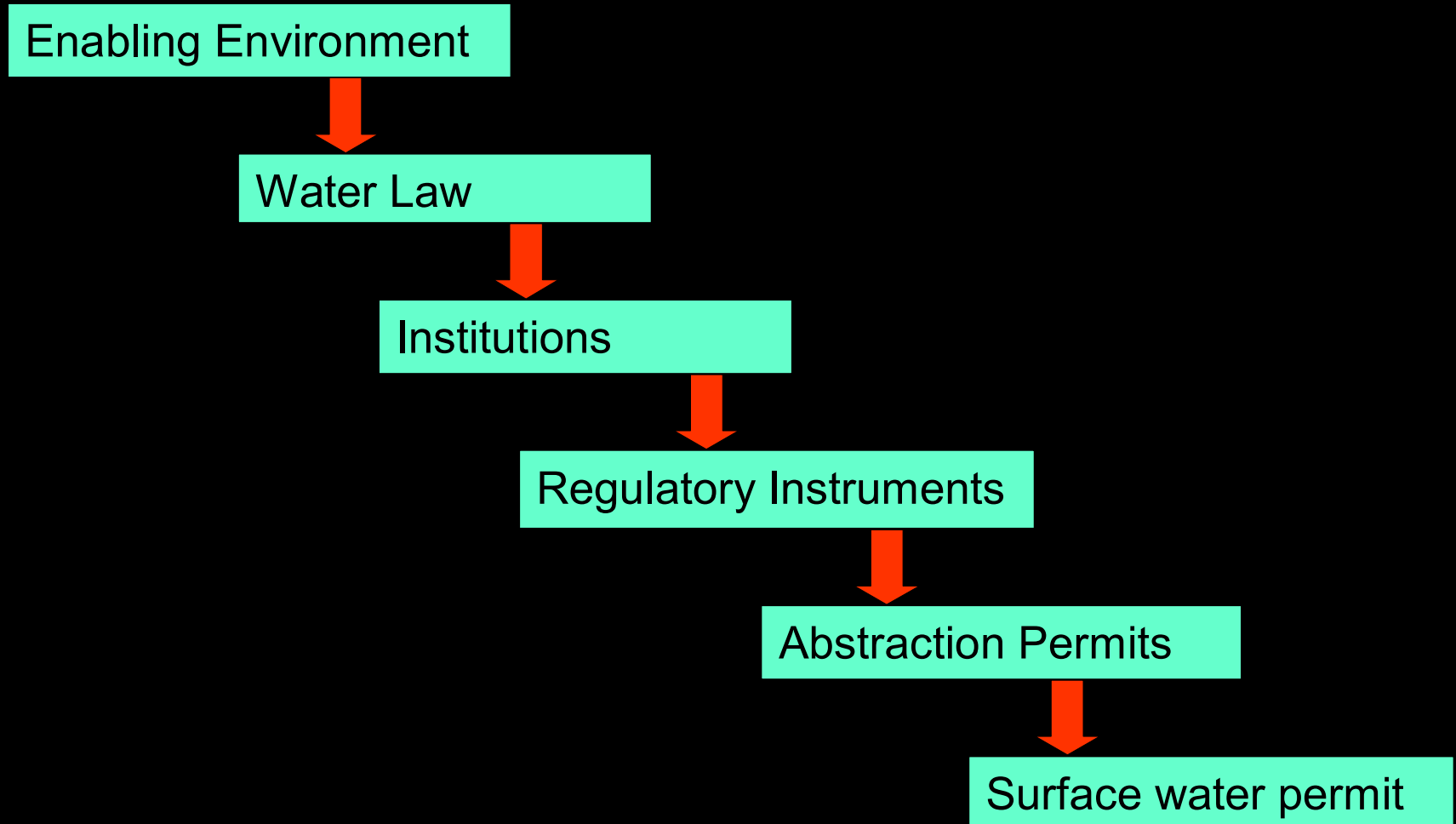
- B1. Creating an enabling environment
- B2. Institutional capacity building

