## Support to the Fitness Check of the WFD and FD

### Introduction

Welcome to the expert consultation aimed at gathering further evidence for the Support to the Fitness Check of the Water Framework Directive and Floods Directive.

The Fitness Check of the EU Water Legislation is a comprehensive policy evaluation assessing whether the current regulatory framework for a policy sector is “fit for purpose” as per the Better Regulation Guidelines. The goal is to assess the effectiveness, efficiency, coherence, relevance and EU added value of EU Water Legislation, thus promoting better/smarter legislation, making it more responsive to current and future challenges as well as helping improve implementation.

**Responding to the surveys**

Please answer all the questions that you are able to through the online tool.
Use the 'ok' button to validate your response.

Where you are not able to answer questions – either because of a lack of data or because it is not relevant to you – there is no need to provide a response. Where answers are uncertain, an estimate is more useful than no information at all. Where annual data is provided, please state the year, source and the currency used in your answers. Please append to your responses any reports, publications or other documents that would be useful for the Fitness Check.

The questionnaires are available in English. Please do not hesitate to get in touch with the project team if you would like any assistance with language, we can provide some translation or direct support on the phone.

The deadline to respond to the questionnaire is **29 March 2019**.

**After the surveys**

The responses to the questions will be analysed and presented in the report supporting the Fitness Check.

Following the end of the consultation period, we will hold a series of follow-up interviews with some stakeholders to clarify responses to this survey or to ask for more details.

If you have any questions, please contact the project team at WFDFitCheck@woodplc.com or the European Commission at ENV-FITNESS-CHECK-WFD-FD@ec.europa.eu

**On information handling**
The information you provide will be used strictly in accordance with the provisions of the legislation on the protection of individuals with regard to the processing of personal data by the Community institutions and bodies.

**Question Title**
1. Name and surname of contact person

Andreas Baumueller

**Question Title**
2. E-mail address

abaumueller@wwf.eu

**Question Title**
3. Name of your organisation

**WWF European Policy Office**

**Question Title**
4. Location where your organisation is active

EU level, but also in many EU MS, including DE, AT, FI, SE, RO, BG, PL, HU, SK, SI, HR, EL, IT, ES, FR, UK, NL, PL.

**Question Title**
5. Type of organisation you represent

- Member State Competent Authority for water (at national, regional or local level)
- Member State Competent Authority for other matters (e.g. agriculture, industry)
- River basin district authority
- International river basin district authority
- EU institution
- Industry interest group
- Water operators

x Non-Governmental Organisation

- International organisation
- Research institution / University
- Other (please indicate)

**Question Title**
6. This survey comprises 10 independent questionnaires.

All stakeholders are able to respond to all questionnaires. However, we have indicated in our invitation email the targeted stakeholders for each survey.

Please choose which questionnaire would you like to respond first.

Once you have completed the questionnaire, the option to respond to another one will be offered. Alternatively you can choose the option 'end of the survey' to complete your response.

x Questionnaire 1 - **Floods Directive implementation**
x Questionnaire 2 - **Water body status – ecological, chemical and quantitative status**
x Questionnaire 3 - **Environmental objectives and exemptions**
x Questionnaire 4 - **Groundwater Directive**
x Questionnaire 5 - **Costs and benefits**
x Questionnaire 6 - **Cost recovery and pricing**
x Questionnaire 7 - **Monitoring and reporting**
x Questionnaire 8 - **Public participation and opportunities for stakeholders engagement**
x Questionnaire 9 - **Coherence**
x Questionnaire 10 - **EU added value**

## Questionnaire 1 - The Floods Directive

**This questionnaire is aimed at Member State competent authorities, trade associations and NGOs.**

Partly in response to the large floods along the Danube and Elbe rivers in the summer of 2002 and partly in response to mounting evidence that socioeconomic development and climate change increase the chances that floods in Europe could become more catastrophic and frequent, in November 2007 the Floods Directive (FD) entered into force.

The purpose of the Directive is to establish a framework for the assessment and management of flood risks, aiming at reducing the adverse consequences for human health, the environment, cultural heritage and economic activity associated with floods.
Please keep these four areas in mind when you reply and distinguish amongst them whenever possible.

The Directive takes a three step cyclical approach (repeated every six years) to flood risk management by requiring Member States to (1) undertake preliminary flood risk assessments (PFRAs) leading to the identification of areas that are at significant risk of flooding, known as areas of potential significant flood risk (APSFRs); (2) prepare flood hazard and risk maps (FHRMs) showing how far floods might extend, the depth or level of water and the impacts there might be; and (3) prepare Flood Risk Management Plans (FRMPs).
OK

---

**7. What would you identify as the key features of the FD that have contributed to its successes?**

The Floods Directive requires assessment of flood risk, and planning to manage it – but not the implementation of those plans. As such its success has relied on its ability to guide national-level as well as cross-border conversations and investment decisions. In this respect, the key to the FD's success has been its detailed prescription of the analysis needed (for example the requirement that flooding from all sources/pathways is considered, the sequential steps provided by APSFRs, FHRMs and FRMPs). This has provided an essential steer for all Member States, and not only those with limited flood risk management experience – several MS with established management systems have benefitted from being forced to address over-looked pathways and solutions, including non-structural measures giving the possibility to address flood risks without harmful infrastructural interventions.

Importantly, this includes the requirement under Article 7(3) FD to consider the impact of natural systems in mitigating floods and the environmental objectives of the WFD (paragraph 14 of the preamble of the FD, explicitly calling for consideration of maintenance and/or restoration of floodplains, is also relevant in this respect). We consider this requirement to have driven the nascent shift in flood management away from costly and energy-intensive downstream solutions and toward remedying problems at their source. More effort to ensure a greater uptake of nature based solutions and tackling problems at their source is however needed.

However, without a requirement to implement plans, delivery has been patchy and EU citizens face widely divergent levels of flood risk. This conforms to the principle of subsidiarity, but highlights how such an approach may not always be suitable for cross-border and single market concerns such as water pollution and ecological damage.

**8. To what extent does the flood risk management framework established by the FD meet the current needs (i.e. reduce the adverse consequences from flooding) ?**

To a large extent

x To some extent

To a small extent

Not at all

I do not know

Views on meeting the current needs

As noted above – the FD has spurred improvements, but many EU citizens remain highly exposed to flood risk and a large proportion of landscapes are still managed in ways that contribute to this risk. With improved implementation of the FD and its coherence with WFD objectives current needs would be better met.

**9. In your opinion, what are the most significant knowledge technological and scientific developments that are relevant for the implementation of the FD? Can these be successfully integrated into the Directive's implementation? Please explain how.**

Most significant knowledge, technological and scientific developments

In our field of expertise, the most significant developments are: much better floods forecasting at basin level, flood routing/modelling, warning (i.e. preparedness), and improvements in the understanding and modelling of soil and natural flood management (green) measures, but also effective methods for stakeholder involvement. Proper cost-benefit analyses considering ecosystem services brought by restoration as well as reduction of maintenance costs in the long term, which are crucial for effective implementation of the FD, are still at a developing stage.

Views on integration

These are already integrated to some extent through Article 7(3) and Article 9. Full implementation of the Water Framework Directive would play a greater role than any changes to the FD: 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 [1]. Greater support for this through the WFD-CIS process would be beneficial.

[1] See also the European Court of Auditors report on the implementation of the EU Floods Directive, that concluded that more efforts are needed by Member States to ensure compliance of flood-related projects with the WFD (European Court of Auditors (2018) Floods Directive: progress in assessing risks, while planning and implementation need to improve. Special Report. No 25).

**10. What aspects of the FD are well integrated with the WFD (Water Framework Directive)? What aspects are not?**

Aspects that are well integrated

There are clear legislative links within Articles 7 and 9 of the FD (as noted above) and Article 4 of the WFD (which allows objectives to be set in recognition of flood risk management needs).

Both Directives have a common focus on providing sensible and sustainable investment in water management through a clear and detailed assessment process – something often lacking in a sector that faces considerable legacy problems and a history of poor investment decisions as a result of vested interests and hidden externalities. Although the RBMP and FRMP cycle is not exactly aligned, the common six-year period and clear division of responsibilities between the two processes helps competent authorities to 'read across'.

Aspects that are not well integrated

As noted above, the disbenefits/economic costs through flooding of poor land and water management does not always feed into RBMP assessments and decisions, even though in many MS the same competent authority is responsible for both processes. This is essentially a problem of poor implementation of Article 9 FD and subsequently Article 4 WFD. Addressing this should be a core priority for the WFD-CIS process.

**11. Article 9 of the FD requires coordination or integration of the FRMPs with the WFD River Basin Management Plans. Has this led to any benefits or obstacles? Can you provide examples?**

x Benefits

☐ Obstacles

☐ Both

☐ None

☐ I do not know

Comment

As noted above, we consider the potential benefits to be considerable but poorly realised. There are numerous small-scale examples of benefits (see for example the improved management of the river Raba as described in our case study report Bringing Life Back to Europe's Waters [1]) and partial attempts to reflect RBMP concerns within flood risk management decision-making (an example here is the initial option appraisal process English Environment Agency's FCERM-AG which partially integrates environmental and disproportionate cost decisions). Gains have however been limited through systemic failures: in many Member States WFD and Flood Management decisions and funding streams remain separate or hypothecated. This is often a symptom of the poor implementation of the WFD: practical responsibility for delivering WFD measures and improvements is too often limited to a single competent body or department within that body, leaving flood management agencies/functions unaware of or unconcerned by WFD requirements.

[1] WWF, ERN, EAA, EEB (2018) Bringing Life Back to Europe's Waters: The EU Water Law in Action.

**12. Based on your experience, how well is the implementation of the FD integrated with other relevant policies (e.g. land use planning, nature based solutions, civil protection, climate change adaptation) at national, regional and local levels?**
**Please elaborate e.g. by pointing out gaps (provide examples to demonstrate) and indicate which spatial level your response relates to.**

| | To a large extent | To some extent | To no extent | I do not know |
|---|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| Land use planning | | x | | |
| Nature based solutions | | x | | |
| Civil protection | | x | | |
| Climate change | | x | | |
| Other: agricultural policy | | x | | |

Comment

Our response is made at a broad, EU-wide level and the extent of linkages will differ between and within Member States. As a general comment flood risk management is increasingly integrated with these other policy areas but crucial gaps remain: development controls on construction in flood-prone areas are frequently by-passed, while forward planning for climate change and best practice in nature-based solutions are still in a demonstration/occasional best practice stage in most Member States. Intensive agricultural lands occupy large territories of floodplains as well as upper catchments where floods generate, and can be a fundamental obstacle for floodplain restoration, in cases where agricultural features (such as drainage and embankments) interrupt/constrain functional floodplains or increase surface run-off. Often this is a perverse result of agricultural subsidies, supporting intensive land-use on floodplains that is uneconomic once flood management externalities are taken into account. We note that in general, grants and incentives (including subsidies) support hard engineering solutions for addressing water challenges such as flooding, and measures thus adopted can be unnecessarily expensive and undermine the achievement of the WFD objectives. Examples of this can be found in the European Commission report carried out by the consultancy WRc in 2017 (*European level report: Evaluation of the contribution of Operational Programmes to the implementation of EU water policy,* Report ref UC12474.01).

**13. Can you provide an example(s) of existing provisions in your country or region's flood risk management framework, which, in your opinion, surpass the level of ambition set by the Floods Directive?**

- Yes
- No
- I do not know

Example

N/A at this level

**14. Do the provisions of Article 10 on public participation allow for effective participation in the production, review and updating of the FRMPs? Can you provide examples?**

x Yes

- To some extent
- No
- I do not know

Comment

| |
|---|
| The provisions of Article 10 are broadly drawn and so undoubtedly allow for effective public participation in FRMPs; however the actual extent of participation has depended on the effort and resources provided by the competent authorities and the level of investment available to implement FRMPs: in Ireland for example flood risk management investment has been substantially restructured and increasing in parallel to the FRMP process and so public engagement has been substantial. In the UK responsibility for FRMPs was vested in a level of local government unused to flood planning and facing major budgetary cuts – instead of the national competent authority for flood management - and engagement has been correspondingly lower.<br><br>Public participation in the FD has undoubtedly been weaker and less effective than participation in the WFD, as a result of the more detailed and extensive consultation requirements in the WFD. Only 'encouraging' active involvement (Art 10 of the FD) often results in authorities neglecting this exercise. |

**15. The FD encourages international / transboundary cooperation. Can you provide example(s) of how it has facilitated transboundary and / or international cooperation?**

| |
|---|
| Examples include:<br>- In the Elbe river basin cross-border cooperation has been fostered and is becoming more and more transparent; objectives of risk management and exchange of different kinds of data have been improved, and methodologies on determination of APSFR are being harmonised.<br>- For the Danube basin, the International Commission for the Protection of the Danube River (ICPDR) has a dedicated expert group on floods which includes delegates of basin countries. There is also a platform within ICPDR for integration with WFD through HYMO expert group and RBM working group work. |

**16. What do you think are the key benefits of implementing the Directive? (over and above a) no deterioration and the achievement of good status for the WFD and b) reduction of the adverse consequences for human health, the environment, cultural heritage and economic activity associated with floods?)**

| | Very significant | Moderately significant | Slighly significant | Not significant | Do not know | Not applicable |
|---|---|---|---|---|---|---|
| Social benefits (amenity, recreation etc.) | | | x | | | |
| Avoided damage (costs) | | x | | | | |
| Sustainable water use (based on a long-term protection of available water resources) | | | | x | | |
| Common methodology, harmonized status assessment and quality standards across Member States | | | x | | | |
| Enhanced transboundary cooperation | | x | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| Enhanced cross-sectoral cooperation | | | x | | | |
| Improved information and knowledge (additional monitoring) leading to better decision making and early intervention | x | | | | | |
| Public information and consultation | | | x | | | |
| Enhanced use of economic instruments, methods and principles | | | x | | | |
| Enhanced innovation | | | x | | | |
| Mitigation of the effects of climate change | | | x | | | |
| Adaptation to climate change | | x | | | | |
| Enhancement of the resilience of Ecosystems | | | x | | | |
| Enhancement of ecosystem services | | | x | | | |
| Protection of associated ecosystem (terrestrial, marine, …) | | | | x | | |

**17. Do you/does your organisation have information on costs associated with implementing the FD in your country or region or information that can contribute to estimating them?**

For each please indicate the year, currency and unit you are referring to. Feel free to provide full time equivalent (FTE) information if that is the information you have available. We have provided the following categories below, following the typology defined in the Better Regulation Guidelines (Tool#58) however if you have cost information available in another format, don't hesitate to send this information alongside your response.

**Compliance costs**: this encompasses investments and expenses in order to comply with substantive obligations or requirements of the legislation, this also includes administrative burden which are costs borne as a result of administrative activities performed to comply with information obligations included in the legislation.

**Enforcement costs**: this includes costs for monitoring and enforcement of the legislation. These are linked to associated activities for the implementation of the legislation.

**Indirect costs**: these costs are incurred by related markets or stakeholders but not directly targeted by the legislation. These are transmitted for example through changes in the prices.
Compliance costs

| |
|---|
| N/A for EU level |

Of which administrative burden (if available)

N/A for EU level

Enforcement and monitoring costs

N/A for EU level

Indirect costs (please describe which)

N/A for EU level

Other costs

N/A for EU level

Other (e.g. no cost data available)

**18. If you would rather upload information on costs, please do so here.**
**Choose File**
No file chosen

**19. Do the administrative requirements of the FD place a significant additional burden on authorities and operators?**

- Very significant
- Moderately significant

x Slightly significant

- Not significant
- I do not know

Please explain your response

The six-year planning and reporting cycle has placed additional requirements on competent authorities. We consider these to be a minor additional burden where authorities and operators already had well-developed flood management duties. Where this was not the case, the additional burden has been more significant – although the additional benefit of systematic flood planning has been correspondingly greater.

**20. In your opinion, how do the costs in relation to the implementation of the FD compare to the benefits (including additional benefits you might have identified) it achieves?**

- The costs are higher than the benefits

x The costs are lower than the benefits

- The costs and the benefits are proportionate
- I do not know

Comment

Almost all Member States under-invest in flood management, when set against other public and private infrastructure. Average discounted returns on flood management investment are commonly in the region of 10:1 (see for example the 2014 UK National Audit Office review of Strategic flood risk management), and will become more important as our climate changes. We strongly doubt that the investment driven by the FD has incurred an economic loss in any Member State.

**21. In your opinion, have the reporting requirements of the FD contributed to a better availability of data at national or regional level?**

○ Yes, fully

x Only in part

○ No

○ I do not know

Comment

This is true to a large extent. The data underlying FRMPs remain difficult to access and/or poorly interpreted in many cases, and it is often not clear how investment decisions and option appraisals link back to the available data and analyses.

**22. In your opinion, are there any missing elements in the current reporting requirements?**

x Yes

○ No

○ I do not know

Comment

There is a need for more detailed reporting of the reasons for eventual investment decisions, and greater reporting against the progress of previous FRMPs; there is also a need for more detailed reporting on the linkages with RBMPs/WFD implementation (e.g. on mutual benefit for WFD and FD). We would recommend this be strengthened through guidance documents and follow up by the EC, and not through a revision to the FD.

**23. Are you aware of any incoherence between the FD and the following policy areas?**

| | Yes | No | I do not know |
|---|---|---|---|
| European Union Solidarity Fund | | x | |
| EU Climate Change Adaptation Strategy | | x | |
| EU Strategy on Green Infrastructure | | x | |
| Community Civil Protection Mechanism | | x | |
| EIA Directive | | x | |
| SEA Directive | | x | |
| SEVESO Directive | | x | |
| INSPIRE Directive | | x | |
| Directive on European Critical Infrastructure | | x | |
| European Commission Guidance for Recording and Sharing Disaster Damage and Loss Data | | x | |

Other (please specify)

The Common Agricultural Policy supports intensive agricultural management of floodplains in a way that often prevents (or increases the costs of) strategic flood management and applying green measures. Similar effect can also occur due to transport policy funding supporting unsustainable navigation projects (estuaries as well as inland waters).

**24. To your knowledge, has the FD led to any unintended outcomes, either positive or negative?**

- Unintended outcome - positive
- Unintended outcome - negative
- Unintended outcome - both positive and negative

x No unintended outcome

Please explain your response

The intended outcomes of the FD were for more detailed analysis, transparency and scrutiny of Member States' flood management systems. This has happened to a greater or lesser extent across all Member States.

**25. Do you believe the FD is achieving its purpose? If not, what would you describe as the main factors that have prevented it from achieving it?**

x Yes

- No
- I do not know

Describe main factors

Broadly speaking we believe the FD to be achieving its purpose. While there is still too little investment in flood management, greater investment is not an explicit goal of the Directive. Trans-boundary co-operation is still nascent/under-developed in many cases and could be accelerated by greater attention and guidance, but the Directive is contributing to improvements here, especially where international coordinating body, such as a river commission, exists. Implementation of the FD would also benefit from a greater synergy with the implementation of the WFD and Nature Directives.

**26. You have now completed the questionnaire on the Floods Directive. Feel free to add any further comment in the box below. The following question will allow you to reach another questionnaire.**

/

27. To which questionnaire would you like to respond next?

- Questionnaire 1 - Floods Directive
- Questionnaire 2 - Water body status – ecological, chemical and quantitative status
- Questionnaire 3 - Environmental objectives and exemptions

- [ ] Questionnaire 4 - Groundwater Directive
- [ ] Questionnaire 5 - Costs and benefits
- [ ] Questionnaire 6 - Cost recovery and pricing
- [ ] Questionnaire 7 - Monitoring and reporting
- [ ] Questionnaire 8 - Public participation and review
- [ ] Questionnaire 9 - Coherence
- [ ] Questionnaire 10 - EU added value
- [ ] End of the survey

## Questionnaire 2 - Water body status – ecological, chemical and quantitative status

**This questionnaire is aimed at Member State competent authorities and NGOs.**

The Water Framework Directive (WFD) foresees as an objective the achievement of overall good status for all surface and groundwater by 2015, except for water where exemptions were applied. Each status type (*chemical, ecological, quantitative*) is determined based on certain indicators (or parameters).

In this part of the questionnaire we are interested in understanding the interactions between these different status and whether these have contributed to facilitate the implementation of the Directives or acted as a barrier.

**Good ecological status** is defined as the state of the system in the absence of any anthropogenic pressures, or a slight biological deviation from what would be expected under undisturbed / reference conditions[1].
Annex V of the WFD outlines three groups of 'quality elements': biological, and two supporting ones, hydromorphological and physico-chemical, to be used in the classification of ecological status.

For **surface water**, good chemical status means that no concentrations of priority substances exceed the relevant environmental quality standards established in the Environmental Quality Standards Directive 2008/105/EC (EQSD).

For **groundwater** to meet good chemical status, hazardous substances should be prevented from entering groundwater, and the entry of all other pollutants (e.g. nitrates) should be limited[2].

For groundwater, good quantitative status can be achieved by ensuring that the available groundwater resource is not reduced by the long-term annual average rate of abstraction. In addition, impacts on surface water linked with groundwater or groundwater-dependent terrestrial ecosystems should be avoided, as should saline intrusions.

[1] Voulvoulis et al. 2017
https://www.sciencedirect.com/science/article/pii/S004896971632157X#bb0340
[2] EEA, Groundwater quantitative and qualitative status
https://www.eea.europa.eu/themes/water/european-waters/water-quality-and-water-assessment/water-assessments/groundwater-quantitative-and-chemical-status

**28. Are the parameters that determine each status type (chemical, ecological, quantitative) clear and logical?**

x Yes, for all

☐ Only for some

☐ No

☐ I do not know

Please explain your response

WFD ecological parameters have a clear and well-reasoned connection to the near-natural state of the waterbody, which is the appropriate ecological reference point. All key classes of biological receptors, together with the most critical supporting factors, are covered in sufficient detail to ensure

a consistent framework between Member States while allowing flexibility over those parameters which can be expected to vary between river basin districts and individual waterbodies. We consider the detailing of survey methods to be an important part of ensuring ecological status parameters are consistent between Member States.

Similarly, chemical parameters are consistently based on the safe levels of substances that have the potential to damage human health. These substances and their limits have been identified and classified through a robust process. Sensible and logical distinctions are made between priority and hazardous substances, in a way that reflects the precautionary principle as set out in TFEU to build upon the Industrial Emissions Directive and REACH process.

Groundwater status assessments are, similarly, built upon the logical principle that aquifers must not be degraded or used unsustainably.

We note in particular the importance of the 'one-out-all-out rule' in ensuring that no parameter or class of damage is overlooked. This is particularly critical as the status of different parameters is not always correlated and monitoring systems do not cover all parameters for all water bodies – in this situation single parameter failures can act as canaries in the mine to highlight significant problems. Moreover, the 'one out all out' nature of status objectives for the WFD has also pushed Member States to address all pressures, and makes it clear where this has not taken place. It is disappointing that there are unaddressed pressures for so many water bodies, but where this has led to poor headline performance in meeting objectives it is for legitimate reasons: water bodies are simply not in good enough health to meet the purposes of the Directive as set out in Article 1.

We know from experience elsewhere in the world how vulnerable surface waters and aquifers are to over-abstraction, contamination and other unsustainable damage – and how drastic the eventual consequences of damage can be. The parameters set out in the WFD are in this respect far-sighted and entirely reflect the purposes of the Directive set out in the preamble: the treatment of Europe's waters as a common heritage that must be used sustainably.

**29. Are the different parameters (e.g. physico-chemical elements, water balance etc) to consider as part of each status type clearly defined?**

x Yes, for all status types

☐ Yes, for some (please precise which)

☐ No

☐ I do not know

Please explain your response

Considerable effort has gone into selecting and refining the various parameters, and providing detailed guidance on their application and interpretation. The details provided by the WFD text and annexes, and the WFD-CIS and intercalibration process, mean that WFD parameters are usually well-defined in relation to other Directives. This reflects the central role of parameters in a Framework Directive, where specific measures and outputs have not been prescribed.

**30. Are the parameters used to define ecological status, the classification of ecological status and relevant biological quality elements up to date from a scientific point of view?**

x Yes, for all

○ Yes, for some (please precise which)

No

I do not know

Please explain your comment

There is enough flexibility within the WFD, GD and EQSD to adjust parameter levels and to change the suite of priority and hazardous substances to which they apply. The only fixed aspects are the core receptors (e.g. biological status elements) and those aspects of chemical status for which scientific certainty exists (e.g. the 'supporting' role of phosphorous compounds in determining ecological status, the toxic effects of lead and arsenic).

We consider it important that specific monitoring and survey methods for biological status elements are set out within the Directive. The 'sampling' nature of WFD monitoring will allow these to be used in combination with novel techniques such as DNA sampling and passive monitoring as these become more developed and reliable, but in our opinion as water ecologists these new techniques do not replace the need to base assessments ultimately on active and direct sampling of receptors. We hence see no need to revise the techniques set out in the Directive.

There is however clear scope for improvement in the assessment of the so-called supporting elements (hydromorphological, physico-chemical elements). This is a problem for hydromorphology in particular, as has been recognised by the EC (see minutes of SCG meeting of 8-9 March 2016, p.3) and is clearly recognised in the WFD and in the CIS Guidance on classification as well as the JRC discussion paper *European surface water ecological assessment methods* (see on this topic [1]). The problem here is that the biological assessment methods in several MS are not sensitive to hydromorphological modifications, allowing undetected *de facto* deterioration of water bodies. The deepening and widening of the Elbe provides an illustrative example - a project with the greatest possible impact on Elbe water bodies did not trigger deterioration in status, as methods used by the authorities for assessing the impact on BQE were not suitable for predicting the impacts of such a project.

Under the WFD, competent authorities need to be in a position to ascertain whether supporting quality elements are consistent with the values specified for the biological quality elements. We agree with that REFORM project, which recommends a precautionary approach involving targeted hydromorphological assessments whenever the biological assessment methods are not sensitive to hydromorphological pressure.

