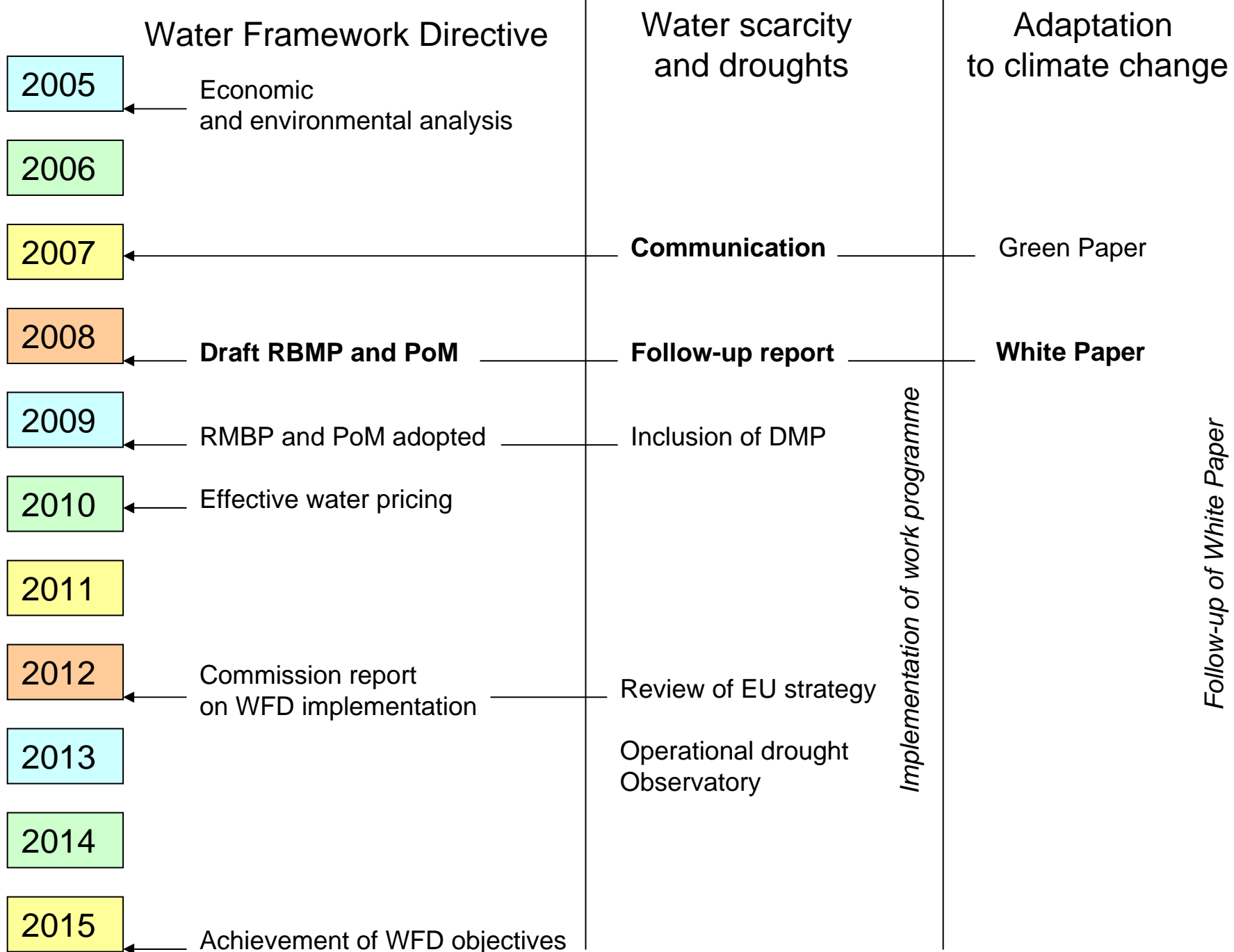




# **Water Scarcity & Drought Management**

## **The European Commission perspective**

Pierre Hecq,  
European Commission  
DG Environment



## Full implementation of the WFD remains a challenge

1. The next major milestone is the adoption of **river basin management plans** and **programmes of measures** by the end of 2009.

