

## IKSE/MKOL Workinggroup ECO - 8th session



# Economic Instruments in the Water Framework Directive: An Opportunity for Water Protection

Shortcomings in the First Management Cycle and the  
Need for Action

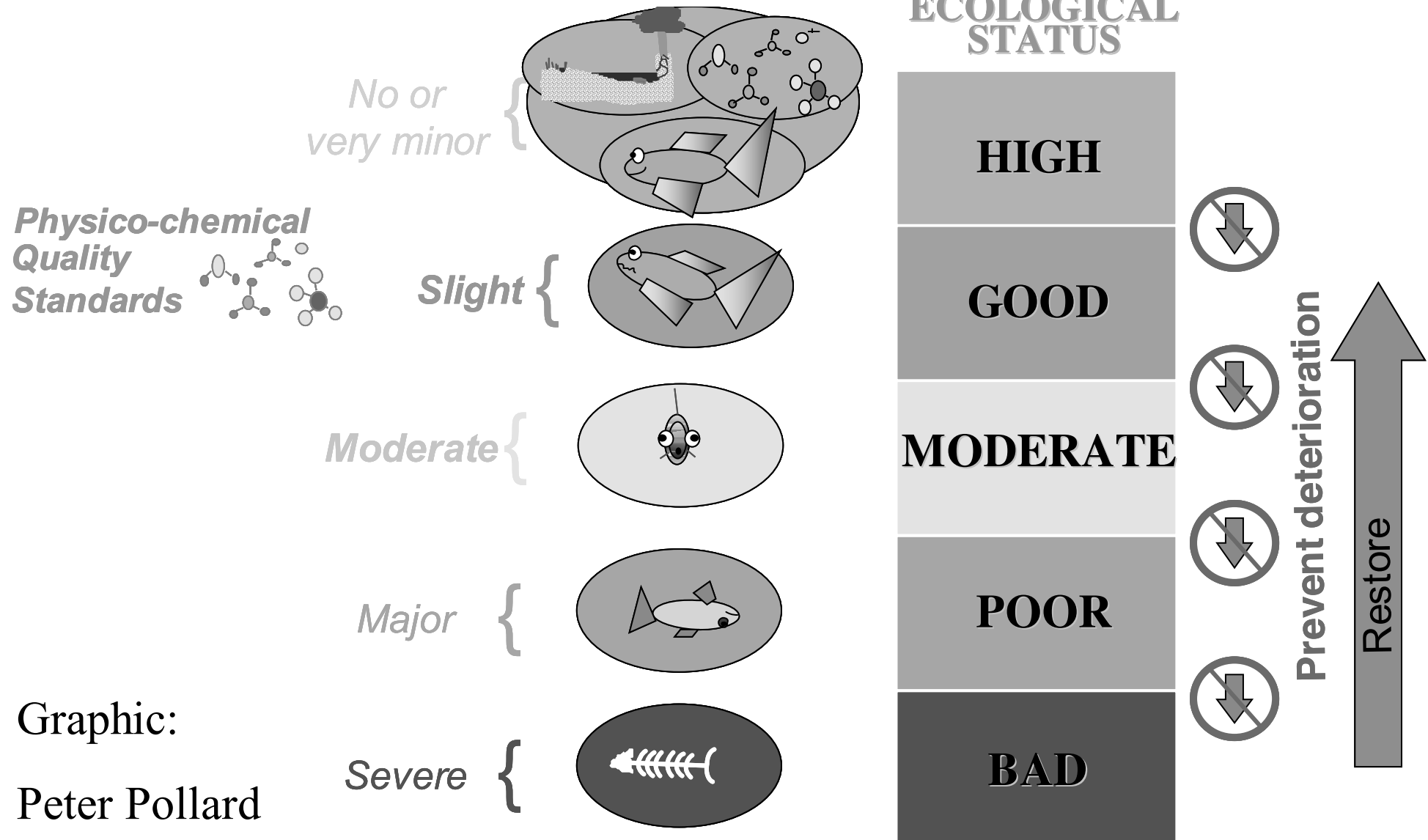
Ministry of Environment  
Prag, 8-9 March 2011

**Michael Bender**  
**GRÜNE LIGA e.V.**

**Bundeskontaktstelle Wasser / Water Policy Office**

# Economic Instruments in the Water Framework should support environmental objectives

## ECOLOGICAL STATUS

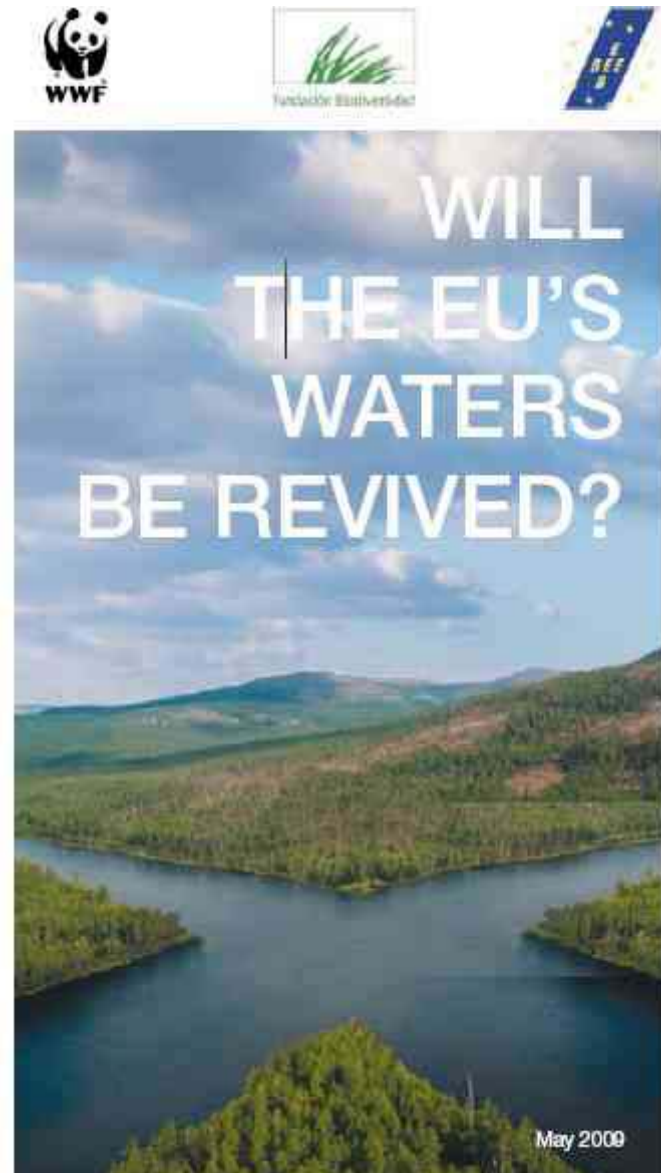


Graphic:

Peter Pollard

## Five priorities for better water management:

- Transparent and publicly owned water management
- Reducing wastage and using water well
- More space for living rivers
- Healthy, safe water for people and nature
- Visionary and adaptive water policies



## 1 Economic analysis (general):

Do the economic analyses provide sufficient information to assess the economic relevance of water uses?