[1] https://circabc.europa.eu/sd/a/0ce84a75-0988-44c5-b02e-c10e3ceb1363/7%20-%20BQEs_Pressures_sep2017.docx

**31. Are the parameters used to define the chemical status and the categorisation of chemical status up to date from a scientific point of view?**

x Yes, for all

Yes, for some (please precise which)

No

I do not know

Please explain your response

Most important here is the ability within the Directives to modify the list and categorisation of priority and hazardous substances, and to adjust the acceptable limits of priority chemicals and the 'chemical' supporting elements of biological status. This flexibility has both driven and accommodated substantial improvements in the scientific understanding of chemical impacts on

water bodies, over the life of the Directives. There are examples of this within most Member States: as one example we would highlight the UK technical advisory group's revision (and tightening) of phosphorous standards for rivers.

We note that greater scientific understanding has overwhelmingly led to the tightening of chemical standards – a true reflection of our emerging understanding that nutrients and priority/hazardous substances have a central role in known public health and ecological crises. The WFD framework, including the EQSD, was able to accommodate well for such new scientific knowledge.

**32. In your opinion, does the chemical status adequately reflect the impact of chemical pollution, for example combination effects of chemicals and pollutants of emerging concern?**

○ Not at all

○ To some extent

x To a great extent

○ I do not know

Please explain your response

The WFD provides the necessary framework to effectively manage chemical pollution in aquatic ecosystems, including emerging pollutants and cocktail effect (mixture toxicity).

The new monitoring approach (ie effect-based tools), as well as the prioritisation process and watch list, together with the strongly precautionary approach taken to hazardous substance limits, as well as the strategy on pharmaceuticals in the environment, provides a sound route to address pollutants of emerging concern in the aquatic environment. However, the consequent implementation of these methods, and thus success in reducing these contaminants will largely depend on the political willingness of Member States to address them. For example in 2011 the EC proposed, based on extensive impact assessment accompanying the proposal, the listing of pharmaceutical substances in the priority substances list of the EQSD - but resistance by the majority of MS prevented their inclusion in the priority substances list (Directive 2013/39/EU). Moreover, using arguments such as lack of validated analytical methods for not listing substances is also not acceptable – if a substance is identified as P(H)S and there is not enough monitoring data it has to be put immediately on the watch list, even if there is not yet an analytical method available. To this end the EC should introduce a procedure to ensure the timely and cost-efficient development / validation of analytical methods.

Mixture toxicity poses a threat to freshwater ecosystems and therefore it is important to address it adequately. However the WFD doesn't need to be changed in order to effectively manage mixture toxicity:
1) Monitoring can be adapted to monitor for mixture effects. As the Directives' definition of pollution relates to all chemicals it is already necessary to evaluate 'in combination' chemical hazards (see e.g. [1] Brack, W., et al (2019)). An approach for chemical mixtures has already been set out in the CIS Guidance Documents no. 19 on chemical monitoring of surface waters, which represents a consensus position on best practice agreed to by all partners (MS, stakeholders, EC).
2) As regards status assessment, mixture effects can be incorporated in either ecological status or chemical status depending on the information provided by the chosen effect-based method (EBM). If the EBMs used provide information on a single or group of substances primarily responsible for effect then EQS values could be adjusted or new substances listed under the priority substances list; because of mixture effects on BQEs they can also be incorporated under ecological status.
3) As regards measures to address such effects, the WFD itself does not hinder the implementation of measures for the remediation of mixture effects in freshwater ecosystems. If an analysis of pressures was done prior to the impact assessment then mitigation can and should be planned at

this stage. If pressures causing the mixture effect are not clear, further steps will be needed, all required under the WFD, to identify them and implement measures to address the impact.

The overarching goal of the WFD's monitoring requirements is to establish a coherent and comprehensive overview of ecological and chemical status. Any new monitoring methods would most easily fall within investigative monitoring, but could also be integrated into surveillance and operational monitoring where appropriate.

We are aware of criticism from some stakeholders and MS that it is confusing to regard certain chemicals as river-basin-specific and therefore part of ecological status, and some as priority substances affecting chemical status. We would like to point out that for the status of a water body it is irrelevant whether the status is affected by chemicals found ubiquitously across Europe (priority substances) or chemicals that are of local/regional/national importance (river-basin-specific pollutants); addressing them effectively is equally important. Removing the physicochemical aspect from the definition of ecological status would negate the WFD's ability to present a holistic picture of the functioning of the aquatic ecosystem. Equally important is a separate list of priority substances, because it allows swift and targeted action for hazardous substances found ubiquitously across EU Member States and it allows for a minimum chemical status of water bodies, which all Member States have to adhere to.

In conclusion, we would note that the greatest barrier to addressing public health risks from pollutants remains political – the poor implementation of the Directives as a result of failures to invest and to tackle pollutants 'upstream'. The procedural codes of the Directives are not a barrier.

[1] Brack, W., et al (2019) Effect-based methods are key. The European Collaborative Project Solutions recommends integrating effect-based methods for diagnosis and monitoring of water quality. Environmental Sciences Europe, 31(10), 1-6).

**33. In your opinion, are there gaps in the parameters used for defining status? If yes, please include these in the table below.**

| | There are no gaps | There are small gaps | There are large gaps | I do not know |
|---|---|---|---|---|
| Surface water | x | | | |
| Groundwater | x | | | |
| Heavily modified water bodies | x | | | |

Further comments

While we consider status definitions to be appropriate, those for HMWBs are vulnerable to poor implementation. Status definitions for heavily modified water bodies depend on the selection of reference waters, the often over-generous interpretation of 'significant adverse impacts' under Article 4(3) and the equally relaxed use of disproportionate expense/cost exemptions. Each of these allows modifications which do not/no longer provide net economic and social benefits to be left unaddressed, by defining 'good ecological potential' in a way that includes their impacts. This leaves Member States aiming for a lower *de facto* ecological state than was intended in the drafting of the WFD.

**34. Have the Directives allowed for technical and scientific advances to be used as part of their implementation? If yes, which one(s)?**

x Yes

○ No

○ I do not know

Comment

There have been considerable advances in water management techniques over the life of the Directives. These have often been driven by the Directives themselves.

Examples include wastewater treatment through for example novel membrane, anaerobic digestion and adsorptive process techniques and the better use of ecological treatments, which offer increasing potential for lower-cost, less energy-intensive and more comprehensive removal of pollutants.

We would like to draw particular attention to the increasing use of upstream solutions, such as catchment management to reduce nitrate pollution of receiving waters. These are a direct result of stringent WFD parameter limits, and have spurred governments and water providers to address major externalities from other industries ( in this case agriculture) for the first time.

**35. Is the notion of 'reference condition' as defined in the WFD still relevant? Is there any science-based information for the definition of reference condition with different / additional criteria?**

x Yes, it is still relevant

☐ No, it is not relevant anymore

☐ Yes, there is scientific information with additional criteria

☐ No, there is no scientific information with other criteria

☐ I do not know

☐ Please explain your response

The ‘reference condition’ as currently defined – the approximation of the ‘natural’ and ‘near-natural’ states – is the only appropriate means of setting ecological targets within the WFD, and of honouring the opening statement of the preamble: that ‘Water is not a commercial product like any other but, rather, a heritage which must be protected, defended and treated as such.’ The purpose of the reference condition is to recognise the full value and potential of this ecological heritage.

Reference condition as currently defined through Annex II WFD provides considerable latitude to Member States in how they assess type-specific biological reference conditions. This is drafted in a way that allows any new scientific and technical methods (including improved modelling and historic/palaeologic data) to be integrated into the definition.

The impacts of climate change make the existing reference conditions even more important. The WFD was drafted in the knowledge of detailed climate change predictions, with the aim of making water bodies resilient to approaching climatic threats. This purpose still stands: any weakening of the existing reference standards risks making water bodies unsuitable for healthy biological communities and unable to buffer the impacts of climate change. We note that the greatest impacts on water bodies are direct anthropogenic pressures and not climate change, and that water bodies in good condition are far more able to cope with climatic extremes – whereas those with simplified

hydromorphology, high concentrations of pollutants and over-abstraction in normal conditions are hardest hit by drought, heat and flood.

We do not believe there is any good reason to change the specified elements set out in Annex V. These provide a sound and comprehensive basis for judging the state of a waterbody. We note in particular that there is no evidence of redundancy or full correlation within the elements.

**36. The WFD requires Member States to take up measures that are not disproportionately costly in their programme of measures (Annex III). Please rate how successful, in your opinion, has your Member State/country been in delivering the WFD objectives (in a cost-effective manner in your river basin district/ country)?**

| | Fully | To a large extent | To some extent | Not at all | I do not know |
|---|---|---|---|---|---|
| Surface water bodies: no deterioration | | | x | | |
| Surface water bodies: good status | | | x | | |
| Surface water bodies (HMWB & Artificial): GEP and good chemical status | | | x | | |
| Surface water bodies: priority substances and priority hazardous substances emissions | | | x | | |
| Long-term trends for substances that tend to accumulate (EQSD Art 3(6 )) | | | x | | |
| Groundwater bodies: no deterioration | | | x | | |
| Groundwater bodies: prevent/ limit pollutants | | | x | | |
| Groundwater bodies: good status | | | x | | |
| Groundwater bodies: reversal of any significant and sustained upward trend | | | x | | |
| Protected areas: PA standards and objectives | | | x | | |

Other (please specify)

Member States have made important progress in implementing the Water Framework Directive. Across Europe, many ongoing declines in water quality and ecological health have been slowed, halted and in some cases reversed. There has been a significant reduction in the number of waterbodies failing WFD standards for key priority substances such as heavy metals (e.g. cadmium, lead, nickel) and pesticides (EEA (2018) State of European Waters report). An increasing body of good practice and analysis by competent authorities shows the huge public gains that are possible if the WFD is implemented in full – see for example the good practice examples in our report *Bringing life back to Europe's waters* [1] and the £8bn net economic gain projected by the English competent authority for meeting the WFD.

This is not to say that implementation has been ideal – it is in most places inadequate and disappointing. Member States have not always followed the spirit or letter of the WFD and so have not realised its full public benefits. In particular we agree with the EC's conclusions on the 2012 WFD fitness check (Commission Staff Working Document)[2] that delays in implementation and insufficient ambition have limited progress. Most recent EC report on 2nd RBMPs indicates similar conclusions [3]. Member States have not made full use of the 18 years since the Directive was ratified and this is reflected in concerns that 2027 deadlines will be breached for some water bodies.

However, even at the current level of implementation, progress has been significant. There is now a much better understanding of the European Union's water resources, providing a foundation for

their sustainable management. Major strides have been made toward this goal – for example, the EEA reports that over the life of the WFD, economic growth has been entirely decoupled from the level of water abstraction [4].

For the first time, each Member State's citizens have access to information on the state of nearby waterways and aquifers – their health and the pressures they face – and have a starting point to engage in water management either individually or through NGOs. Public surveys and actual engagement demonstrate a strong demand for this, and consistent support for the aims of the WFD.

We consider that overall progress has been limited by Member States' unwillingness to tackle environmental damage in a holistic manner. Some sectors and industries have seen far greater improvements than others: for example pollution from urban wastewater and historic mines has been markedly reduced in many Member States while agricultural pollution remains largely unaddressed (as shown by the EEA WISE significant pressures dataset). Progress has proven slowest in less productive sectors such as agriculture and older industrial sites where government does not have direct control. There is a pressing need for Member States to tackle vested interests and inefficient policies in these cases – for broader social and economic reasons, in addition to the environmental improvements this would bring.

---

[1] WWF, ERN, EAA, EEB (2018) Bringing Life Back to Europe's Waters: The EU Water Law in Action.
[2] European Commission SWD(2012) 393: The Fitness Check of EU Freshwater Policy
[3] European Commission COM(2019) 95 final: Report from the Commission to the European Parliament and the Council on the implementation of the Water Framework Directive and the Floods Directive; SWD(2019) 30 final: European Overview - River Basin Management Plans.
[4] EEA (2018) Use of freshwater resources, Indicator Assessment: https://www.eea.europa.eu/data-and-maps/indicators/use-of-freshwater-resources-2/assessment-3

**37. What have been the most significant unintended changes (positive or negative) resulting from the Directives?**

Unintended outcome – Positive

The Directives have led to a number of unintended positive changes.

The collection, analysis and availability of information on water management has helped to address unrecognised problems and to improve the design and prioritisation of infrastructure investments. Examples include the substantial shifts in Ireland's flood management programme mentioned above.

The Directives have also helped to improve the range and capacity of NGOs and community groups involved in water management. NGOs such as the English Rivers Trusts, which draw on both expert staff and substantial volunteer support, have developed as a result of the focus on water management brought by the Directives.

The level of public support for river restorations has also been greater than expected – especially in urban settings. Good practice examples of river restorations have provided greater public benefits than expected, and these have been reflected in RBMP economic assessments that show greater benefits than expected.

Unintended outcome – Negative

We do not consider there to have been unintended negative outcomes of the Directives. The Directives are drafted to allow Member States to avoid disproportionate costs and outcomes in all

cases except for the control of hazardous substances, where the precautionary principle sets de minimis limits whose costs we consider to be appropriate and intended.

We recognise that WFD economic/disproportionate cost assessments have sometimes called for high expenditures to remedy pollution and damage, and that 'no deterioration' assessments under Article 4(7) WFD have blocked a small proportion of major projects (for example the further dredging of the Weser). In our view this reflects the strength of the Directives in tackling vested interests and legacy problems, and preventing unsustainable development. Moreover, we believe that in those cases the benefits of the WFD outweigh the costs.

What we have seen, is problems caused by political unwillingness to implement the WFD. In particular, reticence to force some sectors to address their external costs and avert initial pollution has led to higher financial and energy/carbon costs on 'downstream' sectors such as the water industry. This is a substantial problem, but is not a consequence of the WFD itself.

Unintended outcomes - Both positive and negative

N/A

No unintended outcome

N/A

I do not know

**38. You have now completed the questionnaire on the interactions of water body status (ecological, chemical and quantitative). Feel free to add any further comment in the box below. The next question will allow you to reach another questionnaire.**

/

39. To which questionnaire would you like to respond next?

- ☐ Questionnaire 1 - Floods Directive implementation
- ☐ Questionnaire 2 - Water body status – ecological, chemical and quantitative status
- ☐ Questionnaire 3 - Environmental objectives and exemptions
- ☐ Questionnaire 4 - Groundwater Directive
- ☐ Questionnaire 5 - Costs and benefits
- ☐ Questionnaire 6 - Cost recovery and pricing
- ☐ Questionnaire 7 - Monitoring and reporting
- ☐ Questionnaire 8 - Public participation and review
- ☐ Questionnaire 9 - Coherence

- [ ] Questionnaire 10 - EU added value
- [ ] End of the survey

## Questionnaire 3 - Environmental objectives and exemptions

**This questionnaire is aimed at Member State competent authorities, trade associations and NGOs.**

Article 4 of the Water Framework Directive (WFD) requires Member States to take steps to prevent deterioration of the status of water bodies and to protect, enhance and restore all water bodies. Objectives are specified for surface water, groundwater and protected areas.

Articles 4(3)-4(7) of the WFD allows Member States to apply several exemptions to environmental objectives:

Art 4(3) – exemption for artificial or heavily modified water body;
Art 4(4) – Extension of the deadline;
Art 4(5) – Less stringent objectives;
Art 4(6) – Temporary deterioration;
Art 4(7) – New developments.

Article 6 of the Groundwater Directive (GWD) allows Member States to apply exemptions from measures to prevent or limit the input of pollutants into groundwater.

**40. The 2018 State of Water EEA report identified that some of the objectives of the WFD are yet to be achieved. Do you think that the failure to achieve the objectives by the set deadline are due to the following:**

| | WFD | EQSD | GWD |
|---|---|---|---|
| Way the objectives are formulated in the legislation | | | |
| Level of ambition set in the objectives | | | |
| Way the Directives are implemented at Member State level | x | x | x |
| I do not know | | | |

Other (please specify)

Lack of political will to prioritise water issues at national level, which is also reflected in governments not allocating necessary funding for measures required to meet the objectives of the Directives. Related to that is lack of policy integration.
One implementation aspect that needs to be emphasised is the excessive use and misuse of time delay exemptions.

**41. Which key factors contributed to or hindered the achievement of the objectives of the WFD with regard to good status?**

Contributed to

The main factors contributing to the achievement of objectives have been the clarity and legally-binding character of provisions, the detail available in the Directives as to how objectives should be achieved (for example the definition of a planning process and stipulations around monitoring and reporting) and the support for co-operation between Member States, the EC and stakeholders, that is provided by the CIS process.

Several features of the Directives have been particularly important. Notable among these is the transparency provided by River Basin Management Plans, which provide detailed and public summaries of water problems and their management. Similarly, clear legal requirements on public participation, with set minimum standards including as regard the length of the consultation processes, have allowed for far greater public engagement with sustainable water management. This has also led to the public support for the Directives' objectives. Citizens across all Member States have consistently supported the removal of pollutants from water bodies, improved management of flood risk, and return to ecological health that are promoted by the Directives.

Obligations for status assessment and monitoring have made it possible to reduce uncertainty that existed regarding the status of majority of water bodies and functioning of aquatic ecosystems (data reported for the 2nd RBMPs show that the quantity and quality of available evidence on status and pressures has grown significantly (EEA 2018 State of European Waters; EC's 2nd RBMPs report [1]). The 'one out all out' nature of status objectives for the Water Framework Directive has also been critical. Describing ecosystem health with its 'one-out-all-out principle' the WFD recognises that these ecosystems are made up of complex, interconnected and interdependent relationships between species and physical processes, and embodies the precautionary principle in the face of uncertainty about how these complex web of interactions and inter-dependencies operate. This has pushed Member States to address all pressures, and makes it clear where this has not taken place. It is disappointing that there are unaddressed pressures for so many water bodies, but where this has led to poor headline performance in meeting objectives it is for legitimate reasons: water bodies are simply not in good enough health to meet the purposes of the Directive as set out in Article 1.

Strict obligation on non-deterioration has led to some damaging projects not going ahead and hence objectives of WFD have not been compromised (e.g. deepening of the Weser river in Germany; Biscarrúes dam project in Huesca (Aragón region) or deep dredging of the estuary of the Guadalquivir (Andalusia region) in Spain). WFD has influenced the decisions made before implementation of projects even when projects have not been stopped (eg in Belgium), to ensure effects on nature and water environment of a certain project are taken into account from the beginning. WFD is thus playing a role in the development of current and future infrastructure with a view to protect freshwater ecosystems and good status objective.

WFD also required a shift from addressing policies dealing with specific pollutants/pressures in a fragmented way to a holistic approach integrating all parts of the wider environmental as well as economic and social systems. Despite the fact that this shift is far from being achieved, the WFD has led to nascent cooperation between different professionals and disciplines (for example in many MS, from NL to ES, water management was previously reserved for civil engineers only). This is resulting in a slow but consistent shift towards a more integrated approach to water management which is a basis for achieving the good status objective.

[1] European Commission COM(2019) 95 final: Report from the Commission to the European Parliament and the Council on the implementation of the Water Framework Directive and the Floods Directive; SWD(2019) 30 final: European Overview - River Basin Management Plans.

Hindered

We consider poor implementation to be the main barrier to achieving the objectives of the WFD.

Each of the Directives require strategic planning, and a willingness to address problems, across a range of sectors. This has been notably lacking, and as a result actions have often been uncoordinated and ineffective. There are several contributory factors to poor implementation.

As noted by the 2012 Commission Staff Working Document on the fitness check of EU freshwater policy [1], Member States were slow to transpose and implement key provisions of the Directives, and to structure and resource competent authorities appropriately. This led to 'infringement procedures against the majority of Member States' with regard to the early milestones of the Water Framework Directive, as 'Member States may have taken action too late, under-estimating the magnitude and complexity of the problems to be overcome and the organisational changes required' (*ibid.*). These delays have had substantial knock-on impacts: the 2009 RBMPs included a high proportion of Article 4(4) exemptions for technical infeasibility as a result of uncertainty or lack of knowledge [2]. These gaps in knowledge were for the most part addressed by the 2015 river basin management plans, but this delay leaves Member States needing to achieve the majority of the Directive's objectives between 2015 and 2027 (less than half the time originally available) – with adverse implications for cost, the testing of measures, staff experience, public engagement and political will. However, Member States remained unambitious in the second RBMP cycle, as the new WFD implementation report and WWF's experience on the ground demonstrates [3]: the planned measures fall short of effectively delivering on WFD objectives, as major drivers and pressures have not been tackled adequately (e.g. pressures from changes to the natural flow regime and structure of waters, which are caused by major modifications have not been effectively tackled; to address diffuse pollution by nutrients (nitrogen and phosphorus) and pesticides, not even basic measures are taken in all river basin districts and not for all diffuse pollutants, and the planned supplementary measures are often voluntary, even if the first cycle has shown that this will not deliver the scale of change needed to achieve the WFD objectives).

For less profitable business sectors (most notably agriculture, but also legacy heavy industry) there has also been strong political resistance to making the investments needed to address external costs to the water environment. Individual Member States have been unable to tackle these vested interests without creating a competitive disadvantage, in a single market where other countries are not compliant. This problem can be seen most clearly in the high use of 'disproportionate cost/affordability' exemptions in the 2015 RBMPs in all MS: this exemption is an official statement that the sector in question is not being required by governments to meet the cost of addressing its own pollution / pressure, in the way expected by the 'polluter / user pays' provision in TFEU and the WFD. Similarly, there has been a political opposition to change existing national permit and water rights regimes, which are not aligned with environmental requirements (e.g. hydropower permits in Finland, or water rights / concessions in Spain or Portugal).

It has to be emphasised that Member States have massively overused time delay exemptions, and also made lop-sided investments where only some pressures are addressed - this increases the eventual cost and the political impact of actions. This has left Member States arguing that there is too much to do between 2021 and 2027, and that their poor track record demonstrates the difficulty of the task instead of showing their failure to tackle all pressures strategically.

Linked to these problems, there has been a failure to 'mainstream' WFD actions: the Directives have only slowly been fully integrated into government decision-making processes and the use of available EU funding streams. Lack of integration and policy coherence with other policies (agriculture, transport/navigation, energy, flood management) expresses itself at different levels, through ineffective coordination between different governmental authorities /departments, significant differences as to what constitutes sustainable water management and lack of integrated planning/investment. Consequently, MS also don't use investment opportunities of EU financial mechanisms for WFD measures (focus is mainly on wastewater treatment and flood management) and/or choose to finance activities that undermine WFD implementation (e.g. technical solutions to flood management, navigation, irrigation and land drainage) [see e.g. 4]. As regards agricultural pressure for example, insufficient integration of water policy goals into the CAP has been recognised also by the European Court of Auditors (2014). As example: the CAP has only included a provision to fund RBMP measures (Measure 12.3 of the RDP) since 2013 and this has barely been used by any Member State [5]; the UK Environment Agency limited

WFD-related flood management spending to £10M-£15M/yr throughout the first RBMP cycle, instead of integrating the WFD fully into the prioritisation of its main budget lines.

Preparation and implementation of RBMPs are also not well coordinated with plans / programmes and strategies of other policies (e.g. agriculture, energy, flood management). For example in Spain, the national water law provides a mechanism to coordinate between authorities (also known as 'comité de autoridades competentes'), however in practice it has until now not worked really well due to the lack of political will to support it. In Hungary, sectors, such as agriculture and forestry do not have much knowledge about the WFD and don't understand that it is a framework directive, the implementation of which requires their strong support, indicating that the communication by water sector on the WFD is not effective or active enough; the WFD implementation is also dissociated from flood management, which leads to very weak alignment between the RBMPs and FRMPs and preferred use of grey measure instead of nature based solutions that would deliver both on flood management and WFD objectives. An example of lack of integration of WFD in navigation policy: in Germany the Federal Ministry for Transport has failed to implement the WFD in the field of their responsibility: there are around 340 structures in federal waterways of which only a few are passable for fish; only 2 engineers are responsible for the planning and funds available in the budget for measures cannot be spent.

In this the WFD contrasts with the EIA and UWWT Directives which have been 'mainstreamed' far more effectively. This is in part due to the closer control most Member State governments have over (respectively) the planning process and wastewater management, than they have over the full range of water pressures. It is also a result of time and of efforts by the Commission and ECJ – note for example the large number of infringement cases for the UWWTD. In the case of the WFD enforcement both at national and EU level would need to be significantly stepped up.

In part due to under-resourcing and slow starts by the competent authorities, which are the result of lack of political will, there was limited engagement with NGOs and the general public through the first RBMP cycle in particular, and in many places for the second cycle as well. This has helped to create an adversarial environment and missed many opportunities to attract volunteer effort and involve the public in decision-making.

---

[1] European Commission SWD(2012) 393: The Fitness Check of EU Freshwater Policy
[2] 40% of waterbodies (42,738) were given Article 4(4) exemptions in the 2009 RBMPs, and technical infeasibility was cited for 79% (=33,763) of these (ref: Commission SWD (2012)379). Second RBMPs assessment indicates (SWD(2019) 30 final) that various types of exemptions provided for in the WFD are still being used extensively, with around half of Europe's water bodies, surface and groundwater, currently under exemption; for more than one third of the Member States, Article 4(4) exemptions to the achievement of GES/potential are applied for more than 50% of their water bodies. Even more worrying is that certain types of exemptions, like the exemptions allowing Member States to set lower standards or proceed with damaging projects, have been applied more often in the second than in the first cycle. In addition, the preponderant use of Article 4(4) exemptions instead of Article 4(5) demonstrates as well that Member States are not facing genuine reasons for less stringent long-term targets – they are 'kicking the can down the road' on proper implementation. Exemptions are also not properly justified. Technical infeasibility is still predominant reason for postponing the deadlines, with disproportionate costs on the basis of sectoral affordability/resilience cited more often than in the first cycle.
[3] SWD(2019) 30 final: European Overview - River Basin Management Plans.
[4] European level report: Evaluation of the contribution of Operational Programmes to the implementation of EU water policy, Report Reference: UC12474.01 March 2017, WRc plc for European Commission; European level report: Key descriptive statistics on the consideration of water issues in the Rural Development Programmes 2014-2020, Report Reference: UC12064.01 September 2016, WRc plc for European Commission.

