



# Water Scarcity & Droughts in the EU

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*Peter Gammeltoft,  
European Commission, DG ENV,  
Protection of Water Environment*

# What is the difference between water scarcity and droughts?

## Droughts

Temporary decrease in water availability due – for instance – to rainfall deficiency

→ Natural phenomenon

## Water scarcity

Water demand for human activities exceeds water resources available and the natural recharge

→ Human-driven phenomenon

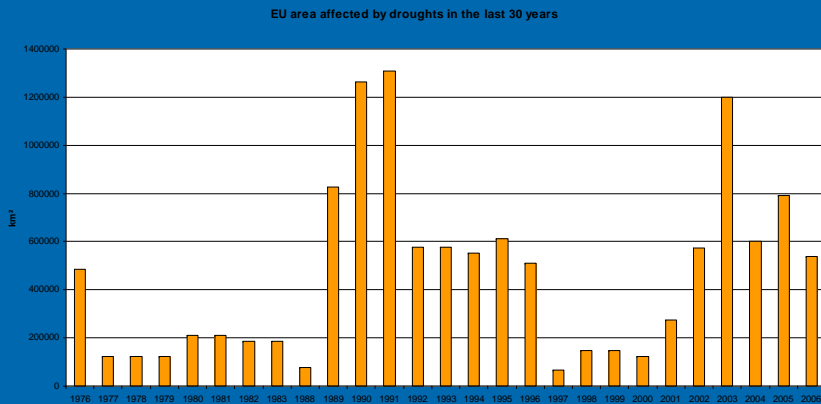
Impacts of droughts  
↗↗ in case of water scarcity

Impacts of water scarcity  
↗↗ in case of drought



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

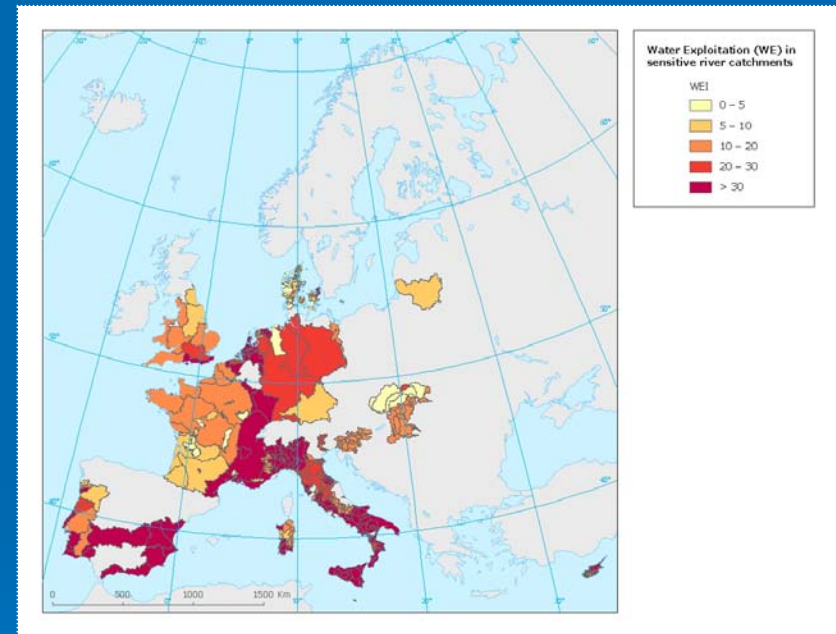
## Droughts



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

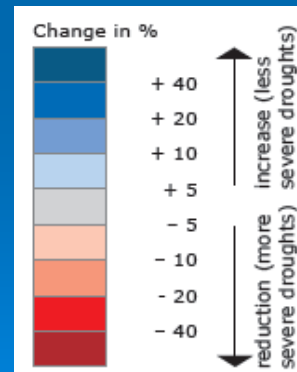
## Water scarcity



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

## IMPACT - DROUGHT

- Increase in frequency and intensity of droughts in many regions of Europe
- Southern and south-eastern Europe are most prone to an increase in drought hazard, but minimum river flows will also increase in many other regions



*Relative change in mean summer minimum 7-day river flow between 2071-2100 and 1961-1990*