↳ In-depth analysis of the measures planned at MS level to address water quantity issues

2. Obligation to deliver by 2010 **water pricing policies** that provide adequate incentives for efficient water use

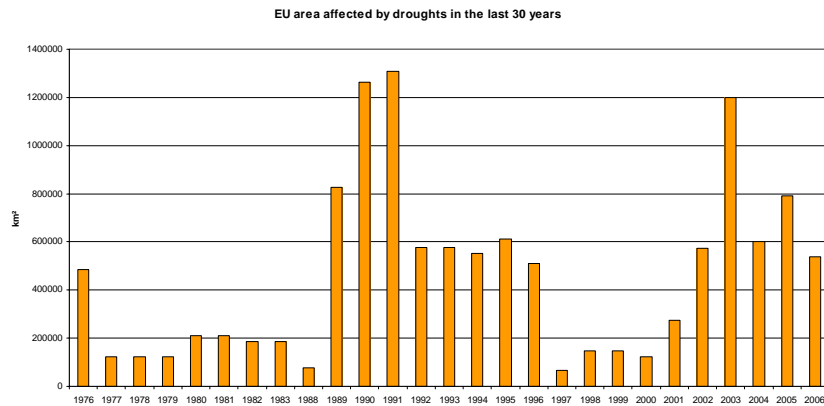
↳ Assessment of adequacy of economic instruments and water pricing with water scarcity and drought concerns



# Communication on water scarcity and droughts

## 1. Increasing impacts of water scarcity and droughts in past 30 years

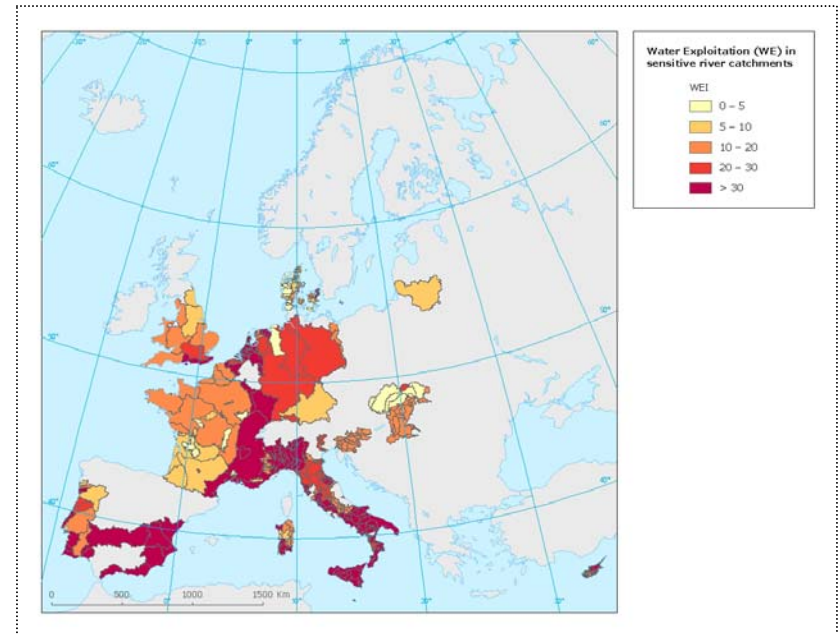
### Droughts



Cost to the EU economy:  
Min € 100 billion in past 30 years

In 2003:  
Min 100 Mio inhab., 1/3 of EU territory  
Cost of € 8.7 billion to the EU economy