[5] European Network for Rural Development (2015) RDP analysis: Support to environment & climate change; M12 Natura 2000 & Water Framework Directive payments

**42. The Directives aim to contribute to the sustainable management of water - in your opinion, what is the sustainable management of water resources? Do the Directives contribute to this?**

Sustainable management of water resources, is management which meets current water resource needs without compromising the health and integrity of the water environment, nor the ability of future generations to meet their water resource needs. In practice this means decisive action to ensure that water use and pollution does not deplete the quantity or quality of water resources and the ecology that depends on them.

The Directives play a fundamental role in sustainable water management across the EU:

- Impact on status: There has been a demonstrable reduction in pollution (particularly from urban and industrial sources, as well as agricultural ones in those locations where they have been concertedly addressed) [1]. Deterioration has also been prevented in a number of cases (while consistent statistics are not available for this, CJEU C-461/13 demonstrates the need and examples include deepening of the Weser river in Germany; Biscarrúes dam project in Huesca (Aragón region) or deep dredging of the estuary of the Guadalquivir (Andalusia region) in Spain)). The increasing number of river restorations across the EU is a result of (and largely dependent on) the Water Framework Directive and its good status/potential objective [2] and many Member States have launched specific funds for WFD-related river restoration (for example the UK Water Environment Grant scheme).
- Increase of knowledge in water status and pressures: Prior to the Directives, there was very little systematic information on the status of water bodies and the pressures they face, even in some of the wealthier Member States. Gathering and applying this information has been critical to improvements in water management.
- Allocation of resources to water management: Similarly, the resources – in staff, consultation, and in capital and operational costs – invested by Member States to meet the Directives has allowed far greater public engagement with sustainable water management and has improved organisational processes. The establishment of River Basin Management Plans and their robust reporting requirements have led Member States to allocate responsibilities and associated resources to competent authorities and to set up consultative bodies at the river basin level. Together this ensures water management is now better planned and evaluated.
- Integration of economics in water management decisions: Economic analyses conducted under Annex III of the WFD show that achieving sustainable water management would have large and continuing economic benefits [3]. It would also be expected to increase resilience to the climatic shocks forecast for the next century. We recognise that the costs of complying with these Directives can be high. However we note that they have driven genuine improvements and that as our understanding of priority substances increases, it frequently confirms the value of the precautionary principle.
- Transboundary cooperation: The Directives represent the largest field of transboundary environmental co-operation in the European Union. Many catchments cross national boundaries and the Directives have led to co-ordinated planning and action along coastlines, major and minor rivers throughout the continent. Even where there were agreements in place before the enactment of the Directives, these have been strengthened by the requirements of the Directives and are now providing greater benefits. The largest-scale examples of this can be seen along Europe’s largest catchments, such as the Rhine and the Danube, for which river commissions spanning several states have

organised and have agreed RBMPs; however, transboundary management of many smaller river basin districts has also been agreed.

---

[1] EEA 2018 State of European Waters report; European Commission COM(2019) 95 final: Report from the Commission to the European Parliament and the Council on the implementation of the Water Framework Directive and the Floods Directive; WWF, ERN, EAA, EEB (2018) Bringing Life Back to Europe's Waters: The EU Water Law in Action.
[2] Gerner et al. (2018) Large-scale river restoration pays off: A case study of ecosystem service valuation for the Emscher restoration generation project, Ecosystem Services, Volume 30, Part B, Pages 327-338, https://doi.org/10.1016/j.ecoser.2018.03.020; United Nations World Water Assessment Programme/UN-Water (2018) The United Nations World Water Development Report 2018: Nature-Based Solutions for Water, Paris, UNESCO; Wetlands International and CIRF (2017) Benefits of European river restoration schemes, https://europe.wetlands.org/download/2535/; Ecohidráulica, S.L. (2016) An analysis of river fragmentation in the Spanish river basins: https://europe.wetlands.org/download/2318/.
[3] For example the UK Government estimates a £8.6bn net benefit from achieving GES for 75% of water bodies by 2027 [UK Defra (2015) Impact Assessment: Update to the river basin management plans for England's water environment].

**43. Does the WFD appropriately consider and respond to water scarcity issues?**

x Fully

- To a large extent
- To some extent
- Not at all
- Not applicable
- I do not know

Other (please specify)

The WFD requires action to address water availability and tackle water demand, and therefore provides an adequate framework to address water scarcity issues. It's true that the achievement of good status under the Directive does not explicitly refer to the quantitative status of surface waters (it does require good quantitative status of groundwater and ensuring a balance between abstraction and recharge). However, as it also has been recognised by the MS, relevant stakeholders and the EC in the CIS guidance document No. 31 on ecological flows in the implementation of the WFD, the 'WFD provisions acknowledge the critical role of water quantity and dynamics in supporting the quality of aquatic ecosystems and the achievement of environmental objectives'.

More concretely, achievement of good ecological status and preventing deterioration of freshwaters presupposes the existence of ecological flow; it is well documented that hydrological regime plays a primary role in determining physical habitats, which in turn determines the biotic composition and support production and sustainability of aquatic ecosystems. In terms of addressing water scarcity issues this stresses 'the need for all flow components to be included as operational targets for water quantitative management from base flows (including low flows) to flood regime (magnitude, frequency, duration, timing and rate of change)' [1].

Moreover, the WFD requires that all water abstractions be controlled and subject to a permit; being part of the basic measures, controls on surface and groundwater abstractions, impoundments and other activities impacting hydromorphology form a strong basis to manage

water scarcity issues, through the authorization process and regular review of permits (in many cases supplementary measures to address scarcity issues will be required). Article 9 of the WFD requires the implementation of pricing policies that incentivise the efficient use of water, as well as cost-recovery, including environmental and resource costs for water services. And WFD's public participation provisions (Article 14) require public participation around water scarcity management issues, in basins where this is a significant water management issue. In addition, indication of other measures to be promoted in the RBMPs is given in the EC's Communication on Water Scarcity and Droughts, which encourages "putting the right price tag on water", "allocating water more efficiently", "considering additional water supply infrastructures", and "fostering water efficient technologies and practices", whereby at the same time emphasising that improvements in the efficiency on the demand side take precedence over any alternative water supply options [2].

The Commission has also recognised that the WFD provides a comprehensive framework for tackling also water quantity issues [see e.g. 3]. As with other pressures and drivers, we see that WFD is not used to its full potential and a significant implementation gap still exists in tackling water scarcity issues (Cf. the WFD implementation report [4]).

[1] CIS guidance document No. 31 on ecological flows in the implementation of the WFD
[2] Cf. http://ec.europa.eu/environment/water/quantity/scarcity_en.htm
[3] SWD(2012) 379 final; SWD(2019) 30 final: European Overview - River Basin Management Plans
[4] SWD(2019) 30 final: European Overview - River Basin Management Plans.

**44. The WFD requires Member States to implement the necessary measures with the aim of 1) progressively reducing pollution from priority substances and 2) ceasing or phasing out emissions, discharges and losses of priority hazardous substances. It also requires reversing any significant and sustained upward trend in the concentration of any pollutant in groundwater. The EQSD requires Member States to take measures aimed at ensuring that the concentrations of substances that tend to accumulate in sediment and/or biota do not significantly increase.**
**To what extent are these objectives precisely defined and understood in your river basin / country?**

| | Fully understood | To a large extent | To some extent | Not at all understood | I do not know |
|---|---|---|---|---|---|
| Progressively reducing pollution from priority substances | x | | | | |
| Ceasing or phasing out emissions, discharges and losses of priority hazardous substances | x | | | | |
| Long-term trends for substances that tend to accumulate (EQSD Art 3(6)) | x | | | | |
| Reversal of any significant and sustained upward trend in the concentration of any pollutant (groundwater) | x | | | | |

If there are any doubts, please explain what these are

It should be noted, that implementation as regards above-mentioned objectives is failing - programs of measures are very weak (e.g. regulatory measures or permit reviews are often not foreseen). However, the reason for this are not lack of clarity or understanding of WFD provisions.

The WFD and its daughter directives specify a clear overall requirement to protect and restore EU water bodies to near-natural health, together with effective and detailed indicators. We haven't identified any real concerns regarding lack of clarity in the provisions for these objectives, and there is certainly nothing that would inhibit WFD implementation and achievement of the objectives. The CIS process has played an important role in clarifying the requirements of the Directive where needed, and in maintaining an appropriate level of consistency between Member States.

Furthermore, several ECJ judgements have reinforced the requirements of the Directives, finding them to be clear enough for the Court to interpret. We consider that some ECJ judgements have been required solely as a result of Member States claiming ambiguity in the Directives where none exists (for example the ruling within C-461/13 that projects ought not be authorised that would cause deterioration in waterbody status).

**45. Do you consider that there is an excessive use of exemptions in your river basin district / country? If yes, what are in your views the key implications of this use for the effective achievement of environmental objectives under the WFD?**

x Yes

○ No

○ I do not know

Comment

There is an excessive use of all types of exemptions in all Member States (especially Art 4.4, 4.5 and 4.7 exemptions), indicating a clear lack of ambition by Member States to deal with the main drivers of freshwaters deterioration.

The latest WFD implementation report (SWD (2019) 30 final) and WISE electronic report show that various types of exemptions provided for in the WFD are still used extensively. Assessment of the second RBMPs showed that more projects are in the pipeline and more cases of Article 4(7) application may occur in the future; and already now, the Article 4(7) has been applied in more than one third of the Member States and has been applied more extensively than in the first cycle. To give one example of immense scale of use and inadequate justification of Art 4.7 exemptions under the WFD: RBMPs for Odra and Vistula Rivers in PL include approximately 600 exemption; NGO analysis concluded that more than 90% of the proposed Art. 4.7 WFD exemptions did not fulfill conditions for applying the exemption (most commonly identified problems were insufficient justification for meeting the conditions for 'overriding public interest' and/or 'significantly better environmental options' criteria).

We have identified several problems with the application of the Art 4.7 exemption:
1) thorough and transparent assessment of all steps as required by the WFD is missing (e.g. PL, AT, RO, BG, SK, SI);
2) sometimes Art 4.7 procedure is not even triggered - inadequate methods used by Member States which do not detect deterioration even when the size and type of the projects make is clear that deterioration in QE(s) will occur (e.g. deepening of Elbe in DE), and sometimes Member States artificially lower the water body status (e.g. in Romania status of all except one water body that were classified in first RBMPs as being in high status was lowered from high to good

ecological status, reducing the percentage of water bodies in high status from around 3% to almost 0% from first to second cycle).
3) blanket exemption is applied for certain type of activities (e.g. considering all flood management projects as being of overriding public interest).

Furthermore, EC's second RBMPs report also found excessive use of Art 4.4 exemptions. Around half of Europe's water bodies, surface and groundwater, are currently under exemption. For more than one third of the Member States, Article 4(4) exemptions to the achievement of GES/potential are applied for more than 50% of their water bodies and for approximately one-fifth of the Member States, Article 4(4) exemptions to the achievement of good chemical status are applied for almost 100% of their surface water bodies. Technical infeasibility is still predominant reason for postponing the deadlines, with disproportionate costs used more often than in the first cycle. Exemption for setting lower standards has been applied more often in the second than in the first cycle, indicting a worrying trend.

These exemptions are often not properly justified, even if minor improvements in this area since the first cycle have occurred. The use of Art 4.4. and 4.5 exemptions for example is not well justified in most Member State (examples include CZ, EE, ES, FR, SE, UK, DE). Distinctions between the use of Art 4.4. and 4.5 exemptions is often blurred; this is despite the fact that the Article 4.4 and 4.5 WFD are essentially different, that Article 4.5 is not an alternative to Article 4.4 and that its application should be exceptional and limited (as also expressed by the EC expressed in its paper reacting to MS' 'Thought Starter').

Member States' application of the Art 4.4 extensions has an effect of delaying the necessary measures and actions into the third WFD planning cycle and beyond – and this risks undermining the objectives of the Directive because the necessary measures may then never be taken and/or there will be pressure to permanently revise downwards the general achievement of 'good' status.

The first cycle and second RBMPs suggest that the Member States have been very creative in finding means by which they have avoided and generally delayed as long as possible before committing to the measures and actions needed to achieve good status/potential, even where it is quite clear what the pressures and drivers of these pressures are, and where the achievement of good status/potential is perfectly achievable in a timely way. Some of these means include: heavy reliance on voluntary measures (even when it becomes clear that they are not delivering); measures not matching the identified pressures or critical measures being defined in a very vague way; relying on 'simple', non-problematic measures for which funding stream is already in place; narrow interpretation of 'disproportionately expensive' as 'disproportionate burdens'/'affordability' (ie availability of resources) [1]; committing only to measures judged as 'cost-effective, however without carrying out an adequate cost-benefit analysis (most of methods MS use are cost based) or carrying it out only for uncontroversial measures; time-prioritising less effective (and less burdensome) measures, particularly mitigation measures instead of tackling actual drivers/sources of impact; etc.

These reasons for delay are not intrinsic to the Directives. We consider them inappropriate and remain concerned that they will undermine the objectives of the WFD: delaying action for so long increases delivery risk and allows critics of the Directives to claim they are unfeasible or not delivering. Loopholes in the application of Art 4.4 WFD and lack of enforcement allow for procrastination or even permanent avoidance of WFD compliance. We therefore disagree with MS arguments, that more time is needed for them to be able to achieve the WFD objectives. There is no assurance that they will deliver if Art 4.4 would allow for extensions after 2027.

It should be noted at the same time that exemptions should serve a useful and positive purpose, and that the flexibility available in the Directives exists for good reason. Achieving good ecological status in 100% of EU waterbodies by 2015 would be prohibitively expensive and in some places socially damaging. Exemptions are well-drafted and are available on the basis of public need and economic efficiency under Article 4(3), 4(5) and 4(7) of the Water Framework Directive. This

flexibility is necessary and sufficient to ensure that the Directives deliver net public benefits both in aggregate and on each individual waterbody. Article 4(5) is particularly important in allowing Member States to set less stringent objectives and then review these in each following RBMP cycle. Used appropriately this will continue to deliver improvements beyond 2027 as the RBMPs review clause prompts Member States to deliver improvements that have become technically feasible and not disproportionately costly over each six-year RBMP cycle. It is critical though that Article 4(5) is not used inappropriately as a 'get-out' clause for legitimate objectives that remain unmet in 2027 as a result of poor implementation. These need to be addressed before 2027.

The CIS process has been central to interpreting the flexible elements of the Directives and ensuring they remain relevant and beneficial, and that implementation by different Member States has not diverged excessively.

---

[1] Interestingly, many 2009 RBMPs used 'technical infeasibility' as a reason for delaying action, and following challenges by NGOs this reason was often changed to disproportionate cost (due, critically, to sectoral unaffordability and not economic efficiency) in the 2015 RBMPs (contrast for a clear example the UK RBMPs in 2009 and 2015).

**46. In your opinion, does your river basin district / country make an effective and transparent use of the exemptions stipulated in the Articles 4(3)-4(7) of the WFD?**

| | Fully | To a large extent | To some extent | Not at all | I do not know |
|---|---|---|---|---|---|
| Surface water bodies: no deterioration | | | x | | |
| Surface water bodies: good status | | | x | | |
| Surface water bodies (HMWBs & Artificial): GEP and good chemical status | | | x | | |
| Surface water bodies: priority substances and priority hazardous substances emissions | | | x | | |
| Long-term trends for substances that tend to accumulate (EQSD Art 3(6)) | | | x | | |
| Groundwater bodies: no deterioration | | | x | | |
| Groundwater bodies: prevent/ limit pollutants | | | x | | |
| Groundwater bodies: good status | | | x | | |
| Groundwater bodies: reversal of any significant and sustained upward trend | | | x | | |
| Protected areas: PA standards and objectives | | | x | | |

**47. Flood risk protection measures constitute an important reason for the designation of HMWB (Heavily Modified Water Body) and are also relevant to justifying exemptions under the Articles 4(6) and 4(7). To what extent is the assessment of flood risk protection measures consistent, coordinated or fully integrated with HMWB designation and exemption justification in your river basin/ country?**

| | Yes, to a large extent | Yes, to some extent | Not at all | I do not know |
|---|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| Coordinated and consistent | | | | |
| Fully integrated | | | | |

Comment

This varies heavily between and within Member States so it is not possible to provide an EU-level response. However as noted above, the use of exemptions is excessive and their justification remains opaque – this is as true of flood risk protection measures as it is of other pressures. The designation of HMWBs is often based on expert judgement, and there is a lack of transparency of the implementation of the key steps of designation. In particular very few Member States have processes in place to identify significantly better environmental options, not entailing disproportionate cost (as required by Article 4(3)b WFD), despite detailed options appraisal processes existing in most MS for flood risk management.

**48. To the best of your knowledge, how effective has the coordination of the application of the Article 4(4)-4(7) exemptions been in a transboundary context in your river basin/ country?**

- Fully
- To a large extent

x To some extent

- Not at all
- Not applicable
- I do not know

Comment

Some, very limited coordination on the application of exemptions seems to have occurred in the case of International river basins for which agreements or conventions are in place. For example, in the Rhine iRBD, exemptions were reported to be coordinated for surface water bodies of basin-wide importance, and the iRBMP outlines the reasons for the application of exemptions, and the Scheldt iRBMP states that Member States and Regions used different methodologies for the application of exemptions but that coordination on transboundary water bodies took place. No specific coordination took place at the international level as regards exemptions in the case of other iRBDs [1].

[1] SWD(2019) 30 final: European Overview - River Basin Management Plans.

**49. Are the provisions related to HMWB and Article 4(7) well integrated with other sectoral policies?**

x Fully

- To a large extent
- To some extent
- Not at all
- Not applicable
- Do not know

Comment

Legal provisions of the WFD related to HMWB and Art 4.7 are in our view fully coherent with other sectoral policies. Existing and new physical modifications and alterations potentially causing deterioration or preventing achievement of good status objective, are frequently linked with the achievement of the objectives of other sectoral policies such as energy, transport, flood protection, coastal defence, water supply and wastewater treatment, irrigation. Both Art 4.3 and 4.7 contain distinct conditions to be met and have to be set out and explained in the River Basin Management Plan; they were introduced into the WFD in recognition that many water bodies in Europe have been subject or might be subject to major physical alterations so as to allow for a range of water uses, which provide valuable social and economic benefits. However, they are not to be regarded and taken as an opportunity to avoid achieving WFD objectives. Integration of the WFD and its links with the implementation of sectoral policies strongly calls for a coordinated approach in implementing provisions related to HMWB and Article 4(7).

However, the practical expression of the implementation of these provisions in Member States indicates a significant lack of integration of water impacts in other sectoral policies; this is reflected by over-use and misuse (see our answer under Q. 45) of HMWB and Art 4.7 exemptions, and this undermines the WFD objectives.

**50. Is it possible for citizens/NGOs to request additional inspections in case of serious environmental complaints?**

x Yes

○ No

○ I do not know

Comment

This should be checked for each individual MS. However, in several MS (e.g. EL, DE, HR, UK) any citizen or NGO can request additional inspections on the above-mentioned matters. However, this does not ensure that inspections are going to happen, nor that they would be adequate. For example in Greece the relevant authorities are under no obligation to conduct an inspection in every case; in practice, the possibility of additional inspections is extremely limited, due to workload, and shortage of personnel and funds. In UK for example, recent data show the UK Environment Agency (EA) follows up only 16% of reports of significant fish kills; the UK EA does not always follow its own Operational Instructions for responding to water pollution [1]. In Croatia, the role of inspections is often limited to concluding that procedures have been followed by the book, however often on-site visits are not conducted, nor experts are hired to evaluate environmental impacts; this makes their conclusions highly questionable.

[1] https://www.fishlegal.net/page.asp?section=940

**51. Is there a possibility for citizens and NGOs to challenge specific decisions relevant to the Programme of Measures including:**

| | Yes | No | Not relevant | I do not know |
|---|---|---|---|---|
| Authorisations for abstraction and impoundment, for artificial recharge or augmentation of groundwater bodies under Art 11(3)(e) and (f) | | | | |
| Authorisations for new modifications or new sustainable human development activities under Article 4(7) | | | | |
| Decisions under Art 4(5) | | | | |

| | | | | |
|---|---|---|---|---|
| Decisions designating a body of surface water as artificial or heavily modified | | | | |

Other (please specify)

It differs from Member State to Member State. For example in Greece, all of the above decisions can be challenged: (a) as parts of RBMP (which is ratified by a Joint Inter-ministerial Decision); (b) as parts of a related authorization or permit (e.g. environmental permit, building license, mining license); (c) as stand-alone authorisations (e.g. water abstraction permits). The possibilities depend on the structure of Greek law, which incorporates some of the above-mentioned decisions in stand-alone or other permits. In Croatia, even if there is a possibility to challenge the above mentioned decisions, the challenges are often rejected or only 'taken into account', without any specific explanation or justification why that is. In Germany, it is possible to challenge only decisions under (a) and (b) mentioned above.

**52. You have now completed the questionnaire on the objectives and the use of exemptions. Feel free to add any further comment in the box below. The next question will allow you to reach another questionnaire.**

/

**53. To which questionnaire would you like to respond next?**

- ☐ Questionnaire 1 - Floods Directive
- ☐ Questionnaire 2 - Water body status – ecological, chemical and quantitative status
- ☐ Questionnaire 3 - Environmental objectives and exemptions
- ☐ Questionnaire 4 - Groundwater Directive
- ☐ Questionnaire 5 - Costs and benefits
- ☐ Questionnaire 6 - Cost recovery and pricing
- ☐ Questionnaire 7 - Monitoring and reporting
- ☐ Questionnaire 8 - Public participation and review
- ☐ Questionnaire 9 - Coherence
- ☐ Questionnaire 10 - EU added value
- ☐ End of the survey

## Questionnaire 4 - Groundwater Directive

**This questionnaire is aimed at Member State competent authorities, trade associations and NGOs.**

In the previous review of the Groundwater Directive (GWD) Annexes, the following four main challenges were identified:

• Updating the list of substances;
• Insufficient comparability of threshold values;
• Insufficient transparency and reporting;
• Knowledge gaps related to substances of concern including emerging contaminants.

The aim of this questionnaire is to understand whether these challenges are still relevant.

**54. In your opinion, have these challenges been addressed by the review? Are there additional challenges to consider?**

○ Yes, fully
x Only partially
○ No
○ I do not know

Additional challenges

While the previous review of the annexes of the Groundwater Directive (GWD) addressed some of our concerns regarding the Directive there are still challenges left to be addressed.

To ensure best possible protection of groundwater bodies we call for a reorganisation of the substances listed in Annex I and II. As regards the establishment of quality standards (QS) or threshold values (TVs) we think that all substances currently in Annex II, Part B of the GWD should be included in Annex I of the GWD and for them QS established. Other non-threshold chemicals such as carcinogens, mutagens, endocrine disruptors (EDCs) and PBTs/vPvBs should also be included in Annex I with strictest possible standards. In addition to substances already listed, Annex I should as a principle therefore contain substances of EU wide concern of relevance for groundwater for which it is possible to set common quality standards (QS): 1. All man-made synthetic substances, which are hazardous; 2. Common QS/TVs applicable across EU can also be set for naturally occurring substances, the presence of which in groundwater is a result of human activity (especially if such a substance falls within the scope of the EU source-control legislation or EQSD). Recognising that in the case of naturally occurring substances the set QS could naturally be exceeded owing to the natural hydrogeological and hydro-chemical conditions in the groundwater body (GWB), MS could be allowed to set a different TV on a case by case basis (for that specific GWB) corresponding to natural background concentrations/levels (NBLs) and taking into account natural sources of this substance. However, so established TVs should not exceed the identified NBLs, which are to be established by an EU wide methodology.

In addition, there is a need to strengthen existing quality standards as contained in Annex I. For example, a GWB with nitrate concentration of 50mg/L can in majority of cases be considered as excessively to heavily polluted. Moreover, to consider a need to establish a stricter GW quality standard for some pesticides is also recommended in the CIS Report No. 7 – 2011-057.

All groundwater relevant substances which are regulated under European laws, but for which it is not possible to set common standards due to natural variability of GW chemical composition (relevant mostly for naturally occurring substances), however they occur in significant concentrations in GWBs across Europe, should be included in Annex II, Part B (e.g. priority substances as listed in the Directive 2013/39/EU, pharmaceutical substances, falling within the scope of the EU medicinal products legislation, REACH substances of very high concern, included in the candidate list). It should become mandatory to establish TVs, according to a common methodology, for all substances listed in Part B of Annex II (MS should not be required only to consider establishing TVs for these substances); moreover, acceptable reasons for not establishing TVs should be defined in GWD. Annex II should also specify that, when in the case of a specific groundwater body NBL exceeds the TV established in accordance with a uniform methodology, the TV for that groundwater body shall equal the NBL of that groundwater body.

In setting QSs/TVs adequate protection of groundwater ecosystems need to be considered. This should include a requirement for considering the groundwater ecosystem as such when setting GW QS and more stringent TVs in line with Annex I(3), and when setting TVs for Annex II(B) pollutants/parameters. Combination effects of different chemicals (mixtures) should also be addressed when setting GW QS and TVs, as well as endocrine disrupting substances (EDCs).

Nano-scale materials and materials with similar properties should also be considered when deciding on listing and setting TVs as they are known to influence kinetics differently than their bulk substances (a.o. distribution over tissues and transport across barriers such as skin, lung, gastrointestinal tract) and have different environmental fate and behaviour.

