



# FACTSHEET

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## THIRD RIVER BASIN MANAGEMENT PLANS: WWF RECOMMENDATIONS

Almost twenty years on from the adoption of the Water Framework Directive (WFD), the improvement in the status of our rivers, lakes, wetlands, coastal and transitional waters, and groundwater across Europe is steady, but far too slow as evidenced by the daunting 60% of surface waters still not in good status. Progress reports have made it clear that the business as usual approach will not be enough to protect our freshwater ecosystems and make sure that the deadline for achieving good water status, already missed by a long shot in 2015 and postponed to 2027, will ultimately be reached.

The fitness check evaluation of the WFD has highlighted that “the next round of river basin management plans and programmes of measures will play a key role in ensuring the necessary progress towards achieving the environmental objectives by the 2027 deadline.”<sup>1</sup> This time, Member States have to get it right: the third River Basin Management Plans (RBMPs), scheduled to be adopted by the end of 2021 and covering the period 2022-2027, must be much more ambitious. The new EU Biodiversity Strategy for 2030 also recognises that “greater efforts are needed to restore freshwater ecosystems and the natural functions of rivers in order to achieve the objectives of the Water Framework Directive”.

Overall, this paper aims to ensure that the third RBMPs reflect the ecosystem approach of the WFD, looking at land use, environmental flows, restoration, sustainable water abstraction, pollution at source in an integrated way.

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- This briefing outlines the main WWF recommendations for measures to be included by river basin authorities and Member States in the third RBMPs. It aims to guide civil society organisations, citizens and any party taking part in the public consultations on the draft plans, which will be conducted in all EU Member States over the course of 2020-2021.
- The paper focuses on measures considered of European relevance. Far from being exhaustive, it concentrates on the main priorities and measures, which can be complemented by basin-specific measures.

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<sup>1</sup> European Commission, [Water Fitness Check](#), p. 119.



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## DAM REMOVAL AND ADAPTATION OF BARRIERS

Hydromorphological pressures are the most common pressure on freshwater ecosystems in Europe. They range from disrupting river continuity through barriers, to straightening rivers for navigation, or the construction of grey/human-made infrastructure for flood prevention.

<sup>1 2</sup> All these modifications disrupt the natural flow of the river and have significant negative effects on the ecosystem and its ability to self-regulate in the face of droughts and extreme floods. An initial estimate by the Adaptive Management of Barriers in European Rivers ([AMBER](#)) project shows the presence of at least one million of barriers (including for irrigation etc.) blocking the flow of rivers.

Dam and barrier removal/adaptation present relatively simple but very effective methods to improve the health of a surface water ecosystem. In the short and long terms, these methods impact on:

- Flow,
- A shift from a reservoir to a free-flowing river,
- Water quality (e.g. temperature and supersaturation),
- Sediment release and transport,
- Connectivity (e.g. migration of fish and other organisms).

Removing dams and adapting barriers also carries many economic benefits. In the USA, where dam removal is already more common, a study by Portland State University found that billions of dollars could be saved if dams were removed instead of repaired.<sup>2</sup>

River Basin Management Plans have previously missed the opportunity to improve river health by tackling hydromorphological pressures including through dam removal. But with the EU Biodiversity Strategy for 2030 having committed to the restoration of at least 25,000 km of free-flowing rivers (see box on the right), barrier dam removal and the adaptation of barriers need to be ramped up.

River basin authorities should include the following elements in the third RBMPs:

- ☐ Identification of the problem: The plans should take stock of all the barriers on the surface water bodies. In addition, the plans should link the occurrence of dams to the negative impact (e.g. flood increase) they are having on the ecosystem, both at their location and downstream.
- ☐ Prioritisation: The plans should identify barriers that are a priority for removals, such as obsolete or decommissioned barriers, barriers in protected areas, barriers that don't serve a significant purpose, or barriers whose removal can free the longest portion of river.

## Relevant Key Type of Measures according to WFD nomenclature

- **KTM10**  
Water pricing policy measures for the implementation of the recovery of cost of water services from industry
- **KTM5**  
Improving longitudinal continuity (e.g. establishing fish passes, demolishing old dams)
- **KTM6**  
Improving hydromorphological conditions of water bodies other than longitudinal continuity
- **KTM7**  
Improvements in flow regime and/or establishment of ecological flow regimes

### Good example: large-scale dam removal, Finland

From 2016 to 2018, WWF-Finland was involved in the demolition of 27 dams, which brought back around 600 km of free-flowing rivers. These calculations do not include the smallest streams, which are excellent places for migratory fish to spawn and grow, so the total amount of re-opened/restored habitat is actually considerably higher.

More information [available here](#).

<sup>2</sup> Gabrowski, [Dam Removal Europe Report](#), 2018, p.31



- Dam removal plans: The RBMPs should include dam removal plans which contain a cost analysis and a monitoring plan to assess the effects of dam removal on water status, biodiversity, and communities. The true cost of building new dams should also be assessed to balance the dam removal costs, and decommissioning costs of dams need to be included in the initial cost estimate. Specific guidance on that aspect will be developed at a later stage.

