

EU water related policies
GNF Living Lakes Webinar



An ecological, policy and economic perspective

Water Framework Directive – policy coherence as a key factor for improved water management and nature conservation in a changing climate

Berlin / Europe, 2 April 2014

Michael Bender
GRÜNE LIGA e.V.

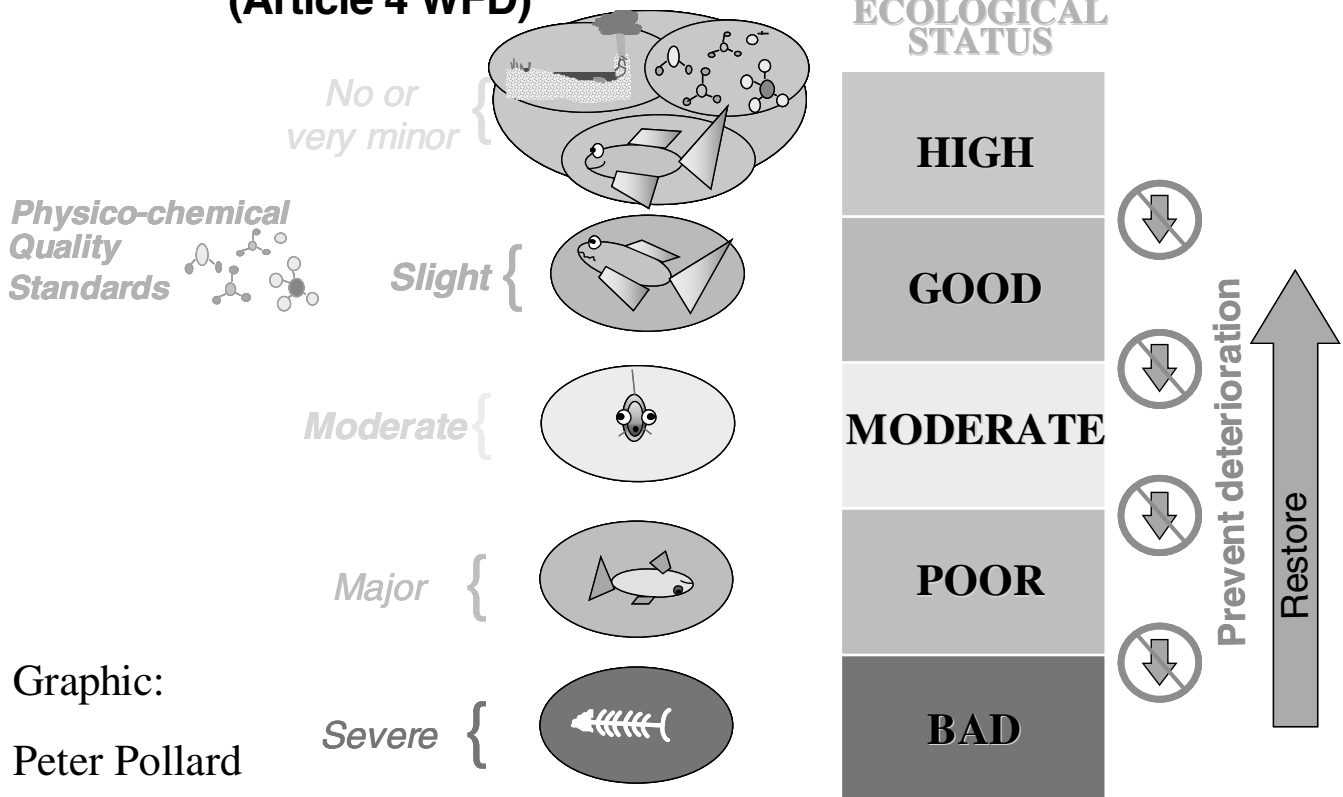
Bundeskontaktstelle Wasser / Water Policy Office

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GRÜNE LIGA -Water Policy Office
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Member states must achieve good ecological status of lakes, rivers, transitional and coastal waters by 2015

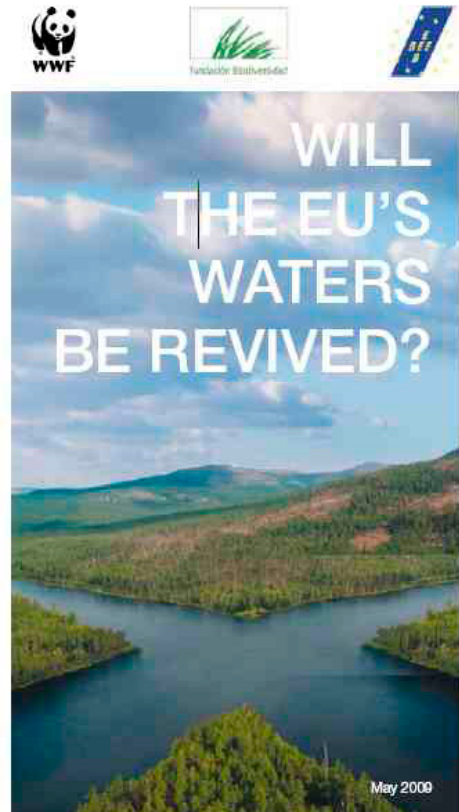
(Article 4 WFD)



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



Economic Instruments in the Water Framework Directive: Shortcomings in the First Management Cycle and the Need for Action