### Water scarcity



33 EU river basins affected so far  
Min 100 Mio inhab., 17% of EU territory  
Significant extension in past 30 years

# Communication on water scarcity and droughts

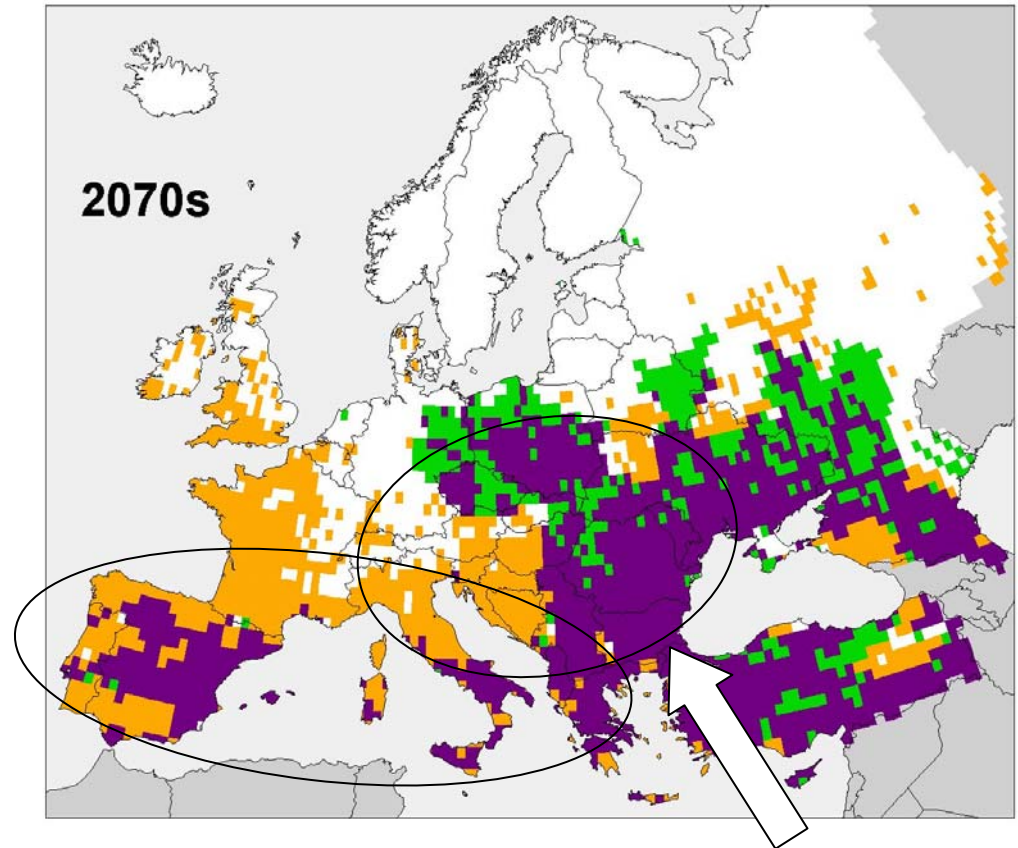
## 2. Expected impacts of climate change and economic development

Proportion of severe water stress EU river basins likely to increase from 19% today to 35% by 2070.

Areas affected by droughts will increase.

If  $t^{\circ}$  rises by 2 to 3 $^{\circ}$ C, water scarcity would affect 1.1 to 3.2 billion people

→  
*Southern Europe*



*Eastern Central Europe*

## What policy options have been identified in the Communication?

- ✧ Putting the right price tag on water
- ✧ Allocating water and water-related funding more efficiently
- ✧ Improving drought risk management
- ✧ Considering additional water supply infrastructures
- ✧ Fostering water efficient technologies and practices
- ✧ Fostering the emergence of a water-saving culture in Europe
- ✧ Improve knowledge and data collection



## Putting the right price tag on water



- ✓ Full WFD implementation ⇒ Effective **water pricing policies** with adequate incentives and adequate contributions to cost recovery by 2010
- ✓ **'User pays' principle** needs to become the rule.
- ✓ **Metering**: pre-condition to price effectiveness ⇒ Introduce compulsory metering programmes in all water using sectors



# Allocating water and water-related funding more efficiently

## 1. Improving **land-use planning**

- ✓ Some EU policies have exacerbated the sensitivity of some river basins
- ✓ Large development of tourism or farming over-abstraction in water stress areas
- ✓ Need to adapt all economic activities to the amount of water available locally

### *Policy options*

- ⇒ Link with 'Health Check' of 2008 (EU level)
- ⇒ Assess linkages between biofuels and water availability (EU level)
- ⇒ Set up appropriate regulations in water scarce river basins (national level)

# Allocating water and water-related funding more efficiently

## 2. Financing water efficiency

### *Policy options*

- ✓ First challenge ⇒ ensure **efficient use of EU budget** (national level)  
⇒ avoid counterproductive priorities (national level)
- ✓ Refine **Community strategic guidelines** for water infrastructures (EU level)
- ✓ Explore how **policies could better and further** contribute to effective water management (EU level)
- ✓ Develop **fiscal incentives** for the promotion of water-efficient devices (national level)



# Improving drought risk management

## *Policy options*

- WFD has all the flexibility to develop **drought management plans (DMP)**
  - ⇒ Report with recommendations endorsed by EU WD in November 2007 (EU level)
  - ⇒ Setting up of DMP (national level)
  
- Observatory and early warning system** on droughts in development:  
Prototypes and implementing procedures by 2012 (EU level)
  
- Optimise **EU Solidarity Fund** ⇒ examine if progress needed in the definition of criteria and eligible operations to better respond to droughts (EU level)
  
