



Water Scarcity and Drought: increasing issues for France and Europe February 6th of 2007 Tokyo

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agencies to the EU*

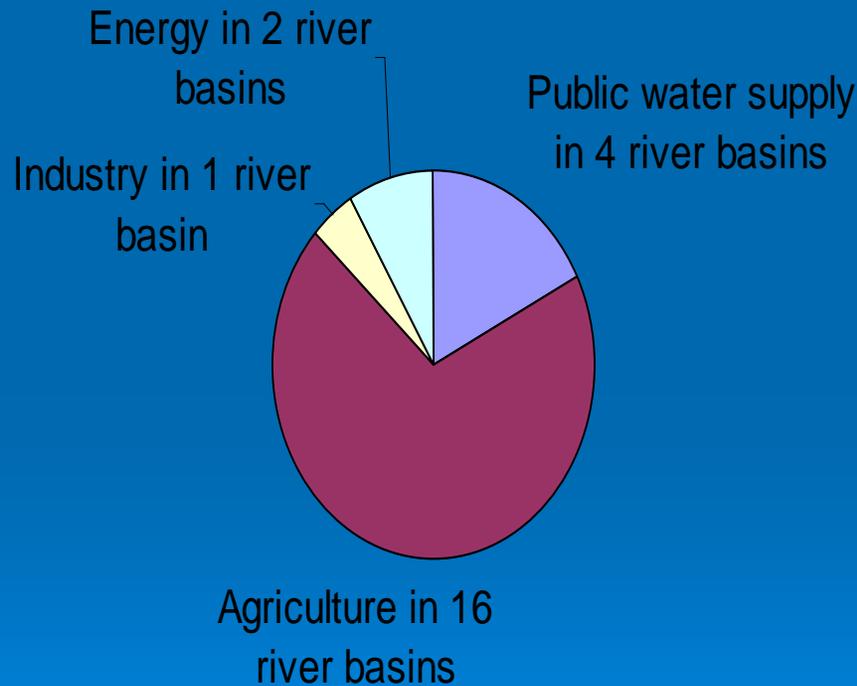


The importance of the phenomena in Europe

	WATER SCARCITY	droughts
countries	14	13 + Norway
Population in million	200	80
Nb of river basins	Almost 26	