## A. Enabling environment

- A1. Policies
- A2. Legislation
- A3. Financing & incentive structures

Presently some 50 tools in these 3 pillars - 13 categories

## A hierarchy of tools



# How are tools described?

The screenshot shows a Microsoft Internet Explorer browser window displaying the GWP Toolbox website. The page title is "GWP Toolbox Main - Microsoft Internet Explorer". The address bar shows the URL: "root/GwpDRG/handler.cfm?event=searchHome&targetFrame=top&language=en". The website header includes "Home", "Community", "Contact", "Search", "Add/edit info", and "My Toolbox". The main content area is titled "Search Results:" and shows the search criteria: "You are searching for: Case" and "Related to: (Tool) C3.1 Improved efficiency of use". Below this, there are search results for "Cases (7)", including "Water Utilisation Plan in Victoria Drainage Basin", "Strategies- City of Casablanca coastal", "Irrigation in Tunisia", and "Water Management Areas of Watermanagement Benelux central area". The selected result is "Tool : C3.1 Improved efficiency of use". The tool description includes "Characteristics" and "Lessons learned". The "Characteristics" section states: "The key to improved efficiency lies in setting up mechanisms for changing peoples' attitudes and behaviour towards water use. Such mechanisms include:" followed by a bulleted list: "Education and communication, including programmes to work with users at school, community and institutional level (C4); Economic incentives including tariffs and charges for water use (domestic, industrial, agricultural) and for provision of environmental services (C7); Subsidies or rebates for more efficient water use can be used in...". The "Lessons learned" section states: "Regulations and byelaws can be used to set standards for water consumption (C6). These may explicitly aim to reduce water misuse or undue consumption" in public water supply systems and regulations can also cover standards and...". The website also features a "GWP approved" logo and a "Print" button.

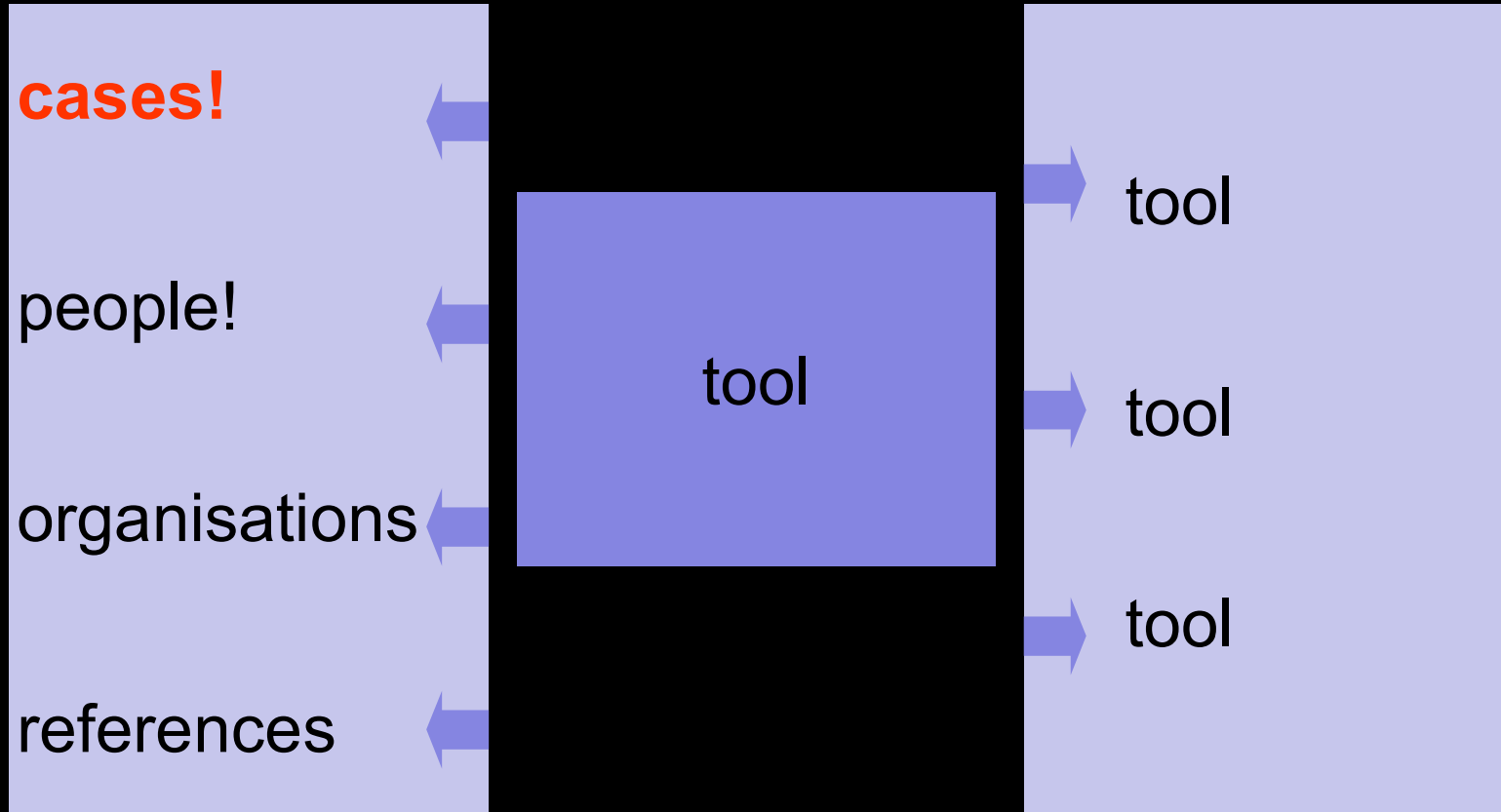
## Characteristics

How to take action  
the IWRM way

## Lessons

- the premises
- the limitations
- the do's & dont's

## Tools linked to .....



## Case studies

- Case studies analysing actual experiences
- Extracting lessons - both good and bad
  - => “good practices”
- Quality: all cases are peer reviewed
- Over 80 cases under development

- i.e a box full of tools and actual cases!
- including Lake Peipsi!