Frage / Indikator	schlecht/nie	mangelhaft/kaum	mäßig/teilweise	gut/vielfach	sehr gut/immer
1 Wirtschaftliche Analyse (allgemein): Lieferten die Daten eine ausreichende Informationsbasis zur Beurteilung der wirtschaftlichen Bedeutung der Wassernutzungen?	[Progress bar with 1 in red circle]				
2 Erheblich veränderte Gewässer: Werden konkrete Aussagen zur Unverhältnismäßigkeit der Kosten gemacht?	[Progress bar with 2 in red circle]				
3 Ausnahmen (Fristverlängerungen und weniger strenge Umweltziele): Werden konkrete Aussagen zur Unverhältnismäßigkeit der Kosten gemacht?	[Progress bar with 2 in red circle]				
4 Verursacherprinzip und Grundsatz der Kostendeckung: a) Wurden alle relevanten Wassernutzungen als Wasserdienstleistungen qualifiziert?	[Progress bar with 3 in yellow circle]				
b) Sind die Preise für die öffentliche Wasserversorgung/Abwasserentsorgung kostendeckend?	[Progress bar with 4 in blue circle]				
c) Wurden Kostendeckungsgrade für die übrigen im Bewirtschaftungsplan definierten Wasserdienstleistungen (landwirtschaftliche Bewässerung, industrielle Eigenwasserversorgung) ermittelt?	[Progress bar with 1 in red circle]				
5 Anreizwirkung der Wasserpreise: Lieferten die Wasserpreise/Abwassergebühren Anreize für einen sparsamen und effizienten Wasserverbrauch in ► der öffentlichen Wasserversorgung/Abwasserentsorgung? ► Industrie? ► Landwirtschaft, Bergbau?	[Progress bar with 4 in blue circle]				
6 Internalisierung von Umwelt- und Ressourcenkosten: a) Wurden die Umwelt- und Ressourcenkosten der Wasserdienstleistungen ermittelt?	[Progress bar with 1 in red circle]				
b) Wurde versucht, Umwelt- und Ressourcenkosten durch Wasserentnahmeentgelte zu integrieren?	[Progress bar with 4 in yellow circle]				
c) Werden die Einnahmen aus Wasserentnahmeentgelten zweckgebunden für Gewässerschutzmaßnahmen oder ökologische Verbesserungen verwendet?	[Progress bar with 5 in yellow circle]				
d) Wurde versucht, Umwelt- und Ressourcenkosten durch die Abwasserabgabe zu integrieren?	[Progress bar with 6 in green circle]				
e) Werden die Einnahmen aus der Abwasserabgabe zweckgebunden für Gewässerschutzmaßnahmen oder ökologische Verbesserungen verwendet?	[Progress bar with 6 in blue circle]				
7 Gegenläufige Subventionen: a) Wurden gegenläufige Subventionen (Landwirtschaft, Binnenschifffahrt, Wasserkraft, Hochwasserschutz, ...) identifiziert und beziffert? b) Wurden gegenläufige Subventionen korrigiert?	[Progress bar with 1 in red circle]				
8 Neue ökonomische Instrumente: a) Wurden Förder- und Finanzierungsinstrumente in die Wasserwirtschaft neu aufgenommen oder erweitert? b) Wurden neue Förderinstrumente in relevante Politikbereiche (Politikintegration!) eingeführt, z.B. Förderatbestände in Agrarumweltprogrammen? c) Wurden neue ökonomische Steuerungsinstrumente eingeführt (z.B. Stickstoffüberschussabgabe)?	[Progress bar with 6 in green circle]				
9 Kosteneffizienteste Maßnahmenkombinationen: Wurden Maßnahmen nach ihrer Kosteneffizienz ausgewählt und priorisiert?	[Progress bar with 7 in yellow circle]				
10 Nutzen für Umwelt und Gesellschaft: a) Wurde der monetäre Wert ökologischer Verbesserungen ermittelt (geringere Unterhaltungskosten, ...)? b) Wurde der Nutzen von Ökosystemdienstleistungen ermittelt?	[Progress bar with 8, 9, 10 in yellow circles]				
	[Progress bar with 11 in yellow circle]				
	[Progress bar with 12, 13 in red circles]				

* Diese Übersicht gibt die Einschätzung der GRÜNEN LIGA wieder, die auf einer eigenen Auswertung der Bewirtschaftungspläne und Maßnahmenprogramme für die Flussgebietsseinheiten in Deutschland beruht.

- In der Regel wird nur die Bruttowertschöpfung des Sektors betrachtet; es fehlt der Bezug der wirtschaftlichen Bedeutung zu den Belastungsfaktoren (pressures and impacts). Wassernutzungen wie Hochwasserschutz, Fischerei und Freizeitnutzungen finden z.B. im deutschen Elbebericht keine Erwähnung.
- Die Unverhältnismäßigkeit der Kosten ist nie der alleinige Grund für die Inanspruchnahme von Fristverlängerungen, wurde selten in Anspruch genommen und nicht im Einzelnen begründet.
- Die Unterlassung ist Anlass für ein Vertragsverletzungsverfahren gegen Deutschland und andere EU-Mitgliedstaaten.
- In 11 von 16 Bundesländern existieren Wasserentnahmeentgelte. Die Länderregelungen weisen große Unterschiede auf.
- Zum Teil findet sich eine explizite Zweckbindung für andersartige oder gegenläufige Maßnahmen wie Gewässer Ausbau oder Deichbau; problematisch im Sinne des Verursacherprinzips sind grundsätzlich auch Ausgleichszahlungen in Trinkwasserschutzgebieten („pay the polluter principle“).
- In vielen Bundesländern wurden Förderprogramme oder -richtlinien zur Gewässerentwicklung neu eingeführt, umgestaltet oder mit mehr Mitteln ausgestattet. In den Bewirtschaftungsplänen tauchen hierzu allerdings keine Angaben auf.
- Z.B. Gewässerschutzmaßnahmen in Agrarumweltprogrammen in Sachsen und Thüringen; diverse Länder-Förderlinien für ökologische Gewässerentwicklung.
- Neueinführung von Wasserentnahmeentgelten in Nordrhein-Westfalen (2004) und im Saarland (2008); Abschaffung in Hessen (2002).
- Allerdings wurden Forschungsvorhaben hierzu vergeben.
- Beratungsprogramme für Landwirte könnten als neue Instrumente angesehen werden (z.B. Niedersachsen, Schleswig-Holstein); sie werden in den Bewirtschaftungsplänen nicht erwähnt.
- Z.B. Priorisierung bei Investitionen in Abwasserbehandlungsanlagen in Thüringen.
- Relevant für die Ermittlung von Umweltkosten, im Zusammenhang mit der Prüfung der „besseren Umweltoption“ und dem Verschlechterungsverbot (Artikel 4.7). Allerdings tauchen in den Bewirtschaftungsplänen bislang erstaunlicherweise keine Fälle nach Artikel 4.7 auf.
- Die Betrachtung des Nutzens von mehr Gewässerschutz für Umwelt und Gesellschaft wird in der WRRL nicht zwingend gefordert, entspricht aber dem Geist der Richtlinie. Schon Erwägungsgrundsatz 1 deutet klar in diese Richtung: „Wasser ist keine übliche Handelsware, sondern ein ererbtes Gut, das geschützt, verteidigt und entsprechend behandelt werden muss.“