The main causes of water scarcity

Main water use in the river basins affected by water scarcity

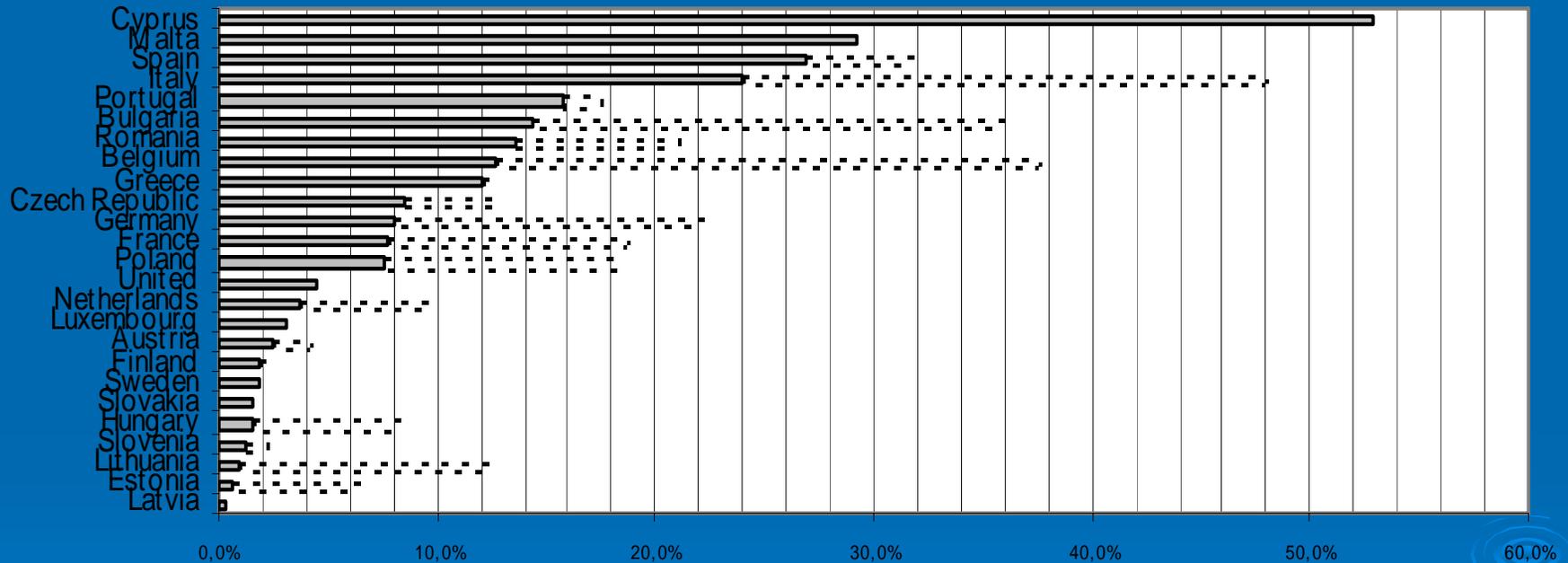


The impacts in Europe

	Water scarcity	droughts Total impact: About € 85 billion
economic	<p>Income losses in agriculture, industrial and energy sectors as well as tourism</p> <ul style="list-style-type: none"> - Investments in water supply infrastructures (desalination plants, new reservoirs, transfers,...) and new water efficient technologies 	<ul style="list-style-type: none"> - Damage on habitations - Urgent supplies - Restrictions in water uses, disruption in navigation
social	<p>Decrease in employment (agriculture)</p> <ul style="list-style-type: none"> - Increase in water prices 	<ul style="list-style-type: none"> - disruption in water supply, quality problems
environm ent	<ul style="list-style-type: none"> - GW: aquifer depletion, seawater intrusion - Surface W: lower river flows, increase of pollutants concentrations, loss of wildlife, deterioration of wetlands 	<p>substitution of hydroelectricity by thermic energy: gas & particle emissions</p> <ul style="list-style-type: none"> - Increase forest fires

Current EU indicator

Water Exploitation Index (WEI) from 1992 to 2003



Water Exploitation Index (%)