## Entering the ToolBox.....

Global Water Partnership - Microsoft Internet Explorer

Address: http://www.gwpforum.org/serve/PSP

**Global Water Partnership**

IWRM Toolbox | Associates at Work | Library | About GWP | News & Events

Regional Action: Central America, Eastern Europe, China, Mediterranean, South Asia, South East Asia, Southern Africa, West Africa

### GWPToday

Welcome to our new Home Page! We are still compiling the information on this site so each time you visit you will see more News and texts posted on the site!

**New IPFRI Water Users**  
15/11/2001  
Read/download ...

**TOOLBOX**  
The IWRM Toolbox, version 1, is to be inaugurated by the GWP Patron, the Crown Prince of the Netherlands, on Tuesday December 4 during the International Conference on Freshwater in Bonn.

**LWP Consulting Partners meeting**  
The 2002 GWP Consulting Partners meeting will be held in Accra, Ghana in June. We will update you as we get more news on this event.

**"GWP in Action, 2001"**  
New publication  
Read highlights on action in the GWP network during 2001 ...

**Water Policy and Practice**  
Article of the Month.

During World Water Congress held in Berlin, October 15-19, 2001 the IWA organized a joint forum with the GWP and the WSSCC on policy and practice in Central and Eastern Europe. Although the discussions

Go to the IWRM Toolbox here ...

News archive

Publications

GWP - IWRM Toolbox Community - Microsoft Internet Explorer

Address: http://www.gwpforum.org/serve/PSP?NodeID=103&FromNodeID=101

**Global Water Partnership**

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**ToolboxCommunity**

Welcome to the Toolbox on Integrated Water Resources Management.

The IWRM Toolbox draws together a wealth of experience and expertise in IWRM. It aims to support water professionals and policy makers by offering practical information and non-pragmatic advice on how to implement IWRM in practice. Read about the main features, the tools, and how to enter information items.

In 2002, this community page will be continuously developed to highlight information and events of special relevance to IWRM. A 'chat room' may be added to stimulate discussion on selected issues.

This Toolbox database was developed in collaboration with the Netherlands Water Partnership.

**Use the Toolbox:**  
My preferred language is:  
 English  
 (under construction) Français  
 (under construction) Español

Search for information:  
Add information  
Go to My Toolbox

Why use the Toolbox  
How to use the toolbox

**Calendar Highlights**  
ECOWATCH in Mexico  
GWP Consulting Partners meeting  
Stockholm Water Symposium

**New IPFRI Water**  
15/11/2001  
Read/download ...

**Editor's choices:**  
To be completed in  
Examples:  
Databases  
Organizational tool  
Virtual fora, dialog  
Other initiatives

GWP Toolbox Main - Microsoft Internet Explorer

Address: http://www.gwpforum.org/serve/GWP/Handler.cfm?event=searchHome&targetFrame=toolbox&language=en

**Global Water Partnership Toolbox**

Welcome to the GWP Toolbox on Integrated Water Resource Management. You can search information in different ways:

Search by category of tools:  
Tool Category:  
A. THE ENABLING ENVIRONMENT Find  
B. INSTITUTIONAL ROLES Find  
C. MANAGEMENT INSTRUMENTS Find

Use Filter Search for:  
Tools  
Cases  
People  
Organisations  
References  
Websites

Enter your question or keyword:  
Find

Use [Advanced Search](#)

**Background Info**  
Why use the Toolbox  
Toolbox manual  
About GWP

**What's New?**  
Water Utilities Partnership - South Asia (Organisation)  
Water as a Social and Economic Good: How to put the principle into practice (Reference)  
International Co-operation in the Scheldt and Meuse River Basins (Case)

**Special**

Global Water Partnership NIP



# The ToolBox process

**Version 1 - Bonn**



**Feedback from users:**  
**cases!, references, translations etc.**  
***(including CEE and CAC)***



**Version 2 - WWF3**



# Europe and and GWP : sharing experiences - within Europe, and with the rest of the World -

## European approaches and experiences

(Water Framework Directive, ECE Convention, Aarhus Convention, London protocol etc.)



## GWP mechanisms for IWRM promotion

(Regional, country and local water partnerships, the ToolBox, the GWP Associated Programmes etc.)



## Co-operation and partnerships:

- within Europe
- with the developing countries

... as e.g. through EU Water Initiative to be announced in Johannesburg



**Thank you!**

**And please look at  
[www.gwpforum.org](http://www.gwpforum.org)**