bad/ never	poor/ rarely	moderate/ partially	good/ often	very good/ always
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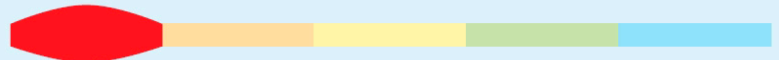
1 Economic analysis (general):

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



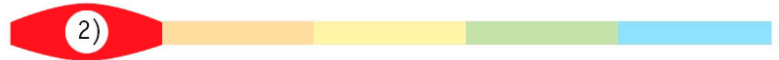
2 Heavily Modified Water Bodies:

Have disproportionate costs been specified?



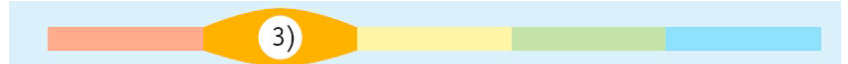
3 Exemptions (extension of deadlines and less stringent environmental objectives):

Have disproportionate costs been specified?



4 Polluter pays principle and recovery of costs:

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

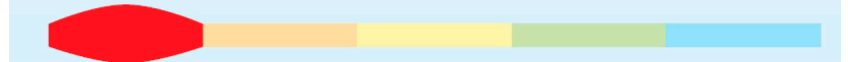


b) Has recovery of costs been achieved in the prices for public water supply and wastewater disposal?

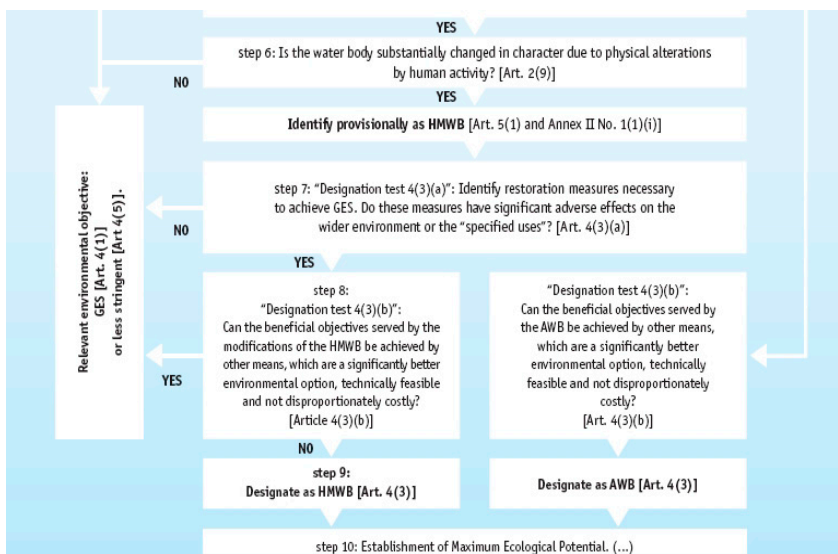


c) Have rates of cost recovery been determined for all other water services according to their definition in the RBMP

(abstraction for irrigation, industrial "self-abstraction")?



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.

Heavily modified Water bodies

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



Classification

„Bundeswasserstraße“
(navigation route of national interest) does not necessarily mean heavily modified or artificial Water Body

Current discussion on national waterways:

- > Upgrade and maintenance priorities
- > Tourism
- > Elbe is no longer included in TEN-Projects

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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
© BMVBS WS 13 Bonn, 2008 W 162 p

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Building New large dams – a sustainable solution for Climate Change mitigation?



Tignes dam, Les Brevières, France. Photo: ©Heidi Megerle 2007

Problems like:

- > interruption of biological continuity & change of habitats massively contribute to the loss of migratory fish population like eel and salmon
- > violations of human rights

=> led to World Commission on Dams (WCD) risks and rights based approach

With its final report, the WCD fulfilled its mandate to establish internationally acceptable criteria, guidelines and standards for the planning, design, appraisal, construction, operating, monitoring and decommissioning of dams.

Compliance with article 4.7 WFD (no deterioration) must be a prerequisite for any new hydropower and dam project or other massive infrastructure.

Building New large dams – a sustainable solution for the world?