Coordination and coherence between the GWD and relevant EU source control legislation (e.g. REACH, pesticides and biocidal products regulations, pharmaceutical legislation) should be strengthened to minimise inputs of relevant pollutants as well as to control their presence in groundwater (also by setting GW QS/TVs informed by source control legislation). Annex I(2) will also need to be adapted accordingly.

In addition, monitoring of groundwater bodies, both quantitative and chemical, is still inadequate; WFD requirements are not complied with. Moreover, TVs have not been set by all Member States for all pollutants and indicators listed in Annex II, Part B of the GWD, which pose a risk of failing good groundwater chemical status.

**55. In your opinion, does the GWD adequately address the need for the protection of groundwater?**

- ○ Yes, fully
- x Only partially
- ○ No
- ○ I do not know

Comment

The Groundwater Directive is an important piece of legislation. Together with the WFD there has been considerable successes in protecting chemical and quantitative status, as EEA status report demonstrates. Groundwaters generally have better status than surface waters (good chemical status 74 %, good quantitative status 89 %) [1]. However major challenges still prevail. In some basins bad chemical status persists often due to sustained pressure from agriculture, a pressure that affects both groundwaters and surface waters, for which MS have not implemented effective solutions. In southern Member States, in addition to chemical pressures, problems with quantitative status are severe, mainly due to over abstraction for public water supply, agriculture

and industry. Moreover, droughts and floods are increasing across Europe. A third of the world's biggest groundwater systems are in danger of drying out. Water quality and quantity issues affect all of Europe and will continue to unless we reach the objectives of the WFD, in which the GWD has a role to play.

A major reason why GWD has not yet fully addressed the need for the protection of groundwater is predominately lack of or inadequate implementation by Member State. However, we've also identified some areas for improvement of the legal provisions of GWD (please see our response to Q. 54 for details): there is a need to strengthen existing quality standards, as well as reorganisation of the annexes to ensure best possible protection of groundwater quality.

[1] EEA (2018) European waters, Assessment of status and pressures, EEA Report No 7/2018.

**56. Do you think the Directive (including the changes made from the 2014 review) is up to date with regard to available scientific knowledge and existing technical data?**

- ○ Yes, fully
- x Only partially
- ○ No
- ○ I do not know

Comment

While the 2014 review was a great opportunity to update the GWD with regards to scientific knowledge and existing technical data, it has not been fully used and some improvements can still be made. More than 10 000 different substances have been identified to be potentially water relevant. In mixtures some substances can cause toxic effects not previously attributed to the present substances. These combination effects of different chemicals (mixtures) should also be addressed when setting GW QS and TVs. Addressing these combination effects is already possible under the current framework of the WFD and these methods should therefore also be implemented for groundwater protection. Additionally EDCs also need to be addressed when setting GW QS and TVs.

In addition, nano-scale materials and materials with similar properties should also be considered when deciding on listing and setting TVs as they are known to influence kinetics differently than their bulk substances and have different environmental fate and behaviour, often showing higher reactivity than their bulk substance. A lot of new research on fate and behavior of nanoparticles has come out (see for example nanofase.eu) as well as on monitoring methods, these however still need to be evaluated for wide scale applicability.

More is also known about GW ecosystems as such and hence the provisions of the GWD should be adapted with a view to ensure their adequate protection (Recital 20 of the GWD does not provide for effective protection of GW ecosystems).

**57. Do you believe Annex I addresses the main pollutants for which EQS can be set?**

- ○ Yes, fully
- x Only partially
- ○ No
- ○ I do not know

Comment

As we explained in our response to Q. 54, we believe that Annex I is not exhaustive enough and should be expanded (for details see our response above). Furthermore, existing quality standards contained in Annex I also need to be strengthened (incl. stringent quality standard for nitrates (25 mg/L) and stringent quality standard for certain pesticides and biocides (at least those substances, which have drinking water standards, as also recommended in the Technical Report on the Review of the Annexes of the GWD (December 2011), and substances, which meet exclusion or/and substitution criteria of pesticides and biocides regulations).

**58. Do you believe the naturally occurring or synthetic substances on Part B of Annex II are sufficient? Do you think they represent the main risks for groundwater bodies ?**

- Yes, fully
- x Only partially
- No
- I do not know

Comment

In addition to shifting all substances that are currently in Annex II, Part B of the GWD to Annex I of the GWD, Annex II, Part B also needs to be expanded: all groundwater relevant substances which are regulated under European laws, but for which it is not possible to set common standards due to natural variability of GW chemical composition (relevant mostly for naturally occurring substances), however they occur in significant concentrations in GWBs across Europe, should be included in Annex II, Part B (see answer to Q. 54 for details).

**59. Are the reporting obligations for threshold values sufficient and justified?**

- x Yes, sufficient and justified
- Sufficient but not justified
- Justified but not sufficient
- Neither sufficient nor justified
- I do not know

Comment

Reporting obligations for threshold values were significantly updated during the 2014 revision of the Groundwater Directive. They are both sufficient and justified however more attention should be given to the quality of the data and reports submitted in the river basin management plans (in which Member States are required to incorporate their information on threshold values). Even though reporting obligations have been updated not all Member States (e.g. Spain) have established threshold values for all substances/indicators to report on. EC recommends that Member States set threshold values for all substances/indicators posing a risk of failing good status, and should clearly describe how natural background levels have been considered in their establishment.

**60. Do you have examples of best practices that have improved the reporting of this information?**

No.

**61. Do you believe that the recently established voluntary groundwater watch list process supports the implementation of the GWD?**

x Yes

☐ No

☐ I do not know

☐ I am not aware of the voluntary watch list

Other (please specify)

The newly established voluntary groundwater watch list does contribute to the implementation of the GWD and protection of groundwater bodies. Similarly to the watch list in the EQSD, it facilitates the gathering of more data on substances for which still little data exist and is desperately needed. However once data collection is complete, and more information on the substances and their effects are available, substances need to be removed from the watch list and listed in the adequate Annex of the GWD with regulatory standards. It should be questioned however whether the voluntary nature of the watch list makes it effective enough or if monitoring watch list substances should be made compulsory instead.

**62. Do you agree with the proposed methodology for the Watch List? Do you believe it can lead to concrete proposals for including substances in Annex I and II? If not, do you have additional suggestions / methodologies?**

☐ Yes

☐ No

☐ I do not know

Other (please specify)

Undertaking the pilot studies on pharmaceuticals and PFAS to test the initial methodology developed within the framework of the EU WFD CIS Working Group on Groundwater demonstrates some positive results in terms of the methodology used [1]. We would want to stress that even if further work might be needed to refine this methodology, this should not prevent or slow done the process of monitoring currently unregulated substances and including them as necessary in Annex I/II of the EU GWD.

[1] Dan J Lapworth et al 2019 Environ. Res. Lett. 14 035004

**63. In your area of work, have you made use of article (11)(3)(j) of the WFD on the authorisation of injection of substances in groundwater (e.g. for operations or exploration and extraction of hydrocarbons, mining activities, construction works, scientific activities etc. )? If yes, what have been the implications of implementing such article?**

○ Yes

○ No

○ I do not know

Other (please specify)

As regards fracking, we note that fracking has two potential implications for groundwater: sourcing of water which is needed to make the injection fluid and the flowback of water (disposal of wastewater), once the water has been used. Direct discharges of pollutants to groundwater (such as injection of wastewater from hydraulic fracturing) are prohibited under the WFD. We are not aware of Article 11(3)(j) WFD being used for fracking, however UK and Poland have active

licences for targeting Shale Gas [1] and many MS show interest in expanding their practices in the future.

We are highly concerned that proper licensing routes are being circumvented in the permissions process for fracking, and believe this could lead to breaches of proper process under Article 11(3)(j) WFD. For example the proposals in England to include shale gas exploration under permitted development rights, and to consider fracking activities within Nationally Significant Infrastructure Projects regime, will both weaken controls over injections to groundwater.

[1] Application in relevant Member States of the Commission recommendations on minimum principles for the exploration and production of hydrocarbons (such as shale gas) using high-volume hydraulic fracturing and related developments relevant for hydrocarbon activities June 2018 p.19

**64. Do you think that the specifications provided on Natural Background in Commission Directive 2014/80/EU are sufficient and coherent with the thresholds values?**

○ Yes

x No

○ I do not know

Other (please specify)

The lack of a uniform methodology for the establishment of TVs and NBLs has been addressed by the EEA who noted that 'the range of concentrations for which threshold values are set can vary quite widely, with differences in methodologies for establishing threshold values and natural background levels, variability in the receptors to be protected, and differences in methodologies for calculating average values' [1]. To increase comparability between Member States' implementation of the GWD, to establish true status of groundwater across Europe, a level playing field and improve transparency and participation of public in planning and implementation process of the GWD a uniform methodology would be needed. The specifications on natural backgrounds provided in Directive 2014/80/EU are more detailed than in the previous version of the GWD, which is an improvement and bring us closer to the benefits of having a uniform methodology. However in order to be fully coherent with threshold values additional clarification and detail are needed. Further clarification should for example specify that in the case a specific groundwater body NBL exceeds the TV established in accordance with a uniform methodology, the TV for that groundwater body shall equal the NBL of that groundwater body. Additionally, Annex II should also specify acceptable reasons for not establishing TVs and accompanied reporting requirement introduced.

[1] EEA (2018) European waters, Assessment of status and pressures 2018, EEA Report No 7/2018.

**65. Do you think Annex II part C requires sufficient information on threshold values? Do you think this information is sufficient to compare threshold values across MS?**

○ Yes

○ No

○ I do not know

Other (please specify)

Reporting requirements are based on the basic requirements of the GWD, some of which would need to be adapted to ensure adequate information that is comparable across Member States can be collected (see response to previous question).

**66. Do you think the GWD sufficiently address Groundwater Dependent Terrestrial Ecosystems ?**

Yes, however the provisions of the GWD should be adapted to ensure adequate protection of groundwater ecosystems. In accordance with the directive land use and climate change have been integrated with the conceptual models of groundwater systems emphasizing on the role of Groundwater Dependent Ecosystems [1]. However, the ecosystems present in groundwaters themselves (groundwater ecosystems) are not really regarded. Originally this was likely due the to the difficulties in assessing the ecological criteria of groundwater ecosystems, due to the lack of an adequate ecological assessment scheme and knowledge [2]. However knowledge gaps are closing and also indicating the need for a more effective protection of these vulnerable ecosystems. To account for that, requirements should be introduced in the GWD for considering the groundwater ecosystem as such when setting GW QS and more stringent TVs in line with Annex I(3), and when setting TVs for Annex II(B) pollutants/parameters, with a view to prevent damage to groundwater ecosystem (not only 'associated bodies of surface water' or/and groundwater dependent 'terrestrial ecosystems') and support the implementation of Article 4(5) of the GWD.

[1]Does groundwater protection in Europe require new EU-wide environmental quality standards? Balderacchi et al. 2014
[2]Ecological assessment of groundwater ecosystems – Vision or illusion? Griebler et al 2010

**67. You have now completed the questionnaire on the implementation of the Groundwater Directive. Feel free to add any further comment in the box below. The next question will allow you to reach another questionnaire.**

/

**68. To which questionnaire would you like to respond next?**

- ☐ Questionnaire 1 - Floods Directive
- ☐ Questionnaire 2 - Water body status – ecological, chemical and quantitative status
- ☐ Questionnaire 3 - Environmental objectives and exemptions
- ☐ Questionnaire 4 - Groundwater Directive
- ☐ Questionnaire 5 - Costs and benefits
- ☐ Questionnaire 6 - Cost recovery and pricing
- ☐ Questionnaire 7 - Monitoring and reporting
- ☐ Questionnaire 8 - Public participation and review
- ☐ Questionnaire 9 - Coherence
- ☐ Questionnaire 10 - EU added value
- ☐ End of the survey

## Questionnaire 5 - Costs and benefits

**This questionnaire is aimed at all stakeholders.**

An important aspect of the Fitness Check is to consider the efficiency of the Directives, that is to say to which extent the costs triggered by their implementation are proportionate and justified in comparison to the benefits. The questions included in this section are focused on identifying evidence to contribute to this aspect of the analysis.

**69. Do you have information on how costs and benefits are being assessed in your region / Member State?**

- Yes
- No
- I do not know

Other (please specify)

We have engaged with this process in many Member States. In our experience, the type and quality of cost and benefit estimates are highly variable between Member States. Full best-practice cost-benefit analysis as recommended by the Wateco guidance is seldom undertaken.

Where thorough assessments have taken place, benefits considerably outweigh costs for even complex measures. Examples include in DE for control of agricultural pollutants in drinking water [1], and in UK for full implementation of the WFD in England [2].
Even where estimates do exist, we believe the marginal cost of the Directives is often over-stated as many WFD-related costs are part of spending programmes that are already committed. For example, most agricultural measures have been funded through already-existing Common Agricultural Policy subsidies. We note as well that actual annual WFD spending has been far less than the estimated costs to date: for example UK estimates the cost of meeting the WFD in England to be £700-800M/yr, but actual spending on WFD-related measures has been approx. £400M/yr.

[1] Umwelt Bundsamt (2017) Quantifizierung der landwirtschaftlich verursachten Kosten zur Sicherung der Trinkwasserbereitstellung
[2] UK Environment Agency (2015) Impact Assessment: Update to the river basin management plans for England's water environment

**70. In your Member State, have you conducted any study to support the quantification of costs and benefits of achieving the objectives from the legislation?**
**If yes, can you please provide a copy of this study and explain briefly the types of costs and the types of benefits considered?**

Choose File

*N/A – the cost and benefit quantifications that exist have been carried out for Member State competent authorities (or for the European Commission), and should be provided through their consultation responses.*

**71. For the Water Framework Directive (WFD)**

Do you have any information on costs to implement the Directive in your country or region or that can contribute to estimating them?

For each please indicate the year, currency and unit you are referring to. Feel free to provide full time equivalent (FTE) information if that is the information you have available. We have provided the following categories below, following the typology defined in the Better Regulation Guidelines (Tool#58). However, if you have cost information available in another format, don't hesitate to send this information alongside your response.

**Compliance cost**: this encompasses investments and expenses in order to comply with substantive obligations or requirements of the legislation, this also includes administrative burden which are costs borne as a result of administrative activities performed to comply with information obligations included in the legislation.

**Enforcement costs**: this includes costs for monitoring and enforcement of the legislation. These are linked to associated activities for the implementation of the legislation.

**Indirect costs**: these costs are incurred by related markets or stakeholders but not directly targeted by the legislation. These are transmitted for example through changes in the prices.
Compliance costs (capital expenditure, investments and operating costs etc.)

N/A

Of which administrative burden (if available)

N/A

Enforcement costs

N/A

Indirect costs (please describe which)

N/A

Other costs

N/A

Other (e.g. no cost data available)

**72. Do you have information on who (i.e. public or private actors) bear these costs?**

- Yes
- No
- I do not know

Other (please specify)

This information exists for some but not all Member States.

It is important to note that the bulk of 'private' costs fall on subsidised or price-supported industries (for example agriculture, electricity generators, privatised water and wastewater companies) who are supported by public funds in exchange for acting in the public interest.

In the particular case of agriculture, many 'additional' WFD costs are in fact the cost of genuinely meeting cross-compliance standards for the first time. The Measure 12.3 funding stream within the Rural Development Programme of the Common Agricultural Policy exists to support any costs beyond these, but has not yet been used for this intended purpose by any Member State (and has only been applied to any degree in three Member States[1]).

[1] European Network for Rural Development (2015) RDP analysis: Support to environment & climate change; M12 Natura 2000 & Water Framework Directive payments

**73. <u>For the Groundwater Directive (GWD)</u>**

Do you have any information on costs to implement the Directive in your country or region or that can contribute to estimating them?

For each please indicate the year, currency and unit you are referring to. Feel free to provide full time equivalent (FTE) information if that is the information you have available. We have provided the following categories below, following the typology defined in the Better Regulation Guidelines (Tool#58). However, if you have cost information available in another format, don't hesitate to send this information alongside your response.

**Compliance cost**: this encompasses investments and expenses in order to comply with substantive obligations or requirements of the legislation, this also includes administrative burden which are costs borne as a result of administrative activities performed to comply with information obligations included in the legislation.

**Enforcement costs**: this includes costs for monitoring and enforcement of the legislation. These are linked to associated activities for the implementation of the legislation.

**Indirect costs**: these costs are incurred by related markets or stakeholders but not directly targeted by the legislation. These are transmitted for example through changes in the prices.
Compliance costs (capital expenditure, investments and operating costs etc.)

N/A

Of which administrative burden (if available)

N/A

Enforcement costs

N/A

Indirect costs (please describe which)

N/A

Other costs

N/A

Other (e.g. no cost data available)

**74. Do you have information on who (i.e. public or private actors) bear these costs?**

- Yes
- No
- I do not know

Other (please specify)

As under Q. 72 – these data are patchy and there are gaps in MS understanding of indirect costs and benefits of the GWD.

**75. For the Environmental Quality Standards Directive (EQSD)**

Do you have any information on costs to implement the Directive in your country or region or that can contribute to estimating them?

For each please indicate the year, currency and unit you are referring to. Feel free to provide full time equivalent (FTE) information if that is the information you have available. We have provided the following categories below, following the typology defined in the Better Regulation Guidelines (Tool#58). However, if you have cost information available in another format, don't hesitate to send this information alongside your response.

**Compliance cost**: this encompasses investments and expenses in order to comply with substantive obligations or requirements of the legislation, this also includes administrative burden which are costs borne as a result of administrative activities performed to comply with information obligations included in the legislation.

**Enforcement costs**: this includes costs for monitoring and enforcement of the legislation. These are linked to associated activities for the implementation of the legislation.

**Indirect costs**: these costs are incurred by related markets or stakeholders but not directly targeted by the legislation. These are transmitted for example through changes in the prices.

Compliance costs (capital expenditure, investments and operating costs etc.)

N/A

Of which administrative burden (if available)

N/A

Enforcement and monitoring costs

N/A

Indirect costs (please describe which)

N/A

Other costs

N/A

Other (e.g. no cost data available)

**76. Do you have information on who (i.e. public or private actors) bear these costs?**

- Yes
- No
- I do not know

Other (please specify)

As above under Q. 72, this varies between Member States. Some MS have a good understanding of who currently bears costs. Very few have assessed the most cost-effective means of meeting EQSD requirements – including options for source control and substitution of active ingredients.

77. **For the Floods Directive**
Do you/does your organisation have information on costs associated with implementing the FD in your country or region or information that can contribute to estimating them?

For each please indicate the year, currency and unit you are referring to. Feel free to provide full time equivalent (FTE) information if that is the information you have available. We have provided the following categories below, following the typology defined in the Better Regulation Guidelines (Tool#58. However, if you have cost information available in another format, don't hesitate to send this information alongside your response.

**Compliance cost**: this encompasses investments and expenses in order to comply with substantive obligations or requirements of the legislation, this also includes administrative burden which are costs borne as a result of administrative activities performed to comply with information obligations included in the legislation.

**Enforcement costs**: this includes costs for monitoring and enforcement of the legislation. These are linked to associated activities for the implementation of the legislation.

**Indirect costs**: these costs are incurred by related markets or stakeholders but not directly targeted by the legislation. These are transmitted for example through changes in the prices.
Compliance costs

N/A

Of which administrative burden (if available)

N/A

Enforcement and monitoring costs

N/A

Indirect costs (please describe which)

N/A

Other costs

N/A

Other (e.g. no cost data available)

N/A

78. **For the WFD**
What do you think are the key benefits of implementing the Directive? (over and above the benefits associated with a) no deterioration, pollution reduction/suppression, achieving good status for the WFD/EQSD/GWD and the additional objectives set for protected areas and b) reduction of the adverse consequences for human health, the environment, cultural heritage and economic activity associated with floods?)

| | Very significant | Moderately significant | Slighly significant | Not significant | Do not know | Not applicable |
|---|---|---|---|---|---|---|
| Social benefits (amenity, recreation etc.) | X | | | | | |
| Avoided damage (costs) | X | | | | | |
| Sustainable water use (based on a long-term protection of available water resources) | X | | | | | |
| Mitigation of the effects of floods | X | | | | | |
| Mitigation of the effects of droughts | X | | | | | |
| Integrated catchment-based approach and integrated | X | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| environmental objectives (ecological (biological, hydro-morphological, physico-chemical) and chemical status elements) | | | | | | |
| Common methodology, harmonized status assessment and quality standards across Member States | X | | | | | |
| Enhanced transboundary cooperation | X | | | | | |
| Enhanced cross-sectoral cooperation - power sector | X | | | | | |
| Enhanced cross-sectoral cooperation - agriculture sector | X | | | | | |
| Enhanced cross-sectoral cooperation - navigation sector | X | | | | | |
| Improved information and knowledge (additional monitoring) leading to better decision making and early intervention | X | | | | | |
| Public information and consultation | X | | | | | |
| Enhanced use of economic instruments, methods and principles | X | | | | | |
| Promotion of source control measures | X | | | | | |
| Enhanced innovation | X | | | | | |
| Mitigation of the effects of climate change | X | | | | | |
| Adaptation to climate change | X | | | | | |
| Enhancement of the resilience of Ecosystems | X | | | | | |
| Enhancement of ecosystem services | X | | | | | |
| Protection of associated ecosystem (terrestrial, marine, …) | X | | | | | |
| Reduced need for drinking water treatment | X | | | | | |
| Reduced need for waste water treatment | | X | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| Reduced health risks from exposure to microbial contaminants, nitrates, pesticides, and other contaminants including priority hazardous substances | X | | | | | |
| Improved availability of fish in rivers/lakes for professional fishers | X | | | | | |

79. **For the EQSD**

What do you think are the key benefits of implementing the Directive?

| | Very significant | Moderately significant | Slighly significant | Not significant | Do not know | Not applicable |
|---|---|---|---|---|---|---|
| Other human health benefits (beyond protection of contamination via aquatic environment) | X | | | | | |
| Social benefits (amenity, recreation etc.) | X | | | | | |
| Avoided damage (costs) | X | | | | | |
| Sustainable water use (based on a long-term protection of available water resources) | X | | | | | |
| Integrated catchment-based approach and integrated environmental objectives (ecological (biological, hydro-morphological, physico-chemical) and chemical status elements) | X | | | | | |
| Common methodology, harmonized status assessment and quality standards across Member States | X | | | | | |
| Enhanced transboundary cooperation | X | | | | | |
| Improved information and knowledge (additional monitoring) leading to better decision making and early intervention | X | | | | | |
| Public information and consultation | X | | | | | |
| Enhanced use of economic instruments, methods and principles | | X | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| Promotion of source control measures | X | | | | | |
| Enhanced innovation | X | | | | | |
| Enhancement of the resilience of Ecosystems | X | | | | | |
| Protection of associated ecosystem (terrestrial, marine, …) | X | | | | | |
| Reduced need for drinking water treatment | X | | | | | |
| Reduced need for waste water treatment | | X | | | | |
| Reduced health risks from exposure to microbial contaminants, nitrates, pesticides, and other contaminants including priority hazardous substances | X | | | | | |
| Improved availability of fish in rivers/lakes for professional fishers | X | | | | | |

80. **For the GWD**

What do you think are the key benefits of implementing the Directive? (over and above the benefits associated with a) no deterioration, pollution reduction/suppression, achieving good status for the WFD/EQSD/GWD and the additional objectives set for protected areas and b) reduction of reduction of the adverse consequences for human health, the environment, cultural heritage and economic activity associated with floods?

| | Very significant | Moderately significant | Slightly significant | Not significant | Do not know | Not applicable |
|---|---|---|---|---|---|---|
| Other human health benefits (beyond protection of contamination via aquatic environment) | X | | | | | |
| Avoided damage (costs) | X | | | | | |
| Social benefits (e.g. amenities) | X | | | | | |
| Sustainable water use (based on a long-term protection of available water resources) | X | | | | | |
| Integrated catchment-based approach and integrated environmental objectives (ecological (biological, hydro-morphological, physico-chemical) and chemical status elements) | | X | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| Common methodology, harmonized status assessment and quality standards across Member States | X | | | | | |
| Enhanced transboundary cooperation | | X | | | | |
| Improved information and knowledge (additional monitoring) leading to better decision making and early intervention | X | | | | | |
| Public information and consultation | | X | | | | |
| Enhanced use of economic instruments, methods and principles | | X | | | | |
| Enhanced innovation | X | | | | | |
| Protection of associated ecosystem (terrestrial, marine, …) | X | | | | | |
| Reduced need for drinking water treatment | X | | | | | |
| Reduced need for waste water treatment | | | X | | | |
| Reduced health risks from exposure to microbial contaminants, nitrates, pesticides, and other contaminants including priority hazardous substances | X | | | | | |

81. **For the FD**

What do you think are the key benefits of implementing the Floods Directive? (over and above a) no deterioration and the achievement of good status for the WFD and b) reduction of the adverse consequences for human health, the environment, cultural heritage and economic activity associated with floods?)

| | Very significant | Moderately significant | Slighly significant | Not significant | Do not know | Not applicable |
|---|---|---|---|---|---|---|
| Social benefits (amenity, recreation etc.) | X | | | | | |
| Avoided damage (costs) | X | | | | | |
| Sustainable water use (based on a long-term protection of available water resources) | X | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| Common methodology, harmonized status assessment and quality standards across Member States | | X | | | | |
| Enhanced transboundary cooperation | X | | | | | |
| Enhanced cross-sectoral cooperation | X | | | | | |
| Improved information and knowledge (additional monitoring) leading to better decision making and early intervention | X | | | | | |
| Public information and consultation | X | | | | | |
| Enhanced use of economic instruments, methods and principles | | X | | | | |
| Enhanced innovation | X | | | | | |
| Mitigation of the effects of climate change | X | | | | | |
| Adaptation to climate change | X | | | | | |
| Enhancement of the resilience of Ecosystems | X | | | | | |
| Enhancement of ecosystem services | X | | | | | |
| Protection of associated ecosystem (terrestrial, marine, …) | X | | | | | |

**82. Is there any other benefit that you think should be considered as part of the Fitness Check?**

No; it would however be important that the benefits listed above are adequately considered in this Fitness Check. This questionnaire on costs and benefits places a heavy weight on importance of costs and seems to disregard the benefits (cf. first set of questions with detailed questions about costs). This will give a highly skewed view on the effectiveness of the Directives. We know that Member States are not adequately or not at all assessing the benefits of the necessary measures; benefits of water improvement or protection measures hence go unnoticed and the failure to recognise the socio-economic values generated by the improvement in water status has contributed to the low ambition in reaching the WFD objectives on time. This questionnaire seems to be adopting a similar approach of disregarding a very important aspect of the WFD implementation (i.e. its benefits).