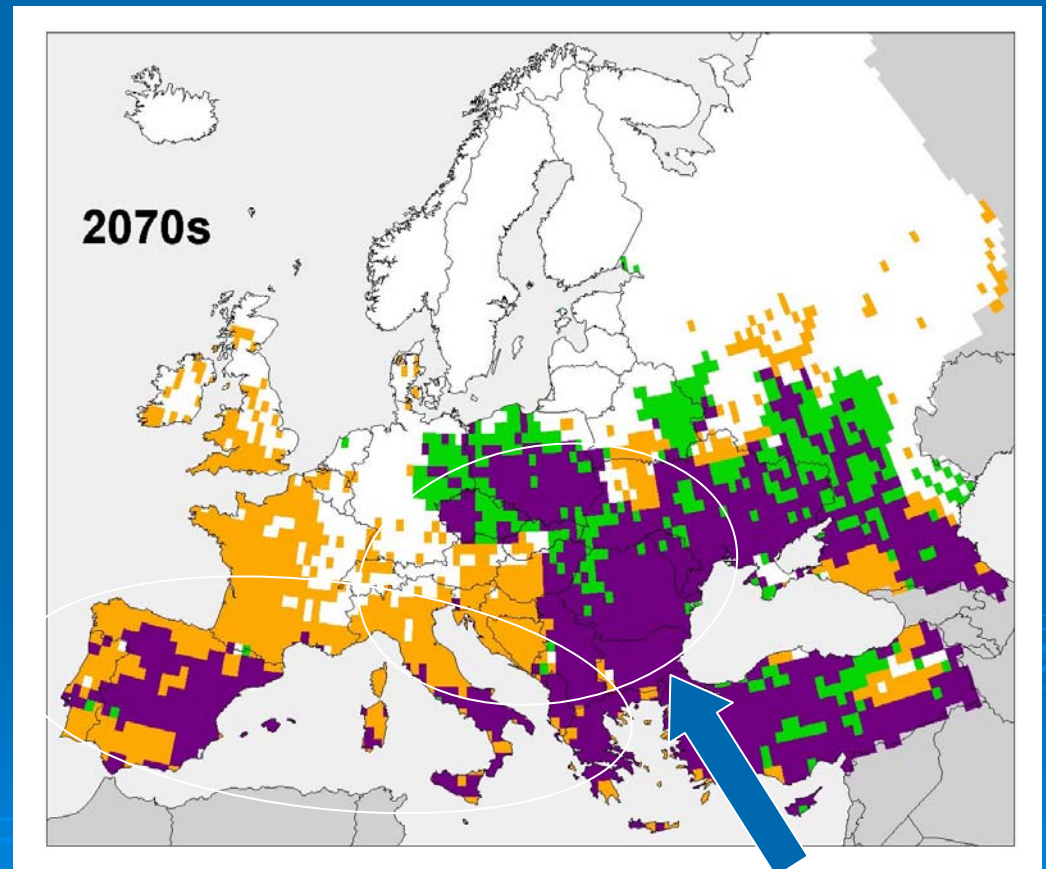
# Expected impacts of climate change and economic development

