Water Framework Directive JASPERS

Checklist tool

July 2024

JASPERS' checklist tool[1] to use when a project[2] could affect the Water Framework Directive (WFD) status of a surface water body or a groundwater body

Update July 2024

[1] This checklist tool has been prepared to facilitate initial discussions on WFD compliance. It reflects current (2022) good practice and remains in line with the CIS Guidance Document 36. However, it has no formal status and it should not be assumed to be comprehensive. Decisions on WFD compliance will always need to be supported by relevant evidence whether or not the Article 4(7) tests need to be applied. Furthermore, whilst the document is intended to facilitate the implementation of Directive 2000/60/EC, any authoritative reading of the law should only be derived from Directive 2000/60/EC itself and other applicable legal texts or principles. Only the Court of Justice of the European Union is competent to authoritatively interpret Union legislation.

[2] The term 'project' is used herein to refer to a development, licensable activity or infrastructure works, or to each of the components of a programme of works or activities [502 and footnote 51]

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Acronyms

AWB	Artificial water body
BQE	Biological quality element
CIS	Common implementation strategy
EIA	Environmental impact assessment
EQS	Environmental quality standard(s)
HMWB	Heavily modified water body
RBMP	River basin management plan
WFD	Water Framework Directive
WWTP	Wastewater treatment plant

PART I
Introduction

1. Introduction and purpose of the JASPERS checklist tool

The JASPERS checklist tool is intended for use as a support tool for stakeholders involved in project development and relevant environmental decision-making. It outlines a stepwise process for assessing and demonstrating project compliance with the EU Water Framework Directive (WFD). The application of the tool is voluntary.

The following sections support the checklist tool insofar as they provide information about the WFD and its implementation in EU Member States as well as summarising some of the relevant contents of CIS Guidance Document 36, Exemptions to the Environmental Objectives according to Article 4(7)*. For detailed guidance, reference should always be made to the relevant definitive European text.

*Important note: numbers in red and square brackets (e.g. [xx]) refer to the relevant line in the English language version of CIS Guidance Document 36, endorsed by Water Directors in December 2017.

Steps 1 to 3 of the checklist tool may be used for assessing whether projects could lead to deterioration or compromise the achievement of the WFD objectives. Step 4 can only be used for projects that are within the scope of Article 4(7) of the Directive. In all cases (whether using the checklist support tool or not), WFD compliance must be demonstrated before a permitting decision is made.

This is Version 2.0 of the JASPERS checklist tool as published in July 2024.

The document will be kept updated in the future with changes and amendments subject to feedback that will be received following concrete use in projects assessments. Please refer to the latest version available on the JASPERS Knowledge Platform: https://jaspers.eib.org/knowledge/index

2. What is the Water Framework Directive?

The EU Water Framework Directive (2000/60/EC) (WFD) protects and seeks to improve the biological, physico-chemical, hydromorphological and chemical status of surface water bodies, and the chemical and quantitative status of ground water bodies. It has a strict no deterioration requirement, including in relation to water-dependent objectives in EU protected areas. The WFD also promotes sustainable water use based on the long-term protection of available water resources.

The overall status of a water body is determined with reference to the status of a suite of individual parameters known as quality elements (or criteria for

groundwaters). Surface water bodies – including rivers, lakes, estuaries and coastal waters – need to reach the default objective of 'good' chemical status and 'good' ecological status or potential across each of these elements. Ground water bodies must similarly achieve good chemical and quantitative status.

The actions and interventions needed to meet the WFD's objectives in any river basin district are described in a Programme of Measures, which is summarised (along with other information including an overview of the main pressures and impacts) in a statutory River Basin Management Plan. Demonstrating compliance with this Plan is usually a prerequisite for a project to receive EU co-financing.

Monitoring is an essential aspect of WFD river basin planning, providing information on current water body status and enabling the improvements delivered through the implementation of measures, to be recorded.

New projects that could affect water body status or compromise the achievement of planned status improvements must demonstrate that they are compliant with the WFD's objectives. In cases where mitigation measures cannot prevent status being affected, it may be possible to apply an exemption under Article 4(7) of the Directive, provided certain criteria are met. Otherwise, the project may not be able to go ahead.