**83. In your opinion, how do the costs in relation to the implementation of the WFD, GWD and EQSD compare to the benefits (including additional benefits you might have identified) they achieve?**

- The costs are higher than the benefits

x The costs are lower than the benefits

The costs and the benefits are proportionate

I do not know

Comment

Overall, benefits clearly and considerably outweigh costs. This is true on economic grounds – as discussed below – and just as importantly it is true in the broader sense of providing EU citizens with a healthy and sustainable environment.

Disproportionate cost clauses within the WFD exist to prevent excessive economic costs from almost all of the Directives' targets. So there is only potential for costs to exceed benefits in those cases where targets are fixed: namely the targets for no deterioration, protected areas and priority substances. And even in these cases, provisions exist to avoid excessive costs (see for example Articles 4(5), 4(6) and 4(7) WFD; the provisions on proportionate, cost-effective and consultative action in Articles 16(2), 16(5) and 16(6) WFD). As a result national economic analyses of these costs (where these exist) provide a varied picture but one in which the overall costs for no deterioration and PA targets appear proportionate to economic as well as social benefits. The specific balance of costs and benefits – including whether a class of target is cost-beneficial – varies between and within Member States. Taking the UK as an example (given it has one of the most developed cost-benefit analyses) government estimates that no-deterioration targets in England have a net benefit of £2.8bn over 37 years, and Natura 2000 targets a net benefit of £800M. They estimate there is a net cost of -£1.1bn for achieving Shellfish PA targets in England, however in Scotland the government supports Shellfish PA targets on economic grounds [1].

At an EU level, there are high estimates for dealing with the costs of several priority substances, which skew current aggregate cost estimates. In some cases these have not been tested in practice and upstream solutions not fully explored, meaning that high end-of-pipe wastewater treatment costs are expected. We note that the eventual cost of addressing environmental pollutants is often far cheaper and less energy-intensive than initial estimates, as improved methods emerge once clear targets are provided (the Montreal Protocol on CFCs is the most famous example of this).

Even where addressing priority substances and priority hazardous substances creates a high cost, we consider this a proportionate response to substances that have been identified by the Commission – following a rigorous and transparent process, including Member States and stakeholders – as potentially dangerous to public health and wellbeing. The large majority of chemical failures are a result of mercury, cadmium, nickel and lead which are all known to have severe impacts on human health, and it is noteworthy that many substances that were recently considered safe are now known to be highly dangerous, and believe this is an issue that justifies the use of the precautionary principle.

[1] Scottish Government (2011) Delivering Scotland's River Basin Management Plans: An Integrated Approach to the Protection of Shellfish Growing Waters

**84. In your opinion, how do the costs in relation to the implementation of the FD compare to the benefits (including additional benefits you might have identified) it achieves?**

The costs are higher than the benefits

x The costs are lower than the benefits

The costs and the benefits are proportionate

I do not know

Comment

Each year, flooding causes billions of euros of damage to EU citizens and businesses. The emotional and health impacts of flooding are severe and long-lasting. The costs of implementing the FD are entirely those of analysis, consultation, strategic planning and reporting. We are not aware of a full analysis of the costs and benefits of the Floods Directive but it is vanishingly unlikely that these planning costs outweigh the economic, social and personal impacts of the damage averted by FD-driven improvements to flood management.

**85. How do the resources required for the reporting on Directives compare to the benefits it delivers?**

| | Resources are higher than the benefits | Resources and benefits are equivalent | Benefits are higher than the resources | I do not know |
|---|---|---|---|---|
| WFD | | | X | |
| EQSD | | | X | |
| GWD | | | X | |
| FD | | | X | |

Other (please specify)

**86. What have been the benefits of trend monitoring to support the implementation of the Directives?**

The Directives all rely on robust monitoring so that consultation and programmes of measures are effective. Because of this the monitoring and reporting requirements are more detailed and prescriptive than the generally flexible output requirements. This is essential, given the complexity of the water environment and the generally low level of knowledge that existed before the Directives were agreed. If these monitoring and reporting requirements were reduced or made less prescriptive then we would expect the quality of data available from many Member States would fall.

We note that the WFD in particular refers to the relevant EN and ISO standards to detail monitoring techniques, providing a strong grounding in best practice. This will allow flexibility to improve monitoring as and when improved techniques are available. A sub-set of new monitoring techniques have become available since the Directives were drafted (for example passive sampling and eDNA are now more developed). We expect these to complement the EN and ISO standards as they become proven technologies, but they do not yet have the scope to replace existing WFD requirements. For example eDNA cannot yet provide accurate assessments of abundance and population structure as opposed to simple presence-absence.

Current monitoring requirements have been important not just in providing an overview of progress against the Directives but also in determining the correct chemical/supporting ecological status targets (for example UK phosphorous standards were revised in 2013 in light of biological monitoring data [1]) and measuring the response of water bodies to specific measures.

[1] UKTAG (2013) Updated Recommendations on Phosphorus Standards for Rivers.

**87. Have any synergies between the four Directives been exploited to reduce costs without undermining the objectives?**

x Yes

○ No

○ I do not know

Comment

Synergies have been exploited, but not to the extent that they could be. As regards the WFD and the FD for example (Cf. [1]), more than half of Member States reported that they have carried out joint consultations of the draft second RBMPs and draft first FRMPs, and at least 21 MS make reference to Article 4 WFD objectives within their FRMPs. However, as regards measures some Member States made unclear or no links between the FD's and the WFD's measures and others made limited links. More importantly, nature based solutions (e.g. NWRM), which provide cost-effective win-win solutions for both directive, that would also reduce overall cost have not been used sufficiently.

Links between the WFD, GD and EQSD are even closer, given that the latter are daughter Directives of the WFD. Groundwater and priority (hazardous) substance status is reviewed as an integral part of the RBMP and should be addressed through WFD PoMs. In many cases the same measures address problems under several of these Directives (for example sustainability-driven reductions in abstraction from aquifers, leading to better water flow and lower concentrations of pollutants in surface waters).

[1] European Overview - Flood Risk Management Plans, SWD(2019) 31 final

**88. Based on your experience of the Directives, what factors have influenced the efficiency of their implementation?**

The greatest factor is a willingness to tackle all pressures in a strategic, holistic and timely manner. Where vested interests and legacy problems have not been tackled, fewer benefits have been realised and ultimately costs have been greater. Some sectors and industries have seen far greater improvements than others: for example pollution from urban wastewater and historic mines has been markedly reduced in many Member States while agricultural pollution remains largely unaddressed. This lop-sided investment has led to many water bodies failing to meet target standards despite heavy investment, and has passed greater costs onto more productive sectors (for example wastewater providers have often been required to invest in additional nutrient removal as a result of poor progress reducing agricultural pollution).

Efficiency has also been greatest where there has been more detailed economic option appraisal and more intensive public consultation. This is a connected point to the one above – better analysis and discussion of options has led to more coherent and effective measures.

The extent and quality of Member States' existing water management planning has also been a key factor in the 'start-up' cost and initial efficiency of the Directives. Member States which had – or rapidly developed – robust planning processes have been more able to set correct objectives, to identify efficient measures, and to finance measures at lower cost (in many cases through good use of existing financing mechanisms).

**89. In your opinion, do the costs of managing the implementation of the WFD and the required coordination for it in your country outweigh the benefits that the implementation of the Directive brings in your country?**

- Yes, to a large extent
- Yes, to some extent
- There is more or less a balance between the costs and the benefits of having this Directive at EU level
- No, not really

x No, definitely not

Could you explain your answer?

Evidence would suggest that the administrative burden of the WFD and its sister/daughter Directives is low in proportion to their benefits. Overall, the introduction of the Directives has simplified and reduced administrative burdens: Commission reporting requirements in the water field fell by 40% between 2000 and 2013.

A majority of the administrative bodies interviewed for the Commission's 2012 Water Policy Fitness Check (SWD (2012) 393) reported either acceptable or low levels of additional administrative costs concerning additional reporting requirements (63%) or additional controls (62%).

As noted by SWD (2012) 393 administrative costs have varied depending on the pre-existing administrative structures and processes in place. Where planning for the Directives has been integrated into robust existing processes (for example water industry investment planning cycles, regular reviews of Member States' CAP subsidy systems) administrative burdens have been relatively low.

**90. In your opinion, do the costs of managing the implementation of the FD and the required coordination for it in your country outweigh the benefits that the implementation of the Directive brings in your country?**

- Yes, to a large extent
- Yes, to some extent
- There is more or less a balance between the costs and the benefits of having this Directive at EU level
- No, not really

x No, definitely not

Could you explain your answer?

Please see our answer to Q. 84.

**91. You have now completed the questionnaire on the costs and benefits of the Directives. Feel free to add any further comment in the box below. The next question will allow you to reach another questionnaire.**

**92. To which questionnaire would you like to respond next?**

- [ ] Questionnaire 1 - Floods Directive implementation
- [ ] Questionnaire 2 - Water body status – ecological, chemical and quantitative status
- [ ] Questionnaire 3 - Environmental objectives and exemptions
- [ ] Questionnaire 4 - Groundwater Directive
- [ ] Questionnaire 5 - Costs and benefits
- [ ] Questionnaire 6 - Cost recovery and pricing
- [ ] Questionnaire 7 - Monitoring and reporting
- [ ] Questionnaire 8 - Public participation and review
- [ ] Questionnaire 9 - Coherence
- [ ] Questionnaire 10 - EU added value
- [ ] End of the survey

## Questionnaire 6 - Cost recovery and pricing

**This questionnaire is aimed at Member State competent authorities, trade associations and NGOs.**

Article 9 of the Water Framework Directive (WFD) requires Member States to ensure cost recovery for water services and incentive water pricing. We are interested in understanding whether this requirement has been implemented. If not, what are the reasons for this and the impacts this has on the achievement of the objectives of the Directives?

**93. Have you carried out any studies about cost recovery / water pricing / the economics of water demand in your country/River Basin District (RBD)? If yes, could you please upload the relevant documents?**

Choose File
No file chosen

**94. Comment to the previous question.**

We have not conducted such a study at the EU level.

At a national level: WWF ES carried out together with academics and experts in environmental economics and law an analysis of the application of Article 9 WFD in 8 RBD in Spain, which represent most of the Spanish territory in terms of population and irrigation demand. The report 'Who pays for water?' (2017) with conclusions of the analysis is available here: https://www.wwf.es/?45600/Quin-paga-el-agua-en-Espaa

The report finds that Art 9 WFD is not applied correctly in Spain, as the information contained in the RBMPs remains confusing and difficult to compare, and there are many exceptions and widespread discounts for the use of water that are not well differentiated. There are also huge imbalances in the payment of water. In some cases, urban and industrial users indirectly subsidize irrigated agriculture, which pays much less for the services provided by water authorities: 0.013 euros on average per cubic meter of water, compared to 0.060 euros.

**95. Are the requirements of the Article 9 of the WFD effectively and timely implemented in your country?**

- Yes, fully
- x Partially
- No
- I do not know

Comment

At an overview level across the EU, Article 9 has only been partially implemented. Although a great majority of Member States introduced or adjusted water pricing mechanisms to meet WFD requirements, adequate water pricing remains a big challenge across the EU [1]. In general water pricing has not been fully and adequately implemented across sectors, and is instead often limited to wastewater treatment and provision of drinking water. Prices do not reflect the real cost, with environmental and/or resource costs rarely integrated in the pricing system. Some mechanisms are selective and exclude certain major users or polluters (e.g. cooling water for thermal power plants and agricultural sludge in Poland[2]) and there is often a huge disparity between contributions of different water users, with households often carrying the biggest burden by paying

much more than agriculture and/or industry (e.g. in France [3], Netherlands). For example also see our answer to Q 94.

This is clearly indicated also in the most recent Commission Staff Working Document on the WFD (SWD 2019 30), which outlines our main concerns with Article 9 implementation:

1. *'The incomplete implementation of the principle of cost recovery and the limited use of economic instruments put a strain on the potential of promoting efficient water management through this instrument. In many cases methodologies to calculate costs are insufficiently documented and essential information is missing'*

2. *'Significant gaps remain and there is room to improve the transparency on how [environmental and resource] costs have been dealt with.*

3. *'Overall, limited changes in the water-pricing policies have taken place in order to implement the Article 9 provisions.'*

4. *'Measures for … the cost recovery of water services are lacking to a great extent [from RBMPs].'*

This has left a substantial gap in the implementation of the WFD. Too many Member States remain fundamentally unaware of the costs and benefits of water resource use, and have not provided the financial instruments necessary to invest in water management improvements.

[1] EC 2012. Report from the Commission to the European Parliament and the Council on the Implementation of the Water Framework Directive (2000/60/EC) River Basin Management Plans (COM(2012) 670 final); COM(2015) 120 final, op. cit.; EC. 2017. Report from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, The EU Environmental Implementation Review: Common challenges and how to combine efforts to deliver better results (COM/2017/063 final); SWD(2017) 153 final, op. cit.; Watkins, E. et al. 2017. Capacity building, programmatic development and communication in the field of environmental taxation and budgetary reform, Final Report (p. 61-90) and accompanying case studies, https://ieep.eu/publications/green-economy/new-suite-of-40-case-studies-on-environmental-fiscal-reform.

[2] Paquel, K.2017. Wastewater fee in Poland. Case study prepared as part of the study "Capacity building, programmatic development and communication in the field of environmental taxation and budgetary reform", carried out for DG Environment of the European Commission during 2016-2017 (European Commission Service Contract No 07.027729/2015/718767/SER/ENV.F.1) and led by the Institute for European Environmental Policy.

[3] Although often considered one of the better systems in the EU, the French cost recovery and water pricing system is still very doubtful, as recognized in 2015 by the French Court of Auditors (French Court of Auditors 2015 report 'Water agencies and water policy: a coherence to be found' (Les agences de l'eau et la politique de l'eau: une cohérence à retrouver). For example, there is still a strong level of inequities between contributions of different users; agricultural effluent charges are low and do not properly reflect the polluter-pays principle, mainly due to legislative choices. Urban consumers pay the major part of the bill, and the figure is increasing (e.g. in 2013, they paid 87 per cent of the total costs, while the industrial share fell to 7 per cent and that of farmers stagnated at 6 per cent on average). There is, therefore, still an effort to be made, mainly for agriculture as well as to capture some of the industry that currently does not seem to be addressed (e.g. navigation).

**96. Please give examples and reasons for the most significant implementation gaps (including timeline) in relation to the following provisions. We are particularly interested in understanding whether the non-implementation is due to a lack of clarity of the Directive's provision, lack of support or other reasons specific to your Member State.**

Ensuring cost recovery for water services including environmental and resource costs

Reasons for poor implementation of Art 9 are political, and are often to do with the lack of political will to challenge vested interests, such as agriculture, navigation or hydropower. The legal provisions are clear, and where further details on implementation of these provisions were required they were elaborated through the work of the CIS process (e.g. WATECO group and subsequent drafting groups (ECO1 and ECO2)) and courts (e.g. CJEU ruling C-525/12; Spanish Supreme Court upholds polluter-pays principle in Spain [1]).

A narrow definition of water services is still used in many Member States. WFD defines water services broadly, thus cost recovery provisions are applicable to a wide range of uses that may have an impact on water and could undermine the objectives of the WFD. Water services 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. This was confirmed also by the EU Court of Justice (C-525/12) [2]. Moreover, WFD's water pricing and cost recovery requirements capture not only the use of water but also discharges to water affecting its quality (diffuse and point source pollution). However, across Europe narrow definition of water services is still being applied (e.g. in one third of Member States only public water supply and wastewater treatment are covered), although improvements from the first RBMPs cycle are visible; moreover, even where broader definition is applied, it does not necessarily cover all water uses and it does not lead to adequate respective cost recovery calculations [3]. The contributions of the water uses to the recovery of the costs are still unclear in many cases, or very vaguely described.

Whereas the costs of water improvement measures are well known and accounted for, many of the benefits of healthy waters due to being less tangible are often overlooked in water management decisions. Assessing the value of improved water status is an important feature of WFD and it is foreseen to be captured by the economic valuation of the so called environmental and resource costs (ERCs), which forms a basis for developing adequate water pricing and ensure cost recovery. Approaches on assessing the ERCs and calculating cost recovery rates vary considerably between Member States and it can in general be said that such assessments are not adequate, even if we can see some improvements from the first cycle [3]; moreover, in about one third of Member States ERCs are not even calculated. In most cases economic assessments of ERCs are cost (financially) based which also leads to benefits (and some economic costs) not being adequately accounted for, thereby skewing the decision making process. There appears to not be enough political will by administrations to appropriately assess ERCs and calculate recovery rates - even if many Member States do consider the ERC assessment as challenging (as expressed e.g. through CIS process and 2012 Council Conclusions on water, and despite the that work on this is quite extensive [4]) more recent attempts within the CIS (2014-2015) to prepare more guidance on assessing recovery of ERCs were not successful (some Member States opposed any such guidance to be approved by CIS).

---

[1] WWF, ERN, EAA, EEB (2018) Bringing Life Back to Europe's Waters: The EU Water Law in Action.

[2] Commission v Germany C-525/12; see also 'Analysis of Case C-525/13 – German Water Services Commission preliminary reaction' (Commission document for Strategic Coordination Group meeting, November 2014).

[3] SWD(2019) 30 final: European Overview - River Basin Management Plans

[4] CIS WATECO guidance and ECO1 and ECO2 information sheets; AQUAMONEY (FP6 project)

Implementing incentive water pricing policies for water users by 2010

There is considerable variation in implementing incentive water pricing. Article 9.4 exemptions have been applied for very different water sectors by different Member States and even between different RBD within each Member State. This is set out clearly within the recent Commission SWD.

Less formally and without passing through exemptions processes, there is wide variation in the water pricing paid by different sectors for abstraction, without any obvious basis in water service or environmental/resource costs. This is most usually the case for agricultural abstraction, which many Member States charge at a considerably lower rate/volume than abstraction for public supply.

There are also a small number of Member States who still do not charge end-users for domestic water supplies.

The barriers to implementing incentive water pricing are overwhelmingly political. In the case of water charges for domestic water supplies this is commonly due to a perceived clash with other social/public principles (e.g. existing rights to free public water supplies in IE; our case study on water pricing in Cyprus where strong opposition from farmers and subsequently various politicians and local authorities prevented the introduction of the new pricing scheme [1]). For agricultural and industrial uses the political barriers are more to do with a failure to challenge vested interests: arguments are made that these industries cannot bear the true cost of their water usage, and this is used to justify no additional charges instead of leading to a recognition that current water use is inefficient and requires improvements.

In some cases there are also legal/capital cost barriers to changes in water charging: for example in the UK the senior class of abstraction rights has been granted in perpetuity without ongoing charges, and there is no legal mechanism for altering this without granting up-front compensation for their capital value.

[1] WWF, ERN, EAA, EEB (2018) Bringing Life Back to Europe’s Waters: The EU Water Law in Action.

Ensuring adequate contribution of the different water users (households, agriculture, industry) to the recovery of the costs of water services taking account of the 'polluter pays' principle

See previous 2 answers.

Reporting the steps towards implementing incentive water pricing which will contribute to achieving the environmental objectives of this Directive and on the contribution made by the various water uses to the recovery of the costs of water services

We have found Member States’ reporting on cost recovery as a whole to be opaque. The methods used to calculate environmental and resource costs can be hard to find and to understand. They can vary considerably between RBDs within a single Member State, making it hard for national-level NGOs to gain an overview of decision-making.

Reporting the reasons for not fully applying the provisions on incentive water pricing and on the contribution made by the various water uses to the recovery of the costs of water services

See previous answer

**97. To which other water services / uses / activities is cost recovery applied or an adequate contribution ensured?**

Agriculture: irrigation

As noted above and in the recent Commission Staff Working Document, agricultural abstraction and diffuse pollution is the least well-addressed of the significant water management issues. This is true in terms of cost recovery/adequate contribution as it is in terms of the Programmes of Measures. Throughout the EU, agricultural water use is heavily subsidised and external costs and damages are overlooked. Article 9.4 exemptions are applied more often to agricultural use than to any other business sector and water charges for agricultural abstraction are on average considerably lower than for any other sector.

Agriculture: diffuse pollution

See previous answer.

Industry: water abstraction

A third of Member States only apply cost recovery to public water supply abstraction and emissions, and other Member States commonly exempt other industrial water uses as well.

Where the environmental and resource costs of industrial water use are estimated, our experience is that these are often set at the cost of providing alternative water supplies/wastewater provision to the industrial user. These can provide high cost figures which Member States commonly set against what they consider to be 'affordable' to industrial users (i.e. consistent with ongoing operation of the same industrial process) and conclude that full cost recovery is disproportionately expensive. As well as being a poor interpretation of the WFD disproportionate expense provisions, this method often overlooks opportunities to make industrial water use more efficient and less polluting. It also leads to the status quo being continued without industrial users being asked to make an adequate contribution to the water environment.

The 2007 Communication on Water Scarcity and Droughts [COM(2007)414] sets out a more systematic route to achieving cost recovery/adequate contribution, based on a water hierarchy whereby alternative water supply options are only considered after all improvements in the efficiency on the demand side have been exploited. In our view this hierarchy is still needed, and reasserting it should overcome many of the current implementation problems.

Industry: emissions to water

See previous answer.

Hydro-energy

In our experience, hydropower is often excluded from cost recovery provisions, and where it is included adequate contribution of this sector to recovery of costs is not ensured. The reasons for such exclusions are not provided in the RBMPs (Art 9.4 exemption is not always used for hydropower generation), and the resulting lack of cost recovery causes substantial disparities between cost recovered from hydropower plants and e.g. urban users (with the latter needing to contribute far more proportionally). According to our assessment decisions to not apply Art 9 to hydropower - or to recover costs only partially - are politically driven. This is also the case for Member States where hydropower presents an activity with widespread impacts on a high

proportion of water bodies (e.g. AT, ES). In some cases hydropower plants as service providers receive subsidies for their activity which goes on to be counted in the costs they incur and this can give biased impression of the reality of the recovery of costs in the RBMPs (e.g. ES). Furthermore, excluding hydropower from cost recovery and subsidising hydropower activities has negative impact on effectiveness of the cost recovery / water pricing tools and hence sustainable water management. BG provides a telling example - the increase in Bulgarian water abstraction charges from 2012 onwards led to a decrease in usage across users and a reduction in total loss of water reported by water supply and sewerage operators; however a substantial increase in the amount of water abstracted and used for the production of hydropower occurred at the same time, due to subsidies for energy produced by small and medium hydropower plants [1].

[1] Arkadi Sharkov (Denkstatt) (2016) Water abstraction charges in Bulgaria; prepared as part of the study 'Capacity building, programmatic development and communication in the field of environmental taxation and budgetary reform', carried out for DG Environment of the European Commission during 2016-2017 (European Commission Service Contract No 07.027729/2015/718767/SER/ENV.F.1) and led by the IEEP.

Navigation

In our experience, full cost recovery is almost never applied to flood protection, recreational use and navigation measures. Only one-third of Member States have included impacts from these sectors within their operational definition of water services. Significant impacts by these sectors on watercourses tend to lead instead to their designation as heavily modified water bodies and the setting of lower objectives. Some Member States have processes in place to identify significantly better environmental options as required under Article 4(3) WFD, which has the potential to secure adequate contributions, but these are inconsistently applied in practice.

Recreational use

See above

Flood protection

See above

Other (please specify)

**98. Are there any non-price measures in place in your country / RBD that aim at efficient water use? If yes, please provide details below.**

N/A for an EU-wide response

Water licencing

Water restrictions

Network leakage reduction goals

Benchmarking

Water efficient devices

Consumer awareness campaigns

Alternative water sources

Other

**99. To what extent has the implementation of cost recovery in your country / RBD contributed to the following objectives?**

| | To a large extent | To some extent | To no extent | I do not know | Not applicable |
|---|---|---|---|---|---|
| Environmental objectives of the WFD | | X | | | |
| Providing a price signal and encourage the efficient use of water | | X | | | |
| Providing incentives to use / develop more efficient technologies or practices | | X | | | |
| Comparable requirements with neighbouring Member States / RBDs | | X | | | |
| Financing of measures | | X | | | |

**100. What are the obstacles that have prevented the implementation of cost recovery from reaching the WFD's objectives?**

☐ Unawareness about the value of the benefits arising from measures
X Lack of a methodology to estimate costs and benefits of measures
X Lack of a methodology to calculate environmental costs
X Lack of a methodology to calculate resource costs
☐ Lack of guidance at EU level with regard to methodologies
X Insufficient acceptance to internalise environmental costs

X Insufficient acceptance to internalise resource costs
X Lack of metering
X Lack of political will

☐ Lack of data / understanding of pressures, impacts and costs of measures
X Resistance from economic sectors (agriculture, industry) to pay for water

☐ Resistance from citizens to pay a higher price for water

☐ Other (please indicate in comments)
Comment

**101. Has the WFD had impacts on the price of water supply for the following sectors? If yes, please describe how.**
Households

We do not know of any case in which the WFD and its daughter/sister Directives have impacted the costs of water supply and its financing, or limited the funds available for other investments. The experience of the privatised water sector in England is telling here, as the UK's regulated companies have managed to invest in meeting the Directives while also reducing water supply prices (in real terms) and disbursing unexpectedly high dividends to private shareholders.