## 2 Heavily Modified Water Bodies:

Have disproportionate costs been specified?

## 3 Exemptions (extension of deadlines and less stringent environmental objectives):

Have disproportionate costs been specified?

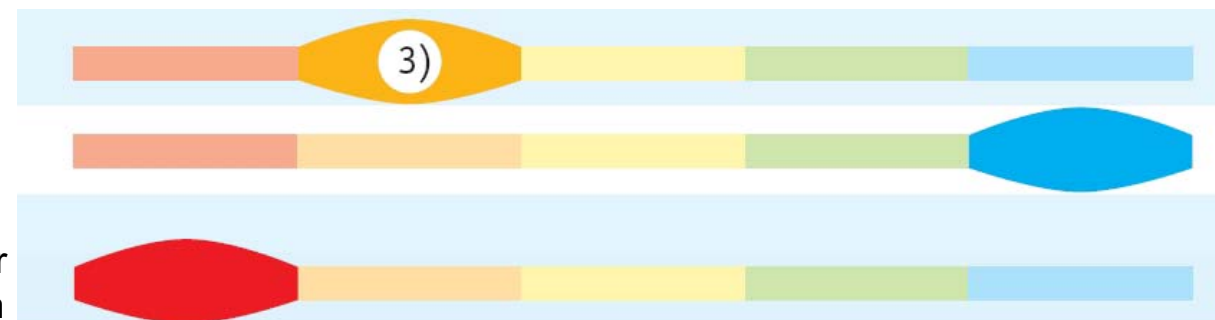
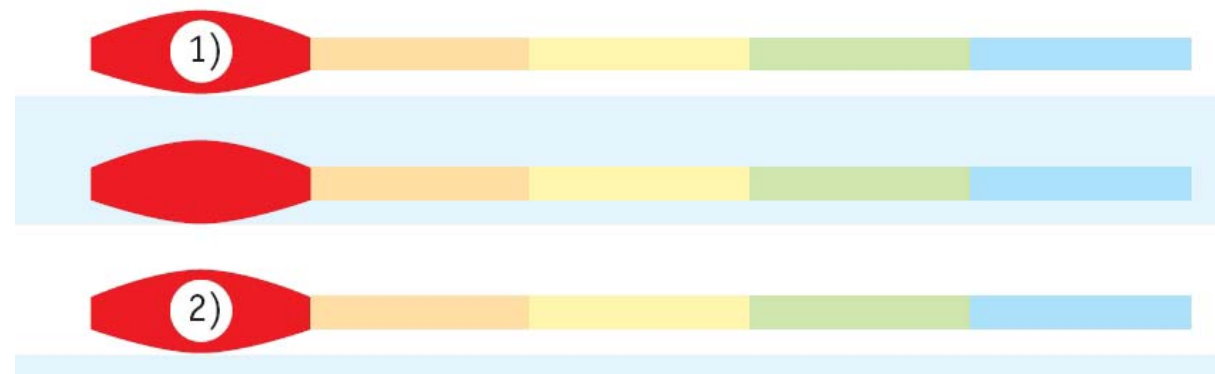
## 4 Polluter pays principle and recovery of costs:

a) Have all relevant water uses been defined as water services?

b) Has recovery of costs been achieved in the prices for public water supply and wastewater disposal?

c) Have rates of cost recovery been determined for all other water services according to their definition in the RBMP

(abstraction for irrigation, industrial “self-abstraction”)?



The economic analysis published in 2005 and summarised in the German River Basin Management Plans (RBMP) does not supply enough information to act as a basis for determining the economic relevance of water uses in relation to the scope of their adverse effects on water management and for evaluating the cost efficiency of measures.

»

**Conclusions of GRÜNE LIGA:**  
*The analysis of water uses represents an important weakness in the RBMPs.*

*The economic analysis of water uses, which has hitherto been insufficient, should be resumed as a matter of urgency and it should not be postponed until the next Management Cycle.*

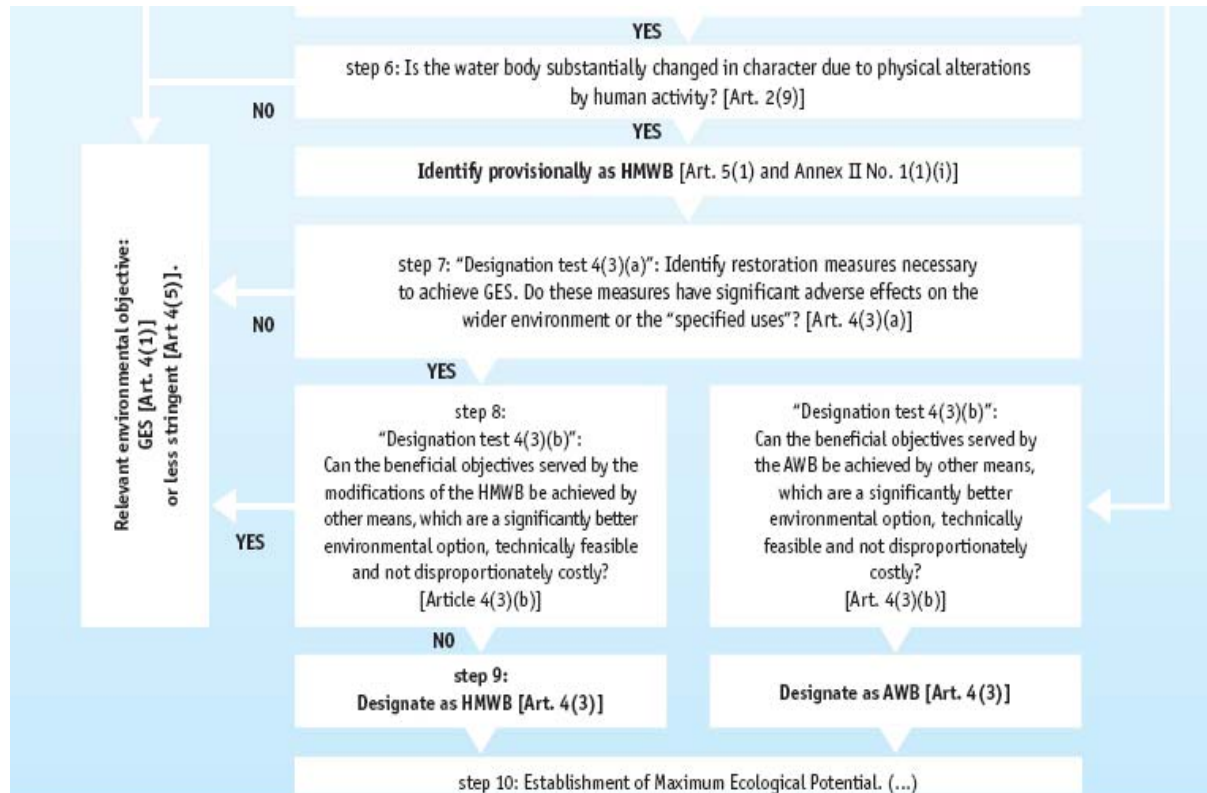
*Article 5 WFD provides for a re-evaluation by 2013; the major inaccuracies and weaknesses must be corrected as part of this process.*



