

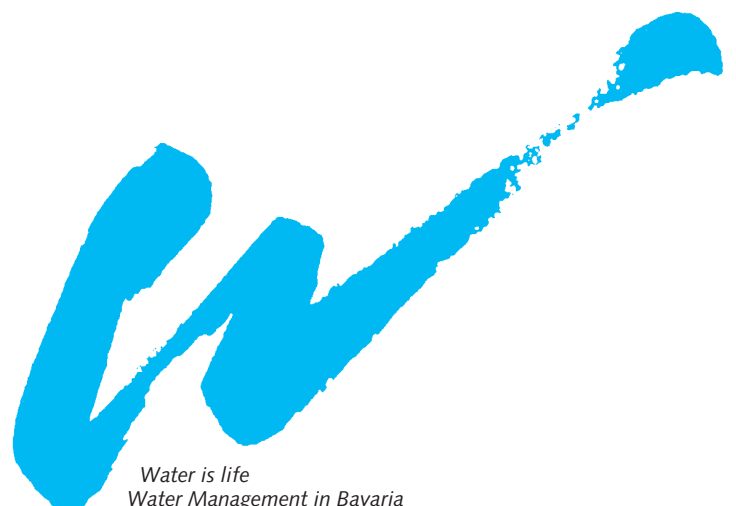


Bavarian Water Management Agency



The European Water Framework Directive and its significance for Bavaria

Directive 2000/60/EC
of the European Parliament and of the Council
of 23 October 2000
Establishing a framework for Community action
in the field of water policy



The objective: An integrated policy on water protection

Is there a need for a European Framework Directive in the field of water policy?



„In Europe the harmonization of legislation in the field of water protection helps to prevent an environmental sell-out and to open up new markets for environmental technologies. The Water Framework Directive means effective and comprehensive water protection for the benefit of the environment and the quality of life in Europe.“

*Dr. Werner Schnappauf
Bavarian Minister of State for Regional
Development and Environmental Affairs*

Since 1975 the European Community has adopted over 20 Directives related to water protection. The newly adopted Water Framework Directive now coordinates European water legislation, by replacing 7 single directives and integrating the others into a legal framework.

The purpose of the Water Framework Directive is an integrated European water policy on water protection at a high and uniform level. This protection does not only apply to water quality but also to the ecological status of water bodies as a whole. Crucial points of the Water Framework Directive are:

- uniform evaluation methods for European waters
- a common objective: the good status of all waters
- strategies and standards against water pollution
- international management plans for entire river basins
- a binding time scale: implementation of the Directive within 15 years



The good status of all waters

The Water Framework Directive applies to groundwater lakes, flowing waters from source to estuary mouth and to coastal waters within a distance of one nautical mile from shoreline

As natural as possible

The overall concept for European waters

The overall concept of the Water Framework Directive (WFD) is the natural status of water bodies: the natural diversity and abundance of aquatic flora and fauna, as well as the natural shape and water flow of rivers and streams unaffected by human activities. The integrated water protection of the Water Framework Directive is mainly based on the following three components: biology, hydro-morphology and water quality. The Directive aims at maintaining and improving the aquatic environment with its ecosystems and water resources.

The „good status“

The core of European water policy

The concrete aim of the Water Framework Directive is to put all water bodies into a „good status“ within 15 years at the latest. The overall term „status“ comprises essential biological, structural, physical, and chemical characteristics.

The „good“ status of a water body is achieved

- when its deviation from the natural status of a comparable water type is only minor
- when the status of the water complies with all relevant EU water quality standards.

For this purpose the Member States have to protect improve and restore all bodies of water, and must prevent the deterioration of their status. In the future, the „good status“ is a standard requirement in European water protection.

How natural are European waters?

The classification of the water status

The Water Framework Directive has introduced a comprehensive description, assessment and classification of water bodies.