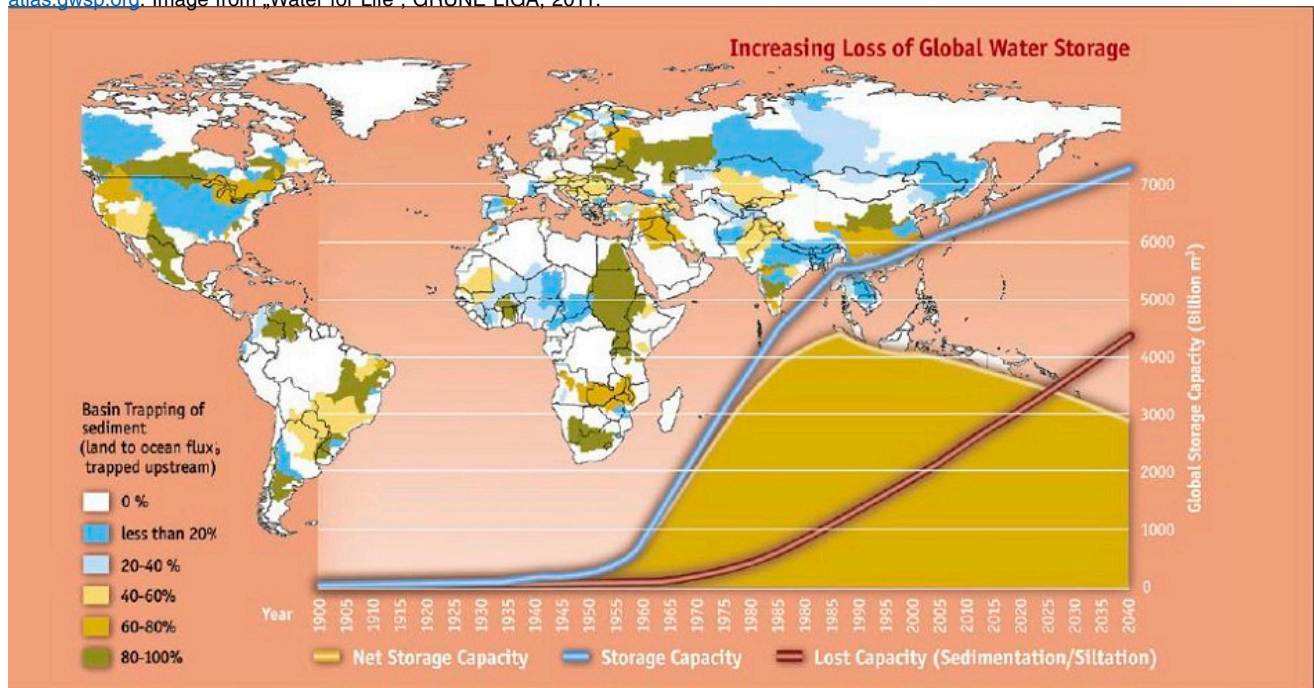
Just one Detail: **Sedimentation**

Sediments trapped behind dams not only impair the functioning of reservoirs, but are also missing downstream, resulting in increased erosion of river beds and deltas.

The WCD estimates that 1% of reservoir storage capacity is lost per year.

- > Projected dams are not even able to compensate the loss of reservoir volume through sedimentation.
- > 20% of all reservoirs will be inoperable by 2015.

Since the early 1990s, the loss of reservoir space through sedimentation exceeds the storage capacity of newly built dams. Based on data from Jenzerand Cesare (2005) and GWSP Digital Water Atlas (2008), Map 51: Sediment Trapping by Large Dams (V1.0), available online at <http://atlas.gwsp.org>. Image from „Water for Life“, GRÜNE LIGA, 2011.

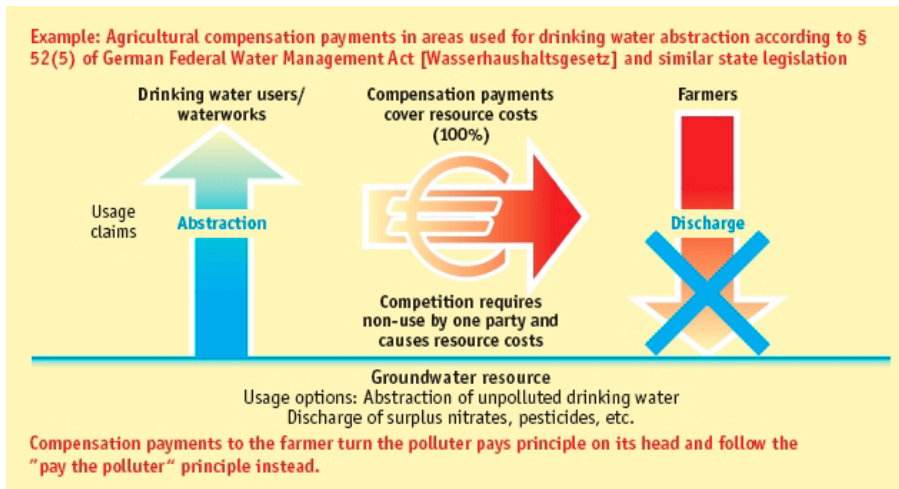


Polluter pays principle and principle of cost recovery

»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.

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.

**Current discussion:
Water abstraction fees have recently been introduced in the states of Rheinland Pfalz and Sachsen-Anhalt.**

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

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Internalisation of environmental and resource costs

Example from the policy paper: 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 m³ (2007) of water annually – represent the largest water users nationally across Germany. Coal mining requires about 800 million m³ of additional 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.

There is some
progress!

Full Water abstraction tax
for open pit coal mining
has been introduced in
North-Rhine Westphalia in
2011.



Internalisation of environmental and resource costs



»

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.