Picture:  
Wasserwirtschaftsamt München



## Heavily Modified Water Bodies and exemptions



Excerpt of the decision tree for HMWB designation as given in the Guidance Document of the CIS Working Group 2.2

»**Conclusions of GRÜNE LIGA:**  
*It can be assumed that by designating a water body as „heavily modified“ and „artificial“ there has been almost no serious assessment of the economic criteria as required by the WFD! This is a striking contravention of the Directive's requirements.*

*Thus, a reassessment of HMWB designation must be carried out as a matter of urgency.*

*Where there has been recourse to deadline extensions and less stringent environmental objectives, disproportionate costs must be discussed in a more concrete manner than has hitherto been the case in the RBMPs.*

Most federal states simply list very generally those uses of the water body whose *mere existence* justifies designation as an HMWB  
The designation Tests (step 7 and 8) have not been carried out.

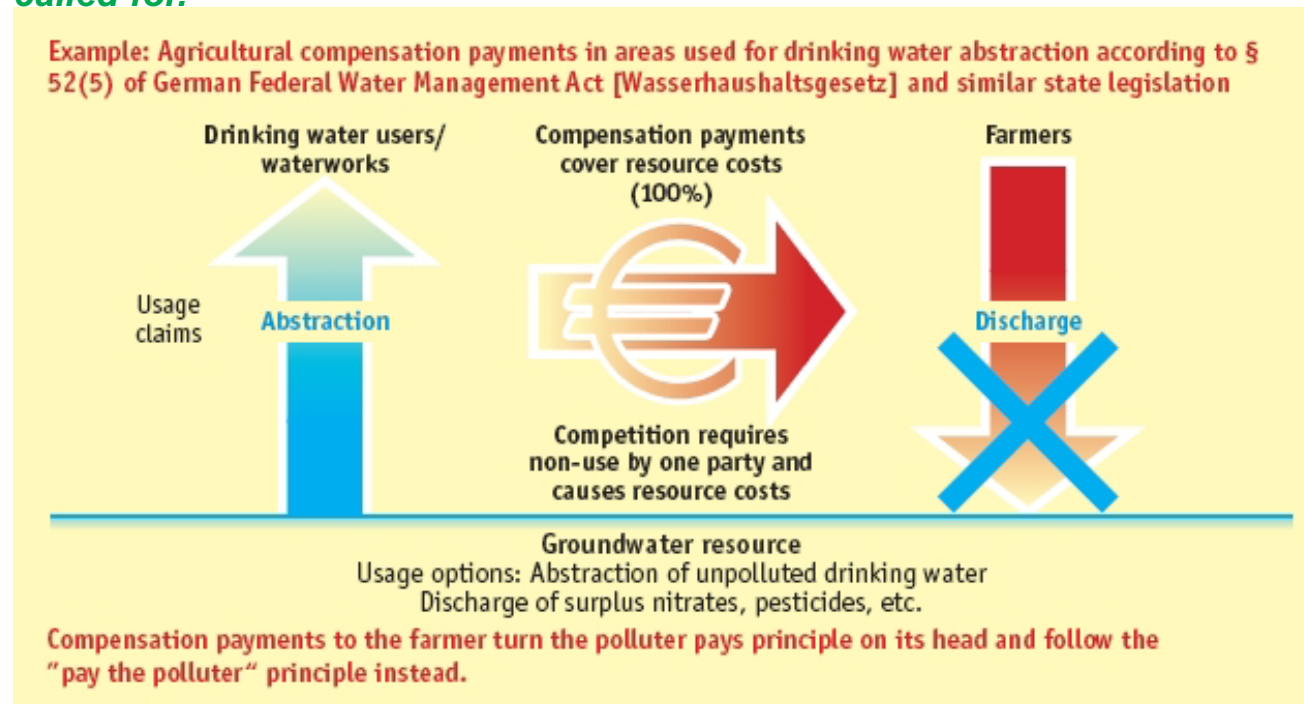
## Polluter pays principle and principle of cost recovery

»

### Conclusions of GRÜNE LIGA:

*The polluter pays principle and the principle of cost recovery are set forth in article 9 WFD. In view of its impreciseness and the dispute surrounding the meaning of article 9, it should be remembered that the „polluter pays“ principle and the principle of cost recovery have been anchored in German water management and environmental policy for many years.*

*However, the use of these two principles ranges from nearly full application to no inclusion and anywhere in between, depending on the water use. A more systematic application for all water uses is called for.*