- for surface water the Directive distinguishes between the „ecological status“ and the „chemical status“

- for groundwater the Directive distinguishes between the „chemical status“ and the „quantitative status“

The classification of waters according to their status reflects the degree of naturalness. The main criterion is the biological quality. As there is no uniform scale of rating for water bodies, all assessments are based on types of water. The status of the water is to be illustrated on maps in colour, as is already common practice in Germany for the presentation of water quality according to the saprobic (based on invertebrates) system. Assessment procedures provided by the Water Framework Directive, however, are more comprehensive and more sophisticated. The biological quality elements alone range from phytoplankton to fish.

How can European waters continue to be used?

The handling of conflicts



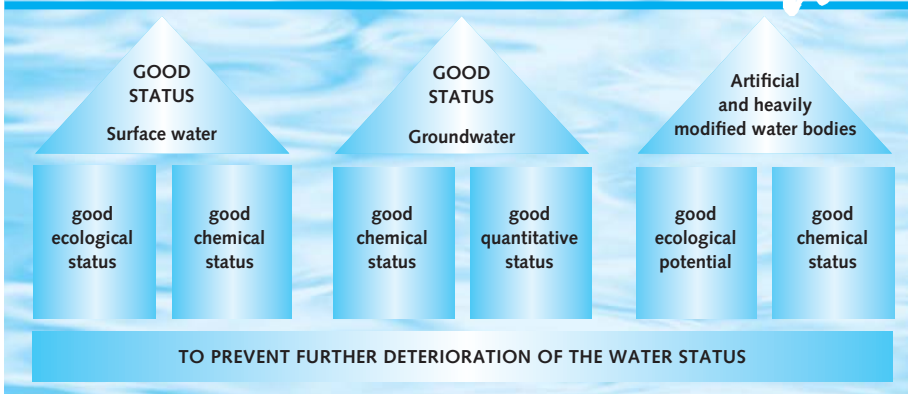
The Water Framework Directive demands that „artificial or heavily modified“ surface waters, achieve „good ecological status“, which

for instance is the case with navigation canals. Here, the overall concept represents the best approach to achieve the natural status in harmony with the respective modified water body. An important objective is for instance the ecological continuity of waters.

The Water Framework Directive (WFD) allows less stringent environmental objectives or extended deadlines in some well founded exceptional cases, e.g. when overriding public interest is in contrast to the application of the Directive. These exceptions, however, are dependent on stringent conditions and regulations.



The objectives of the WFD related to the water status



Protection of water against pollutants



Focal points of the WFD are strategies and standards against water pollution

To achieve clean water

A combined approach

According to the WFD the pollution of surface water is controlled by the following combination of measures

- *emission controls* at source by means of BAT (best available technology) or best environmental practices, together with
- *quality objectives* for water in terms of limit values for the concentration of pollutants.

The more stringent requirements are applicable respectively. This combined approach follows the German strategy, which concentrates on water protection at source. Additionally, quality objectives guarantee an effective protection from pollutants.

No risks please

The list of „priority substances“

The WFD introduces EU-wide uniform standards for pollutants presenting a significant risk to water. „Hazardous substances“ are substances, which are toxic,

persistent and liable to bio-accumulate. These substances are assessed according to their risk potential and registered in the list of „priority substances“. The release of these substances into the environment must be reduced step by step. Furthermore, priority hazardous substances are to be phased-out within a maximum of 20 years. The objective is the protection of the marine environment.

The EU Commission has proposed a list of 33 „priority substances“ containing certain heavy metals, plant protection products and industrial chemicals. 11 of these substances have been classified as „priority hazardous“ and therefore a zero emission. The European Parliament and the Council are to adopt specific measures against pollution of water by „priority substances“.

For less risky substances, Member States will have to set up chemical quality standards if these substances are liable to cause significant pollution in one of their waters.

Groundwater protection

Beware of the first signs...

As a measure of preventive groundwater protection direct discharges of pollutants into groundwater are to be prohibited. If the concentration of a pollutant in groundwater is significantly increased a trend reversal must be introduced, at the latest when 75% of the admissible limit value is reached. The Commission will propose to

the European Parliament specific measures for the protection of groundwater.