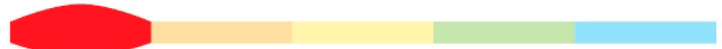
There is still a great deal of leeway to (re)design water abstraction taxes in a sensible manner from an ecological and environmental perspective at the state level. This room to manoeuvre should be used promptly in order to achieve the environmental objectives of the WFD. In accordance with article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

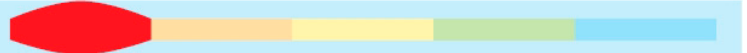


7 Harmful subsidies:

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

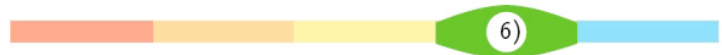


b) Have counter-productive subsidies been revised?



8 New financial instruments:

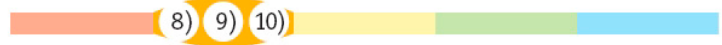
a) Have financing and funding instruments been introduced into water management or expanded?



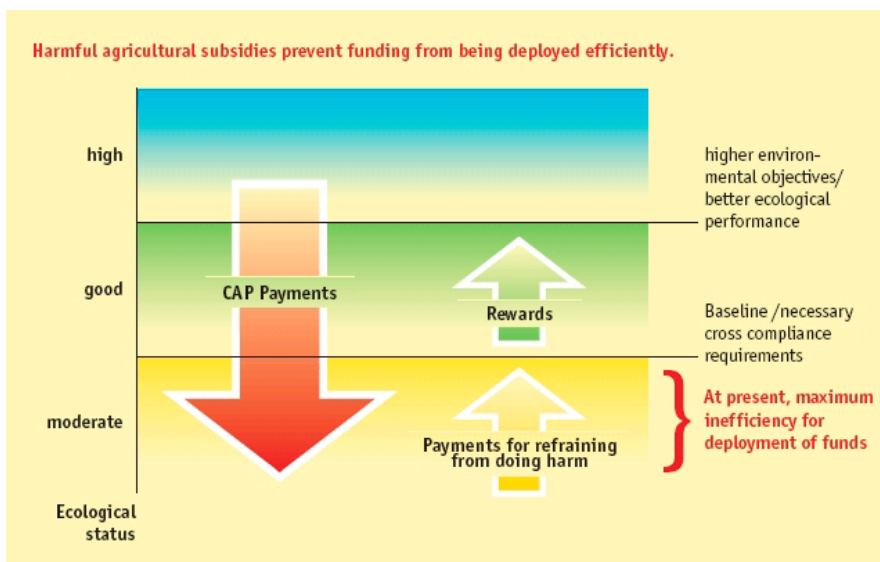
b) Have new funding instruments been introduced into other relevant policy fields (policy integration), e.g. funding in agri-environmental programmes?



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. ...

»

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.

Water related EEB & GRÜNE LIGA recommendations for CAP-reform:

ENSURE STRICT ENVIRONMENTAL OBLIGATIONS IN PILLAR 1 AS FROM JANUARY 1ST 2014:

No direct payments to farmers without strict cross compliance including environmental standards based on the Water Framework Directive and binding obligations for water metering, nutrient balancing, pesticide application and erosion control.

DECEMBER 2012

EU COMMON AGRICULTURAL POLICY 2014-2020: CAP-REFORM MUST DELIVER TO SAFEGUARD EUROPE'S WATERS!

387 BILLION EUROS OF PUBLIC FUNDS REQUIRE
EFFECTIVE ENVIRONMENTAL STANDARDS

Position of European Environmental Bureau, GRÜNE LIGA, NABU,
Living Rivers Foundation, Global Nature Fund, Bodensee-Stiftung,
Deutsche Umwelthilfe, Coalition Clean Baltic, DUENE, Quercus and PAN Germany

KEY RECOMMENDATIONS:

1. ENSURE STRICT ENVIRONMENTAL OBLIGATIONS IN PILLAR 1 AS FROM JANUARY 1ST 2014:

No direct payments to farmers without strict cross compliance including environmental standards based on the Water Framework Directive and binding obligations for water metering, nutrient balancing, pesticide application and erosion control.

2. INTEGRATE 10% ECOLOGICAL FOCUS AREAS ON AGRICULTURAL LANDS (COMPUL- SORY AT FARM LEVEL) FOR WATER, SOIL AND BIODIVERSITY IMPROVEMENT:

Mitigate nutrient and pesticide effects from agricultural runoff and improve water dependent ecosystems with buffer strips, wetlands and riparian zones along all water courses, ditches, ponds and lakes.

3. SECURE SUFFICIENT FUNDING BY EARMARKING 50% FOR AGRI-ENVIRON- MENTAL MEASURES, COMPENSATION PAY- MENTS RELATED TO WATER FRAMEWORK DIRECTIVE AND NATURA 2000 AND ORGA- NIC AGRICULTURE IN A STRONG PILLAR 2 FOR SUSTAINABLE RURAL DEVELOPMENT:

Support real environmental improvements through rehabilitation of wetlands, floodplains and riparian habitats, through land use adapted to natural water dynamics such as polyculture and extensive grazing in floodplains, and through water friendly farming through organic agriculture.

The following short-list of **basic measures to be included** into the scope of cross compliance was agreed on by the Common Implementation Strategy Expert Group on **Water Framework Directive and Agriculture** in October 2012. They are readily applicable and compulsory for farmers, they need to become cross compliance provisions by January 1, 2014:

1. Respecting Compliance with the authorisation for water abstraction (WFD art. 11.3.e).
2. Respecting Compliance with the authorisation for the creation of an impoundment that affects a water body or a riparian area (WFD art. 11.3.e).
3. Respecting requirements for water metering as implemented by Member States (WFD art. 11.3.b).
4. Respecting the prior authorisation for the modification of riparian areas and the requirement for restoration of riparian areas as implemented in the Member States (WFD art. 11.3.i).
5. Respecting mandatory requirements to control diffuse sources of pollution by phosphates as implemented in the Member States (WFD art. 11.3.h).
6. Respecting requirements for slurry storage and spreading outside of Nitrogen Vulnerable Zones, to reduce diffuse pollution of nutrients and minimise organic pollution as implemented in the Member States (WFD art. 11.3.h).