#### Expected at EU level:

The EU Biodiversity Strategy foresees technical guidance and support to help Member States identify sites and mobilise funding to be delivered in 2021 by the European Commission in consultation with all relevant authorities.

#### EU Biodiversity Strategy for 2030

"Greater efforts are needed to restore freshwater ecosystems and the natural functions of rivers in order to achieve the objectives of the Water Framework Directive. This can be done by removing or adjusting barriers that prevent the passage of migrating fish and improving the flow of water and sediments. To help make this a reality, at least 25,000 km of rivers will be restored into free-flowing rivers by 2030 through the removal of primarily obsolete barriers and the restoration of floodplains and wetlands."





## HYDROPOWER

Additional steps to those proposed above should be made to ensure that the negative impacts of existing hydropower plants are reduced as much as possible. A recent study commissioned by WWF shows that 5,734 hydropower plants are being planned across the EU, in addition to the 19,268 existing ones.<sup>3</sup> However many of these planned plants are not even included in Member States' RBMPs and, when they are, the exemptions that are necessary to authorise their construction are poorly justified (see section on exemptions). Additionally, there seems to be a reluctance of river basin authorities to recognise the role of the hydropower sector in river degradation. In the second cycle of RBMPs, only a fifth of Member States linked the significant hydro-morphological pressures to sectors responsible for them.<sup>4</sup>

The third RBMPs should include:

- ☐ Identification of the sectors responsible for each hydro-morphological pressure on a water body.
- ☐ An inclusive inventory all the possible planned hydropower plants proposed, including run-of-the-river and pumped storage plants which also have a detrimental impact on rivers. If projects that are in the planning stage when the RBMP is drafted are not included in the RBMP, they cannot pass the article 4(7) test and are not eligible to article 4(7) exemption.<sup>5</sup> If they are included, Member States need to make sure that they properly justify why this plant is needed, in line with the requirements of article 4(7). There should be no blanket exemptions for small hydropower plants.
- ☐ Clear-cut limits: If a hydropower plant is proposed in a protected area the plans should not go forward.
- ☐ Plans for refurbishment: In order to ensure energy needs are still met the refurbishment of older outdated plants must take precedence over the construction of new plants. This includes the refurbishment of pumped storage plants.

## Relevant Key Type of Measures according to WFD nomenclature

- **KTM10**  
Water pricing policy measures for the implementation of the recovery of cost of water services from industry
- **KTM5**  
Improving longitudinal continuity (e.g. establishing fish passes, demolishing old dams)
- **KTM6**  
Improving hydromorphological conditions of water bodies other than longitudinal continuity
- **KTM7**  
Improvements in flow regime and/or establishment of ecological flow regimes

## Regulatory framework for identifying obsolete plants

Identifying obsolete plants should be done through the process of the review of permits required under WFD article 11(5) and recommended in the EU Biodiversity Strategy for 2030 (see section on water allocation and abstraction control). Currently, the polluter-pays principle is not being applied to the hydropower sector. Operators of hydropower plants do not have to pay for the destruction of the ecosystems. The cost recovery principle could be a way to force the hydropower sector to pay for the restoration of the areas that have been degraded through the operation of hydropower plants.

<sup>3</sup> WWF, Geota, RiverWatch, Euronatur, [Hydropower pressure on European rivers. The story in numbers](#), 2019.

<sup>4</sup> European Commission, Staff Working Document, [European Overview - River Basin Management Plans](#), p. 239

<sup>5</sup> Where a project is put forward in the middle of the 6 years cycle and was not included in the previous RBMP, Member States should either formally update the existing RBMP or conduct a proper ad hoc public consultation, e.g. using the EIA process or other proper consultation. Source: CIS Guidance Document 36, [Exemptions to the Environmental Objectives according to Article 4\(7\)](#), p. 46.



## RIVER AND WETLAND RESTORATION

In order to achieve the objectives of the WFD, Member States can't only rely on mitigation measures to address current pressures, but also to address pressures from the past. The recreation and restoration of wetlands are explicitly listed as a supplementary measure in the WFD. In addition, all Member States have agreed to conserve and use wetlands wisely under the Ramsar Convention. The conclusions of the Fitness Check also found that the benefits of restoring ecosystems greatly outweigh the costs,<sup>6</sup> however that Member States were not investing nearly enough money in restoration efforts.

In the EU Biodiversity Strategy for 2030, the Commission has committed to present binding EU nature restoration targets in 2021. In the next RBMPs Member States should recognize that restoration of freshwater ecosystems can help significantly in the fight against climate change, because they are natural carbon sinks, and provide protection against many of the pressures that these ecosystems face. For example wetland environments naturally retain water and filter pollutants from it. Restoration of these ecosystems will help achieve both the quantitative and qualitative aspects of the WFD and contribute to the restoration targets set by the EU Biodiversity Strategy.