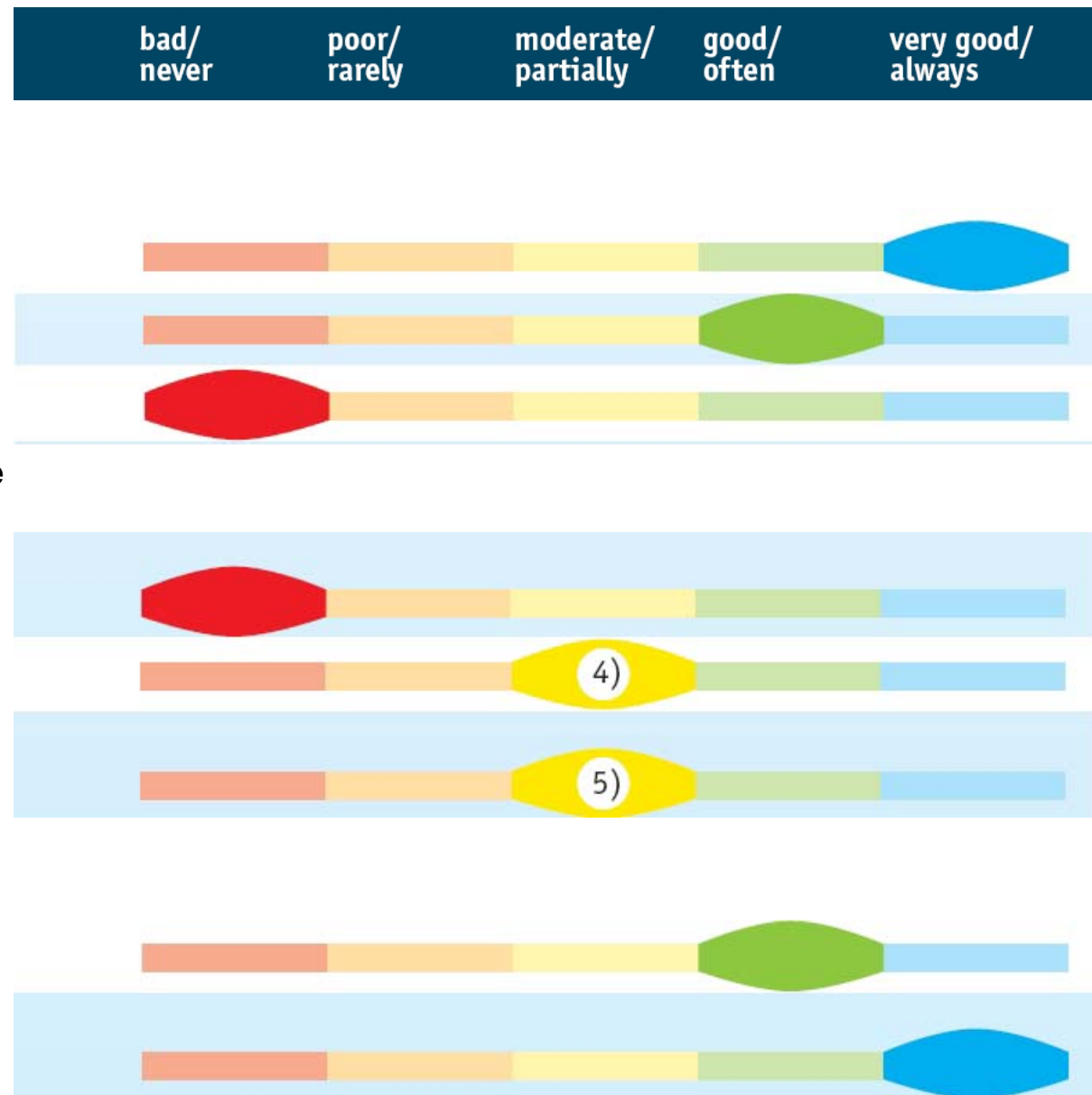
*To apply the polluter pays principle more consistently: oblige energy producers, mining companies, agricultural business and other intensive water users to pay adequate contributions to the recovery of costs.*

## 5 Incentives of water pricing:

Do the prices/waste water charges provide incentives for efficient water use/for water saving for:  
Public water service including wastewater treatment?  
Industry?  
Agriculture, Mining industry?

## 6 Internalisation of environmental and resource costs:

- Have the environmental and resource costs of water services been identified?
- Have attempts been made to integrate environmental and resource costs into **water abstraction fees/taxes**?
- Are revenues from water abstraction fees/taxes earmarked for water resource protection or ecological improvements?
- Have attempts been made to integrate environmental and resource costs into the **wastewater tax**?
- Are revenues from the wastewater tax earmarked for water resource protection or ecological improvements?





## Water prices and Water abstraction fees

»

### **Conclusions of GRÜNE LIGA:**

*Quantity-dependent water prices for public water supply in Germany, which by and large recover costs, have been a successful model – also when compared to other EU countries – and have led to a significant reduction in drinking water consumption since 1990. The incentive effect of this pricing structure should not be carelessly put at risk.*

*Instead, the objective should be to transfer the effective incentives of quantity-dependent prices that recover costs to other water abstractions and uses.*



Compiled for GRÜNE LIGA by  
Alexandra Gaulke on the basis of the budgets  
of individual federal states.

## Internalisation of environmental and resource costs



### Example: Lack of water abstraction taxes for mining and energy production

Mining and energy production are by and large exempt from a duty to pay in all federal states where a tax or fee is levied on water abstraction. In future, the full rates for water abstraction charges should be applied in particular to these sectors as their water uses are associated with high external costs. Thermal power stations – which abstract 20.1 billion m<sup>3</sup> (2007) of water annually – represent the largest water users nationally across Germany. Coal mining requires about 800 million m<sup>3</sup> of freshwater. The long-term negative implications are clear from the decision to set less stringent environmental objectives (according to article 4 paragraph 5 WFD) for nine groundwater bodies in the German Elbe River Basin that are affected by mining because it will not be possible to achieve a good status even by 2027.

Yet there have not even been rudimentary calculations in the River Basin Management Plans nor in the economic analysis which allow the enormous costs of mining and cooling water usage to be quantified.

