



## GERMANY

The draft RBMP for the [Elbe](#)<sup>24</sup> was assessed in April 2021 as well as an [86-page overview report](#) as a summary of the individual regional plans for the Rhine<sup>25</sup>. The Rhine draft RBMP foresees article 4(4) time extensions for 20-30% of the groundwater bodies and more than 38% of the surface water bodies. In the Elbe, article 4(4) will be applied to more than 80% of rivers, 70% of lakes, all transitional water bodies, and 36% of groundwater bodies (qualitative status). No article 4(7) exemptions are planned in the draft RBMPs.

Despite their long-lasting cooperation, the eight relevant federal states and the federal environmental ministry did not publish a joint draft RBMP for the entire German part of the Rhine basin. They have only released an overview report and a link to the regional draft RBMPs suggesting that this approach is sufficient. However, neither the overview report nor the federal states' draft RBMPs specify relevant figures for the German section of the international draft RBMP. This is particularly true for the implementation of the masterplan for migrating fish. The overview report and more than 15

regional consultation documents do not clearly address the existence of more than 290 barriers to the Atlantic salmon. The overview report does not clarify the plans of the national water and shipping authorities in order to implement WFD-requirements. They are responsible for the Rhine itself and for all tributaries designated as national waterways.

The main findings of the assessment are:

**Removal and adaptation of barriers:** The Elbe RBMP refers to 86 out of the 417 existing barriers to be addressed during the 2022-2027 RBMP and aims to identify solutions for the downstream Geesthacht weir, which was equipped with a fish passage in 2010 that is no longer operational. The Rhine report makes a general statement on dam removal but is not clear about the criteria for removal, the development of cost-benefit assessments or the number of planned removals. It does not refer clearly to the Masterplan for Fish Migration which addresses species including the Atlantic salmon, and is therefore not up to date.

24. Reference: DE5000

25. Reference: DE2000

**Hydropower:** The Rhine report does not refer to planned hydropower plants even if these are foreseen, and it does not include a justification or criteria for their instalment. No reference is made to the refurbishment or decommissioning of older outdated hydropower plants. In the context of a pilot project at the Unkelmühle (Sieg) hydropower station, researchers found that the total extra loss of salmon was up to 25.1 % of the relevant population investigated at this station<sup>26</sup>. A significant share of the loss occurred in the backwater area of the weir where salmon can be easily killed by predators. The draft RBMP of North Rhine – Westphalia does not highlight or address this problem.

**Inland navigation:** The draft RBMP recognises major impacts caused by navigation: the Elbe estuary has been deepened for navigation and is currently an “oxygen valley” bottleneck for migrating fish; river bed erosion in the rest of the river seriously affects Natura 2000 wetlands. However, the planned upscaling projects are not considered in the plan, and no justification is provided for estuary dredging despite declining ship traffic. The “holistic concept for the Elbe river (Gesamtkonzept Elbe)” provides a strategic approach to tackle river bed erosion and the river’s bed load deficit, by deconstructing a very minor part of the 6,900 groynes, and restoring wetlands. However, this remains voluntary, vague and contradictory and it does not define specific measurable indicators. In addition, the draft RBMP does not clearly include this measure in its PoM.

**River and wetland restoration:** In both RBDs, the descriptions of the protected freshwater ecosystems do not refer to the specific water quantities and qualities required for achieving good status. Nature-based solutions and natural water retention measures are not explicitly mentioned in the plans. It remains unclear how many restoration actions will be undertaken. For example, in North-Rhine – Westphalia, despite the existence of the 2012 local development concepts, the implementation for the 2022-2027 period is imprecise with no transparency about planned measures and their location.

Methods applied to assess the status of groundwater in the Elbe basin fail to implement the WFD’s key indicator for good quantitative status – the status of groundwater dependent ecosystems. Contrary to the reality of widespread degradation and drying out of wetlands, floodplains and forests, groundwater status is presented as good throughout the Elbe basin. Exceptions to this rule are only found in lignite mining areas.



The Geesthacht fish passage was a 2010 milestone for the recovery of fish migration in the Elbe, and funded as a measure to compensate for other environmental impacts of a power company. However, the passage is no longer operational and reflects the fact that the responsible authorities have neglected the operationalisation of restoration measures.

(Source: Th. Gaumert)

**Water allocation and abstraction control:**

Even in Natura 2000 sites, it remains uncertain whether effective abstraction controls will be established. For example, abstractions for drinking water from groundwater are made in the Berlin-Brandenburg border region without permits or information about the groundwater balance, which hampers the achievement of conservation objectives.