Protection of drinking water

Drinking water – an indispensable food



Water bodies from which drinking water is obtained must be protected and monitored in order to prevent the deterioration of water quality,

thus reducing the level of purification treatment. For this purpose water protection areas can be established. In Bavaria, this has already been put into practice. The water obtained must comply with the quality standards of the European Drinking Water Directive.

Recovery of costs for water services

Prices that tell the truth

The WFD introduces economic instruments to support a sustainable and environmentally sound water use. By 2010 the water services for water supply and wastewater disposal must provide

- that charges offer an incentive to use water efficiently, and
- that water users (industries, households, and agriculture) contribute to cost recovery in accordance with the polluter pays principle

The recovery of costs must include environmental and resource costs. An economic analysis of water uses is the basis for decision-making processes.

The method: River basin management

Planning in natural units

The WFD not only sets objectives for water protection but shows in detail how to approach them. For Germany, the obligation to manage water bodies in river basin districts is new. River basin districts consist of one or more neighbouring river basins including groundwater and coastal waters. The river basin of the Rhine from the Alps to the North Sea with all its tributaries is an example of such a river basin district. Germany is involved in 10 river basin districts, 5 of which are international. Bavaria is involved in three international river basin districts: the Danube, the Rhine and the Elbe district, and to a small extent also in the Weser river basin district. For each river basin district a management plan must be set



up. In those cases where river basin districts overlap more than one Member State an internationally coordinated management plan becomes necessary. Where a river basin district extends beyond EU borders Member States must also seek the coordination with non-EU States.

The WFD gives a detailed and rather narrow time scale for the planning steps and their implementation (see table). Environmental objectives must be achieved by 2015. Afterwards the management plans will be checked and updated every 6 years.

The WFD links water protection to effective action regarding the river basin as a unit. At the same time, river basin planning takes into account different ecological economic and social circumstances of the regions

Planning stages

How to plan water protection? The WFD gives precise instructions:

1. Collecting information, analyses and assessment



A starting point for planning is the complete description of water bodies and their classification categories. All significant impacts on

water bodies caused by human activities in river basins must be investigated and assessed. Above all it must be determined whether a „good status“ is achievable at all. The monitoring and measure programmes depend on the results of these assessments. An economic analysis provides the basis for cost covering water services and the assessment of cost effectiveness of measures.

2. Monitoring programmes

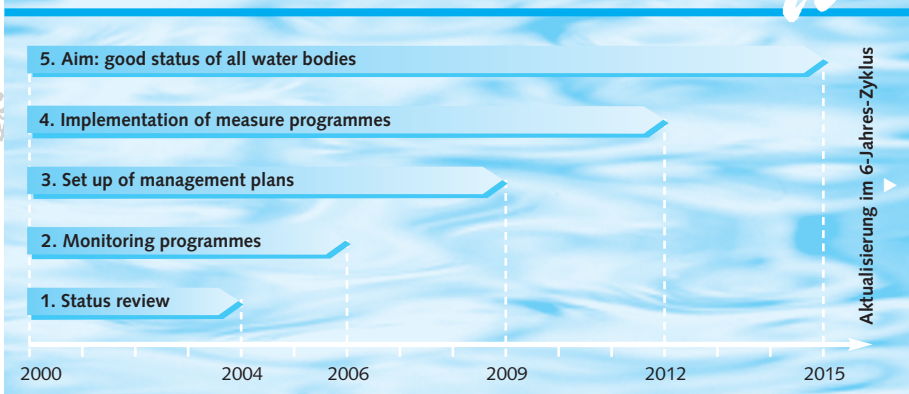


The monitoring programmes must provide a coherent and comprehensive view of the status of the water bodies. The intensity of monitoring varies according to the problems:

- „surveillance monitoring“ of the overall status of the water bodies
- intensified „operational monitoring“ for water bodies at risk
- „investigative monitoring“ to investigate the cause of pollution

The monitoring of waters together with the information gathered within the respective river basin form an investigative network to trace water problems reliably and promptly.