The third RBMPs should include:

- ☐ Prioritisation: Member States should identify different freshwater ecosystems that would benefit from restoration.
- ☐ Restoration targets: Member States should indicate a number of km<sup>2</sup> to be restored consisting in different ecosystems. Indicators such as quantity and dynamics of water flow, structure and substrates of river beds should be defined.
- ☐ Nature-based solutions (NBS): Instead of building grey infrastructure for flood management Member States should use nature-based solutions. For example restoring the natural floodplains of a river can provide multiple benefits, just one of them being natural protection against floods. Member States should integrate the indicators laid out in their Flood Risk Management plans and assessments.
- ☐ Natural Water Retention Measures (NWRM): Examples of measures reported under KTM23 refer to the restoration of floodplain meadows and floodplain forests but also reconstruction of drainage systems in agriculture and forestry or removal of weirs in the context of river restoration. Less than 20 River Basin Districts have reported using NWRM.
- ☐ Sound financial mechanism: Member States should again look at the economic principles of cost recovery and polluter-pays to fund these measures

## Relevant Key Types of Measures according to WFD nomenclature

- **KTM23**  
Natural water retention measures
- **KTM24**  
Adaptation to climate change
- **KTM25**  
Measures to counteract acidification
- **KTM26**: Reconnection of former side arms to the main stream

### Good example: restoration of the Arga river, Spain

The Arga river in Spain had suffered from intense channelling which resulted in loss of vegetation on its banks. From 2007 onwards, a restoration project, started at national level, and continued with funding from the LIFE programme, restored and reconnected the former meanders. The project resulted in an improvement of water quality and the restoration of the habitats of threatened species, including the European mink (*Mustela lutreola*).

<sup>6</sup> European Commission, [Water Fitness Check](#), p. 60.



## WATER ALLOCATION AND ABSTRACTION CONTROL

More than 7,600 (7%) European surface water bodies are affected by significant water abstraction pressures and 16% of the area of groundwater bodies is affected by over-abstraction.<sup>7</sup> According to the <sup>6</sup> WFD definition of groundwater good quantitative status, the long term annual average rate of abstraction should not exceed the available groundwater resource. The relatively good quantitative status of groundwater bodies under the WFD (89%) does not mean that the current levels of water abstraction are sustainable: they do not account for illegal water abstraction, which is huge in some Member States, and sometimes overestimates return rates.

The third RBMPs need to tackle this issue by working on the main sectors responsible for water abstraction. The main significant pressures causing failure to achieve good quantitative status are water abstraction for public water supply (yet this pressure has been on the decrease), followed by agriculture and industry. For these last two sectors, water abstraction has not decreased throughout the first two cycles,<sup>8</sup> partly because most Member States apply exemptions to allow and/or register small abstractions.<sup>9</sup>

Particular attention needs to be paid to agriculture. Whilst water abstraction in Europe decreased overall by 19 % between 1990 and 2015,<sup>10</sup> water demand from agriculture grew in 2010-2015 in Southern Europe (the area of Europe which is the most affected by water scarcity).<sup>11</sup> In Spain, the area of irrigated agriculture increased by 9.3% between 2005 and 2015, while water consumption increased by 2.8%. In the areas where there is no water available in rivers and reservoirs, the use of groundwater increased by 33% between 2005 and 2015.<sup>12</sup> The overall decrease in water abstraction has not resulted in an increased availability of water for nature and other uses than agriculture.

The third RBMPs should include:

- ☐ Identification of significant water abstraction (see box page 7).
- ☐ A list of all planned infrastructure impacting ground or surface water flow regimes, including water transfers and reservoirs, and an assessment of how they impact on overall flow characteristics and water balances. In particular, circular economy and water reuse infrastructures should go hand in

## Relevant Key Type of Measures according to WFD nomenclature

- **KTM07**  
Improvements in flow regime and/or establishment of ecological flow regimes
- **KTM08**  
Water efficiency, technical measures for irrigation, industry, energy and households
- **KTM09/10/11**  
on cost-recovery (see section 4)
- **KTM12**  
Advisory services for agriculture,
- **KTM13**  
Drinking water protection measures (e.g. establishment of safeguard zones, buffer zones etc.)
- **KTM21**  
Measures to prevent or control the input of pollution from urban areas, transport and built infrastructure, for groundwater related pressures
- **KTM24**  
Adaptation to climate change.

## EEA 2020 State of the Environment Report

"It is also important to have a strategy in place for keeping saved water for the environment, rather than for increasing agricultural production."

<sup>7</sup> European Commission, Staff Working Document, [European Overview - River Basin Management Plans](#), p.225.

<sup>8</sup> EEA, [European Waters](#), 2018, p. 59.

<sup>9</sup> European Commission, Staff Working Document, [European Overview - River Basin Management Plans](#), p.223.

<sup>10</sup> EEA, [State of the Environment Report 2020](#), p. 106.

<sup>11</sup> Eurostat, [Water abstraction by sector](#), EU, 2018.