- Optimise **European Mechanism for Civil Protection** ⇒ identify all possibilities of assistance in case of severe drought (EU level)



## Considering additional water supply infrastructures

- ✓ Need to respect **water hierarchy** (EU and national levels)
  - ⇒ **Water saving** must be the priority
  - ⇒ Additional water supply infrastructures to be considered **only when other options exhausted** (water savings, water pricing, cost-effective alternatives) – subject to EU legislation
- ✓ Commission position on **alternative options** (like desalination, waste water re-use) will be based on further assessment – report by end 2008 (EU level)
- ✓ Need to ensure **coherence** between objectives of WFD and objectives of Energy Policy for Europe (EU and national levels)



## Fostering water efficient technologies and practices

- ✓ Water use in the EU could be reduced by **40%** through technological improvements.
- ✓ Approach adopted on **energy efficiency** also valid for water
- ✓ **Policy options**
  - ⇒ Develop **standards** and legislation to cover **water-using devices** (EU level)
  - ⇒ Address the water performance of buildings (EU level)
- ✓ Reduce **leakage** in public and private networks ⇒ adopt binding performances with fines in case of excessive leakage (national level)



# Fostering the emergence of a water-saving culture in Europe

## *Policy options*

**Information, education and training** : priority areas for action

⇒ Develop large campaigns of information, advisory services, exchanges of best practices (national level)

*Consumers demand more information on water performance*

⇒ Encourage inclusion of water management rules in quality and certification schemes (EU and national levels)

⇒ Explore expansion of EU labelling schemes to promote such products (EU level)



## Improve knowledge and data collection

### *Policy options*

- Develop a **water scarcity and drought Information System** across Europe (EU level)
  - ⇒ Information on **extent, impacts** of water scarcity and drought issues
  - ⇒ Description on the basis of **agreed indicators**
- Disseminate the results of **research** on water scarcity and drought issues (EU and national levels)
- Enhance and encourage research on technological activities under the **7<sup>th</sup> Community Research Framework Programme** (EU level)



# Follow-up report of the Communication on water scarcity and droughts

- Commitment by the Commission to deliver a follow-up report by the **end of 2008**
- Report today **in preparation**
- The report will **provide**:
  - **Feedback on progress** made in measures to be implemented at EU and national levels
  - **A work programme** in order to further implement the measures of the Communication



## Next steps on water scarcity and droughts

- **September 2008:** Refinement of the draft follow-up report on the basis of stakeholders' comments
- **End October 2008:** Adoption of the follow-up report by the Commission
- Presentation of follow-up report to Council and Parliament
- **2009 – 2012:** implementation of the work programme included in the follow-up report
- **2012:** review by the Commission of the EU strategy on water scarcity and droughts



## White Paper on adaptation to climate change

- Green Paper on adaptation to climate change adopted in June 2007
- Wide stakeholder consultation in order to prepare a White Paper

Overwhelming support for future action on adaptation

- Need to establish a framework to reduce the vulnerability of social, economic structures and ecosystems to the impacts of climate change

Water will be one of the core issues in the adaptation debate.

# White Paper on adaptation to climate change

⇒ Benefits of early action

⇒ Raising public awareness – develop exchange of information and experiences across Europe

⇒ Green infrastructures

⇒ Grey infrastructures

## Conclusions

A lot remains to be done – Still many gaps in national policies

Need to move towards more water demand management oriented policies

Tight link between the follow-up of the Communication on water scarcity and droughts and the forthcoming White Paper on adaptation to climate change

The annual European assessment will make it possible to follow on a regular basis the evolution of water scarcity and droughts in Europe

Monitoring of the work programme to be part of the follow-up report

Review of the strategy on water scarcity and droughts by 2012



Thank you for attention

# Relevant EU Policies

- ✓ **Nitrates Directive** (91/676): Targeted to prevention and restoration of pollution of waters by nitrates (and phosphates indirectly)
- ✓ **Environmental impact assessment Directive** (85/337): Irrigation projects subject to an environmental impact assessment if MS so decides.
- ✓ **Water Framework Directive** (2000/60): Overall framework addressing quality and quantity aspects.
- ✓ **Communication on water scarcity and droughts** (COM (2007) 414) – **Follow-up Report**
- ✓ **Green paper « Adapting to climate change in Europe – Options for EU action »** (COM(2007) 354) – **White Paper**