## Internalisation of environmental and resource costs



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### **Conclusions of GRÜNE LIGA:**

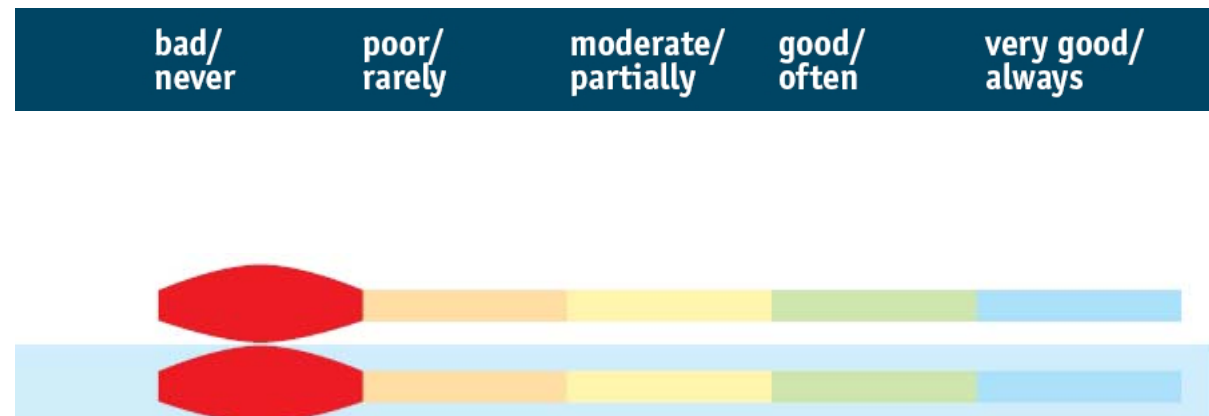
***Water abstraction taxes and the wastewater tax are currently the most important instruments for allocating environmental and resource costs to polluters. The national wastewater tax should be retained. Introduction of water abstraction taxes in all federal states and the expansion of the scope of these usage-linked taxes is a matter of urgency.***

***There is still a great deal of leeway to (re)design water abstraction taxes in a sensible manner from an ecological and environmental perspective at the state level. This room to manoeuvre should be used promptly in order to achieve the environmental objectives of the WFD. In accordance with article 9 WFD, 2010 would have been a good time for this.***

***There is a particularly urgent need for far-reaching exemptions, such as for mining and energy production, as well as agriculture, to be removed since these act as subsidies that cause considerable environmental damage. In essence, failure to remove unreasonable privileges for individual groups of users is down to a lack of political will.***

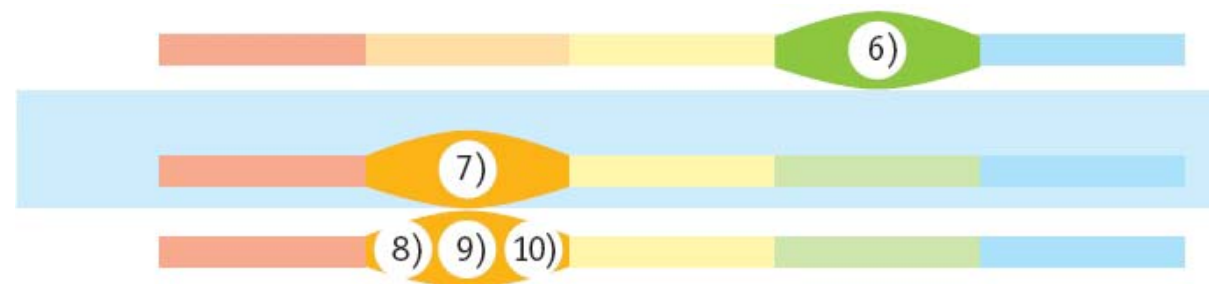
## 7 Harmful subsidies:

- a) Have subsidies with adverse ecological effects (agriculture, inland navigation, hydropower, flood protection, etc.) been identified and quantified?
- b) Have counter-productive subsidies been revised?



## 8 New financial instruments:

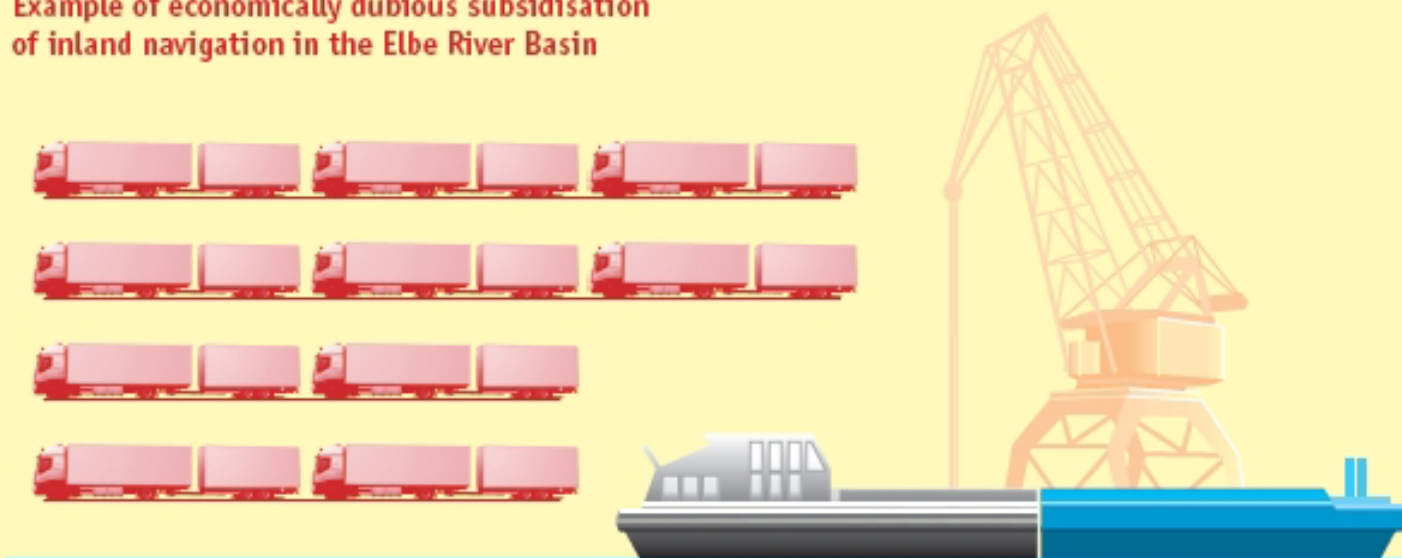
- a) Have financing and funding instruments been introduced into water management or expanded?
- b) Have new funding instruments been introduced into other relevant policy fields (policy integration), e.g. funding in agri-environmental programmes?
- c) Have new economic incentive instruments been introduced (e.g. nitrogen surplus tax)?



## Harmful subsidies

There has been no reassessment or reversal of subsidies for ecologically harmful water uses by agriculture, inland navigation, energy production, flood protection, tourism, etc. in the RBMP's. ...

