

Economic Evaluation in EU Water Framework Directive

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EU Water Framework Directive

- New holistic approach in water resources management
- Integrating environmental concerns
- No more single sector regulations for water uses
- Establishment of methods and objectives rather than detailed prescriptive requirements on EU-level
- Implementation in river basins and river basin districts

WFD: 8 major issues

- 1. Overall aim: good water status of all surface waters**
(Art. 4, app. V)
- 2. Water management on a river basin scale** (Art. 3)
- 3. River basin management plans and programmes of measures for all waters**
(Art. 11 and 13, appendices Vi, VII, VIII)
- 4. Combined approach for point and diffuse source**
(Art. 10, app. IX)
- 5. Economic analysis, principle of cost recovery, polluter pays principle** (Art. 9, App. III)
- 6. Public participation** (Art. 14)
- 7. Protected areas** (Art. 6, app. IV)
- 8. Reduction of dangerous substances** (Art. 16, app. X)

Art. 5

**Characteristics of the river basin district,
Review of the environmental impact of human activity,
economic analysis of water use:**

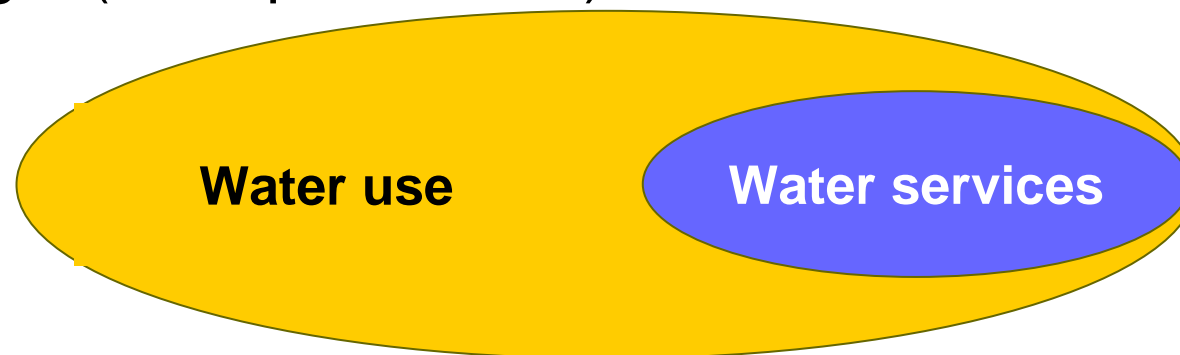
- an analysis of the characteristics of a river basin district,
- **a review of the impact of human activity on the status of surface waters and on groundwater,**
- **an economic analysis of water use**

Economic Analysis

□ **water use**

- Water use: water services together with any other (human) activity having a significant impact on the status of water.

i.e.: inland navigation, hydropower, fisheries, sports and leisure, irrigation, drainage, water supply, waste water discharge, (flood protection?)



Economic Analysis Annex III

□ **water use**

□ The economic analysis shall contain information for:

- making the relevant calculations for recovery of costs of water services, for taking account of long term forecasts of supply and demand for water, and where necessary:
- estimates of the volume, prices and costs associated with water services, and
- estimates of relevant investment to make judgements about the most cost-effective combination of measures

Article 9

Recovery of costs for water services

Member States shall take account of the **principle of recovery of the costs** of water services, including **environmental and resource costs**, and in accordance in particular with the **polluter pays principle**.

Environmental and resource costs

- **Environmental costs:** costs of the environmental damage costs of aquatic ecosystem degradation and depletion caused by a particular water use.

→ **incentive to reduce environmental damage in aquatic systems**

- **Resource costs:** opportunity costs of using water in a particular way (e.g. through abstraction or wastewater discharge) even though an alternative water use would generate a higher economic value.