The main driver of the costs of water supply are separate to the Directives: they are financing costs, the structuring of water supply corporations, and the requirements of non-WFD regulations and EU instruments such as the UWWTD and ESIF (for example many Cohesion Fund grants have been conditional on greater pass-through of public water supply costs to domestic customers).

We note that WFD and GWD provisions requiring sustainable management of water resources will in the mid- to long-term markedly reduce the costs of water supply in some water-stressed areas which might otherwise face exhausted water supplies and the need to invest heavily in new sources or transport.

Agriculture

As noted above, cost recovery from agriculture and industry has varied between and within Member States. At an aggregate level there has been very little change in agricultural water prices as a result of the WFD, and agricultural users currently pay far less than domestic or industrial users in many EU Member States. Even when water pricing exists for agricultural users, rates are so low as to provide little incentive for the efficient use of water. Incentives are further undermining in many Member States by subsidies that cover the costs of water rates.

The picture for industrial uses is better, and volumetric charging is now prevalent for industrial users. As mentioned above industrial water charges are usually based on direct financial cost alone and seldom include full environmental and resource costs, so where there have been increases in charges these are due to the fuller pass-through of previously-subsidised water supply costs.

Industry

See previous answer

Other

**102. How does the reporting on Article 9 in the River Basin Management Plans contribute to the following?**

X More transparency for citizens and water users about the costs of water services
X More transparency about the need to finance measures to comply with the WFD
X Better understanding of the effectiveness of the water pricing policy
X Better understanding of the financial costs of water services
X Better understanding of the environmental and/or resource costs of water services
X Better understanding of the demand function for water
X Possibility to compare the approach with other Member States / RBDs

**103. How do the resources required for the implementation of Article 9 compare to the benefits it delivers?**

○ Resources are proportionate to benefits

○ Resources are higher than benefits

X Resources are lower than benefits

○ Do not know

Comment

Investment in the implementation of Article 9 is a vanishingly small fraction of the overall financial needs of water management – which in many Member States approaches 1% of total GDP. Article 9 analyses are, however, necessary for the efficient and sustainable use of water resources, and as such the gains available from improved water management far outweigh the planning costs involved in implementing Article 9.

**104. Can you rank, by approximation, the sources of finance for the Programme of Measures in your country / RBD?**

These vary by Member State and RBD, so it is hard to provide a single answer at an EU level.

However, in general the greatest sources of finance are in rank order:

1. Borrowing or investment by water and wastewater supply bodies (ultimately funded through water rates or general taxation).
2. Direct state investment by Member States – in particular investment in (i) flood risk and coastal management and (ii) navigation, but also funding of specific habitat restoration projects.
3. European financial instruments – in particular use of the Common Agricultural Policy mechanisms, and the ESIFs (most notably the Cohesion Fund).
4. Borrowing or investment by energy supply bodies (again, ultimately funded through water rates or general taxation).
5. Direct investment by other sectors (NGOs, agriculture, chemicals industry) either self-financed or debt-financed.

**Tariffs / taxes paid by users or polluters that are earmarked to contribute to the Programme of Measures**

3

Public budget (national / regional / RBD)

1 (including here all investment by price-regulated utilities)

EU funds

2

Private funding

4

Other

**105. To the best of your knowledge, is the 'polluter pays' principle applied in your river basin district / country to recover environmental and resource costs?**

- Yes, fully
- Yes, partially

X No

- I do not know

Comment

Although there are occasional good practice examples of the ‘polluter pays’ principle being applied to recover such costs, there are systemic shortfalls in every Member State. This is recognised by the recent WFD implementation report and in the outcomes of the 2012 fitness check of EU water policy.

**106. You have now completed the questionnaire on water pricing, cost recovery and 'polluter pays' principle. Feel free to add any further comment in the box below. The next question will allow you to reach another questionnaire.**

/

**107. To which questionnaire would you like to respond next?**

- Questionnaire 1 - Floods Directive
- Questionnaire 2 - Water body status – ecological, chemical and quantitative status
- Questionnaire 3 - Environmental objectives and exemptions
- Questionnaire 4 - Groundwater Directive

- [ ] Questionnaire 5 - Costs and benefits
- [ ] Questionnaire 6 - Cost recovery and pricing
- [ ] Questionnaire 7 - Monitoring and reporting
- [ ] Questionnaire 8 - Public participation and review
- [ ] Questionnaire 9 - Coherence
- [ ] Questionnaire 10 - EU added value
- [ ] End of the survey

# Questionnaire 7 - Monitoring and reporting

**This questionnaire is aimed at Member State competent authorities.**

This questionnaire focuses on monitoring and reporting obligations stemming from the legislation concerned.

By *monitoring* we understand the environmental monitoring requirements included in the legislation (e.g. measurements of concentration of pollutants).

By *reporting* we mean the obligation from Member States to provide information on the implementation of the legislation at national level.

**Monitoring**

The WFD requires Member States to establish monitoring programmes for the assessment of the status of surface and groundwater. As part of this requirement, Member States must establish a surveillance monitoring programme, an operational monitoring programme and an investigative monitoring programme.

There are four categories of monitoring requirements:

Monitoring of ecological status of surface water;
Monitoring of chemical status of surface water (Article 8);
Monitoring of quantitative status of groundwater (Article 8);
Monitoring of chemical status of groundwater (Article 8).

Further requirements are included in the Directive's appendices, for example the frequency of monitoring for different quality elements for ecological status, and for priority substances is indicated in Annex V of the Water Framework Directive (WFD), the requirements for monitoring programmes for groundwater are included in Annex V 2.4 and Annex II 2.3. Additional requirements are also included in the EQSD (Environmental Quality Standards Directive) (e.g. trend monitoring) and the GD on specific parameters to monitor.

We are interested in understanding whether these requirements related to monitoring are clear and unambiguous, whether the costs from the monitoring requirements are proportionate to the benefits received from it and to understand the extent the monitoring requirements contribute to the achievements of the objectives of the Directive. Finally, we are also interested in understanding whether the CIS process is supporting the implementation of the monitoring requirements, for example through the design of guidance on monitoring and the intercalibration exercises.

**Reporting**

The following reporting requirements are included for Member States in the legislation considered under this Fitness Check:

Identification of the individual River Basin Districts and Competent Authorities (Art 3 - WFD);
Characterisation of river basin districts (Article 5 - WFD);
Summary reports on monitoring (Article 15(2) - WFD);
Report on progress on the implementation of the programme of measures (Article 15(3) - WFD);
River basin management plans (Articles 13 and 15 - WFD);
Reporting on the watch list (Article 8(b) – EQSD);
Reporting inventory of emissions, discharges, and losses of all priority substances and pollutants for

each River Basin District (RBD) or part of a river basin district lying within their territory (Article 5 -EQSD);
Reporting on preliminary Flood Risk Assessment and Areas of Potential Significant Flood Risk (Article 4, 5 – Floods Directive (FD));
Flood Hazard Maps and Flood Risk Maps (Article 15 – FD);
Flood Risk Management Plans (Article 15 – FD).

**108. Are the monitoring requirements included in the WFD and supplemented by the GWD (Groundwater Directive) and EQSD clear and unambiguous?**

X Yes, fully

- Yes, for some
- No
- I do not know

Comment

| |
|---|
| N/A |

**109. If you identified any unclear or ambiguous monitoring requirement, how did you interpret and implement them?**

| |
|---|
| N/A |

**110. Are the monitoring requirements included in the WFD and complemented by the GWD and EQSD relevant and sufficient?**

| | Relevant, but not sufficient | Relevant and sufficient | Neither relevant, nor sufficient | I do not know |
|---|---|---|---|---|
| Spatial coverage | | x | | |
| Frequency | | x | | |
| Period of monitoring | | x | | |
| Parameters to be monitored | | x | | |

Other (please specify)

| |
|---|
| N/A |

**111. In your opinion, are the monitoring requirements implemented consistently across the different basins and/or countries (i.e. similar methods and comparable results)?**

- Yes, fully

x Yes, for some

- No
- I do not know

Comment

| |
|---|
| Monitoring programmes differ considerably between Member States. This is not always an implementation problem as the Directive provides reasonable latitude in the design of monitoring programmes. We have raised concerns in several Member States that a number of quality |

elements are poorly monitored, leaving an unacceptable proportion of water bodies monitored only for one or two quality elements. From a statistical standpoint this has prevented competent authorities from gaining a genuine national overview of water body status – breaching the surveillance monitoring requirements – and falsely overstates the proportion of water bodies at good status. This was a particularly marked problem for the first RBMP cycle, and better surveillance for the second RBMP cycle has then led to 'headline' falls in reported status. This in turn has made it difficult to track actual progress. More importantly it has caused entirely foreseeable political problems for the design and funding of programmes of measures, as governments have been surprised at the poor headline progress figures and have become resistant to approve additional measures within what appear to be a failing programme.

**112. Are the monitoring data being fully used to improve the implementation of the Directive? If no, is there additional uses you can think of?**

○ Yes, fully

x Only partly

○ No

○ I do not know

Other (please specify)

Monitoring data consistently show that a small number of sectors and pollution/damage pathways lead to a high proportion of element and status failures. These are not however always targeted by programmes of measures. In particular agricultural pollution and water body modifications remain largely unaddressed across most Member States.

**113. If your monitoring include sediment monitoring, do you believe this brings useful information to guide the decision making?**

x Yes

○ No

○ I do not know

Comment

Sediment monitoring can provide highly useful data when used appropriately – for example to identify the sources of sediment pollution and their transport pathways, and to monitor soil-bound phosphate levels at ecologically sensitive receptors.

**114. What have been the benefits of trend monitoring to support the implementation of the Directives?**

As noted above, monitoring networks were often incomplete during the first RBMP cycle (and remain so in many cases). Status boundaries for quality elements have also changed in a number of Member States between the first and second RBMPs. These factors have made it difficult to identify and act on genuine trends.

The principle of seeking to identify and act on downward trends, remains an important one. This is true of both surface waters and groundwaters: in both cases early indications of declining quality provide a 'canary in the mine' that allows timely action to minimise damage and the cost of remediation.

**115. Do you have cost estimates available in relation to establishing and maintaining monitoring networks? If yes, please provide these and indicate the scale at which these are applicable (national level, RBD level or other).**

Establishing monitoring networks

N/A

Maintenance of monitoring networks

N/A

Other costs

Please note these data are seldom published - and in some cases actively withheld from publication (see for example the UK government's refusal to publish the latest Environment Agency review of water quality monitoring).

It can also be difficult to identify genuine additional costs of WFD monitoring, as a considerable amount of water quality monitoring would be conducted regardless of the Directives.

**116. In your opinion, are the benefits from the monitoring requirements proportionate to the costs incurred? Please explain your response.**

- The costs are higher than the benefits
- x The costs are lower than the benefits
- The costs and the benefits are proportionate
- I do not know

Comment

Where they exist, cost-benefit analyses of the Directives are strongly positive. Effective monitoring is an essential part of implementing the Directives and should be judged in that context.

**117. Is your monitoring program well linked with other policies? Does the reporting under the Directives exploit links with reporting under other environmental directives or schemes?**

- Yes, fully
- x Only in part
- No
- I do not know

Comment

Implementation of the Directives remains poor, and links with other policies and legislation have not been properly exploited by Member States.
RBMP monitoring has been combined in many cases with investigations, analyses and reporting under the FD, UWWTD and the Nature Directives.

**118. Have you experienced technical difficulties in setting monitoring networks (e.g. flows, costs, characteristics of the water body). If yes, please explain the difficulties encountered and how these were overcome.**

N/A

**119. In your opinion, are the Common Implementation Strategy Guidance Documents available on monitoring sufficient to allow harmonised implementation at EU level?**

x Yes, fully

- Yes, in part
- No
- I do not know

Comment

The CIS process is an important and innovative feature of the Directives, ensuring that Member States can maintain a consistent and proportionate approach within a framework Directive. Monitoring has understandably been a key focus, which is reflected also in the number of CIS guidance and thematic documents approved on this topic. Member States and NGO stakeholders have put considerable time and effort into the selection and discussion of CIS work areas. CIS guidance on monitoring will undoubtedly need to evolve over time but at the moment it is fully consistent with harmonised implementation of the Directives.

**120. To what extent you consider that the reporting requirements for the Directives under this Fitness Check are coherent and synergistic?**

- To a small extent
- To some extent
- To a moderate extent
- To a great extent

x To a very great extent

- I do not know

Comment

There is NO major lack of coherence within the body of EU water policy, including as regards reporting requirements. For example, there is a need to synchronise and coordinate the FRMPs and the RBMPs according to Article 9 of Floods Directive, and a need to avoid double reporting. Reporting under the WFD needs to be made in conjunction with reporting obligations under other water directives, ensuring complementarity data flows and avoiding duplications and reusing as much data and information as possible for different purposes (as also suggested in the CIS WFD reporting guidance No 35).

**121. Do you consider the reporting under the WFD, EQSD, GWD and FD to be sufficiently aligned with other relevant environmental policies (marine, nitrates, nature, air, emissions, etc.) in terms of both content and timing?**

Yes. There is scope for alignment where appropriate. In particular, we note that the six-year RBMP cycle does not prevent PoMs adapting to new information between RBMPs, nor content from WFD monitoring being used to inform other environmental policies and actions.

**122. In your opinion, have the reporting requirements contributed to a better availability of data at national or regional level?**

x Yes, fully

- Yes, in part

No

I do not know

Comment

Reporting requirements under the Directives have undoubtedly contributed to better availability of data. There is still work to be done in making data readily available, as key data are often buried deep in technical documents/annexes in formats (for example .pdf) that are hard to manipulate and make use of. It can also be very hard for members of the public to access information in a form that they can understand – for example the details of planned measures on their local water body, and the rationale for them. However, data are now far more detailed and readily available to technical/expert stakeholders.

**123. In your opinion, are there any missing elements in the current reporting requirements?**

Yes

x No

I do not know

Comment

No – although it is critical that the work started by the WISE portal is continued, to make reported data available in useful formats.

**124. You have now completed the questionnaire on monitoring and reporting. Feel free to add any further comment in the box below. The next question will allow you to reach another questionnaire.**

/

**125. To which questionnaire would you like to respond next?**

- [ ] Questionnaire 1 - Floods Directive implementation
- [ ] Questionnaire 2 - Water body status – ecological, chemical and quantitative status
- [ ] Questionnaire 3 - Environmental objectives and exemptions
- [ ] Questionnaire 4 - Groundwater Directive
- [ ] Questionnaire 5 - Costs and benefits
- [ ] Questionnaire 6 - Cost recovery and pricing
- [ ] Questionnaire 7 - Monitoring and reporting
- [ ] Questionnaire 8 - Public participation and review
- [ ] Questionnaire 9 - Coherence
- [ ] Questionnaire 10 - EU added value
- [ ] End of the survey

## Questionnaire 8 - Public participation and engagement

**This questionnaire is aimed at all stakeholders.**

*Article 14* of the Water Framework Directive (WFD) requires Member States to encourage the active involvement of all interested parties in the production, review and updating of the River Basin Management Plans (RBMPs).

The Directive describes three steps of consultation:

• Consultation on the timetable and work programme to produce the RBMPs;
• Consultation on the overview of the significant water management issues;
• Consultation on the draft river basin management plans.

*Article 11(5)* requires Member States to ensure that, where monitoring or other data indicate that the objectives set out under Article 4 for the body of water are unlikely to be achieved:

• the causes of possible failure are investigated;
• relevant permits and authorisations are examined and reviewed as appropriate;
• monitoring programmes are reviewed and adjusted as appropriate;
• additional measures as may be necessary in order to achieve those objectives are established, including, as appropriate, the establishment of stricter environmental quality standards following the procedures laid down in Annex V".

*Article 23* requires Member States to determine penalties applicable to breaches of the national provisions adopted pursuant to the WFD.

**126. To the best of your knowledge, are the requirements of the Article 14 under the Water Framework Directive to publish and make a range of documents available for comments to the public effectively and timely implemented in your country?**

- Timely and effectively
- Timely but not effectively
- Effectively but not timely

x Neither timely nor effectively

- I do not know

Comment

The answer will vary from Member State to Member State. However, in general we can say that even if in some cases Art 14 WFD requirements are timely implemented, they are in most cases not implemented effectively.

For example in Greece, in the case of the first RMBP review (a) public consultation lasted less than 6 months, and (b) not all supporting documents were made available. The exact legal consequences of these omissions are currently pending in front of the administrative courts. In Croatia, the documents mentioned above were available only on the website of Croatian Waters and one actively needed to look for them or request them as consultations were not promoted; in the form they were provided (hard to read several hundred pages document, absence of non-technical summary) discouraged participation of a general citizen; the maps prepared were available in a format that made them difficult or impossible to read (ie they were pasted in a .pdf document, and not available in a separate .jpg or similar format). A number of Member States have

failed to make information available in a form understandable to interested citizens – for example the UK consultations for RBMPs in England aggregated actions with the proposed PoMs at such a high level that it was near-impossible to see what actions were proposed for a given water body and why.

In Spain, no real active participation of the stakeholders and public in water management decisions is ensured - in the case of the 2nd RBMPs there were no active debates organised in formal frameworks, such as working groups, where it would be possible to discuss priorities of water management, or what should feature in RBMPs and what not. Instead, water authorities only provide a series of very long and difficult to understand planning documents, for the stakeholders and public to review and comment. It is worth noting as well that influential lobby groups (e.g. hydropower and irrigators) use other, non-formal means of influencing the authorities, which is also reflected in finally adopted plans.

In contrast, consultations related to the Danube iRBD, were timely and effective; WWF DCP is an official observer in ICPDR, which gives us an opportunity to be actively involved in the Danube basin level river basin management planning and Danube basin flood risk management planning processes. Via the different expert, working groups or higher level meetings WWF is able to express written or oral opinion, give inputs to relevant draft documents even before they are publicly published (including the work plan, SWIMI paper and draft RBMP). Apart from publishing the draft DRBMP and DFRMP for public debate, an international public forum was organized in the 2nd phase, and all comments received in a written form or expressed at this forum were collected, analysed and responded to in a transparent way. For each feedback or recommendation it was explained if it was taken on board or not and why.

**127. Please give examples and reasons for the most significant implementation gaps (including timeline) in relation to publishing and making available for comments to the public.**

Consultation timetable and work programme (consultation mechanisms) to produce the RBMPs (3 years before adoption/ 6 months to comment)

In general:

- not provided on time (causing delays in adoption of the plans).

Overview of the significant water management issues (2 years before adoption / 6 months to comment)

In general:

- Not provided on time (causing delays in adoption of the plans);
- Sometimes SWMIs documents and draft RBMPs documents are consulted on at the same time;
- Member States not actively reaching out to stakeholders (such as environmental NGOs, civil society) or general public (documents are simply made available);
- No feedback is provided on Comments received - it is not clear why certain comments are taken into account and others not (often NGO comments are disregarded).

Draft river basin management plans (1 year before adoption/ 6 months to comment)

In general:

- Member States not actively reaching out to stakeholders (such as environmental NGOs, civil society) or general public (documents are simply made available).
- Incomplete draft RBMPs, lack of information provided in the plans or the non-availability of background documents, or draft background documents referred to are not made available upon request in a timely manner in the public consultation process. Moreover, to request for documents, one needs to know exactly what one is looking for. This makes it difficult or impossible to compare and verify the conclusions and assumptions of the RBMPs with the supporting documents, and it also means that interested parties are not given sufficient information to enable them to express their views in a meaningful way.
- Information not provided in an understandable format (requiring very specialist knowledge of water management or policy processes; key details not signposted; in a format that is unusually difficult to analyse such as .pdf).
- Maps can be of of low quality, presented in low-definition, which makes it impossible to see the exact delineation of water bodies and their assumed status. Maps are also not always attached to the RBMPs, but pasted in the main documents which decreases the quality of the presented maps.
- Documents available for consultation are often extremely long and technical, which limits significantly the possibility for general public to participate (one needs to be an expert in this field to understand what is planned); for this shorter, visually appealing and understandable summaries of draft plans would be required.
- Significant gaps in monitoring/investigation programmes such that causes of failure cannot be presented.
- Failure to describe the proposed actions for specific water bodies within draft RBMPs.
- Failure to set out the measures that would be needed for specific water bodies to reach good status.
- No feedback is provided on comments received - it is not clear why certain comments are taken into account and others not (often NGO comments are disregarded). It is thus difficult to assess the real impact of consultations on the RBMPs, SWMIs or other aspects of the WFD.

**128. Do you consider the length of the consultation period to be adequate?**

Consultation timetable and work programme to produce the RBMPs: 3 years before adoption – 6 months

Yes (this should be the minimum), provided that all documents are made available in a timely, complete and efficient manner.

Overview of the significant water management issues: 2 years before adoption– 6 months

Yes (this should be the minimum), provided that all documents are made available in a timely, complete and efficient manner, and all stakeholders, including NGOs are actively approached, involved. This minimum time is needed for stakeholders and public to be able to provide meaningful contribution.

Draft RBMPs: 1 year before adoption– 6 months

Yes (this should be the minimum), provided that all documents are made available in a timely, complete and efficient manner, and all stakeholders, including NGOs are actively approached, involved. This minimum time is needed for stakeholders and public to be able to provide meaningful contribution.

**129. To the best of your knowledge, what outreach and consultation mechanisms (or their combination) used in your river basin district / country to engage with a) key stakeholders and b) general public have been the most effective and what was the impact? Please explain why they have been effective.**

For key stakeholders

Different from Member State to Member State.

The most effective were in general those where stakeholders were actively approached, for example through organizing workshops, round tables, events or training sessions, and where effort was made to ensure stakeholders' participation or contribution. Clarity on which decisions stakeholders can influence, and how, is critical. Providing feedback to the comments from stakeholders is also crucial to ensure continued participation and interest.

However, often even if such events were organised, stakeholder participation was limited, due to geographical constraints (distance) and limited publicity (stakeholders were not actively approached); some events were organised before draft RBMPs became available, and in most case feedback was not provided. Stakeholder-group feedback in several Member States appears to have been largely overlooked, with decisions taken through parallel and more opaque processes (for example the UK-England experience where catchment stakeholder bodies were established but given no input to the second RBMPs).

For general public

As above.

Detail about the SWMIs and potential measures for specific local water bodies are essential for consultation of non-expert citizens. Consultation events need to be organised with a clear purpose and impact, and should be as brief as possible – otherwise most people will not engage.

**130. What interpretation and criteria for "active involvement" do you apply in your river basin district/ country?**

Active involvement is implemented differently across different Members States. It should imply an effective interaction of responsible authorities with stakeholders and public, from politicians, NGOs to local users; public participation needs to be interactive, open to all interested parties and allowing decisions on eventual PoMs to be taken at a devolved/citizen level wherever possible, with a transparent process for which decisions can be influenced and how input has been considered. It should not be only provided for but actively enabled, and responsible authorities should ensure public and stakeholder participation in all phases of WFD planning and implementation.

Practice across EU falls far short of these requirements (see implementation gaps under Q.127, 129).

**131. According to your opinion, what are the key benefits of public information, consultation and active involvement of interested parties in the production, review and updating of the RBMPs and FRMPs (flood risk management plans) in your river basin district/country?**

The importance of timely, informed public participation cannot be overstated and is crucial for achieving WFD objectives. Key benefits include the following:
a) the submission of local knowledge, which is needed, considering the knowledge gaps and geographical scope of the RBMPs;
b) as draft RBMPs are prepared by advisors hired by the authorities, public participation is practically the only avenue of external review and criticism both of the scientific basis and the policy options;
c) better informed decision-making;
d) supplementary materials increase RBMPs decision-making transparency, enhancing transparency and democratic accountability;
e) if public participation involves a constructive dialogue, all parties involved can learn from each other. This not only raises awareness and helps surpass stalmates, but can also lead to more creative solutions to identified problems / pressures;
f) public participation fosters the progressive realisation of human and social rights associated with the state of aquatic systems (e.g. the right to water);
g) as aquatic systems are, to a large extent, public goods, public participation should be considered a right of the users (i.e. the public) and an essential aspect of their management;
h) public participation brings the multiple users of aquatic systems to the same forum, ensuring sustainability of both the uses and the systems that support them;
i) it ensures a better understanding of costs and benefits of planned water management measures, which leads to more acceptance of water management and water prices (as well as better awareness of water issues);
j) if public participation involves a constructive dialogue, all parties involved can learn from each other;
k) measures that are supported by stakeholders and/or public have a higher chance of being implemented and of success (fewer implementation problems); it also leads to less litigation, fewer delays, and more effective implementation;
l) public participation raises awareness of our contribution as citizens to water management problems, and makes it more likely that people will take positive action outwith the RBMP process.

**132. Are you aware of any assessments that evaluate effectiveness, costs and benefits of public information and consultation activities as well as stakeholder engagement platforms?**

Not for RBMPs or other WFD related issues.

**133. In your opinion, have the Article 14 provisions contributed towards achieving the objectives of the WFD in your River Basin District/ country?**

x Yes

○ No

○ I do not know

Why?

For reasons see Q. 131. It should be noted however, that due to the implementation gap (as described above under Q. 127 and 129) not all benefits Art 14 WFD provides for have been realised.

**134. Is it possible for citizens or other organisations to request or initiate challenges following any situation described below? If yes, please provide a short overview of the process for this.**

Lack of public participation under Article 14

It differs from country to country. It should be noted that barriers to environmental justice are currently widespread across the EU [1]; even if legal standing to challenge authorities exists for NGOs / individuals (which is not the case in all Member States), NGOs or individuals are effectively prevented to challenge decisions before courts due to time (lengthy procedures), money or fear of repercussions (retaliation or intimidation by companies and investors).

For example, in Greece lack of public participation can be judicially (administratively) reviewed by launching a legal (administrative) challenge to the Joint Ministerial Decision approving the RBMPs.