Note that WFD article 11 lists basic measures as "minimum requirements to be met" in every river basin management plan.

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Support real environmental improvements through **rehabilitation of wetlands, floodplains and riparian habitats**, through land use adapted to natural water dynamics such as paludiculture and extensive grazing in floodplains, and through water friendly farming through organic agriculture.



Reducing nutrient loads of Baltic Sea tributaries through restoration, creation and management of wetlands

Baltic Sea Case – the use of restored Wetlands to reduce nutrient input

Eutrophication is, along with overfishing, the most severe environmental problem of the Baltic Sea. Baltic rivers carry large amounts of nutrients. About 70% of the nitrogen inputs and 44% of the phosphorus inputs originate from diffuse sources, mainly from agricultural lands. The resulting eutrophication of coastal and marine waters leads to algal blooms which deteriorate marine habitats through drastically decreased water transparency and oxygen depletion. The HELCOM Baltic Sea Action states the goal of “**a Baltic Sea unaffected by eutrophication**” and addresses the need for action in its „**clear water**“ objective.

In the context of river basin management for Baltic Sea tributaries, wetlands can play an important role in reducing diffuse nutrient inputs from agriculture. This is reflected in many water and marine protection policies, from the Water Framework Directive (WFD) to the **HELCOM Baltic Sea Action Plan** to – most recently – the **EU Strategy for the Baltic Sea Region**.

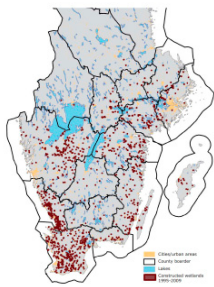
But although wetland management is part of several policies, it is not sufficiently addressed on a strategic level, e.g. in the Baltic River Basin Management Plans.

24 - 25 March 2011 in Greifswald, Germany
Greifswald University



GRÜNE LIGA Conference Conclusions

1. Wetlands are indispensable for nutrient reduction in the Baltic Sea
2. Wetland measures need clear priorities
3. Wetland strategies need a policy mix to be effective
4. Integrate wetlands strategies in River Basin Management Planning!
5. Make use of the high cost-effectiveness of wetlands!
6. Factor in the wider environmental benefits of wetlands!
7. Adapt and redesign agricultural policies for better wetland management!
8. Learning from Sweden: Integrate wetlands in the agricultural landscape!
9. Make use of existing “ecohydrological” planning and management tools!
10. Support wetland strategies with economic instruments!
11. Better wetland management needs communication and information



Cyanobacterial bloom (blue algae) in the Baltic Sea, summer 2010
Source: ESA - European Space Agency

Distribution of constructed wetlands (red) in Southern Sweden. Map: DAWA 2010, Swedish Board of Agriculture

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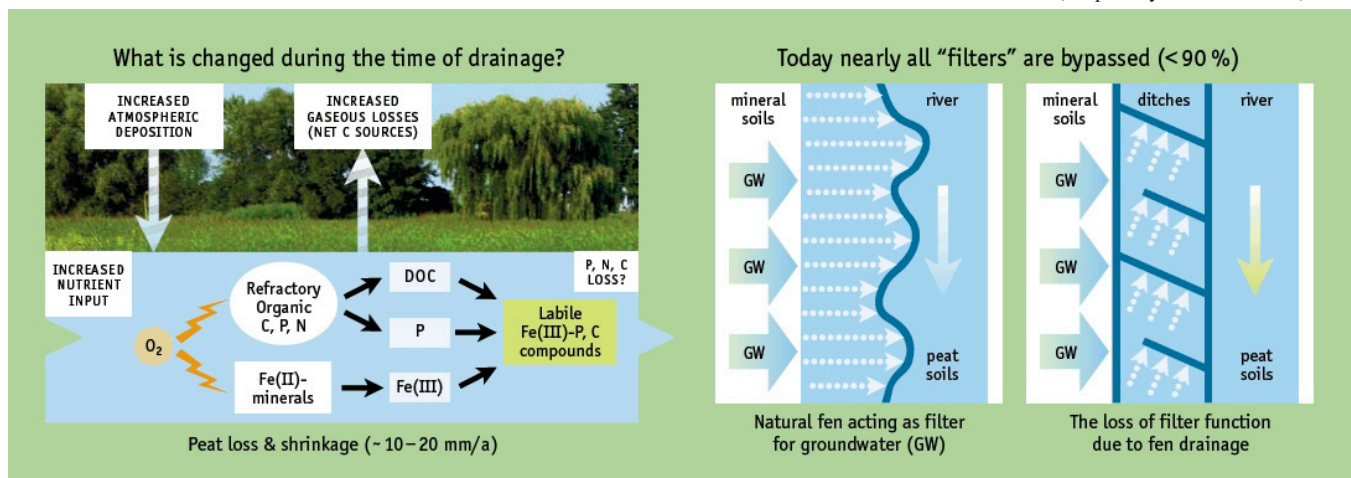
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Drained Wetlands contribute to Climate gas emissions

Drainage, degradation and unadapted management of wetlands continue to cause significant harm to the Baltic Sea. More than 90% of all fens in the region were transformed into agricultural lands that emit large quantities of nutrients and CO₂.