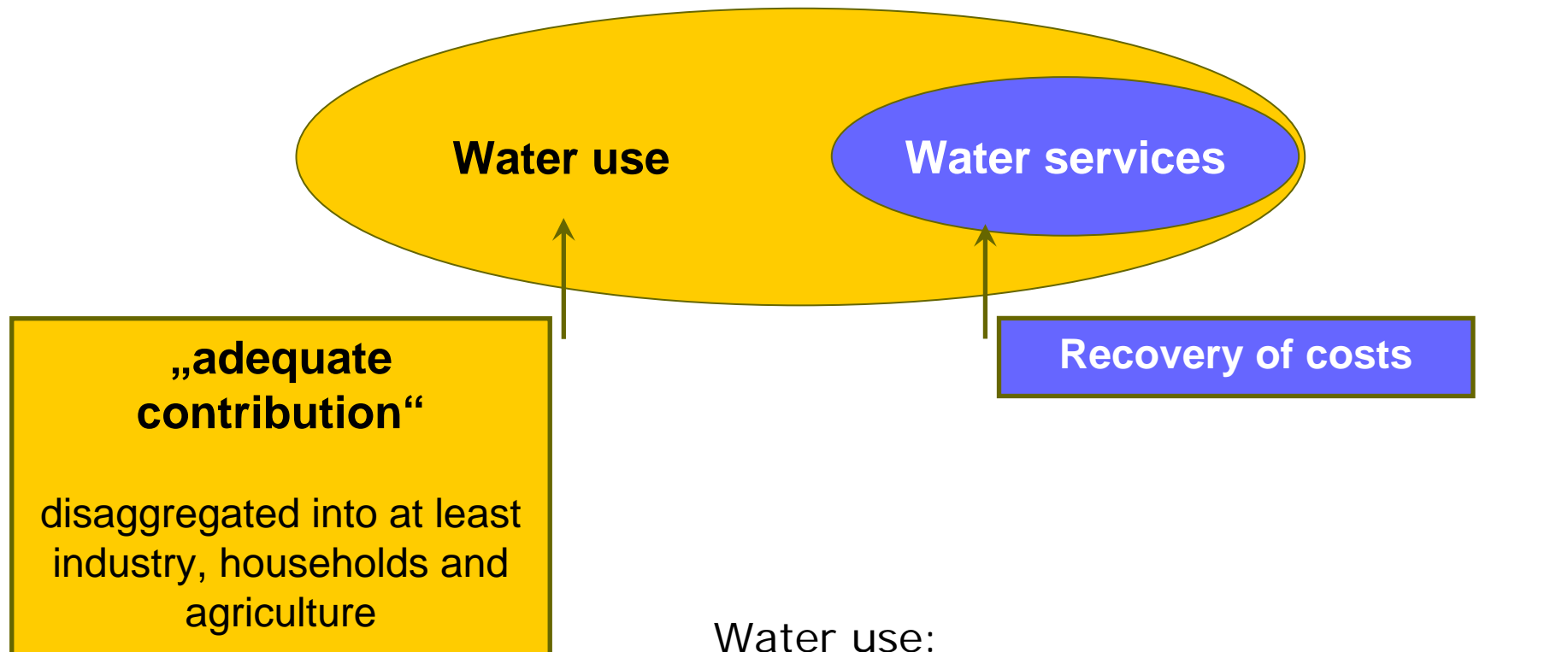
→ **incentive for efficient resource allocation**

Art. 9 (cont'd)

Member States shall ensure

- that water-pricing policies provide adequate incentive .. to use water resources efficiently, and thereby contribute to the environmental objectives of this Directive,
- an adequate contribution of the different water uses, disaggregated into at least industry, households and agriculture, to the recovery of the costs of water services, based on the economic analysis and taking account of the polluter pays principle.