[1] EEB (2018) Challenge Accepted? How to Improve Access to Justice for EU Environmental Laws, https://eeb.org/publications/105/sustainability-governance/96092/challenge-accepted-report.pdf

Administrative or judicial review of the River Basin Management Plans / Flood Risk Management Plans

It differs from country to country. It should be noted that barriers to environmental justice are currently widespread across the EU; even if legal standing to challenge authorities exists for NGOs / individuals (which is not the case in all Member States), NGOs or individuals are effectively prevented to challenge decisions before courts due to time (lengthy procedures), money or fear of repercussions (retaliation or intimidation by companies and investors).

For example, in Germany no legal remedy is provided for under the current law against the management plans. According to the amended Environmental Remedies Act appeals by recognised associations can only be lodged under certain conditions, and since management plans are not subject to the obligation to conduct a Strategic Environmental Assessment (SEA) it is not possible for recognised associations to lodge appeals against the RBMPs. In theory, it is possible to take legal action against an individual RBMP by means of a constitutional complaint, but only to the extent that fundamental rights are violated. On the other hand, programmes of measures are subject to the obligation to carry out an SEA and hence legal remedies against programmes of measures are possible. However, it should be noted that taking an action against a large number of programmes of measures prepared for Germany (ten) by means of individual legal remedies would quickly exceed the financial resources of complainants (especially if these are NGOs). In addition, it should be noted that for each individual programme of measures, an action would have to be brought before the respective competent administrative court of a federal state.

In Greece, for example, final administrative reviews can be further challenged in the courts. In the Greek legal system, the judicial review of the RBMP's cannot be further challenged before superior court, i.e there is no right to appeal. Indirect review might possibly be initiated by a complaint to the European Commission, if the latter decides to adopt a similar complaint.

Meanwhile, legal challenges to unambitious/inadequate PoMs in the English RBMPs have struggled to reach a conclusion, as there is no mechanism in English law to challenge poor performance against WFD Article 4 status goals – only the process of consultation and decision-making can be challenged.

**135. In your opinion, would the absence of such review procedure pose a problem?**

x Yes

○ No

○ I do not know

Why?

There are real problems with the current review procedures, but removing the procedures would not improve matters. What is needed is the improvement/replacement of procedures to reach an acceptable level of access to justice.

Absence of such a review prevents NGOs and individuals the right to challenge decisions which harm the environment in court. Access to the courts and the ability to challenge decisions that impact the environment is crucial to achieving the proper implementation of the WFD and other water related legislation. The ability for NGOs to access courts and challenge decisions, such as lack of public participation in water management planning, before competent administrations and courts is a key element for NGOs to exercise their public interest function.

**136. Can you provide information on the results of these review procedure?**

/

**137. To the best of your knowledge, are the requirements under Article 11(5) effectively implemented in your country?**

○ Yes

x No

○ I do not know

Comment

We are not aware of any Member State effectively implementing Art 11.5 WFD, which clearly requires an analysis of the causes of failure, and an adjustment of RBMPs.

To give two examples; in Greece the first review of RBMP's simply maintained the measures included in the original RBMP (with some modifications, e.g. restatement of certain measures, addition of new ones) and in most cases, the justification was rudimentary or non-existent. The late adoption of the (original) RBMPs complicates further the situation: it seems that the authorities have taken the view that no such analysis is required or is possible, due to lack of time.

In Germany, 36% of groundwater bodies are in poor chemical status due to excessive nutrient inputs, 75% of which come from agriculture. However, no effective measures to reduce nutrient inputs can be found in the RBMPs. Furthermore, the implementation of measures is largely voluntary and the responsible bodies for implementation of identified measures have not been defined; ensuing, measures are not implemented.

**138. Is it possible for citizens or other organisations to request or initiate any of the following:**

| | Yes | No | I do not know |
|---|---|---|---|

| | | | |
|---|---|---|---|
| An ad hoc investigation by the competent authorities in case of serious environmental harm relevant to the Directive (notably via a complaint-handling system operated by the competent authorities) | | | |
| An administrative or judicial review procedure of permits or authorisations or general regulatory requirements | | | |
| An administrative or judicial review of monitoring programmes | | | |
| An administrative or judicial review of applicable environmental quality standards | | | |

Other (please specify)

It differs from Member State to Member State.

**139. Can you provide an estimate of the number of review procedures launched on the basis of Art 11(5) since January 2016?**

Such data is not necessarily publicly available.

**140. Are you aware of breaches of provisions related to the WFD for which sanctions were adopted? If yes, can you provide some illustrative examples?**

- Yes
- No
- I do not know

Why?

N/A for EU level.
However, see for example for Scotland:
https://www.sepa.org.uk/regulations/enforcement/penalties-imposed-and-undertakings-accepted/

**141. Are there any specific arrangements for planning and carrying-out of inspections or other checks and follow-up to detected non-compliance with obligations imposed on economic operators and others under each category of measures required under Article 11(3)? If yes, please describe.**

- Yes

x No

- I do not know

Comment

This is a critical gap in implementation in many Member States. Often no specific arrangements (or the resources for them) exist, even if relevant WFD authorities are empowered to undertake inspections.

**142. Are the results of inspections, checks and enforcement activities concerning Article 11 related obligations recorded and statistics published?**

- Yes

No

I do not know

Comment

As far as we are aware, such statistics are often not published (e.g. not in BG, HR, DE, EL).

Statistics are recorded in UK and available in summary form through sporadic publications or specific Freedom of Information requests. Availability of information is often restricted to the point of being unusable where specific economic operators can be identified – which is often the case in small catchments or sectors with few operators (for example where there is only one hydropower operator in a catchment).

**143. Is there a sanctioning system in case of non-compliance with permit conditions or authorisations?**

Yes

No

I do not know

Comment

This differs from country to country: in a continuum from Member States with no such system (e.g. EL), through those with a system in theory but not in practice (e.g. HR), those with patchy systems were only a very small number of breaches are detected and fewer addressed (e.g. UK-England) to those with relatively functional systems (e.g. BG).

**144. In your view are the sanctions available at Member State level effective, proportionate and dissuasive as required by the Directive?**

Yes

x No

I do not know

Why?

Even when sanctions exists, they are often not effective, proportionate nor dissuasive. For example in EL, lack of specific rules concerning complaint-handling and permit review, combined with chronic shortage of personnel and funds, and with great geographical disparity, render the system completely ineffective. In Germany exceeding the nutrient load for example isn't sanctioned. In HR, before inspection the inspectors need to announce that they are coming to the property in question and are prone to corruption.

**145. Please specify for each review procedure the applicable rules (access/subject matter/relevant authority/deadlines/costs).**

/

**146. In your opinion, would the absence of such review procedure pose a problem?**

x Yes

- No
- I do not know

Comment

See our response under Q. 135.

**147. You have now completed the questionnaire on public participation and engagement. Feel free to add any further comment in the box below. The next question will allow you to reach another questionnaire.**

/

**Question Title**

148. To which questionnaire would you like to respond next?

- Questionnaire 1 - Floods Directive
- Questionnaire 2 - Water body status – ecological, chemical and quantitative status
- Questionnaire 3 - Environmental objectives and exemptions
- Questionnaire 4 - Groundwater Directive
- Questionnaire 5 - Costs and benefits
- Questionnaire 6 - Cost recovery and pricing
- Questionnaire 7 - Monitoring and reporting
- Questionnaire 8 - Public participation and review
- Questionnaire 9 - Coherence
- Questionnaire 10 - EU added value
- End of the survey

## Questionnaire 9 - Coherence of the legislative framework

**This questionnaire is aimed at all stakeholders.**

This set of questions explores whether the Water Framework Directive (WFD), Environmental Quality Standards Directive (EQSD), Groundwater Directive (GWD) and Floods Directive (FD) are coherent, internally, with each other, and with other legislation, including in other policy areas. We are interested in identifying potential conflicts, inconsistencies, duplication and gaps, but also example of synergies.

In this section of the questionnaire we are particularly interested in examples of incoherence / gaps / overlaps, including information on the impacts these have on the effectiveness / efficiency of the legislation. If you would like to share information on aspects of the legislation that are coherent or work particularly well together, please use the comment box at the end of the questionnaire.

**149. In your opinion does any internal incoherence affect the functioning of the WFD, EQSD, GWD and FD?**

WFD

No; the Directives are drafted in a way that draws in and encompasses all EU water law. As it has been confirmed by the previous assessment on coherence of the WFD [1] no internal incoherence or contradiction within or between WFD, FD, EQSD, GWD and FD exists: significant streamlining and simplification has been achieved, and any doubling of obligations has been eliminated, by the introduction of the WFD. Furthermore, objectives of these directive are also well aligned. As daughter directives, the GWD and the EQSD are integrated into the procedural framework of the WFD with regard to RBMPs and public consultation; and according to FD FRMPs need to be drafted and integrated with RBMPs. The core EU environmental principles (PPP, subsidiarity, sustainable development, precautionary principle) are also all consistently applied within the Directives.

The WFD is drafted to be plan-based with very limited prescription of outcomes, allowing the import of other legislation to be included and for flexibility in implementation as long as the specific obligations and objectives of the Directive are achieved. We haven't identified any major divergence between Member States in interpretation of legal requirements of these Directives, and where they has occurred CIS process and CJEU rulings have played an important role in ensuring consistent interpretations with the directives and comparability across Member States (Cf. e.g. recently adopted Art 4.7 guidance, or WFD intercalibration exercise; CJEU C-461/13). Where gaps still exists this are the result of Member States not being compliant with the Directives.

[1] European Commission SWD(2012) 393: The Fitness Check of EU Freshwater Policy

EQSD

No; see answer under WFD. Moreover, any previously identified incoherence within the WFD as regards priority substances has been resolved with the adoption and 2013 revision of the EQSD (e.g. timeline for the review of the list of priority substances and WFD planning cycle, and WFD's obligation to come up first with the list and then two years later with the standards).

GD

No; see answer under WFD.

FD

No; as already explained in the questionnaire on the FD, there are clear legislative links between the FD and the WFD. Both Directives have a common focus on providing sensible and sustainable investment in water management through a clear and detailed assessment process. Although the RBMP and FRMP cycle is not exactly aligned, the common six-year period and clear division of responsibilities between the two processes helps competent authorities to 'read across'.

However, in practice the benefits of flood risk management measures that contribute to WFD objectives are not taken into account during the RBMP process and in particular decisions on disproportionate cost. In general Member States thus opt for sub-optimal solutions for addressing flooding, overlooking significantly better environmental options including in some cases green/nature based measures [1].This can and does undermine the achievement of the WFD objectives. This is entirely a problem with implementation, and not the Directives themselves.

[1] See also the European Court of Auditors report on the implementation of the EU Floods Directive: European Court of Auditors (2018) Floods Directive: progress in assessing risks, while planning and implementation need to improve. Special Report. No 25.

**150. In your opinion, are there issues of compatibility of the WFD requirements with National legislation?**

x Yes

○ No

○ I do not know

Comment

As it is evident from our responses to previous questionnaires as well as from the recently published WFD 5th Implementation Report we are faced with poor implementation of the WFD in all Member States [1], with lack of political will to challenge vested interests being the main culprit for this situation. This is also reflected in the number of non-conformity infringement and Pilot cases open against certain Member States. As an example, national laws of some Member States pertaining to licensing or permitting systems, which undermine the achievement of WFD objectives, could be highlighted (e.g. in Spain for water abstraction permits; in Finland for hydropower permits).

[1] European Commission COM(2019) 95 final: Report from the Commission to the European Parliament and the Council on the implementation of the Water Framework Directive and the Floods Directive.

**151. In your opinion does any gap affect the functioning of the WFD, EQSD, GWD and FD?**

○ Yes

X No

○ I do not know

Comment

We haven't identified any incoherence between WFD, GWD, FD and EQSD (see our response to Q. 149).

**152. Are you aware of any incoherence between the Directives under the scope of this Fitness Check and the other water Directives?**

| | Yes | No | I do not know |
|---|---|---|---|
| Drinking Water Directive | | X | |
| Urban Waste Water Treatment Directive | | X | |
| Marine Strategy Framework Directive | | X | |
| Bathing Water Directive | | X | |
| Nitrates Directive | | X | |

Other (please specify)

/

**153. Please describe any incoherence between the Directives under the scope of this Fitness Check and the other water Directives.**

As mentioned above one of the reasons why the WFD was introduced was to ensure greater policy coherence within the EU water policy. The directives of the EU water policy are coherent and complementary. The approach taken by the WFD creates positive overlaps (for example in terms of their policy focus and objectives) and reinforces action under the UWWTD and NiD (for example based on the non-deterioration obligation of the WFD). Coherence with the DWD is addressed through the protection of sources of drinking water under Art 7 WFD. Furthermore, UWWTD, NiD, DWD and Bathing Water Directive are all basic measures under the WFD.

There are also strong links between the MSFD and the WFD. The WFD overlaps with the MSFD in coastal waters, being that it relates to improving and protecting the chemical and ecological status of surface waters also in estuaries (transitional) and coastal waters to one nautical mile out to sea. Both Directives have comparable objectives; whilst Good Environmental Status of the MSFD is not exactly equivalent to Good Status under the WFD, there is a significant overlap particularly in relation to chemical quality, the effects of eutrophication and aspects of ecological and hydromorphological quality. Overlaps with the WFD are explicitly recognised in the MSFD, which outlines that in coastal waters MSFD is only intended to apply to those aspects of Good Environmental Status which are not already covered by the WFD (e.g. some aspects of biodiversity, such as marine mammals, or noise and litter). Outside of the coastal areas, in wider marine waters, the WFD and its related directives provide important support for the achievement of Good Environmental Status objective of the MSFD (this is especially true for contaminants (Descriptor 8) and eutrophication (Descriptor 5), given that most of the human activities causing these pressures are terrestrial in nature or taking place in the coastal zone).

We recognise that reporting timeframes differ between different Directives, but we do not see this as a problem. Where they draw on similar material it should not be too onerous to carry information across between documents. Where new information is needed, it will often be preferable to stagger reporting deadlines to allow competent authorities to focus on each in turn. Moreover, 2012 WFD fitness check report also recognised that since the ‘adoption of the WFD, much water law (revised and new) has become increasingly coherent in this regard (and further taken forward through WISE)’ [1].

[1] European Commission SWD(2012) 393: The Fitness Check of EU Freshwater Policy

**154. Are you aware of any incoherence between the Directives under the scope of this Fitness Check and Industrial and air quality policies?**

| | Yes | No | I do not know |
|---|---|---|---|
| Industrial Emissions Directive | | X | |
| Mercury Regulation | | X | |
| Air Quality Directives | | X | |
| Directive on the management of waste from extractive industries | | X | |
| European Pollutant Release and Transfer Register | | X | |

Other (please specify)

**155. Please describe any incoherence between the Directives under the scope of this Fitness Check and Industrial and air quality policies?**

Water directives are coherent with industrial and air policies, as also concluded by the 2012 WFD fitness check report [1]; Industrial emissions and air quality directives are important tools in controlling pressures on water bodies and thus contribute to achieving EU water policy objectives, for which enforcement of permit conditions is critical (note that the enhanced requirements on inspection to examine impacts of an installation on the surrounding environment was added to aid coherence with EU water policy).

It is worth emphasising that tighter pollution controls on priority (hazardous) substances are coherent with the less demanding requirements provided by other EU Directives and Regulations. Consistent with EU acquis, it is made clear that highest relevant standards apply - for example the WFD/EQSD standards where these exceed IED Best Available Techniques. These tighter requirements simply stress the precautionary principle to a greater extent, which we know is sensible given the long-lasting and systemic nature of many water-bourne pollutants, the particularly high-risk pathways provided by the water environment (into drinking water, bathing waters, fisheries and shellfisheries, through transport into heavily-populated waterfronts etc.), and the fact that some water environments (in particular estuaries) provide conditions where pollutants can be particularly long-lasting, can build in concentration, and can be technically very difficult to address. Specifically on IED, the EQSD is a coherent extension of the IED which builds on the BAT framework for all emissions by applying a precautionary approach to specific hazardous priority substances.

[1] European Commission SWD(2012) 393: The Fitness Check of EU Freshwater Policy

**156. Are you aware of any incoherence between the Directives under the scope of this Fitness Check and nature legislation?**

| | Yes | No | I do not know |
|---|---|---|---|
| Habitats Directive[8] | | X | |
| Birds Directive [9] | | X | |

Other (please specify)

**157. Please describe any incoherence between the Directives under the scope of this Fitness Check and nature legislation.**

There are many synergies between the objectives and requirements of the Birds and Habitats Directives (BHDs) and of the Water Framework Directive (WFD) with cross-references ensuring coherence and integration. They provide a sound basis for joint objective setting, management, the consideration of derogations/exemptions, monitoring, public engagement and reporting. For more details on areas of commonality see Day (2015) [1]. Numerous examples have shown how the implementation of measures under the WFD has generally benefited the objectives of the nature directives and how infringements of the WFD are often also infringements of Nature Directives in relation to freshwater species or habitats. See for example:
- Numerous examples in 'Bringing life back to Europe's waters: The EU water law in action' (2018) and in 'Successes of EU Water Framework Directive implementation, Evidence of river restoration measures improving ecological conditions' (2019) [2];
- 'Managing floods in Europe: The answers already exist', 26 September 2002, http://assets.panda.org/downloads/managingfloodingbriefingpaper.pdf;
- UK Water Capital Grants 2015, offering opportunity for grants and indicating priority catchments is also targeted at protecting Natura 2000 sites that are failing to meet EU standards because of diffused water pollution from agriculture, https://www.gov.uk/government/publications/water-capital-grants-2015-natura-2000-catchments;
- Decision by the European Commission, following a complaint presented by WWF Spain, to refer Spain to the European Court of Justice (ECJ) over the serious deterioration of the Doñana National Park, and for its failure to implement the EU WFD and Birds and Habitats Directives, http://www.wwf.eu/media_centre/?uNewsID=341990.

European Commission Guidance has clarified the relationship between terminology used in the Nature Directives and in the WFD [3]. The three Directives form a joint framework for implementation in water dependent-Natura 2000 sites and the full exploitation of their potential depends on Member State coordinated and integrated approach for implementation. At workshop on joint implementation of the BHDs, WFD and MSFD, MS, stakeholders and the Commission, concluded that 'although there are differences in objectives and assessment, there are no objective obstacles which would prevent these directives from working together efficiently and exploit synergies' and that 'looking at individual obligations or articles in isolation is not helpful', as the narrow focus leads to conflicts and prevents securing benefits from synergies [4]. It is also acknowledged that potential conflicts that might arise in implementing these directives (only potential conflicts identified between the WFD and the BHD were linked to highly modified water bodies) can be solved on a case by case basis, 'by early cooperation, negotiation and well informed choices using the flexibilities that the Directives provide' [5]. Consult also Janauer et al (2015) 'Synergies and Conflicts between Water Framework Directive and Natura 2000: Legal Requirements, Technical Guidance and Experiences from Practice', in Ignar et al (ed.), Wetlands and Water Framework Directive, Protection, Management and Climate Change, The GeoPlanet: Earth and Planetary Sciences Book Series, Springer International Publishing, available under Open Access, pp 9-29 (including examples).

As regards the FD, although the FD does not make explicit reference to the BHDs, Member States are under a duty to take appropriate steps to coordinate the implementation of the FD with the WFD, which has strong synergies with the BHDs. Particular emphasis is placed on opportunities for improving efficiency, information exchange and for achieving common synergies and benefits having regard to the environmental objectives laid down in Article 4 of the WFD, which contains provisions in relation to protected areas including Natura 2000 sites (See Article 9 FD).

For examples of synergies and coherence of EU nature conservation objectives with flood risk management see:
- Raba River case from ‘Bringing life back to Europe's waters: The EU water law in action’ and cases from ‘Successes of EU Water Framework Directive implementation, Evidence of river restoration measures improving ecological conditions’ [2];
- Natural water retention measures provide great opportunities for reaping multiple benefits, including flood risk reduction, and habitat conservation and improvement, and for synergetic implementation of FD and BHDs [6].

[1] Day, C (2015) The "Fitness Check" of EU Nature Legislation: Legal Analysis of certain Mandate Questions, legal research for WWF-UK.
[2] WWF, ERN, EAA, EEB (2018) Bringing Life Back to Europe’s Waters: The EU Water Law in Action; Wetlands International – European Association and Italian Centre for River Restoration (2019) Successes of EU Water Framework Directive implementation Evidence of river restoration measures improving ecological conditions.
[3] Links between the Water Framework Directive (WFD 2000/60/EC) and Nature Directives Frequently Asked Questions, December 2011, http://ec.europa.eu/environment/nature/natura2000/management/docs/FAQ-WFD%20final.pdf).
[4] EC (2015) Workshop on coordinated implementation of nature, biodiversity, marine and water policies (2-3 December 2014 Brussels), Summary Report (Final, 30/1/2015), p. 12
[5] *Ibid.*, p. 13.
[6] EU (2014) EU policy document on Natural Water Retention Measures, By the drafting team of the WFD CIS Working Group Programme of Measures (WG PoM), Technical Report - 2014 – 082; see in particular pp 4-7.

**158. Are you aware of any incoherence between the Directives under the scope of this Fitness Check and energy and climate change legislation or related policies?**

| | Yes | No | I do not know |
|---|---|---|---|
| Renewable Energy Directive | | X | |
| Communication on EU strategy for adaptation to climate change | | X | |
| Water scarcity and droughts policy | | X | |
| Climate proofing measures | | X | |
| Green infrastructures / Natural Water Retention Measures | | X | |

Other (please specify)

TEN-E Regulation (Regulation (EU) No 347/2013)

**159. Please describe any incoherence between the Directives under the scope of this Fitness Check and energy and climate change legislation.**

Overall the legal interaction between the Directives under the scope of this Fitness Check and energy and climate change legislation is clear. However, conflicts still frequently arise especially when it comes to the implementation of energy legislation (i.e. RED, TEN-E Regulation (Regulation (EU) No 347/2013)). The creation of a new energy system based on renewable energy sources requires the construction of production facilities and new associated networks such as grid connections. Some of these may have impacts on freshwater ecosystem and water body status – we have raised concerns that not all of these impacts are necessary parts of sustainable development. Inappropriately sited and designed hydropower plants are the most

frequently encountered examples; however TEN-E projects of common interest (PCIs) may also threaten the status of surface water bodies or groundwater in a number of ways (e.g. some PCIs involve creation of reservoirs for pumped water energy storage plants; PCIs where pipelines cross watercourses may permanently alter water status through physical modifications of the water bodies).

TFEU states that the Union energy policy should have 'regard for the need to preserve and improve the environment' (Article 194 TFEU). The development of new and renewable forms of energy and implementation of energy infrastructure policy, to allow the Union to meet its core energy objectives, should therefore be implemented with this in mind. Moreover, the various safeguards in place under the WFD (notably Articles 4, 11) ensure that socio-economic and cultural considerations are consistently regulated throughout the territory of the EU and that proposals on renewable energy and Trans-European networks in accordance with Treaty provisions do not undermine the achievement of the aims under the environment title of the TFEU and objectives of the WFD. RED and energy infrastructure policy defined by the TEN-E Regulation should be read and implemented with this in mind. Moreover, there are several legal instruments in place to prevent and mitigate any potential negative impacts of energy projects on the water environment and nature, including, in particular, the EIA and SEA Directives and non-deterioration obligation and Art 4.7 of the WFD. In addition, the EC has issued non-binding guidelines to support Member States in defining adequate legislative and non-legislative measures to streamline the environmental assessment procedures and to ensure the coherent application of environmental assessment procedures, including procedures for assessing conditions for application of WFD project exemption, required under EU law for energy projects [1].

As regards TEN-E Regulation, it is problematic that the main criteria for selecting PCIs do not include their impact on the environment and already at that stage ensure that potentially damaging projects are not even included on the PCI list. Much depends on the concrete implementation of TEN-E but also Treaty provisions (eg Article 194 TFEU), and lack of consideration for freshwater ecosystems in developing the EU's energy infrastructure can lead to selection of problematic projects as PCIs (for an example of a problematic PCI see a case study on Kaunertal in 'Projects of common interest? Case studies of environmentally damaging and controversial EU energy infrastructure 'projects of common interest' (PCIs)' (14 October, 2013) [2]).

However, there are many examples of good practice where water and nature consideration have been integrated in energy policy and implementation (see e.g. chapter on hydropower in our report 'Bringing Life Back to Europe's Waters') as well as of cooperation between the energy sector and environmental NGOs, demonstrating that EU energy policy and nature conservation and water goals are compatible. Positive examples of progress on integration and coherence of WFD with energy policy demonstrate that incoherence or conflicts are only the result of inappropriate implementation and inadequate integration of water ecosystem protection in energy policy, and that the WFD is not a systematic obstacle to development of energy projects, but rather promotes more sustainable development, public engagement and better territorial planning.

Furthermore, we are aware of specific criticism by some Member States that WFD targets can complicate other climate change mitigation efforts, but believe this is misplaced. There is a consistent stress within the WFD on control at source where climate change impacts are lowest, and stringency of the WFD has driven considerable innovation in lower-energy water treatment - altogether Directives should be seen as a key foundation for EU circular economy programmes. Climate change costs can also be included in disproportionate cost analyses where MS choose to do so (note this is not always the case).

WFD targets can be achieved with lower energy requirements if upstream measures are properly considered. This is not just a point about pharmaceutical substitution and control: Member States commonly require tertiary wastewater treatment for nitrates instead of controlling wasteful agricultural fertiliser use. In these circumstances it is disingenuous for some of the same Member States to argue that energy demands are too high. In any case, we know that removing P(H)S from the natural environment is seen by the general public as a priority worthy of attention - no Member State would openly promote continued levels of industrial or pharmaceutical pollution in their waterways and aquifers, and so should not be allowed to argue for this indirectly through technical and opaque alterations to EU Directives and policy. Further, WFD and UWWTD requirements are themselves driving innovations to make wastewater treatment less energy-intensive.