Emissions of Carbon Dioxide and Laughing Gas (Nitrous Oxide)

Source: Dominik Zak (adapted by GRÜNE LIGA)

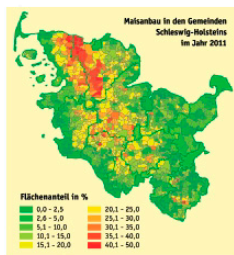




Biomasseförderung leistet aktiven Beitrag zum Artensterben

Die fehlende Einbeziehung der Wasserrahmenrichtlinie in die Bestimmungen zum Greening der landwirtschaftlichen Direktzahlungen vermindert wesentliche Fortschritte bei der Verbesserung der Gewässergüte im Bewirtschaftungsraum ab 2015. Dafür stehen in EU-Haushalt jährlich etwa 40,5 Milliarden Euro bereit (Basis 2012).

Dieser Tatbestand wird in Deutschland durch die Biomasseanbauförderung allerdings noch weit in den Schatten gestellt. Hier werden die in der Vergangenheit durch den Einsatz von milliardenschweren Investitionen in den Flächenanbau erreichten Fortschritte in der Wasserrahmenrichtlinie vor allem hinsichtlich der Nährstoffbelastung durch die von allen Bittern zu zahlende EEG-Umlage aktiv zunichte gemacht.



© Landesamt für Landwirtschaft, Umwelt und ländliche Räume Schleswig-Holstein, Abteilung 4 Gewässer

Der sprunghafte Anstieg der Maisanbauflächen für den Biomasseanbau erreicht regionale dramatische Ausmaße. In einigen Gebieten der leicht in Schleswig-Holstein wird inzwischen auf über 50% der Gemeindefläche (!) Mais angebaut. Der künstliche Maisboom verstärkt selbst in norddeutschen Tiefland die Bodenversauerung und Erosion dort, dass ein deutlicher Verlust fruchtbarer Ackerböden eintritt, der als vermehrter Eintrag von Sand, Düngern und Pestiziden in den Gräben und Gewässern erhebliche Schade Wirkung entfaltet.

- Biomasseförderung
- Wasserentnahmetgelt im Bundesvergleich
- Agrar-Reform muss Gewässer besser schützen
- Meldungen
- Kontakt/Impressum

Der Silomaisanbau macht auch vor Schutzgebieten nicht halt. Auf einigen Flächen des Biosphärenreservats Schorfheide-Chorin wurde seit 2007 bereits im fünften Jahr in Folge Mais angebaut. Die massive Ausweitung des Anbaus von Energiepflanzen lässt einen direkten Beitrag zum Artensterben (vgl. Natur- und Landschaftspflege in Brandenburg, Ruff 4/2011 mit den Empfehlungen des Naturschutzbundes). Darüber hinaus werden Gewässerzonen (z. T. Biegel) umgeflutet und schützenspendende Gehölzsumme an Ufer abgeholzt, ohne dass die Behörden korrigierend eingreifen würden.

Die Biomasseförderung verschärft den Grünlandmehrfach und führt beim Entzogen der Grünland zum zusätzlichen Einsatz schwer kalkulierbarer Mengen von Grundwasser, kleineren Fließgewässern und Seen, der Küsten- und sogar der Meeresgestirne und kontaminiert die bisherigen Erfolge der Anstrengungen der Bundesländer.

Der erhebliche Zuwachs beim Silomaisanbau führt in einigen Gebieten zu erheblichen Belastungen von Grundwasser, kleineren Fließgewässern und Seen, der Küsten- und sogar der Meeresgestirne und kontaminiert die bisherigen Erfolge der Anstrengungen der Bundesländer.

Der Einsatz fossiler Energie für die Bodenbearbeitung, Mineraldüngung und den Transport der Biomasse resultiert in einem hohen CO₂-Ausstoß von 2,7. Das bedeutet, dass die fossilen Inputs der Energieerzeugung aus Silomais 37 % betragen, bei Annahme einer idealen Vermeidung von Mineraldüngern (Zahlen für Schleswig-Holstein, Claus et al., 2011). Die unter Mais besonders gravierende Nitratsubstranz und Methanemissionen führen zum Ausstoß erheblicher Mengen klimaschädlicher Gase. Die negative Klimawirkung des Maisbaus nimmt schädlich ab, da die Ausmaße an, wenn der Anbau auf ehemaligen Moor- und Feuchtwaldstandorten stattfindet, so wie sogar deutlich weniger klimaschädlich, den Torf direkt zu verbrennen.

Ernterückstände Biomasse von Moor

konventionell angebauter Mais für Biogas	890 t CO ₂ /t J
Torf	106 t CO ₂ /t J
zum Vergleich: Heide	75 t CO ₂ /t J
Pärlkultur Schilf	430 t CO ₂ /t J
Pärlkultur Schwarzerle	387 t CO ₂ /t J

A. Schäfer, DUENE u. K./Umweltamt Greifswald

Harmful subsidies

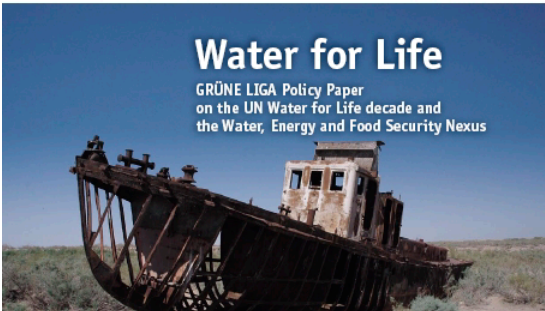
Additional pressure on water resources is caused by the massive increase of public money spent on **biomass payments** in the context of renewable energies policies. Truly alarming developments can be observed in Germany. Artificially created high returns of biomass production, mostly maize and rapeseed, have led to drastic increases of the price for agricultural land. Investments in these lands compete with agricultural use for food production. In light of the low net renewable energy gain of biomass production through conventional farming, these production schemes need much stricter environmental criteria.