<sup>12</sup> WWF Spain, [Agua para hoy, Sed para mañana](#), 2019.



hand with proper water allocation for nature, otherwise they will result in lower water levels in rivers.

- Proper justification for all the planned impoundments or infrastructure for water abstraction and regulation. The RBMP should either justify that they comply with WFD environmental objectives, or, if not, justify the use of exemptions (see section on exemptions). In particular, “overriding public interest” should be justified as it is required under both the WFD and the Habitats Directive.
- Clear identification of the authorities responsible for concessions, authorisations or permitting processes and a process whereby those authorities must refuse a permit if it compromises the achievement of the WFD environmental objectives, either directly or by referring to other institutions.
- A review of abstraction permits, as recommended by the EU Biodiversity Strategy and as per articles 11(3) and 11(5) of the WFD. The review should assess the efficiency and relevance of permits in light of foreseen water availability and of the economic analysis of water use which is required under article 5 of the WFD. Where controls have proved not to be efficient and where there are still significant abstraction pressures, permits have to be updated.<sup>13</sup>
- A regime of abstraction controls over the abstraction of fresh surface water and groundwater, impoundment of fresh surface water (article 11(3)(e)), and artificial recharge or augmentation of groundwater bodies (article 11(3)(f)), included among basic measures. Such controls are made possible by the latest technology, such as the installation flowmeters that transmit real-time information. Control of water abstraction is obviously key for the environment but also for users (water security, guarantee of water permits, and fight against illegal use).

According to the reporting on the second cycle of plans, progress is mainly needed in the following countries: Spain, Portugal and to lesser extent Sweden, Italy, Malta and Slovenia.<sup>14</sup>

#### Expected at national/EU levels:

- National level: Correct and equitable water pricing for abstraction.
- EU level: The EU Biodiversity Strategy foresees technical guidance to Member States on their measures to review water abstraction and impoundment permits and to restore ecological flows in the revised River Basin Management Plans, to be delivered by 2023.

#### Good example: estimating water abstraction

Proper estimate of water abstraction should include:

- Abstraction from surface water for urban, agriculture, industry, and other uses, including seasonal variation, total annual demand, and loss of water in distribution systems (Annex II, 1.4 WFD)
- Abstractions from groundwater (Annex II, 2.1 WFD)
- Sufficient data to calculate the long-term annual average rate of overall recharge (Annex II, 2.2 WFD)
- A mechanism to monitor water consumption/abstraction per sector, which can feed in the programme of measures.<sup>1</sup> A good approach to this is the definition of any sort of **exploitation index** for each surface or groundwater body, which includes water demands.

A good example of an Exploitation Index is the Water Exploitation Index+ defined by the EEA. Even if the use of such an index is not required to assess the status for surface waters under the WFD, it is useful to compare the level of abstraction pressures between different areas in the river basins and we suggest such an approach in the Third RBMPs.

More information [available here](#)

<sup>13</sup> *Ibid.*

<sup>14</sup> European Commission, Staff Working Document, [European Overview - River Basin Management Plans](#), p.224.





## DROUGHTS MANAGEMENT

Unlike water scarcity, a human-made recurrent imbalance that arises from an overuse of water resources, drought is a natural phenomenon. It is a temporary, negative and severe deviation along a significant time period and over a large region from average precipitation values aggravated by higher temperatures which increase evapotranspiration.

The increasing frequency, duration and intensity of droughts observed in the last 60 years in the Mediterranean region, Western, South-Eastern and Central Europe, is likely to be reinforced over the next 80 years.<sup>15</sup> According to the Copernicus Institute, 2019 was the warmest year on record for Europe, with very tangible consequences on water: the volume of water flowing through rivers was lower than average for two thirds of the year in 2019, and the lake surface temperature 0.34°C higher than normal in summer 2019.<sup>16</sup>

In the second planning cycle of the WFD, “Climate checks” of programmes of measures were reported to be done in all river basin districts except RBDs in six Member States, but sometimes more as a paper exercise.<sup>17</sup> This is why drought management strategies need to be developed as part of river basin management and in response to climate change. This is key to developing a preventive response to climate change impacts which is incorporated in the standard water management rules, and not only reactive emergency measures.

The third RBMPs should include:

- ☐ Thorough “climate checks” of Programmes of measures, as recommended by the Common Implementation Strategy (CIS) Guidance document number 24, “[River Basin Management in a changing climate](#)”.
- ☐ Water accounts to calculate water balance at the river basin and sub-catchment levels. This is closely linked to the identification of ecological flow (see [CIS Guidance document No. 31](#)), ensuring that the water needs of an aquatic ecosystem are respected and that water balances stay within sustainable limits. Both aquatic and terrestrial ecosystems need water coming/moving from the rivers (ecological flow regimes) and surging and exchanging from the aquifers (groundwater flows feeding and balancing water tables in wetlands).
- ☐ A summary of the effects of a prolonged drought, as well as measures to restore the water body after a prolonged drought, as per WFD article 4(6)(e) (see exemptions section).