Planning and deadlines of the WFD



3. Programmes of measures to be taken

Programmes of measures are the core of the management plans. They are designed to eliminate deficits concerning the status of the water bodies



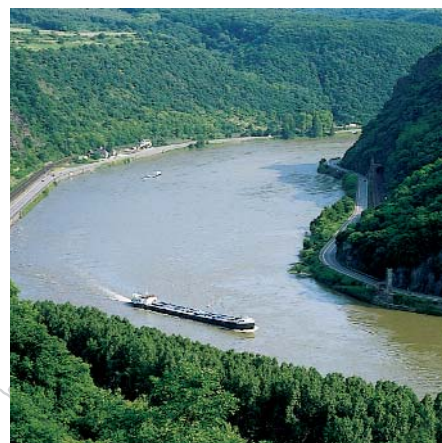
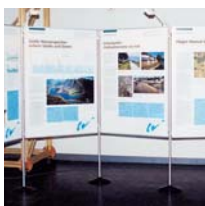
■ The WFD contains a catalogue of „basic measures“ which represent binding minimum requirements, which are partly about the implementation of EC-Directives, and partly about the fact that Member States must enact regulations or prohibitions themselves.

■ „supplementary measures“ are to be taken if necessary to achieve the objectives effectively

The WFD contains a list of legal, administrative, technical, economic and further measures. The programmes of measures are to be established at a national – or even international – level by 2009, and must be coordinated within the whole river basin district. Prior to that, in federal Germany, the programmes must be coordinated between the federal Länder. Measures for water protection must be implemented by 2012. The EU Commission has to receive comprehensive reports.


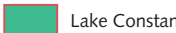


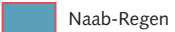

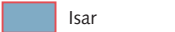




4. Public involvement

The public is to be actively involved in the implementation of the WFD through information and consultation. During the production of the river basin management plans the public must have several opportunities to comment on the issues related to the plans. The participation and consequences as well as any resulting changes must be documented in the river basin management plan.





▲ Major river basins in Bavaria.
The Rhine (via Main and Lake Constance) and the Danube (near Bad Abbach)

Bavarian sub basins determined by watersheds




	Iller-Lech		Lake Constance
	Altmühl-Paar		Upper Main
	Naab-Regen		Regnitz
	Isar		Lower Main
	Inn		Elbe
			Weser