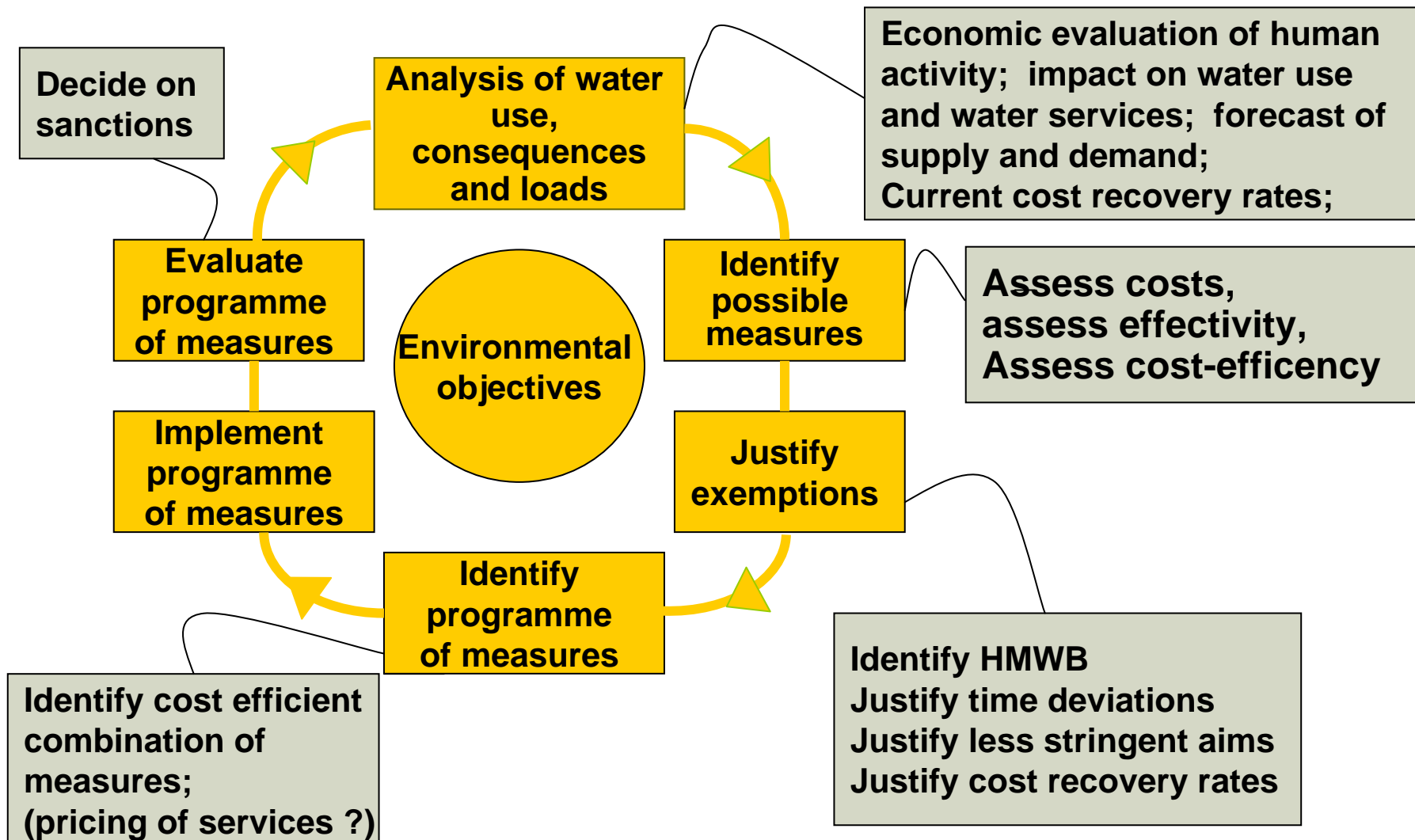
Recovery of cost



Water use:

inland navigation, hydropower, fisheries, sports and leisure, irrigation, drainage, water supply, waste water discharge, flood protection?)

Economic aspects in the WFD



Tourism and water use

- **Analysis of water use**
(sector, economic relevance, water use ?)
- **Environmental costs**
(environmental damage?)
- **Resource costs**
(opportunity costs?)

**Thank you for
your attention**