### Example of economically dubious subsidisation of inland navigation in the Elbe River Basin



In the first quarter of 2005, the volume of goods transshipped at the port of Halle/Saale totalled a mere 391 tonnes. This broadly equates to ten lorry-loads or half a shipload. EUR 80 million are earmarked for investment to expand the waterways along the River Saale. Navigation on the River Saale is not mentioned anywhere in the Elbe RBMP.



## Harmful subsidies

But after about 20 years of discussion the ministry of transport starts to reconsider infrastructure investments in inland navigation according to actual transport volume.

### Gütertransport Prognose 2025

Seewärtige Zufahrten



Gütertransport  
≥ 10 Mio. t



Gütertransport  
≥ 5 Mio. t



Gütertransport  
≥ 3 Mio. t



Gütertransport  
≥ 1 Mio. t



Gütertransport  
≥ 0,1 Mio. t



Untersuchungen zu  
Wasserstraßen mit  
touristischer Nutzung

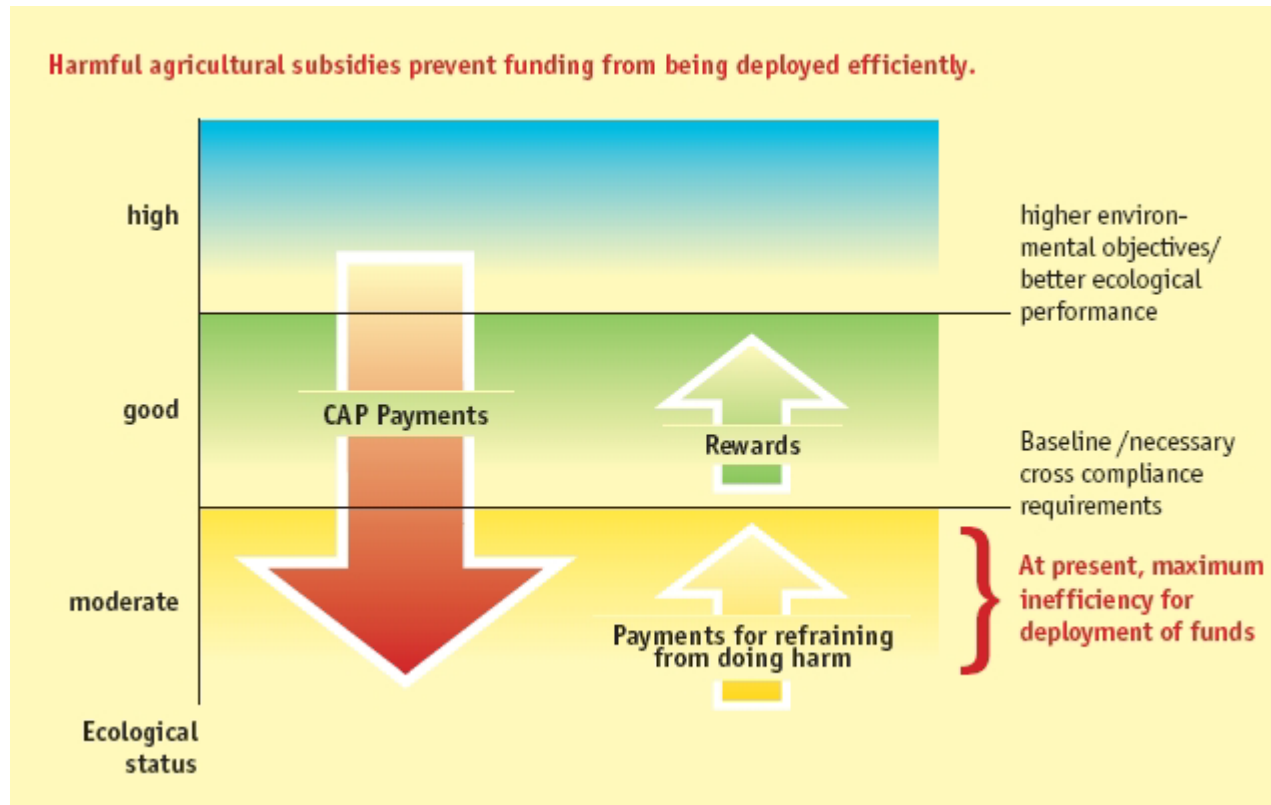


Rest



Grafik aufgebaut auf Karte von www.wsv.de  
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## Harmful subsidies



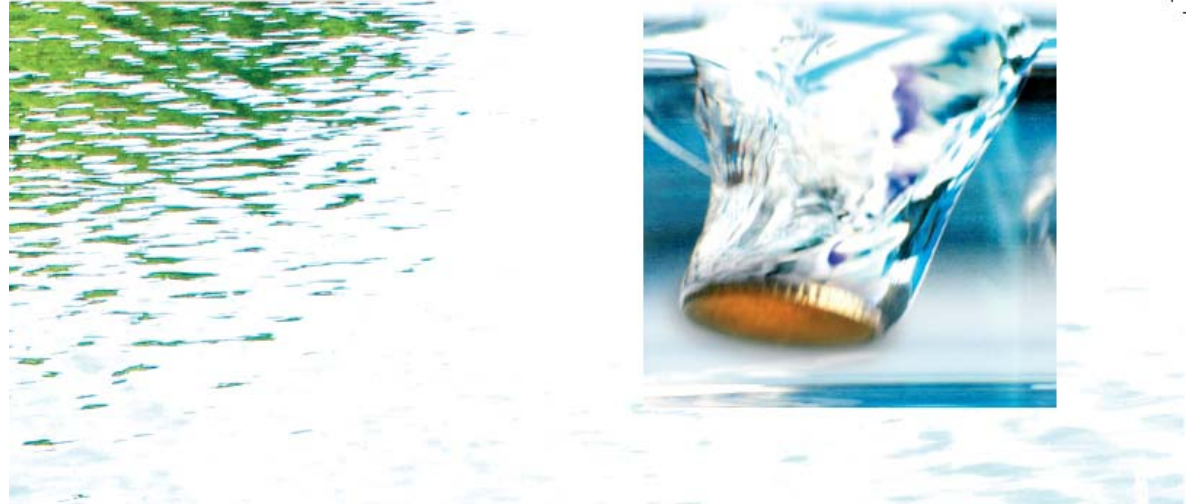
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### Conclusions of GRÜNE LIGA:

*The large number of ecologically harmful subsidies should be evaluated comprehensively in terms of their extent and their impact on water resources.*

*It is necessary to take corrective action for subsidy policy, particularly in the area of agricultural funding, and this must take priority over the deployment of additional grants and funding.*

## New economic instruments



There has been surprisingly little said about new economic instruments as part of the River Basin Management Planning process in Germany.