As of 2011, approximately 17 % of all arable land in Germany was used for biomass production (2 million hectares). Particularly the increase in maize production has in many areas resulted in a significant deterioration of the status of Germany's waters. The modest successes of agrienvironmental schemes and other measures that had been achieved in reducing eutrophication are literally overrun by these developments.

From official estimates it can be clearly concluded that with current impacts, the **environmental goals of the Water Framework Directive and the Marine Strategy Framework Directive will not be achieved** in any of the groundwater bodies classified in bad status in 2009, in all coastal and marine waters (Baltic Sea and North Sea), as well as in most rivers and lakes e.g. in the state of **Schleswig-Holstein**.

GRÜNE LIGA -Water Policy Office
Michael Bender, wasser@grueneliga.de

EU water related policies
GNF Living Lakes Webinar



Water for Life

GRÜNE LIGA Policy Paper on the UN Water for Life decade and the Water, Energy and Food Security Nexus

This policy paper was produced by GRÜNE LIGA in cooperation with:

- WBCF
- Global Nature Fund
- Living Lakes
- GegenStrömung CounterCurrent
- inbe
- Bodensee Stiftung
- Netzwerk UNISER Wasser
- INTERNATIONAL RIVERS

The handling of our water resources is mainly driven by natural water demands. It still lacks a Water Management approach that integrates a wide array of policies and economic activities taking into account ecosystem requirements. This policy integration would much better reflect how we value water not only economically, but also socially and culturally – for people, for nature, for life.

Besides climate change, there are further aspects of a globally changing world that all influence the water cycle, such as population growth, land use and urbanization. In many regions water scarcity and even rising temperatures are not caused by climate change or natural scarcity and droughts, but by poor water governance. Mismanagement of water resources, caused by corruption, misplaced investments or lack of funding – no matter if public or private – often lead to a failure in providing safe drinking water and sanitation where they are needed most. Overuse and pollution of surface water and groundwater continue to pose a threat to human lives and to the prospects for humans living conditions and increasingly impact diversity and productivity of natural ecosystems.

Ever since the announcement of the first Water Decade in Rio del Plata to 1980, water has been high on the international agenda. If they are to be successful in the long run, national and global development policies cannot ignore to sustain the availability of natural resources. As Agenda 21 stresses, water is a key factor across many sectors. German non-governmental organizations (NGOs) under the umbrella of the German NGO Forum on Environment and Development advocate sustainable water policy in the context of development co-operation from a German and European point of view – in their own country and in their international activities.

WFD-Policy Papers and WRRL-Info-newsletters on www.wrrl-info.de



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



Why Wetlands? – Background

Wetlands can be regarded as the "kidneys of the landscape" as they filter water and reduce the water budget. In the context of 15 countries participating in the WFD, the wetlands can play an important role in reducing diffuse nutrient inputs from agriculture. This role is highlighted in many water and nature protection policies, from the Water Framework Directive (WFD) to the WFD-Child Plan Action Plan for the "most sensitive" – the Danube River Basin.

However, the ecological potential of wetlands is not sufficiently addressed in strategic plans, e.g. in the German River Basin Management Plans. There is an urgent need for action and for strategic goals.

The water bodies have been the main focus for the WFD. However, the WFD also includes the protection of wetlands. The WFD-Child Plan Action Plan for the Danube River Basin Management Plan (2018-2021) includes the following objectives:

Wetlands are, along with overfishing, the most severe environmental problem of the Baltic Sea. WFDs cover very large amounts of wetlands. About 20% of the European Union and 45% of the world's population live in wetlands, making them agricultural lands. The resulting eutrophication of coastal and marine waters leads to major losses, which exacerbate water scarcity through eutrophication-induced water management and oxygen depletion. The WFD-Child Plan Action Plan for the Danube River Basin Management Plan (2018-2021) includes the following objectives:

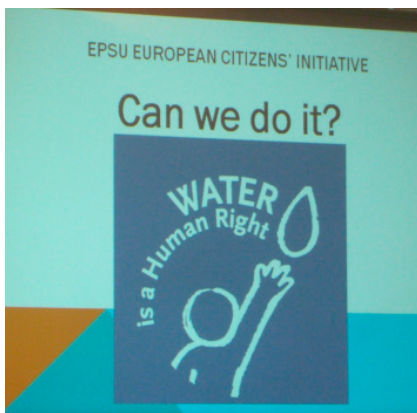
The WFD-Child Plan Action Plan for the Danube River Basin Management Plan (2018-2021) includes the following objectives:

- Why Wetlands? – Background
- Constructed Wetlands in the Agricultural Landscape – Experiences from Sweden
- Wetland Adaptation in Germany – Country Reports from Poland and Lithuania
- GRÜNE LIGA Conference Conclusions

Constructed Wetlands in the Agricultural Landscape – Experiences from Sweden

Sweden has been a pioneer in the construction of wetlands since 1985 and 2002 has shown that wetlands in the right location can reduce diffuse pollution of lakes and streams by up to 50% per year and reduce nitrogen losses by up to 30% per year.

Wetlands are, along with overfishing, the most severe environmental problem of the Baltic Sea. WFDs cover very large amounts of wetlands. About 20% of the European Union and 45% of the world's population live in wetlands, making them agricultural lands. The resulting eutrophication of coastal and marine waters leads to major losses, which exacerbate water scarcity through eutrophication-induced water management and oxygen depletion. The WFD-Child Plan Action Plan for the Danube River Basin Management Plan (2018-2021) includes the following objectives:



in Germany and in Europe

Can we do it? Yes we can!

The European Citizens Initiative

„Water and sanitation are a human right!

Water is a public good, not a commercial product!!“

has been signed by about 1.9 Million European Citizens thus making it the first successful European Citizens Initiative ever.

European Parliament and European Commission talked to the initiators on 17th February 2014. www.right2water.eu