## Relevant Key Type of Measures according to WFD nomenclature

- **KTM24**  
Adaptation to climate change.

### Good example: Drought management plans in Spain

In 2018, the Spanish Government approved the revision of Special Drought Plans for 16 river basin districts, some of them transnational. Those plans distinguish between episodes of droughts due to natural conditions and situation of water scarcity due to imbalance between water demand and available water resources, and different management measures are planned for both situations.

More information [available here](#).

<sup>15</sup> JRC, [Meteorological Droughts in Europe](#), 2016, p.4.

<sup>16</sup> Copernicus Climate Change Services, [European State of the Climate 2019](#), 2020.

<sup>17</sup> European Commission, Staff Working Document, [European Overview - River Basin Management Plans](#), p.224.





- | 9
- Drought management plans: In the river basins most affected by drought, a drought management plan must complement the RBMP (as per article 13(5) of the WFD) and include indicators and thresholds establishing onset, ending, and severity levels of the exceptional circumstances (prolonged drought); measures to be taken in each drought phase in order to prevent deterioration of water status and to mitigate negative drought effects; organisational framework to deal with drought. Most importantly, drought management plans should clearly separate drought from water scarcity. Water scarcity issues (imbalance between the water available and demand) that are caused by human misuse should be tackled by the RBMP itself, as well as by insurances policies for the use of water (mainly in economic terms).

The drought management plan could also be done at national level if deemed more efficient.

#### Expected at national level:

Drought Management Plans at national level. See [guidance document](#) from the Global Water Partnership Central and Eastern Europe, 2015.



## FLOOD MANAGEMENT

According to Copernicus Climate Change Services, November 2019 was one of the wettest Novembers on record, with precipitation of up to four times the normal amounts.<sup>18</sup> Floods are expected to be more frequent in the future. The fact that 70-90% of floodplains in Europe have been environmentally degraded<sup>19</sup> worsens both the height floods reach and the damage they cause, as land use is changing in these areas.

The Floods Directive brought much better floods forecasting at basin level, flood routing/modelling, warning and preparedness, and improvements in the understanding and modelling of soil and natural flood management measures. However, many measures that would contribute to WFD objectives have flood risk management benefits that are not taken into account during the RBMP process and in particular decisions on disproportionate cost.<sup>20</sup>

The third RBMPs should include:

- ☐ A proper hydromorphological assessment.
- ☐ Evidence that the objectives and requirements of the Floods Directive have been considered in the drafting of the third RBMP and that the programme of measures is expected to contribute to mitigating the effects of floods and droughts.
- ☐ The development/refurbishment of natural water retention, green infrastructure measures, sustainable drainage systems, such as the construction of wetland and porous pavements, to reduce urban and rural flooding and contribute to the achievement of WFD environmental objectives.
- ☐ Details of the application of Article 4(7) of the WFD for new flood defense projects and infrastructure.
- ☐ Recognition of the economic and social costs through flooding of poor land and water management from the Flood Risk Management Plans, especially in the assessment of disproportionate costs.
- ☐ Screening of grey flood protection infrastructure against the environmental objectives of the WFD.
- ☐ Measure to address land-use and its impact on flood protection. Currently, 40% of floodplains are occupied by farmland, so the RBMP should request from farming authorities that they take the pertinent measures to make farming compatible with floods

## Relevant Key Type of Measures according to WFD nomenclature

- **KTM23**  
Natural water retention measures
- **KTM24**  
Adaptation to climate change.
- **KTM07**  
Improvements in flow regime and/or establishment of ecological flow regimes, including the definition of “generator flows” FOR CLARIFICATION; those flows that resemble strong flash floods and can generate changes in the hydromorphology, with ponds and side arms, that later help in buffering floods.

## Expected at EU level:

Greater support through the WFD CIS process would be beneficial.

## Good example: dyke relocation in the Lödderitzer forest

WWF and partners worked in the Lödderitzer oak forest to remove the existing dyke and built a new one further from the river, and restored around 600 hectares of the most important floodplain habitat in Central Europe. This is expected to reduce flood levels by nearly 30cm for a 100-year flood for 8km upstream of the project site, providing a considerable reduction in flood risk for the city of Aken.

More details [available here](#) on 26-27.

<sup>18</sup> Copernicus Climate Change Services, [European State of the Climate 2019](#), 2020.

<sup>19</sup> EEA, [Floodplains: a natural system to preserve and restore](#), 2019.

<sup>20</sup> WWF, [Support to Fitness Check on the WFD](#).