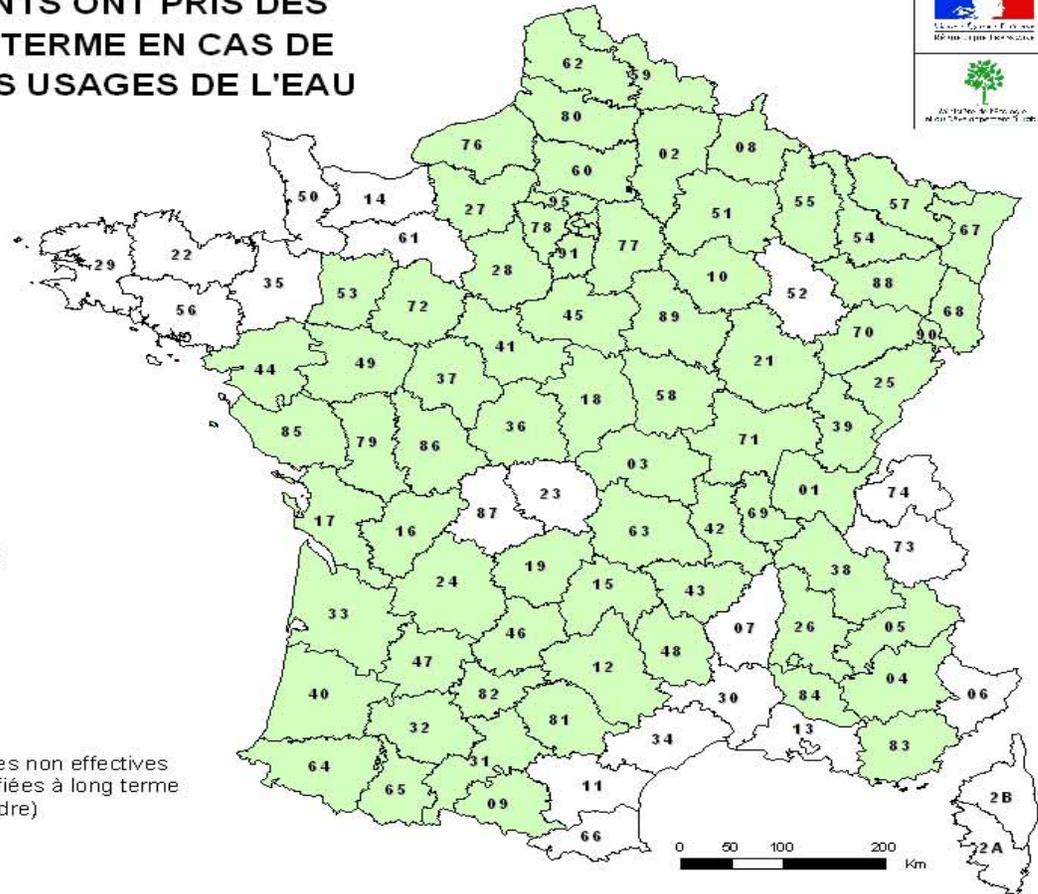
■ WEI - Energy - - - WEI

The situation in France

- Drought events become more and more frequent
- Three important events since 2000
- Around 85% of the 60 million French inhabitants impacted by restriction in 2005
- 75 departments where measures of restriction were taken during the summer 2005
- In 2003, 77 departments were impacted

restriction of uses in France in 2005

CETTE ANNÉE, 75 DÉPARTEMENTS ONT PRIS DES MESURES PLANIFIÉES A LONG TERME EN CAS DE NECESSITÉ LIMITANT CERTAINS USAGES DE L'EAU (ARRETÉS CADRE)



Etat des arrêtés de limitation des usages :

- Néant  Aucun arrêté

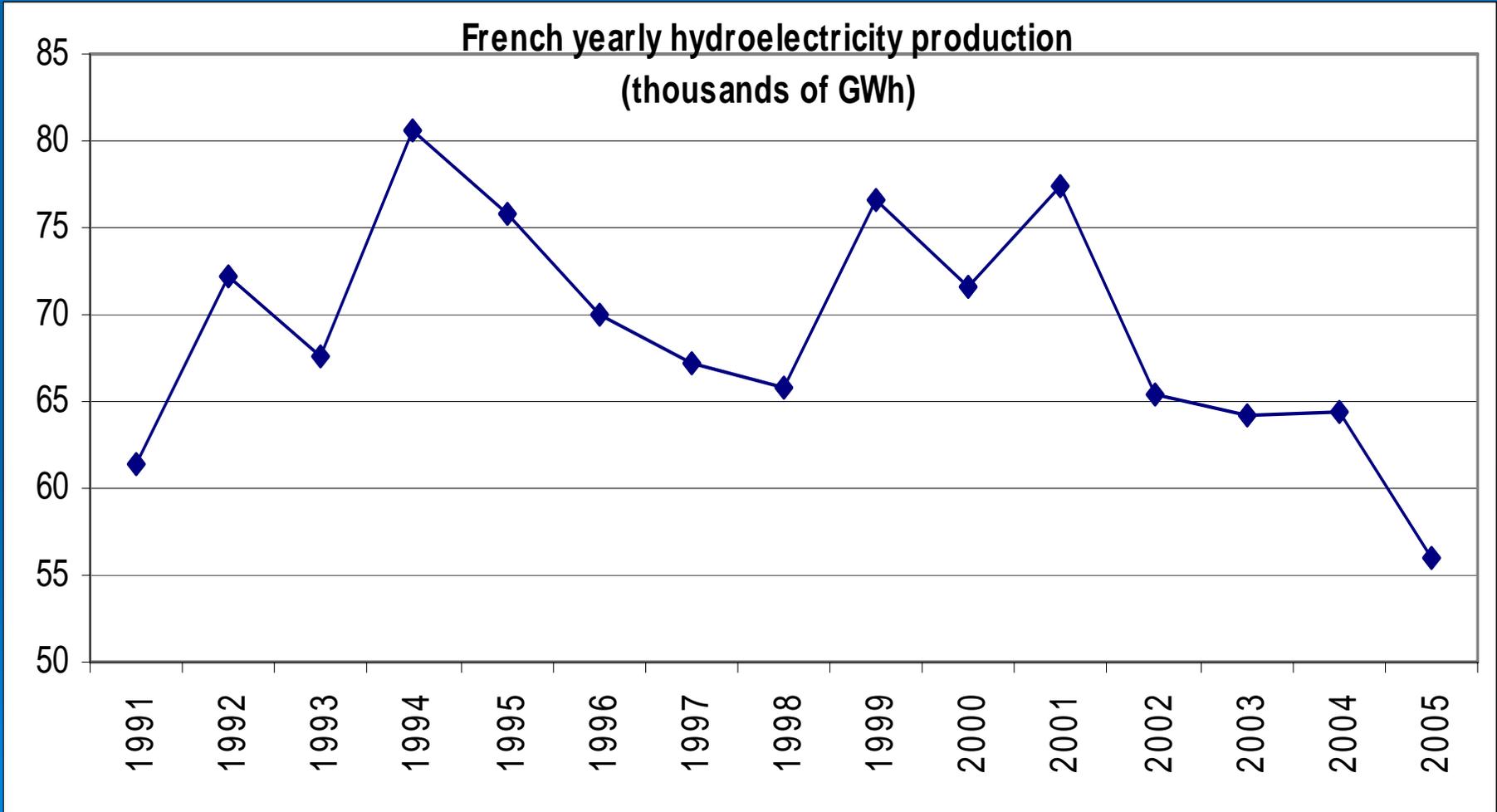
- Mesures planifiées  Mesures de limitation des usages non effectives mais des mesures ont été planifiées à long terme en cas de nécessité (arrêtés cadre)

