

# **A Blueprint to safeguard Europe's waters II**

**Presentation at CIWEM meeting  
SOAS, London, 11 January 2012**



# Challenges for water management and the development of the Blueprint

- Governance issues and policy coherence
- Uncertainties – scientific and socioeconomic
- Getting the economics right
- Knowledge gaps
- No “one size fits all” solutions - subsidiarity

# Need for joined-up management

- **Common drivers for different water impacts (part I)**
- **Environmental risks are becoming systemic in nature and can no longer be tackled in isolation (EEA, SOER2010)**
- **Strong links between water issues and other environmental issues (nature, air, waste, climate,..)**
- **Strong links between policy choices in other policy areas (agriculture, energy, transport,....) and water policy**
- **Lack of joined-up management leads to inefficiencies and waste of natural resources**

# Policy scenarios to understand complexity

**Water resource balances** (quantity, quality) for relevant European river basins - SEEAW framework - monthly resolution - ECRINS reference system

Disaggregated information on the **use of water** for the base year by the different economic activities, including estimates on its environmental impact.

Information on technical, non technical or structural **measures** affecting water availability and water use by the different economic activities, including estimates on their environmental impact.

**Scenarios** for land-use changes, hydrological parameters and use of water by the different economic activities

**optimisation model**, maximization of net social benefits from the use of water by economic sectors

baseline scenario / sensitivity analysis

Selection of measures

Environmental, Social, Economic constraints

**Blueprint Specific Objectives**

indicative targets at EU level for reducing the vulnerability of water resources

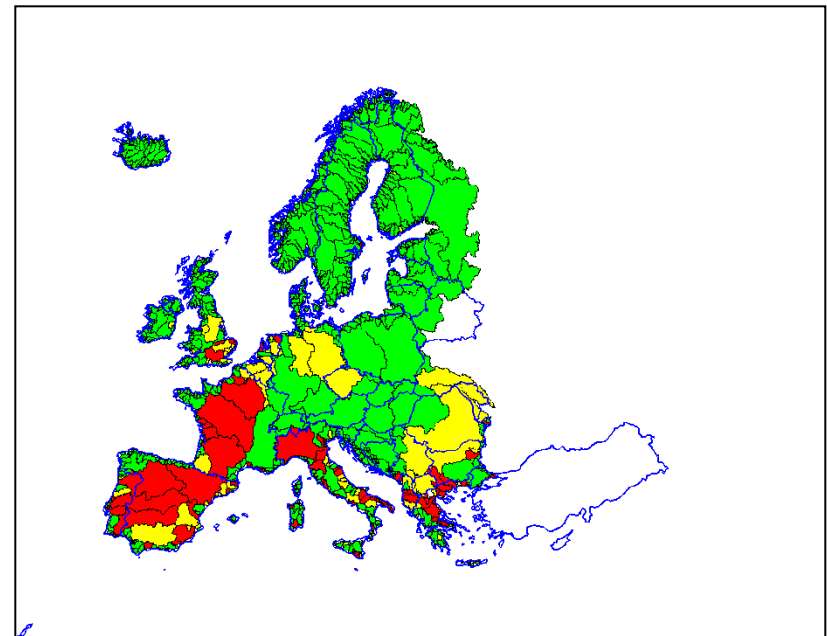
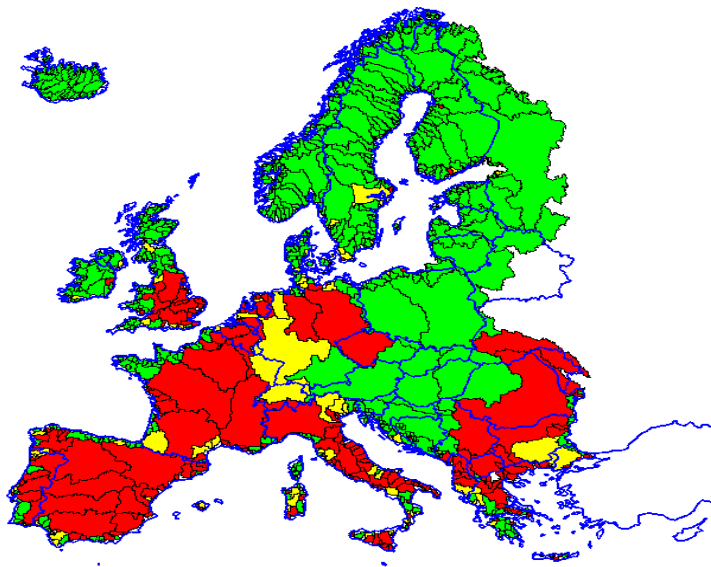
- *natural water retention,*
- *water savings,*
- *reuse/recycling*
- *water quality*