Location of the State Offices for Watermanagement

-  with over all responsibility for sub basin
-  participating offices

Regional governments with over all responsibility for river basin

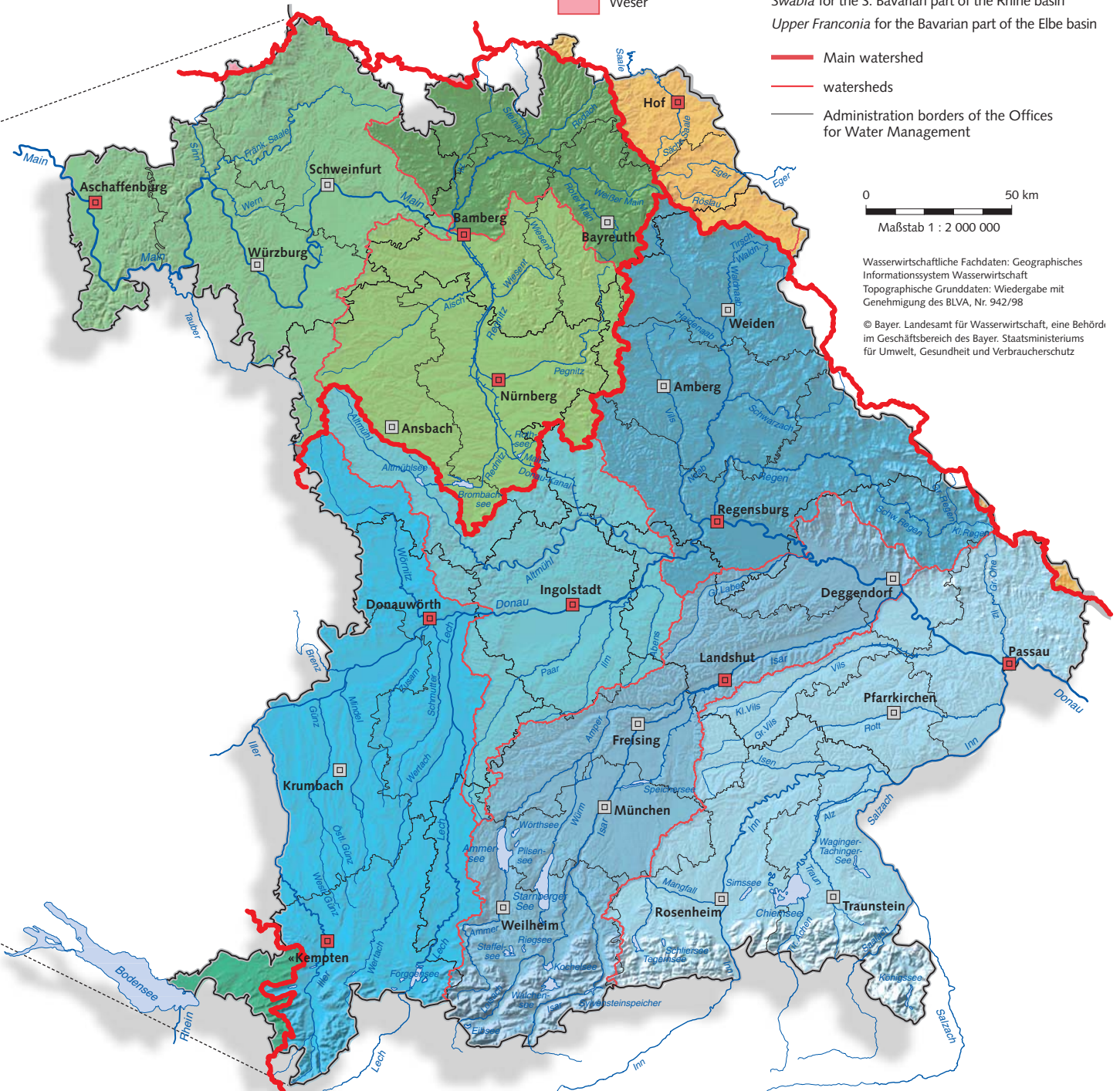
Lower Bavaria for the Bavarian part of the Danube basin
 Lower Franconia for the N. Bavarian part of the Rhine basin
 Swabia for the S. Bavarian part of the Rhine basin
 Upper Franconia for the Bavarian part of the Elbe basin

-  Main watershed
-  watersheds
-  Administration borders of the Offices for Water Management

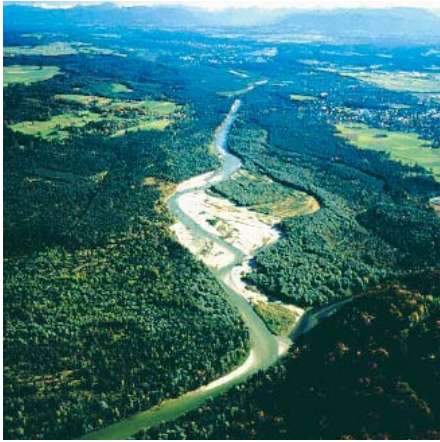
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Wasserwirtschaftliche Fachdaten: Geographisches Informationssystem Wasserwirtschaft
 Topographische Grunddaten: Wiedergabe mit Genehmigung des BLVA, Nr. 942/98

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The Implementation of the Water Framework Directive in Bavaria



Creating preconditions

Legal implementation

The WFD must be put into German law by the end of 2003. The German Water Resources Act (WHG) and the Länder Water Acts (Bavarian Water Act, BayWG) must be amended and new ordinances must be adopted. A working group of the Federal Government and the Länder are at present discussing the question, in how far agricultural law has to be adapted, e.g. the Fertilizer Ordinance.