Last of all and just as importantly, WFD targets are critical to resilience of EU waters - and we know that the resilience of the water environment will be one of the critical factors in allowing the EU to cope with climate change impacts. So it is counter-productive to sacrifice resilience merely to make climate change mitigation less politically complex.

[1] Exemptions to the Environmental Objectives according to Article 4(7), New modifications to the physical characteristics of surface water bodies, alterations to the level of groundwater, or new sustainable human development activities, CIS Guidance Document No. 36 (2017); EC (2013) Streamlining environmental assessment procedures for energy infrastructure Projects of Common Interest (PCIs), http://ec.europa.eu/environment/eia/pdf/PCI_guidance.pdf.
[2] https://www.birdlife.org/sites/default/files/attachments/PCI_case_studies.pdf
[3] WWF, ERN, EAA, EEB (2018) Bringing Life Back to Europe's Waters: The EU Water Law in Action

**160. Are you aware of any incoherence between the Directives under the scope of this Fitness Check and agriculture legislation?**

| | Yes | No | I do not know |
|---|---|---|---|
| Common Agricultural Policy Regulation | x | | |
| Sewage Sludge Directive | | x | |
| Fertilisers Regulation | | x | |
| Sustainable Use of Pesticides Directive | | x | |
| Plant protection product Regulation | | x | |
| Fisheries and aquaculture legislation | | x | |
| Soil and land planning policies | | x | |

Other (please specify)

The implementation of Common Agricultural Policy as a key driver of farming practices that in many cases enhance water pollution and scarcity, and also prevent large-scale restoration efforts.

**161. Please describe any incoherence between the Directives under the scope of this Fitness Check and agriculture legislation.**

Agriculture has been, and remains, one of the main drivers of deterioration of surface and groundwater bodies (as clearly demonstrated e.g. by EEA 2018 State Of European Waters report); pressures exerted include diffuse or point source pollution by organic matter, nutrients and pesticides, over-abstraction and other hydromorphological impacts (including by dams

building and drainage). Although we note increasing consistency between Directives and agricultural policy (e.g. RDP Measures, WFD targets within Pillar II etc.) and the beneficial impact of the Directives in improving the efficiency of EU agricultural spending (e.g. reducing and managing the contribution of agricultural practice to flood risk), it remains clear that the way CAP provisions are applied in Member States renders CAP a key driver of farming practices that in many cases enhance water pollution and scarcity, and also prevent large-scale restoration efforts.

Both historically and in its current form, the CAP has not addressed the water issue seriously or sufficiently. This was also recognised by the European Court of Auditors, which in 2014 concluded that that the EU has been only partially successful in integrating water policy goals into the CAP [1]: 'cross-compliance and rural development funding have thus far had a positive impact in supporting the policy objectives to improve water quantity and quality, but these instruments are limited, relative to the policy ambitions set for the CAP and the even more ambitious goals set by the CAP regulations for the 2014–20 period'; it went on to say 'that delays in the implementation of the WFD have, as a matter of fact, hindered the integration of water policy objectives into the CAP'. Moreover, direct payments can be seen as directly undermining the implementation of EU water legislation at national level.

We do recognise that the potential provided by legal instruments of the CAP continues to be there, but Member States fail to use it - although in theory especially EU rural development investments can lead to a win-win situation for both water bodies (e.g. contributing to ensuring ecological flows) and farmers (e.g. some more water available for crops), in practice investments benefit only the latter. Some examples of inadequate integration include:
- Lack of adequate transposition of WFD principles and requirements into national legislative frameworks pertaining to agriculture in many MS, which results in objectives of agricultural policy being placed above environmental objectives of the WFD (e.g. see example of Spain where providing water to all demands and users is considered at the same level as achieving the good status objective);
- RDPs are prepared in isolation from RBMPs. For example, in Spain in the case of modernisation of irrigation investments, there is no link between the improvements provided by the modernisation in terms of water efficiency and the need for these to result in a better condition of affected water bodies; there is no requirement to return water savings achieved by improved efficiency in irrigation back to environment and to directly contribute to achievement of environmental objectives of affected water bodies.
- There are major differences in what different departments consider a sustainable water management (e.g. disagreement between environmental and agricultural departments on what constitutes 'water savings'), which undermines WFD objectives. For example, higher water use efficiency has long been considered an attractive target for reducing pressures on water bodies and for achieving good status objective of the WFD. Consequently, it is one of the most important measures funded by EAFRD and included in many RBMPs across Europe. Unfortunately, irrigation efficiency has seldom led to effective water savings, as experience shows [2]: switching to more efficient irrigation systems usually goes hand in hand with expanding the actual irrigated area or switching to more water intensive crops, leading not to water savings but to even greater water use. Article 46 of EAFRD Regulation (Regulation 1305/2013) stipulates criteria that Member States or regions should apply if they are to finance irrigation investments; however despite these safeguards, which are also not fully adequate, the application of Article 46 of EAFRD Regulation has proven problematic and provisions have not yielded the desired effect of water use reduction needed to contribute to the WFD objectives.
- Cost recovery and water pricing obligations have not been at all applied or not adequately applied to agriculture (see our response under questionnaire 6 - cost recovery and water pricing).

In addition to driving deterioration, agricultural policies can also prevent restoration efforts, needed to achieve good status objective. Intensive agricultural lands occupy large territories of floodplains and can be a fundamental obstacle for floodplain restoration, this often being a

perverse result of agricultural subsidies, supporting intensive land-use on floodplains that is uneconomic once flood management externalities are taken into account.

The problems we have raised here are well-known to those working on the 2020 revision of the Common Agricultural Policy, and recognised as a facet of wider flaws in the CAP. We would expect incoherence between the water Directives and the CAP to be addressed through this CAP revision process, and in this context any alterations to the Directives would be unhelpful; a revision process for the water Directives would mean an uncertain and shifting target for those working to ensure coherence through the CAP revision.

[1] European Court of Auditors (2014) Integration of EU water policy objectives with the CAP: a partial success, Special Report, https://www.eca.europa.eu/Lists/ECADocuments/SR14_04/SR14_04_EN.pdf.
[2] EEA (2012) Towards efficient use of water resources in Europe, EEA Report No 1/2012; WWF Spain (2015) Modernization of Irrigation in Spain: A bad business for nature and society, http://awsassets.wwf.es/downloads/factsheet_modernizationmar15_eng.pdf.

**162. Are you aware of any incoherence between the Directives under the scope of this Fitness Check and navigation legislation?**

| | Yes | No | I do not know |
|---|---|---|---|
| Inland Navigation Regulation | | | |
| Regulation for the development of the trans-European transport network | | | |

Other (please specify)

Similarly as in the case of energy policy, the implementation of EU transport policy has in the past compromised the achievements of the WFD objectives. It is important to emphasise that identified incoherence, especially in the pre-2013 period, can be attributed to inappropriate and inadequate integration of water and nature protection considerations in transport policy, which was often combined with poor implementation of EIA and SEA Directives. WFD has together with Nature Directives contributed to better territorial planning, better governance and public participation to support more sustainable development.

The aim of the EU transport policy is increasing mobility, removing major barriers in key areas and fueling growth and employment, as well as cutting CO2 emission in transport. The implementation of the Trans-European Network for Transport (TEN-T) is central to this, and amongst other implies also promoting as much as possible inland navigation as a sustainable mode of transport (i.e. construction and upgrading of inland waterways and port infrastructure). WFD on the other hand sets the expectation that unnecessary navigation supporting structures should be removed and that infrastructure should be redesigned wherever possible to improve habitats and fish passage and to restore natural shorelines; moreover, it requires that such infrastructure should not lead to further deterioration in the current state of water bodies. Potential for conflict between transport policy and WFD objectives therefore clearly exists, and there are several examples of transport infrastructure projects, sometimes implemented with the use of EU funds that have threatened or compromised water status and freshwater biodiversity.

However, following the adoption of the new TEN-T Regulation in 2013 (Regulation 1315/2013) EU transport policy better reflects environmental considerations. In particular, the TEN-T Regulation states that, during infrastructure planning, Member States and other project promoters should give due consideration to the risk assessments and adaptation measures adequately improving

resilience to climate change and environmental disasters (Recital 34 TEN-T Regulation). The Regulation also considers that Member States and other project promoters should carry out environmental assessments of plans and projects in order to avoid or, where avoidance is not possible, to mitigate or compensate for negative impacts on the environment, such as landscape fragmentation, soil sealing and air and water pollution as well as noise, and to protect biodiversity effectively (Recital 35 of TEN-T Regulation; see also Recital 36 which states that “The protection of the environment and of biodiversity, as well as the strategic requirements of inland waterway transport, should be taken into account.”). Moreover, the Article 36 of the TEN-T Regulation is very clear in requiring an integrated approach, requiring that environmental assessment of plans and projects is carried out in accordance with the EU environmental law, including the WFD, Nature Directives and the EIA and SEA Directives. Article 15 of the TEN-T Regulation sets very rigid targets (compliance with class IV waterways according to the European Conference of Ministers of Transport) that if applied would cause severe conflicts with WFD objectives in most cases; however, it also states that at the request of a MS, in duly justified cases, exemptions shall be granted by the Commission. Article 16 establishes priorities for inland waterway infrastructure development and outlines that priority should inter alia be given to "paying particular attention to the free-flowing rivers which are close to their natural state and which can therefore be the subject of specific measures" (Art 16(e)).

However, serious concerns are reported about some of the projects annexed to the TEN-T Guidelines and the Connecting Europe Facility (CEF) regulations, which will require a close monitoring of the development of the projects and selection of those projects for financing to ensure that implementation of the transport policy in Europe is in line with the TFEU and relevant EU legislative acts (such as the WFD). One such project is the project to improve navigation conditions on the Danube between Calarasi and Braila in Romania [1]. The project’s aim is to improve navigation conditions along a stretch of the Romanian Danube by removing so-called “bottlenecks” (shallow stretches). The Danube has been designated as the Pan-European Transport Corridor VII, part of the priority axis No. 18 TEN-T. As many of the bottleneck areas overlap with ecological hot spots, such as sturgeon migration routes and protected areas, the project has raised concern among stakeholders and environmental international organisations, including WWF since its beginning. Part of the project is also the creation of a bottom sill at Bala (Danube rkm 345), which according to expert judgement, disrupts fish migration on Bala – Borcea branch to a great extent and hinders fish access to upstream habitats up to the Iron Gates; specifically, it seriously threatens the last naturally reproducing populations of wild sturgeons in European watersheds. As such it violates environmental law, specifically the EU Water Framework Directive, and derived EU guidance and jurisprudence of CJEU (Case C-461/13).

There are legally binding provisions in place to ensure that Member States and project promoters avoid, mitigate or compensate for negative impacts on the environment (WFD, but also EIA and SEA Directives and Nature Directives), and good examples of coherence between the WFD and transport policy can be found (see for example the case of waterway management on the Danube in Austria, presented in our report ‘Bringing Life Back to Europe’s Waters’ [2]). These demonstrate that WFD is not a systematic obstacle to navigation or other transport projects, and that the problem lies in poor implementation of the WFD and related nature legislation, and in inadequate integration of water and nature protection consideration in transport policy.

[1] For more information on this project please contact Irene Lucius (ilucius@wwfdcp.org)
[2] WWF, ERN, EAA, EEB (2018) Bringing Life Back to Europe’s Waters: The EU Water Law in Action

**163. Are you aware of any incoherence between the Directives under the scope of this Fitness Check and chemicals legislation?**

| | Yes | No | I do not know |
|---|---|---|---|
| Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) | | X | |
| Biocidal Products Regulation | | X | |
| Persistent Organic Pollutants (POPs) Regulation | | X | |
| Single-Use Plastics Directive | | X | |
| Cosmetics Regulation | | X | |
| Directive on human medicinal products | | X | |
| Regulation on veterinary medicinal products | | X | |
| Classification, Labelling and Packaging regulations | | X | |

Other (please specify)

**164. Please describe any incoherence between the Directives under the scope of this Fitness Check and chemicals legislation.**

As already concluded by the 2012 WFD fitness check there is no major incoherence between water directives and EU chemicals legislation; implementation of legislation listed above contributes to the objectives of EU water policy, mainly by controlling the introduction into the environment of specific groups of substances.

**165. Are you aware of any incoherence between the Directives under the scope of this Fitness Check and other legislation?**

| | Yes | No | I do not know |
|---|---|---|---|
| Environmental Liability Directive | | X | |
| Environmental Impact Assessment Directive | | X | |
| Strategic Environmental Assessment Directive | | X | |
| Aarhus Convention – public information and participation and access to justice | | X | |

Other (please specify)

**166. Please describe any incoherence between the Directives under the scope of this Fitness Check and other legislation.**

WFD is fully synergistic with SEA and EIA Directives (which assist in preventing unnecessary damage to water bodies), as well as with the ELD (which contributes to EU water policy objectives by aiding restoration and acting as a deterrent to further damage); no major incoherence can either be identified in the case of Aarhus Convention.

**167. Are you aware of any incoherence between the Directives under the scope of this Fitness Check and international commitments?**

| | Yes | No | I do not know |
|---|---|---|---|
| UN Sustainable Development Goals | | X | |
| UNECE Water Convention | | X | |
| UN Convention on Climate Change | | X | |
| UN Convention on desertification | | X | |
| OSPAR Convention | | X | |
| Barcelona Convention | | X | |
| HELCOM | | X | |

Other (please specify)

**168. Please describe any incoherence between the Directives under the scope of this Fitness Check and international commitments.**

Keeping sources of water - freshwater ecosystems - healthy through full implementation of the WFD is key to the success of several Sustainable Development Goals, in the EU and abroad, which all MS and the EU have committed to achieve by 2030. As recently recognised by the High Level Panel on water, convened by the United Nations and the World Bank Group, water is the common currency which links nearly every SDG, and the way it is managed will be crucial in determining whether the world achieves Agenda 2030 [1]. Similarly, sustainable energy generation and water management including for improved climate mitigation (roll out of sustainable renewables; mitigating potential of freshwater ecosystems) and adaptation (esp. floods, droughts) is important for delivering on the Paris Agreement, given the importance of water as the medium through which climate change exerts its clearest and most direct impact on our livelihoods and on numerous economic sectors (e.g. agriculture, energy and tourism).

WFD also has an impact on water management globally, serving as a reference for legal frameworks governing water management in other countries giving the EU necessary power in international negotiations.

[1] High Level Panel on Water (HLPW) (2018) Making Every Drop Count, An Agenda for Water Action, HLPW Outcome Report, p. 15. See also WWF UK (2017) A River Runs Through it, p. 12-13.

**169. You have now completed the questionnaire on coherence of the legislative framework. Feel free to add any further comment in the box below. The next question will allow you to reach another questionnaire.**

/

**170. To which questionnaire would you like to respond next?**

- ☐ Questionnaire 1 - Floods Directive
- ☐ Questionnaire 2 - Water body status – ecological, chemical and quantitative status
- ☐ Questionnaire 3 - Environmental objectives and exemptions
- ☐ Questionnaire 4 - Groundwater Directive

- [ ] Questionnaire 5 - Costs and benefits
- [ ] Questionnaire 6 - Cost recovery and pricing
- [ ] Questionnaire 7 - Monitoring and reporting
- [ ] Questionnaire 8 - Public participation and review
- [ ] Questionnaire 9 - Coherence
- [ ] Questionnaire 10 - EU added value
- [ ] End of the survey

## Questionnaire 10 - EU added value

**This questionnaire is aimed at all stakeholders.**

This set of questions explores whether the action from the Water Framework Directive (WFD), Environmental Quality Standards Directive (EQSD), Groundwater Directive (GWD) and Floods Directive (FD) is better led at EU level or whether similar results could be achieved at national level with similar efficiency. We are also interested in understanding the benefits from the EU wide coordination of the implementation, coherence of the legislation and benefits from the Common Implementation Strategy.

The responses provided as part of this section will be important in order to establish the baseline against which the Fitness Check is to be conducted.

**171. How would you describe the additional value provided by the Directives compared to what would have occurred at Member State level without the Directives? Please explain your response.**

x Very significant

- Moderately significant
- Slighly significant
- Not significant at all
- I do not know

Comment

The WFD has been the main driver in developing a more stringent and ambitious national legislation for the protection of water (see for example the Controlled Activities Regulations in Scotland). The Directives establish a stronger and more consistent basis for the protection of a vital resource or as the WFD states ‘a heritage which must be protected, defended, and treated as such’.

It further provides a vital cross-border protection of freshwater ecosystems, including through supportive specific provisions which can be credited for facilitating cooperation, for example in the context of the International Commission for the Protection of the Rhine and the International Commission for the Protection of the Danube River. This transboundary approach revived and created new stimulus after the implementation of the Directive and the extent of cooperation and communication would not have been seen without it. Watersheds and the various pressures that affect their quality don’t follow national borders, calling for a common approach and standards in water management to prevent inaction in one country undermining the efforts of countries downstream.

Harmonization of objectives and action at EU level are also essential to prevent a race to the bottom (i.e. trying to attract investments by lowering standards). The WFD helps deliver a level playing field in competition terms for companies in support of the EU single market. The establishment of common water protection standards and procedures across the entire EU internal market provides favorable conditions for sustainable economic development. Any repatriation of competences in this field would lead to patchier, and very likely lower, protection levels combined with distorted competition and increased burden on companies operating across several EU Member States.

An additional added benefit of the Directive is the continuous status updates of freshwater ecosystems for European citizens, which are required under the WFD. This had been an important catalyst to increased public awareness of the state and value of European waters

across the EU. Without the directive it is doubtful that Member States would inform citizens about their surface waters, at least not at the regularity established by the Directive. Since the introduction of the directives there have been significant improvements of certain status indicators. For example for a number of priority substances listed under the Water Framework Directive, like cadmium, lead and nickel, and pesticides such as chlorfenvinphos and simazine, European measures towards preventing releases to the environment have been effective in significantly reducing their presence in water bodies. However the holistic approach outlined in the directive, required to reach good status, has not yet been consistently implemented across Member States.

**172. Do the issues covered by the Directives still require action at EU level (rather than at national or regional levels)? Please explain why and provide examples where possible.**

x Yes, fully

○ Yes, some

○ No

○ I do not know

Comment

The directives remain critical to driving improvement in water management, and MS implementation failures demonstrate that without the Directives and further implementation this major policy area would remain neglected, with substantial ongoing costs to EU citizens.

The Water Framework Directive (WFD) is one of the most important pieces of EU environmental legislation ever to have been adopted. It revolves around a key idea that nature is the source of water and we must protect, maintain and enhance our water ecosystems if we want to have sufficient amount of water of sufficient quality available for all legitimate water uses in the future. Many decisions were taken before the Water Framework Directive was written and put into place. The abridged process is outlined in the Water Framework Directive itself. The Community Water Policy Ministerial Seminar (1988), Ministerial Seminar on groundwater (1991), European Environment Agency (1995) all came to the conclusion that long-term deterioration of freshwater quality and quantity needs to be avoided and therefore community surface waters need to be protected. In 1995 the Council adopted conclusions requiring the drawing up of a new framework Directive establishing the basic principles of sustainable water policy for all EU Member States. The ecological, practical, and economic arguments for having the Directive remain virtually the same today as when the Directive was introduced. It is clear that EU wide action was needed because rivers do not stop at borders, and water as a whole is part of a global cycle; this can also be applied to the daughter directives of the WFD. Disruption of the ecosystem, whether it be through pollution over abstraction, or flow changes, affect the ecosystem downstream no matter what country follows. 19 years since the adoption of the Water Framework Directive, this is still unequivocally true. According to the Living planet report published by the WWF, freshwater biodiversity is declining at a faster rate than terrestrial or marine with a decline of 83% since the 1970s. Continued restoration and protection of freshwater ecosystems is not only a necessity but should also be a priority. There is no room for error and no time for low ambition.

The State of Water report clearly shows that only minor improvements have been made, currently still 60% of European surface waters are not in good status even though the directive has outlined an innovative holistic approach to water management, desperately needed after the previous segmented approaches. The reasons are clear, exemptions have been applied en masse, representing the low ambition of governments to tackle this problem and the small budget allocated to water management over the years, instead of genuine public interest reasons for

exemption. Therefore, we are still in the same situation as in the early 2000, the remaining 60% of surface waters need to be brought to good status and using the directive this status needs to be preserved beyond 2027. Moreover the drivers of bad status are still present and in some cases have become more prominent. Diffuse pollution is still a significant problem and appropriate measures have not been but in place by Member States, to effectively deal with this pressure. Dams and hydropower development are also still a significant pressure, with new structures being planned all across Europe.

Beyond this having an EU wide directive has brought concrete benefits. In some countries the establishment of a framework Directive has freed up European funds to support countries especially in the development of urban waste water treatment facilities, desperately needed to protect human health as well as ecosystem health. In Romania the establishment of a new sewage treatment works (co-funded by the EU structural and cohesion program) led to a considerable decrease in organic pollutants and nutrients (more details can be found in the report Bringing Life Back to Europe's Waters). These funds and overall EU wide action are still clearly needed as have we not reached the goals of the WFD.

**173. What are the key additional benefits of implementing the Directives? Are there any benefits that would have occurred anyway without the implementation of the Directives?**

According to the new Blue 2 study estimating the 'monetary' value of ecosystem services provided by water are almost impossible because water is essential for all life on the planet. However we do know that there are countless benefits to having healthy freshwater ecosystems (which do not necessarily need to be monetised). Wetlands regulate water flows, filter water, serve as floodplains, and store carbon, clean water at source subsequently results in reduced treatment costs for drinking water, and all freshwater ecosystems are a hotspot for biodiversity which in itself has multiple benefits for example for tourism.

Living near a clean lake or river also increases quality of life, by reducing stress and increasing overall psychological and overall health.

Where Member States have attempted to monetise the marginal benefits of achieving compliance with the WFD these are substantial (for example the £22.5bn benefit estimated for England by the competent authority) [1].

An additional benefit of having the directive is that due to monitoring requirements we now have a wealth of information on freshwater ecosystems and their health**.** This isn't only valuable for water management but also for creating awareness for and interest in freshwater ecosystems by the general public and different stakeholder, which according to the directive are required to be informed and are crucial for effective implementation of the Directives. Since 2000, it has become abundantly clear that sustainable water management is not a top political priority in EU Member States (see above). From this we can assume that not much improvement would have been made without the directive. In some cases, for citizen protection, flood management efforts might have been established. However these would have predominantly been grey infrastructure not in line with the goals of the Water Framework Directive. Stakeholders have also mostly agreed (74-72%) that the directive has brought enormous added value by stimulating cooperation between stakeholders and administrative units [2]. Involvement of stakeholders also stimulates scientific research and better and more consistent data gathering and monitoring.

[1] UK Environment Agency (2015) Impact Assessment: Update to the river basin management plans for England's water environment
[2] Fitness Check of EU Freshwater Policy, SWD(2012) 393 final.

**174. How would you rate the value of implementing the Directives in transboundary river basins?**

x Very significant

- Significant
- Moderately significant
- Slighly significant
- Not significant at all
- I do not know

Comment

The Directives represent the largest field of transboundary environmental co-operation in the European Union. Many catchments cross national boundaries and the Directives have led to coordinated planning and action along coastlines, major and minor rivers throughout the continent. There is a clear contrast with the implementation of, for example, the Birds and Habitats Directives for which each country has focused on its own contribution to the Natura 2000 network without necessarily co-operating with its neighbors.

The largest-scale examples of this can be seen along Europe's largest catchments, such as the Rhine and the Danube, for which river commissions spanning several states have organized and have agreed RBMPs. The Danube River Basin Management Plan for example has been agreed by 14 sovereign states (five of which are not yet EU Member States).

Member States have agreed transboundary management of many smaller river basin districts. Often there were agreements in place before the enactment of the Directives, but these have been strengthened by the requirements of the Directives and are now providing greater benefits. One example among many is the collaboration between Spain and Portugal through the Albufeira Convention. This is an agreement between the two countries to establish the amount of water that goes to Portugal from four Spanish river basins: the Tajus, Duero, Guadiana, and Miño-Sil. There are also provisions within the Convention to maintain and improve water quality. This is an agreement between Member States that forms part of the common implementation of the WFD by Portugal and Spain and has been adapted and strengthened to meet WFD objectives. Competent authorities for water management (e.g. the Guadiana River Basin Authority) are now asking for further revision of the Convention in light of evolving regional measures to deliver WFD objectives, such as E-flow management in the Guadiana river.

Scientifically it is clear that a river basin approach, regardless of whether or not it transcends different countries, is the most effective and appropriate basis for water management. The water ecosystems are affected by every activity that takes place on land as well as through our actions in abstracting, using and returning water to rivers, the sea and the ground. Transboundary management embeds collaborative working at a river catchment scale, delivering a range of environmental, social and economic benefits and protecting our surface and groundwaters. It stimulates the exchange of information and best practices between water management authorities from different countries and can lead to a more efficient and cost effective approach.

In addition to this river-basin-specific co-operation, the CIS process should be mentioned again as a very good and unusual example of co-operation between Member States and civil society groups in the interpretation of EU environmental policy.

**175. You have now completed the questionnaire on EU added value of the legislative framework. Feel free to add any further comment in the box below. The next question will allow you to reach another questionnaire.**

/

**176. To which questionnaire would you like to respond next?**

- ☐ Questionnaire 1 - Floods Directive implementation
- ☐ Questionnaire 2 - Water body status – ecological, chemical and quantitative status
- ☐ Questionnaire 3 - Environmental objectives and exemptions
- ☐ Questionnaire 4 - Groundwater Directive
- ☐ Questionnaire 5 - Costs and benefits
- ☐ Questionnaire 6 - Cost recovery and pricing
- ☐ Questionnaire 7 - Monitoring and reporting
- ☐ Questionnaire 8 - Public participation and review
- ☐ Questionnaire 9 - Coherence
- ☐ Questionnaire 10 - EU added value
- ☐ End of the survey