# Example of need for integration and joined up management (water stress from ClimWatAdapt)




## Summer Water Exploitation Index (excl cooling water)

FP6 SCENES Scenario  
«Economy First» 2050

FP6 SCENES Scenario  
«Sustainability Eventually» 2050

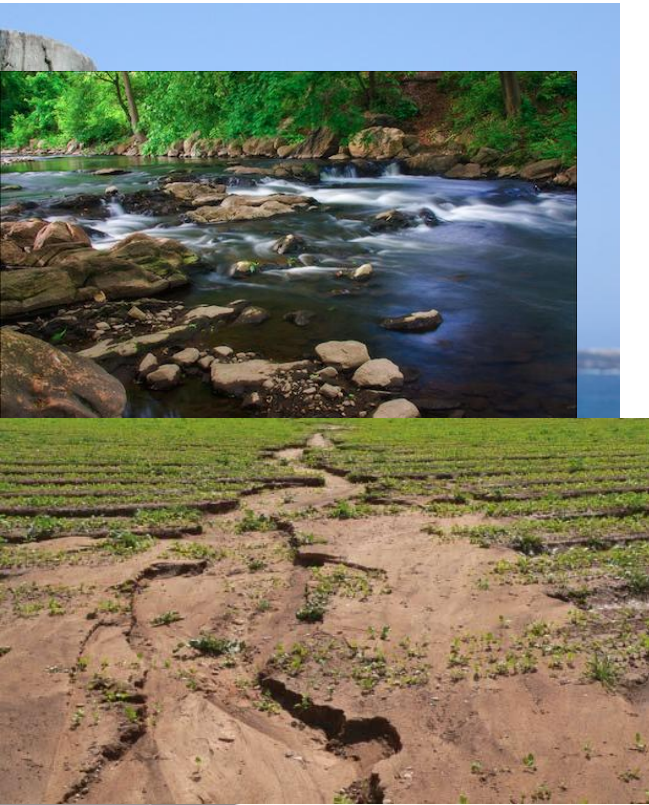


Source: DG Environment,  
ClimWatAdapt database, 2011

-  Low stress (WEI < 20%)
-  Medium stress (20% < WEI < 40%)
-  High stress (WEI > 40%)

# “Unlocking” the most promising measures

## Managing water demand



Protecting the  
water ecosystems



Improving  
availability of  
clean water

# Overview of measures

## Managing water demand

efficiency measures  
at the buildings level

Improvement of  
irrigation systems  
and management

water efficient  
products

Distribution networks

Crop management

Reducing water  
pollution at source

Water reuse & recycling

Soil management

Restoring  
longitudinal  
continuity

*Water storage*

Restoring the  
riparian area of  
water courses

Restoring lateral  
connectivity

*Treatment of brackish  
or sea water*

*Transfers*

Protecting the  
water ecosystems

Improving availability  
of clean water

# Policy Options 1

## ■ Better integration quantitative water management needs in the River Basin Management plans

- assessment of the baseline scenarios and effectiveness and impacts of the programmes of measures and development of tools at EU and basin/national level
- Covering management of demand for and availability of clean water
- need for a wider integration perspective (water – energy – food nexus, virtual water flows)
- more concrete and operational definition of environmental flows

## ■ Sectoral level:

- Voluntary certification standards for business
- coherence with SCP related schemes



# Policy Options 2

## ■ Demand Management

- Agricultural water efficiency
- Efficiency of public water supply (leakage)
- Water efficiency in buildings
- Link to metering, pricing and/or targets

## ■ Water Availability, Clean Water and Natural Water Retention Measures

- Enhancing natural features to increase soil water retention and groundwater recharge (provides also flood control and other ecosystem services)
- Buffer strips
- Water re-use

# Policy Options 3

## ■ Ecosystem Protection

- Restoration of riparian areas
- Longitudinal river continuity
- Restoring lateral ecosystem continuity

# Economic tools

- **Abstraction Fees**
- **Metering**
- **Pricing structure, including**
  - Inclusion of all social costs
  - Cost recovery for infrastructure
- **Cost of pollution**
- **Payment for ecosystem services**
- **Sustainable financing schemes**

# Knowledge Base

- **Ensuring the knowledge base for current and emerging challenges**
  - Improved set of shared indicators
  - More focused reporting and statistic requirements
  - Better exploit the potential of WISE
- **Better understanding of costs, including environmental costs**
- **Improve the relevance of research for practical water policy**

# Governance

- **Effective coordination at the river basin scale between the various administrations responsible for water.**
- **Better targeting of international river basins agreements towards WFD implementation**
  - monitoring networks
  - programmes of measures, funding
- **Integration with other policies**
- **Need for frameworks for inter-sectoral or transboundary financing (i.e. payment for ecosystem services)**
- **Enforcement**

# Innovation

## ■ European Innovation Partnership (EIP) on Water

- Identify the key barriers to water related innovations
- Foster the development of multi disciplinary innovations in the areas of water efficiency and water management
- Foster the development of a resource efficient water industry
- Competitive European solutions to water management and water efficiency

***Thank you for your attention***

**[http://ec.europa.eu/environment/water/blueprint/index\\_en.htm](http://ec.europa.eu/environment/water/blueprint/index_en.htm)**