**Flood and drought management and climate proofing:** The Elbe draft RBMP briefly summarizes the challenges posed by climate change to water management. However, this has not clearly been reflected in river basin management. The draft RBMP includes a good practice example from Saxony on improved land use to reduce flood risk.

**Agriculture:** The Elbe draft RBMP includes a thorough assessment of the main pressures from agriculture but it is presented only at the RBD level and not for each water body. Regarding diffuse pollution, the draft RBMP states that mandatory and voluntary measures to improve farming practices and prevent nitrogen pollution and other nutrient leakages will be applied in all water bodies where this constitutes a significant pressure, but locations are not clear. In the Rhine RBD, the ambition and measures of the draft RBMP are vague and unclear on minimising nitrogen pollution, eutrophication, creating buffer zones along watercourses, especially in North Rhine Westphalia, and the lack of measures to protect small water bodies with groundwater-dependent habitats.

26. see omslagside (nrw.de), page 22.

		DE	
Topic		Elbe	Rhine
<b>1</b>	<b>Removal and adaptation of barriers</b>		
	1. Identification of the problem		
	2. Prioritisation		
	3. Cost-benefit analysis and monitoring plan		
	4. Ambition		
<b>2</b>	<b>Hydropower</b>		
	1. Pressures and sectors		
	2. Inventory of planned projects		
	3. Justification and exemptions		
	4. Criteria and thresholds		
	5. Plans for refurbishment and decommissioning		
<b>3</b>	<b>Inland navigation</b>		
	1. Pressures and sectors		
	2. Inventory of planned projects		
	3. Justification and exemptions		
	4. Criteria and thresholds		
	5. 'Working with nature'		
<b>4</b>	<b>Freshwater ecosystem protection and restoration and NBS</b>		
	1. Protected areas and their status		
	2. Prioritisation		
	3. Restoration targets		
	4. Nature-based solutions (NBS)		
	5. Natural Water Retention Measures (NWRM)		
	6. Sound financial mechanism		
<b>5</b>	<b>Water allocation and abstraction control</b>		
	1. Identification of significant water abstractions		
	2. Prospects of new water abstractions, related infrastructure and land uses		
	3. Review of abstraction permits		
	4. Abstraction control		
<b>6a</b>	<b>Drought management</b>		
	1. PoM "climate checks"		
	2. Drought management plans		
<b>6b</b>	<b>Flood management</b>		
	1. PoM "climate checks"		
	3. Link with the Floods Directive		
	4. Land use and flood management		
<b>7</b>	<b>Agriculture</b>		
	1. Assessment of pressures		
	2. Gap analysis and measures		
	3. Diffuse pollution		
<b>8</b>	<b>Coal mines (and combustion)</b>		
	1. Assessment of the problem		
	2. Priority hazardous substances		
	3. Climate change		
	4. Justification and exemptions		
	5. Cost recovery		
	6. Liabilities		
<b>9</b>	<b>Economic instruments and adequacy of budget</b>		
	1. Cost recovery calculation for sectors		
	2. Cost recovery rates and exemptions		
	3. Budget		
<b>10</b>	<b>Exemptions</b>		
	1. Number of exemptions		
	2. Gap analysis		
	3. Art. 4(4) and 4(5) exemption justifications		
	4. Article 4(6) exemption justifications		
	5. Article 4(7) exemption justifications		
<b>11</b>	<b>Review and update on the implementation of the previous RBMP</b>		
	1. Implementation of measures		
	2. Effectiveness of measures		

### Economic instruments and budget

**adequacy:** The Elbe draft RBMP only refers to public water supply and waste water treatment as water services relevant for cost recovery, and includes a general reference to water extraction and wastewater fees. For example, the State of Brandenburg (average annual precipitation <600mm) continues to de facto subsidize water abstractions for agricultural irrigation by exempting it from the state's water abstraction fee. Groundwater abstraction is charged at less than 1 Euro cent per cubic meter, equalling only 7% of the regular fee (0.00805 Euro/m<sup>3</sup>). Most strikingly, in times of continued drought, surface water abstraction was entirely exempt from the fee in 2018, eliminating the last economic incentive for its rational use. Environmental and resource costs are not quantified. The draft RBMP includes a budget estimation of almost €7 bn, with €4.4 bn assigned to the PoM and the rest for RBMPs after 2027. 50% of the budget is assigned to improve hydromorphology, 30% to waste water treatment and €0.7 bn to diffuse pollution. The estimated overall Rhine budget is €9.1 bn, but it lacks detail.