## AGRICULTURE

Farming has impacts on all aspects of water status – quantitative, chemical, and ecological.

| 11 Agriculture is a significant source of water abstraction in Europe for irrigation. Water abstraction for agriculture is the second pressure preventing the achievement of good quantitative status (after abstraction for public water supply). Agriculture remains the sector using the largest share of water (40% of annual water use in Europe), especially in Southern Europe where crop irrigation is expanding (see also dedicated section on water allocation and abstraction control).<sup>21</sup>

Although part of the water abstracted for agriculture is returned to the environment, it has often been polluted in the process. Agriculture is the first source of diffuse pollution of water, mainly due to manure and fertilisers, and therefore negatively affects the chemical status of surface and groundwater. The latest State of the Environment Report 2020 indicates that while the nitrogen surplus is overall decreasing in the EU, the phosphate surplus in the EU-28 increased by 14 % in the period between the reporting periods 2008-2011 and 2012-2015.<sup>22</sup> The WFD fitness check identified that one area where there is room for improvement is diffuse nutrient and chemical pollution from agriculture.<sup>23</sup>

Finally, farming also causes physical and hydrological alterations of watercourses, mainly because of infrastructures for irrigation (dams, barriers and locks), drainage and flood protection.

Despite this alarming situation, no sufficient basic and supplementary measures on agriculture have been taken in the first and second cycles of RBMPs, and when they have been taken, there has been no proper analysis of their expected or measured impact. The Commission reports that “in half the cases no ex-ante assessment is made of the extent to which the measures taken will be sufficient to close the gap to good status.”<sup>24</sup>

One key challenge is the lack of coherence between the Common Agricultural Policy (CAP) and the RBMPs. As the new CAP Strategic Plans are already being drafted in 2020-2021, before the finalization of the third RBMPs, it is crucial that the preparatory “Significant Water Management Issues” documents are already used to inform CAP strategic planning.

## Relevant Key Type of Measures according to WFD nomenclature

- **KTM02**  
Reduce nutrient pollution from agriculture
- **KTM03**  
Reduce pesticides pollution from agriculture.
- **KTM11**  
Water pricing policy measures for the implementation of the recovery of cost of water services from agriculture
- **KTM12**  
Advisory services for agriculture
- **KTM13**  
Drinking water protection measures (e.g. establishment of safeguard zones, buffer zones, etc.)
- **KTM24**  
Adaptation to climate change.

### Good example: Guidance document, Danube basin

The International Commission for the Protection of the Danube River is preparing a guidance document on sustainable agriculture to mitigate drought impacts and to reduce nutrient pollution from diffuse sources. The guidance document will be available by the end of 2020.

<sup>21</sup> EEA, [State of the Environment Report 2020](#), p. 108.

<sup>22</sup> EEA, [State of the Environment Report 2020](#), 106.

<sup>23</sup> European Commission, [Water Fitness Check](#), page 68.

<sup>24</sup> European Commission, Staff Working Document, [European Overview - River Basin Management Plans](#), p.5.





The third RBMPs should include:

- A robust assessment of the main pressures from agriculture on freshwater bodies, and of the effectiveness of past and ongoing measures.
- The interventions needed in the farming sector should contain sufficient detail and be tailored to the instruments available under the CAP, to facilitate their uptake and funding.
- Measures to improve farming practices and prevent nitrogen pollution and other nutrients leakages. Agreements and contracts with the farmers concerned in the vicinity of the catchment area are a way to encourage better practices.
- Mandatory basic measures to control discharges from fields and protect water bodies. This can include cross-compliance (future conditionality) requirements of the Common Agricultural Policy.
- Basic measures required by the Nitrates Directive, targeting the designated nitrate vulnerable zones. These should include measures to limit fertiliser use, for instance using economic incentives such as specific fees for fertilisers.
- Measures should not only be corrective measures, such as buffer strips or catch crops. They should also be measures targeting the issue at the source, such as reductions in the use of fertilisers and in the phosphate content of animal feed.
- An ex-ante assessment of whether the basic measures will be enough to achieve the environmental objectives of the WFD. If they are not sufficient, then the RBMP must contain supplementary measures.

### Expected from the future CAP:

**EU level:** The future CAP should be made more coherent with WFD obligations. In particular, as regards the CAP Strategic Plans regulation:

- the water-related elements of conditionality (Annex III) must be reinforced,
- the Natura 2000 and WFD payments (Art. 67) should be made mandatory for Member States,
- strong safeguards must be introduced for any investment support for irrigation to be in line with the achievement of good water status by 2027 (Art. 68).

**National level:** Member States need to make a much better use of the CAP to support the WFD and fund the relevant interventions on agriculture:

- use the Significant Water Management Issues documents from the river basin authorities to inform CAP strategic planning,
- ensure a proper implementation and verification of CAP conditionality requirements, with sufficient control and dissuasive penalties,
- support the provision of advisory services for improved water and nutrient management in agriculture,
- avoid any policy incentives (e.g., higher payments per hectare or investment support) that encourages the expansion of irrigation,
- use all appropriate Rural Development schemes under the CAP to fund RBMP measures.



## ECONOMIC INSTRUMENTS

| 13

According to Article 9 of the WFD, competent authorities should ensure that the costs of water management measures, including environmental and resource costs, are estimated, and water policies established to recover them, taking into account the polluter-pays principle. With the Commission's fitness check highlighting lack of funding as a significant obstacle to WFD implementation<sup>25</sup>, it is clear that by not properly implementing cost recovery, Member States are depriving themselves from a source of revenue. Instead, they allow costs of measures to be borne mainly by consumers, and do not incentivise good practices, which at end requires even more measures to reach the good status.