Under the WFD's administrative arrangements, each Member State has identified one or more competent authorities that are responsible for applying the rules of the Directive.

3. Some key concepts under the WFD relevant to the checklist tool

3.1. WFD water body objectives

A WFD surface water body should comprise 'a discrete and significant' lake or reservoir; stream, river or canal or part thereof; transitional water (such as an estuary or lagoon); or stretch of coastal water (see Figure 1). A groundwater body is 'a distinct volume within an aquifer or aquifers'.

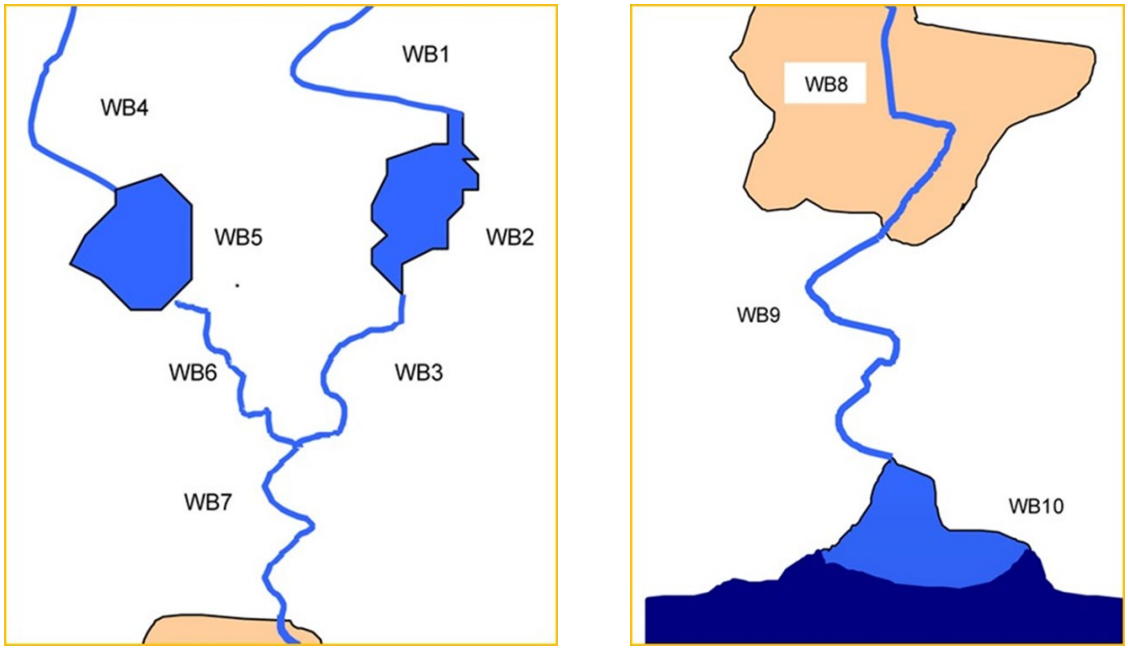

Figure 1: Water body examples

The default objective of the Directive is to meet good chemical status and good ecological status or potential in all surface water bodies. The one-out-all-out principle means that every element in a water body must therefore reach good status. Groundwater bodies should achieve good quantitative and good chemical status. The concept of good status is elaborated below.

3.2. Chemical, ecological and quantitative status

WFD chemical status is determined via the monitoring of the priority and priority hazardous substances covered by the Environmental Quality Standards (EQS) Directive (2008/105/EC as amended). EQS are applied primarily to water but may also be set for biota or sediment. Each substance either meets the relevant EQS or fails to meet it. For a water body to be at good chemical status overall, there must be no failures.