		LEVEL OF PERFORMANCE				
		high	good	moderate	poor	N/A
RELEVANCE	Not applicable or relevant for the RBD					
	This problem/ challenge has already been solved in the second RBMP					
	One of the many problems/challenges in this RBD					
	One of the Significant Water Management Issues (SWMI)					
	The main problem/challenge in this RBD					

**Table 18:** Overview of the performance of the draft 2022-2027 RBMPs Rhine and Elbe (Germany) on key topics by indicator.

Country specific concerns also include:

**Public participation:** In the Rhine, active public involvement does not take place in the vast majority of the river basin. The planning procedure lacks transparency and does not encourage citizens to take part in consultations, e.g. in North-Rhine–Westphalia, roundtables for active involvement at the local/regional level were announced but did not take place. Furthermore, the summary does not allow for a full understanding of the challenges and measures in the Rhine. And, all 15 regional plans have to be checked to assess whether fish migration is properly considered within the whole basin. The current river basin management approach is far from adequate, resulting in the non-acceptance of measures.

### **Pollutants including mercury, biocides and pesticides**

- The high level of pollution in the Elbe RBD is one of the main problems for the implementation of the quality requirements of the WFD. Despite the ban on deterioration, there are still direct and indirect discharges of heavy metals, industrial chemicals and other pollutants into the Elbe, its tributaries and groundwater bodies. In particular, the high loads of mercury and brominated diphenyl ethers (BDEs) are alarming. Less than 1% of rivers will therefore achieve good chemical status by 2027 (draft RBMP, p239). Annex A5-2 of the draft RBMP indicates that most water bodies are expected to achieve good chemical status by 2033 and others after 2045. This differing annual information on deadline extensions is incomprehensible, especially since according to the German coordination body of the relevant federal and states' water authorities<sup>27</sup>, good chemical status is not achievable until about 2100 due to atmospheric inputs of mercury.
- Deadline extensions are largely justified by “natural conditions.” But, several conditions for claiming these time extensions are not met since reasons are not documented transparently. There is no further information in the documents on measures concerning hazardous substances planned for 2024-2027, on the expected duration of the deadline extension after 2027, and methodological information on the effectiveness of the measures. In general, according to article 4(4) WFD, the deadlines specified in article 4(1) WFD can only be extended if the status of the impaired water body does not deteriorate

further. In order to claim deadline extensions due to natural conditions, active emission sources should have ceased at least within the deadlines applicable without extensions – by 2020 (article 4(1)a in connection with the OSPAR convention). By only referring to international agreements, the German states shirk their responsibility to implement the targets. It is not clear how the water authorities contribute to the achievement of these targets. For mercury, the reference to the coal phase-out law (draft RBMP, p.24) is not sufficient, since a complete phase-out is not planned before 2038.

- For pesticides and biocides, more transparent information is required on how the water authorities contribute to their reduction. Here, it is surprisingly stated that it is “of fundamental importance whether the use of a pesticide or biocide is already prohibited or whether an authorization still exists” (draft RBMP, p.171f.). Reference is also made to the Plant Protection Act and the national Action Plan for the sustainable use of pesticides, but it is not apparent how the implementation of the requirements will be achieved. The Elbe draft RBMP does not clarify which of the 260 biocides and 270 pesticides, that are in more than 40,000 products on the German market, are sold, applied and released. Water body information is not provided. Even for the few river specific or priority biocides like Cypermethrin, a public inventory or gap analysis is still outstanding. The draft RBMP contains no comprehensive measures to minimise pesticide input at source, especially for small water bodies (<10 km<sup>2</sup> basin size).

There are polluted water bodies for which specific measures are not established, for example within the Tide Elbe sub-basin, while for all others measures will not be implemented before 2027. Furthermore, there is no transparent management plan to protect Natura 2000 sites and groundwater ecosystems from biocides since there is no monitoring of vulnerable habitats close to piers (which are often at risk from contamination from biocides from motor boats) and a lack of criteria. Monitoring is also inadequate. No effective surface water environmental quality standards (EQS) and monitoring standards have been established for over 70% of approved pesticides and biocides. It remains unclear which substances and metabolites are considered for the relevant total groundwater quality standards. For almost 25% of substances EQS cannot be applied because the analytical methods are not sufficient.



**FOR PESTICIDES AND BIOCIDES, MORE TRANSPARENT INFORMATION IS REQUIRED ON HOW THE WATER AUTHORITIES CONTRIBUTE TO THEIR REDUCTION.**

27. Bund-Länder-Arbeitsgemeinschaft Wasser (LAWA), 2017.