Recovery of environmental and resource cost remains limited for most of the river basins and sectors, and water users are contributing very unequally to the integration of negative externalities and their recovery. The drinking water supply and sanitation sector applies financial cost recovery the most, while other sectors such as hydropower, agriculture, industry and navigation remaining largely exempt. There is no solid ground for such disparities to persist and certainly not a serious economic one, considering that water as an input to water-dependent sectors only represents around 5% of gross value added in these sectors.<sup>26</sup>

The European Commission highlighted that “for the third RBMPs Member States should: [...] Ensure the proper implementation of Article 9 on cost recovery, including the calculation and internalisation of most of the financial, environmental and resource costs for all activities with a significant impact on water bodies and the economic analysis to underpin the programme of measures”.<sup>27</sup> Measures to implement cost recovery should be included in the basic measures required by Article 11(3)(b) to reach the environmental objectives of the directive.

The third RBMPs should include:

- A comprehensive list of the sectors contributing to the largest pressures on fresh water, which cost recovery should apply to. Those are (among others):
  - Sectors contributing to hydromorphological pressures (see section 4), in particular: hydropower companies, the navigation (including navigation infrastructure) and flood protection sectors. Cost-recovery should for instance ensure the adequate contribution from water

## Relevant Key Types of Measures according to WFD nomenclature

- **KTM09**  
Water pricing policy measures for the implementation of the recovery of cost of water services from households
- **KTM10**  
Water pricing policy measures for the implementation of the recovery of cost of water services from industry
- **KTM11**  
Water pricing policy measures for the implementation of the recovery of cost of water services from agriculture

## Good examples: economic instruments

- France: Revenues from taxes targeting pollution or abstraction are used to finance water measures.
- Portugal: Water resources tax that is earmarked for integrated water management.

<sup>25</sup> Only 46% of RBDs reported that funding was secured to implement measures in all relevant sectors, while 17% reported having no financing secured at all. Source: European Commission, [Water Fitness Check](#), p.23.

<sup>26</sup> European Commission, [Water Fitness Check](#), page 63.

<sup>27</sup> European Commission, Staff Working Document, [European Overview - River Basin Management Plans](#), p.6



users to achieve the environmental objectives in the different water bodies. In this regard, the economic instruments can contribute to the restoration of degraded areas. They could incentivise hydropower companies to invest in the refurbishment of existing hydropower plants, the removal of obsolete dams, or restoration measures in river bodies affected by hydropower plants, as this would reduce their cost share (see related sections).

- Agriculture as a main source of diffuse pollution and water abstraction: Proper cost recovery schemes covering agriculture should be in place, such as agricultural effluent charges which reflect the polluter-pays principle and the impact of abstractions in the water bodies (taking into consideration that in some regions up to 70% of the water goes for agriculture). Cost recovery should also stimulate rational water use and avoid that progress in water efficiency leads to unsustainable increases in water use.
- Sectors responsible from point source pollution, in particular Urban Waste Water Treatment Plants (UWWTPs), and industry.

- ☐ For each of the aforementioned sectors, proper calculation of all financial, environmental and resource costs, in terms of externalities that the society bears due to the use of water resources for economic development must be estimated. They should reflect the value of improved water status including the water security and the provision of other water-related ecosystem services, but also they must take into account also the non-financial benefits of good water status (e.g. bending the curve on aquatic biodiversity), and forms the basis for the definition of recovery rates.
- ☐ Limited number and proper justification for the exemptions to the implementation of cost-recovery provided under article 9(4). Agriculture is the sector where article 9(4) exemptions are applied the most. It is important to make sure that all the activities where cost recovery does not apply are covered by an exemption (for instance, most of the time cost recovery is not applied to the hydropower sector and yet no exemptions are mentioned in the RBMPs), and that exemptions are properly justified.

### Expected at EU level:

Member States should use a definition of water services which are not limited only to supply of water and wastewater treatment, but can for example also include impoundment for hydroelectric power generation, navigation and flood protection, and abstraction or storage for irrigation and industrial purposes - as confirmed by the EU Court of Justice judgement C-525/12 - and covers not only strict water use but also discharges leading to diffuse and point source pollution.





## EXEMPTIONS

Currently, around 53% of water bodies fall under at least one exemption, and in some Member States, this number is higher than 95%.<sup>28</sup> While the ability to use exemptions is an important part of the legislation, the excessive use of exemptions is counterproductive and goes against the objectives of the WFD.

Firstly, it is crucial that Member States use exemptions far less in the third planning cycle. RBMPs should not turn into a list of exemptions justifying why Member States and RBAs are not acting to improve the health and condition of rivers, wetlands and aquifers.