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

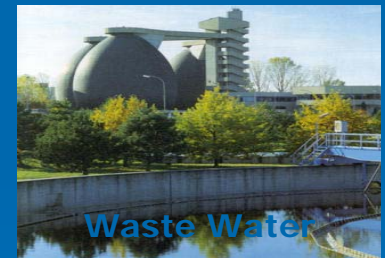
*Southern Europe*



*Eastern Central Europe*

# Pressures on water resources

## + *Climate Change*



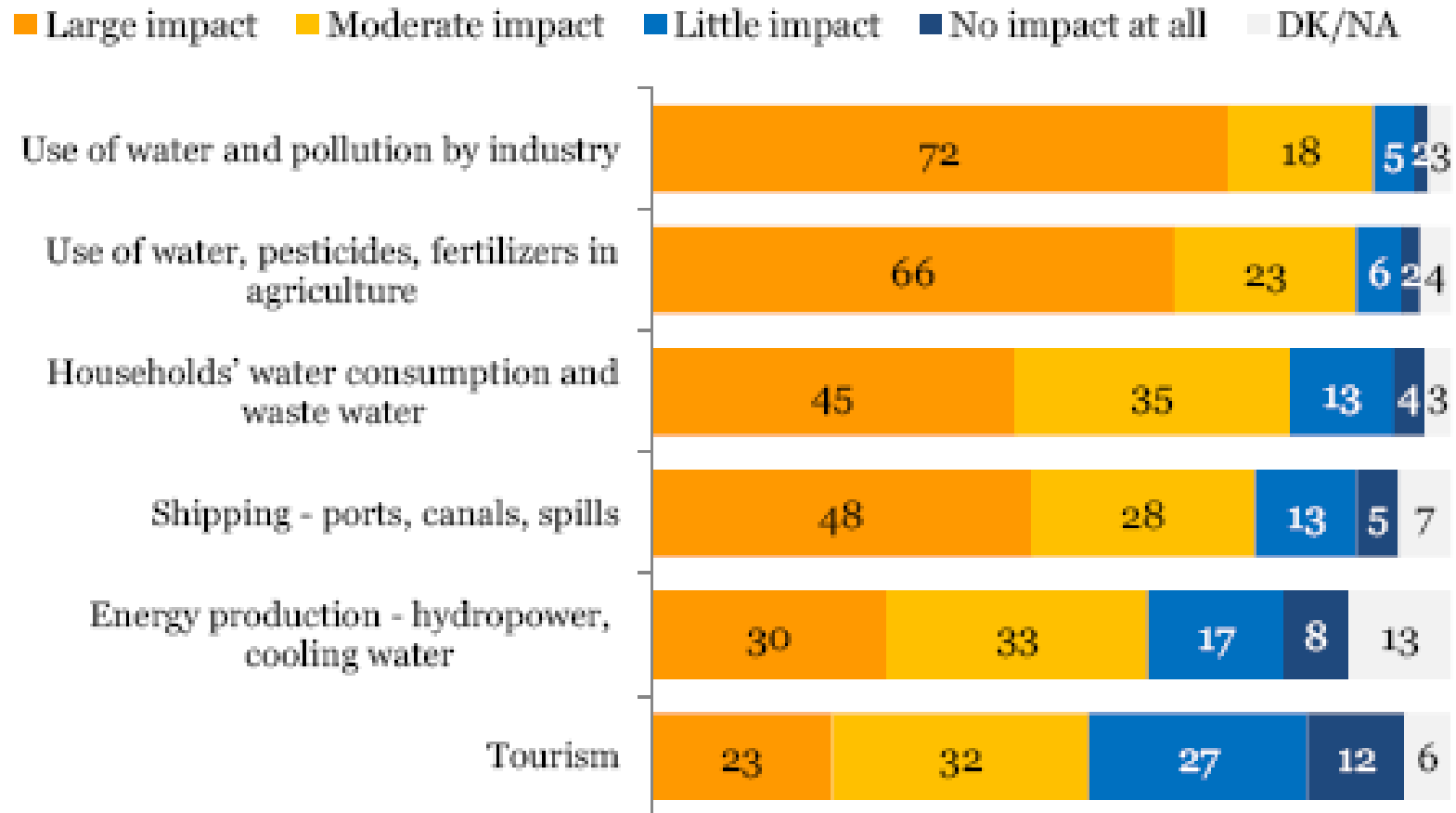
If current trends continue, 1,8 billion people will be living in countries or regions with water scarcity by 2025, and two thirds of the world population could be subject to water stress

*Asha-Rose Migirio, UN Deputy Secretary  
General, 2009*

# Eurobarometer: European's attitudes to water

(March 2009)

## Perceived impact of various factors on the status of water



Q5. Can you please tell me how much impact you think each of the following has on the status of water in your country? Does it have a large impact, moderate impact, a little impact or no impact at all?

Base: all respondents, % EU27



# WS&D

## The policy development till now


- Commission Communication 2007
- Environment Council conclusions of 30 October 2007 - supportive of COM Communication and invited the Commission to review and further develop the WS&D policy by 2012
- European Parliament adopted a report on the Commission communication October 2008, calling for a number of initiatives incl. pilot projects and preparatory actions
- Annual follow up reports
- Launch of Policy Review for 2012

# Commission Communication WS&D 2007

## - 7 policy options

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

# Challenges

- Ineffective water pricing policies
  - Secondary effects of land-use and land-use planning
  - Water savings versus waste of water (40% of water wasted)
  - Partial integration of water concerns in all sectoral policies
  - Get comparable data across Europe
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# Solutions

- Full implementation of existing EU instruments and policies
- Policy integration
- Ensuring effective water pricing policies and applying 'user pays' principle
- Water efficiency and demand management
- Sustainable land-use planning (priority in water scarce river basins) – Address the impacts of all economic activities (IA)
- Drought management & early warning
- Targeted use of EU and national funds to improve land-use planning, promote sustainable agriculture and encourage water saving
- Raise awareness among both businesses and consumers: information, education and training
- Better knowledge and data collection to back up policy-making

# 2012 Policy Review – Context

- The WS& D Policy review will be integrated in a revised European water strategy – a "*Blueprint to safeguard European Waters*"
- The Blueprint will also be based on
  - a report on the implementation of the WFD
  - a review of vulnerability of environmental resources (water, biodiversity, soil etc.) to climate impacts and man-made pressures

# 2012 Policy Review WS&D– Vision

- to introduce a water saving culture in Europe and achieve a drought resilient society
- to ensure demand management allowing to provide water for all essential uses even under aggravated climatic conditions
- Original policy options remain valid – and new to be identified



# Conclusions

- Review of WS&D policy will feed into a "Blueprint to safeguard European Waters"
- Building blocks are being identified and initiated
- Strong synergies with WFD & vulnerability of environmental resources processes
- Key challenges:
  - Improved implementation
  - Improved climate resilience
  - Improved resource efficiency
  - Improved policy integration
  - Post-2013 financial perspectives
  - Other finance
  - Wide consultations



***Thank you for your attention***

***Questions?***