In light of the pressing need to reduce the use of resources, substance-specific taxes on the use of pesticides and mineral fertilizers should be investigated.

»

### **Conclusions of GRÜNE LIGA:**

***The broad lack of new economic instruments indicates that there are still significant shortcomings and challenges in the field of policy integration.***

***The introduction of a nitrogen surplus levy and/or wider application of schemes for agricultural best practise seems particularly urgent.***

## 9 Cost-effective combination of measures:

Have measures been selected and prioritised according to their cost-efficiency?

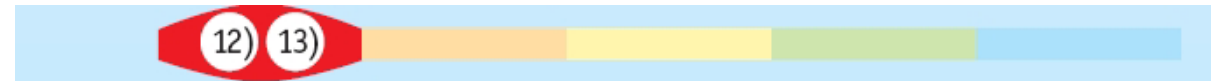


## 10 Benefits for the environment and society:

a) Have ecological improvements been valued in monetary terms (e.g. lower maintenance costs, etc.)?

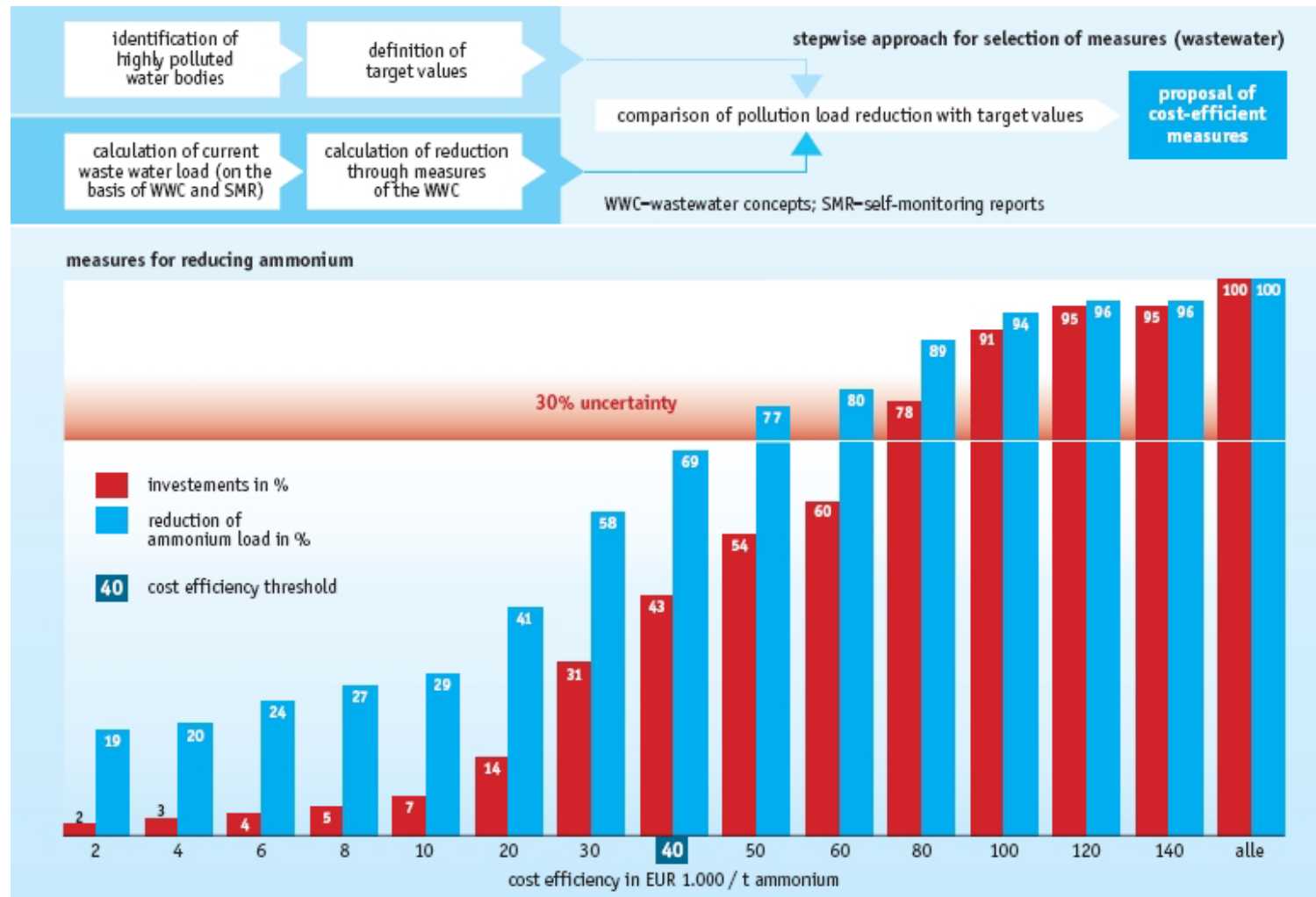


b) Have ecosystem services been taken into consideration as benefits?



## Cost-effective combinations of measures

There are relatively few details relating to the cost-effective combinations of measures in the German RBMPs. There may still be considerable potential to improve the ecological efficiency for the deployment of funding by using systematic approaches.



In Thuringia, cost efficiency thresholds for measures to reduce P- and N-loads were defined in order to select measures for the first management cycle.

This was based on an evaluation of 6.500 potential measures from wastewater concepts regarding their respective costs and potential effect. As a result, thresholds for a permanent reduction of pollution loads were defined at EUR 150.000 per t for phosphorous and EUR 40.000 per t for ammonium.

(Source: RBMP Thuringia)



## Benefits of water protection for society and the environment



On the whole, the *economic and social advantages* which are offered by implementing the requirements of the WFD are not discussed in the RBMPs in Germany – neither in terms of the monetary advantages of ecological improvements nor with regard to the wider benefits that arise from providing ecosystem services.