Secondly, in order to reduce the reliance on exemptions, the third RBMPs should include a proper gap analysis. The gap analysis is used to show the scale of action that is necessary to achieve WFD objectives. It should be used to explain the reasons for the decisions taken and to provide the underlying evidence. This should specifically include:

- a summary of the measures required under Article 11 which are envisaged as necessary to bring the bodies of water progressively to the required status by the extended deadline,
- the reasons for any significant delay in making these measures operational,
- the expected timetable for their implementation are set out in the river basin management plan.
- A review of the implementation of these measures and a summary of any additional measures will be included in updates of the RBMP.

Based on a concrete gap analysis outlining the scale of necessary actions, the 2021 RBMPs would then contain measures to improve water body status or to prevent deterioration towards meeting the objectives by 2027, unless it is already known that more time is needed due to natural conditions. For the 2027 RBMPs, the gap analysis will need to be updated and decisions on exemptions reviewed in accordance with the directive. While the gap analysis is not mentioned explicitly in the directive it falls under the category of properly justifying exemptions.

Thirdly, Member States should improve the justification of exemptions in the third cycle of plans. In particular:

- **Transparency** in relation to the justifications for the use of exemptions should be further improved in the RBMPs,

## General exemptions use

According to the European Commission's assessment report on 2<sup>nd</sup> RBMPs:

For the third RBMPs Member States should: "[...] Reduce reliance on exemptions to ensure a timely achievement of the WFD objectives and improve transparency in relation to the justifications used."

## Article 4(4) exemptions

Member States in the Common Implementation Strategy have agreed that the use of time exemptions on grounds of "technical feasibility" and/or "disproportionate costs" is allowed for the last time in the third RBMP. This means that water bodies which are still not in good status/potential at the time of publication of the RBMP in 2021 can still be subject to the application and justification of a time extension until 2027, but that management authorities should take all necessary measures to bring them to good status by 2027. On the contrary, time exemptions on grounds of 'natural conditions' can still be used to justify an extension of the deadline after 2027.

According to the document endorsed by the Water Directors in 2017 on the Clarification on the application of WFD article 4(4) time extensions in the 2021 RBMPs and practical considerations regarding the 2027 deadline,

"Article 4(4) time extensions are allowed in the 2021 RBMPs on grounds of 'technical feasibility' and/or 'disproportionate costs' with the objective of a phased achievement of good status or potential by 2027, or afterwards where 'natural conditions' prevent achievement by 2027

<sup>28</sup> WWF European Policy Office, Data source: EEA WISE, 2018, WFD reporting EC dashboards.



including clear criteria for the decision. In case of extending deadlines or lowering objectives, the necessary remaining measures and timeline for implementation should be clearly indicated.<sup>29</sup> This should include showing what progress has been made on water bodies currently under exemption.

- **Article 4(4)** : Under Article 4(4), the extension of the deadline needs to be justified and, under Article 11, a concrete program of measures drawn up analysing what the gaps are to achieving good status by the deadline.
- **Technical feasibility**: Technical feasibility under Article 4(4) and technical 'infeasibility' in relation to Article 4(5) need to be substantially improved and made more transparent in most of the RBMPs.
- **Disproportionate costs**: The justifications for disproportionate costs under Article 4(4) and Article 4(5) should be better distinguished. Costs cannot be considered disproportionate only because they are deemed as unaffordable.
- **Article 4(6)**: A few Member States have applied Article 4(6) exemptions due to prolonged droughts, such as Spain and the Netherlands, while prolonged droughts should be tackled through drought management plans. By no means should a Member State apply an exemption due to drought if they cannot show that proper water allocation throughout the year has been applied.
- **Article 4(7)**: Member States should include in the RBMPs an inventory of projects under development to ensure that the RBMPs present a complete overview of all current and planned developments, including particularly new hydropower, navigation, flood protection, drainage and water abstraction projects. Member States should ensure a thorough assessment of the expected effects of projects under development on water body status/potential at quality element level RBMPs. For the application of exemptions Member States are encouraged to implement the policy recommendations and the best practice guidance that has been elaborated under the CIS.<sup>30</sup> Member States must still show how the objectives can be achieved despite the negative environmental effects of these projects.

## Article 4(6) exemptions

Member States should be proactive about tackling extreme weather occurrences due to climate change through the RBMP to ensure water security, instead of applying article 4(6) exemption in retrospect. Therefore, the third RBMPs must include an assessment of the measures taken to tackle exceptional floods/drought under the previous cycle and actions to make sure they will not compromise the recovery of the quality of the body of water once the circumstances are over (see previous sections on droughts and floods).

## Heavily modified water bodies

Lastly, the designation of water bodies as Heavily Modified Water Bodies – which can be described as some kind of exemption as they do not need to reach good status, but good "potential", should be properly identified and justified. The ecological potential should be properly defined and as ambitious as possible, for example through the definition of proper ecological flow regimes, as in the case of water bodies right downstream of a dam.

### For more information

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<sup>29</sup> Assessment report 2nd RBMPs, p.178

<sup>30</sup> CIS Guidance Document 36: [Exemptions to the Environmental Objectives according to Article 4\(7\)](#)