Assignment of competence

Competence and coordinate planning



In Bavaria the operative implementation of the WFD lies mainly within the sphere of competence of the Bavarian Water Management Administration. Those responsible for the maintenance of waters or the water services could also be affected. A cooperative participation of other parties such as agriculture and economy is also essential.

The administration borders within Bavaria are not set up according to river basins. Non-the-less it is possible to implement the WFD using the existing pattern of administration. The river basin management plans are being developed on a local level by the State Offices for Water Management, who have specific knowledge of the most suitable areas, regional characteristics and the needs of

the parties involved. Planning will be coordinated in two stages:

■ *First planning level:* 10 sub-basins form the smallest planning unit.

The individual Water Management Offices are fully responsible for the appropriate area.

■ *Second planning level:* Coordination of operations within Bavaria for the river basins Danube and Rhine. On this level one District Government is fully responsible. The coordination with Bavaria's neighbours bordering on the river basin districts is also carried out at this level.

The overall coordination lies with the Bavarian State Ministry for Regional Development and Environmental Affairs.

Pooling of interests

Public involvement



Public acceptance and joint responsibility is a main feature of the implementation of the WFD. The Bavarian citizens will be up to date about planning procedures and will have a say in the crucial phases. Information and hearings with regard to the planning steps are coordinated on a regional level by the District Governments with overall responsibility. Information events for associations began in Spring 2001.

Joint action for clean rivers and oceans

Cross-border cooperation



Bavaria is situated in the heart of the EU and therefore has a responsibility for the good status of the large European rivers Danube, Rhine and

Elbe, so contributing to the protection of the aquatic environment of the North Sea and the Black Sea. For the time being the Bavarian river basin management plans has to be coordinated with the neighbouring Länder Baden Würthemberg, Hesse, Thuringia and Saxony on the one hand, and on the other hand with Austria and the Czech Republic. The cooperation with Hesse and Baden-Würthemberg is already being tested in the river *Main pilot project*. Within the framework of the *International Commission for the Protection of the Danube River (ICPDR)* Germany is closely working together with other riparian States of the Danube, which is a good platform for the implementation of the WFD in the Danube basin. The same applies to the *International Commissions for the Protection of the Rhine and the Elbe*.

River basins in Bavaria Area and responsibility

Mayor river area	Area in Bavaria in km ²	River area	area in km ²	Responsible Office for water management
Rhine (Main)	20325	Unterer Main	8380	Aschaffenburg
		Oberer Main	3820	Bamberg
		Regnitz	7520	Nürnberg
		Bodensee	590	Kempton
Danube	48220	Iller-Lech	10100	Donauwörth
		Altmühl-Paar	6700	Ingolstadt
		Isar	10030	Landshut
		Naab-Regen	9420	Regensburg
		Inn	11970	Passau
Elbe	1977	Eger, Saale	1850	Hof
Weser	48	Fulda, Werra	190	Örtliches WWA

Contacts and addresses in Bavaria

In short ...

The new European Water Policy....

- The aim: clean and natural waters in Europe
- The method: cross- border planning with regard to European river basins

....and the implementation in Bavaria

- In Bavaria water protection will be enacted on a regional basis (10 sub basins)
- Bavaria is counting on public consent and cooperation with regard to water protection
- Bavaria shares the responsibility for the main European rivers Danube, Rhine and Elbe

■ Steering Committee „Water Framework Directive“ (WFD)

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■ Technical coordination of the WFD

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■ Pilot project „Management plan for the river Main“

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▶ Elbegebiet:
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■ The WFD on the internet

- ▶ www.umweltministerium.bayern.de unter: Themen: Wasser: Die Umweltpolitik der Europäischen Union.
- ▶ www.bayern.de/lfw



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