»

### **Conclusions of GRÜNE LIGA:**

***Cost-benefit analyses should be a standard instrument for water management planning and be used regularly, even for flood protection measures.***

***Improved water protection creates economic benefits and adds to quality of life!***

## But Who cares???



**Die ökonomischen Instrumente  
der Wasserrahmenrichtlinie  
als Chance für den Gewässerschutz**

Defizite und Handlungsbedarf  
im ersten Bewirtschaftungszeitraum

Positionspapier der GRÜNEN LIGA e.V.  
zu den deutschen Flussgebietsbewirtschaftungsplänen

**GRÜNE LIGA** Netzwerk  
Ökologischer  
Bewegungen

IKSE/MKOL WG ECO 8  
Prag, 7-8 March 2011

## WFD-Policy Papers and WRRL-Info-newsletters



**GRÜNE LIGA** Netzwerk  
Ökologischer  
Bewegungen

Michael Bender  
Tobias Schäfer

**Gewässerschutz im Zeichen  
der Wasserrahmenrichtlinie**

Konflikte, Handlungsfelder und gute Beispiele



**GRÜNE LIGA** Netzwerk  
Ökologischer  
Bewegungen

**WRRL-INFO 18**

**INFORMATIONEN ZUR EG-WASSERRAHMENRICHTLINIE**  
GRÜNE LIGA e.V. BUNDESKONTAKTSTELLE WASSER AUGUST 18 - AUGUST 2009

**EINSCHÄTZUNG DES BEWIRTSCHAFTUNGSPLAN-  
ENTWURFS DER FGG ELBE**

Die GRÜNE LIGA zieht zu den von der Flussgebiets-  
gemeinschaft (FGG) Elbe vorgelegten Entwürfen zu Bewir-  
tschaftungsplan und Maßnahmenprogramm folgendes Fazit:

- Die Entwürfe für den Bewirtschaftungsplan und das  
Maßnahmenprogramm bleiben hinsichtlich der **Detai-  
liertheit** weit hinter den Erwartungen und Möglichkeiten zu-  
rück. Problematisch ist hierbei insbesondere das Fehlen und  
die unzureichende öffentliche Verfügbarkeit von ergänzen-  
den Länderberichten.
- Die Ziele für das Erreichen des guten Zustands in den  
Oberflächengewässern sind erniedrigt. Lediglich 14 Pro-  
zent der Fließgewässerstrecken sollen im Jahr 2015 den ge-  
ten Zustand erreichen. Für den „Rest“ werden Frist-  
verlängerungen in Anspruch genommen.
- Das Konzept zur Herstellung der biologischen  
Durchgängigkeit in überregionalen Vorranggewässern  
ist zu begrüßen. Allerdings bleibt angesichts der Gesamt-  
zahl von etwa 11.000 Querbauwerken im deutschen  
Elbegebiet der Gesamtumfang der angestrebten Verbes-  
serung der biologischen Durchgängigkeit weitgehend un-  
klar.
- Mit den im Bewirtschaftungsplanentwurf angestrebten  
Nährstoffreduktionszielen lässt sich ein guter ökologischer  
Zustand auf absehbare Zeit nicht erreichen. Mit den für das  
Jahr 2015 formulierten Zielgrößen einer Reduzierung der  
Belastung durch Stickstoff um 4,1 Prozent und durch Phos-  
phor um 6,5 Prozent werden für das Elbegebiet völlig unzu-  
reichende Ziele formuliert (vgl. WRRL-Info 17).

**EINSCHÄTZUNG DES BEWIRTSCHAFTUNGSPLAN-  
ENTWURFS DER FGG ELBE**

**MITTELPAPIER DER EU-KOMMISSION**

**BEWERTUNGEN**

**KONTAKT/IMPRESSUM**

- Der angegebene aktuelle Zielerreichungsgrad beim  
mengenmäßigen Zustand des Grundwassers spiegelt die  
aufgrund von Grundwasseranhebungen im  
Elbegebiet nur unzureichend wieder.
- Das in der WRRL verankerte Verschlechterungsverbot  
für den Zustand der Gewässer – ein zentrales Umweltziel  
der Richtlinie sowohl für Oberflächengewässer als auch für  
das Grundwasser – wird im Bewirtschaftungsplan und  
Maßnahmenprogramm nur unzureichend berücksichtigt. Eine  
Operationalisierung des Verschlechterungsverbots für den  
wasserbehaltenden Vollzug steht weiterhin aus.
- Das Fehlen von Landesberichten für einzelne Bundes-  
länder, der geringe Umfang und die schlechtere öffentliche  
Verfügbarkeit von Dokumenten, die inhaltlich konkretisier-  
end über die Dokumente der FGG-Elbe hinausgehen, ist stark  
zu bedauern. Die Aussagekraft der Maßnahmenplanungen  
wird durch den hohen Abstraktionsgrad der Maßnahmen-  
programme stark eingeschränkt.
- Wichtige Wasserbewirtschaftungsfragen**  
Die GRÜNE LIGA stellt für den Gewässerschutz im Zei-  
chen der Wasserrahmenrichtlinie **zehn vorrangige  
Handlungsfelder** (siehe Karte). Diese Handlungsfelder  
werden in den Entwürfen zur Bewirtschaftungsplanung  
keineswegs in ausreichender Form berücksichtigt.  
Demgegenüber formuliert der Entwurf für das Maßnahmen-  
programm der FGG Elbe lediglich vier länderübergreifende  
wichtige Wasserbewirtschaftungsfragen:

- Hydromorphologische Veränderungen der Oberflächen-  
gewässer
- Signifikante stoffliche Belastungen (Nährstoffbelastung)
- Wasserentnahmen und Überleitungen von Wasser
- Bergbau und deren Auswirkungen

GRÜNE LIGA -Bundeskontaktstelle Wasser  
Michael Bender, [wasser@grueneliga.de](mailto:wasser@grueneliga.de)



... sometimes people do!



**VOLKSENTSCHEID**  
**Unser Wasser**  
**Am 13.2. JA! ❌**

**Machen wir gemeinsam die  
Gesetze, die uns allen nutzen!**

Für Infos und zum Mitmachen: [www.berliner-wassertisch.net](http://www.berliner-wassertisch.net)  
Tel: 030 - 44 33 91 44

**ALLES offen legen!**

#### Our Water:

Unser-Wasser-Peoples Initiative in Berlin mit 280.887 valid signatures lead to some improvements in transparency.

678,507 people voted for the publication of the treaties that were concluded during the partial privatization of Berlin Water- and Sewageworks on the first successful public referendum in Berlin on 13 February 2011 an incredible share of 98.2 percent of the votes!