Réalisation : DIRECTION DE L'EAU
Septembre 2005

Costs for agricultural sector

Year	Subsidies for losses of crops
2003	590
2004	24
2005	250

Costs and losses for energetic sector in France (around 300 M euros in 2005)



Costs of measures to prevent scarcity

- The first event of severe drought in 1976
- Since 1987 the investments to prevent water scarcity represent about 5 billion euros in France, about 30% were financed by water agencies
- The measures deal with: interconnection, transfer, metering, water saving, use of BAT, water charges, storage, water reuse,....

Existing tools in France

- The Masterplans of 1992 include early warning systems with thresholds (information, alert, crisis)
- Restriction measures can be taken at local level
- Monitoring and metering are developed for both superficial and groundwaters
- Agreements are existing with « owners » of dams to provide water for receiving middle during the dry season
- Preventive measures are financed by water agencies and charges are collected

A European initiative: providing guidelines on water scarcity and drought

Chapter I: Definition and assessment of the different phenomena

Chapter II: Drought Planning and Management

Chapter III: Long term imbalances in supply and demand

Chapter IV: Common principles (Conclusion and Recommendations)

+ A policy summary

The documents were endorsed by the EZU water directors



Which needs at EU level to deal with water scarcity and droughts?

- Need to integrate social, economic and environmental aspects
- Need of coordination of measures (international RB)
- Need to take lessons from previous drought events
- Need to include drought sub management plans in Programme of Measures (PoM) and River Basin Management Plans (RBMP) where and when necessary



Main challenges to ensure the consistency between WFD implementation and scarcity issues

1. take into account the possible «competition» between water scarcity and environmental protection issues and objectives (WFD) in the future (GES by 2015)
2. Improve the link between WFD implementation and water scarcity management particularly for the interpretation and the implementation of articles 4.6 and 4.7 (dealing with exemptions to environmental objectives)



Main recommendations

- When and where needed, a specific “drought management (sub)plan” should be included in the WFD RBMP (art. 13.5).
- Public participation (art. 14) should also be organized around water scarcity management issues
- When developing the WFD PoM and associated RBMPs (art. 11 and 13), quantitative and qualitative aspects should be jointly considered
- The integration of specific quantitative management measures inside the PoM could add supplementary constraints (technical and financial) to be taken into account, specially when justifying the potential exemptions, a clear link with article 4.6 “prolonged drought” should be made.



Now EU countries see the need of a political initiative

No new directive

Need to fill different types of EU identified gaps:

- Technical gaps
- Financial gaps
- Legal gaps

- A political initiative because the WFD has imposed new constraints: the GES, in countries already suffering from scarcity

Technical gaps in Europe and proposed actions

Gaps

-no evaluation of the effectiveness of quantitative measures for offer, supply, long and short term action



-No catalogue of quantitative measures to prepare PoM of the WFD



Actions

- Need to include these questions in research framework programm

-Work within the CIS to identify possible quantitative measures

Financial gaps in Europe and proposed actions

Gaps

Need to reinforce the second pillar of the Common agricultural policy at EU level

Need to adapt regional funds to district scale and needs

Actions

→ -Consultation between DG env and DG Agri

→ -Work between DG env and DG regio to go from a regional scale to a district scale

legal gaps in Europe and proposed actions

Gaps

No clear definition of « prolonged drought » in article 4.6 →

Need to clarify quantitative derogation in article 4.7 →

No standards for water reuse (public health) →

Actions

-Need of a guidance for article 4.6

-Need of a guidance for article 4.7

-Need to work on the definition of standards



Thank you for your attention