Ecological status is derived from the monitoring of a number of 'biological quality elements' (BQEs), for example aquatic flora, benthic invertebrates and fish, and comparing these to their natural, undisturbed (reference) condition. Each element is then classified according to a scale of high-good-moderate-poor-bad, with the WFD objective being to achieve good status. The Directive recognises, however, that variations in characteristics such as water flow or currents, continuity, substrate structure, water temperature, salinity and oxygenation will affect the ability of a water body to meet good ecological status. The status of each of the relevant hydromorphological and physico-chemical[3]

[3] Specific pollutants are currently a component of the physico-chemical supporting elements and therefore contribute to ecological status. However, following the 2019 Fitness Check, the European Commission adopted a proposal to revise the lists of pollutants in surface water and groundwater. This is part of the so-called integrated water management proposal, amending Directive 2000/60/EC establishing a framework for

'supporting elements' [884] therefore also contributes to determining the overall ecological status of a water body[4].

The priority and priority hazardous substances for which environmental quality standards have been adopted are taken into account only in the classification of chemical status. They are not supporting elements for the classification of ecological status (although Member States must take any identified, direct ecotoxicological effects into account during the classification process) [535 and footnote 52[5]].

Ecological 'potential' is the equivalent to ecological status for designated Heavily Modified (HMWB) or Artificial water bodies (AWB)[6]. For such water bodies, the default WFD objective is to reach good ecological potential. The classification for HMWBs and AWBs therefore follows a scale of maximum-good-moderate-poor-bad [837[7]].

Throughout this checklist tool hereafter, any reference to water body or element level 'status' (or to an effect on status) should be interpreted as including 'potential' in cases where the water body in question is designated as Heavily Modified or Artificial.

Groundwater is classified according to its quantitative and chemical status. Groundwater status can be good or poor, where poor means the water body fails to meet its WFD objective. As with surface water bodies, the one-out-all-out principle applies.

Community action in the field of water policy, Directive 2006/118/EC on the protection of groundwater against pollution and deterioration and Directive 2008/105/EC on environmental quality standards in the field of water policy. When this proposal is adopted, likely in the second half of 2024, another expected change of relevance to this checklist is the proposal to move river basin specific (synthetic and non-synthetic) pollutants out of the list of physico-chemical elements supporting WFD **ecological** status, into the list of contaminants covered by WFD **chemical** status. The purpose of this proposed change is to harmonise standards for pollutants that are relevant at the level of river basins.

[4] Climate change may impact on the ability of some water bodies to meet good status because of fundamental changes in WFD supporting elements such as temperature, salinity or sediment dynamics, with potential consequences for the underlying reference conditions. While the 2009 CIS guidance No. 24 River Basin Management in a changing climate discusses some of the implications for achieving the WFD objectives, other climate change challenges are being addressed in the 2022-2024 CIS Work Programme.

[5] See Section 2.2 of CIS Guidance Document 13: Overall Approach to the Classification of Ecological Status and Ecological Potential

[6] Heavily modified water bodies are water bodies that have been confirmed to have undergone a substantial change in character as the result of a physical modification(s) associated with a current use (see examples of modification types in Figure 2). Artificial water bodies are canals and similar that have been created where land previously existed. To be so-designated it must have been shown that the measures needed to restore the water body to good ecological status would adversely impact on a sustainable human use as defined in Article 4(3)(a) of the WFD.

[7] Some Member States do not use all five classes when classifying the ecological potential of water bodies; for example, some define only maximum, good and moderate, where moderate is equivalent to 'less than good' potential. If the classification of ecological potential is not fully developed [1082], it can be difficult to determine whether a project will cause deterioration or affect the ability of the water body to achieve its WFD objective. A precautionary approach should be applied in such cases.

3.3. Understanding what is meant by an effect on water body status

In the context of this checklist, and using WFD terminology, an (adverse) effect on water body status means either [1121]:

- a **deterioration** [555] across a status class boundary at the scale of the water body (for example from good to moderate; or from moderate to poor; or from good to fail) of an individual element or substance [776][8]

OR

- a modification or alteration, which prevents or **compromises the achievement of an improvement in status** [768] that could otherwise reasonably be expected (e.g. as the result of implementation of a measure proposed in the River Basin Management Plan)[9].

The methodology set out in this checklist tool first considers whether a mechanism for a potential effect on status exists (Step 1). It then goes on to confirm whether an effect would indeed be expected (Steps 2 and 3) and, if so, to assess the (significance of the) expected effect, with mitigation measures in place if relevant, to determine whether there will be a residual[10] effect on water body status in line with the description above (Steps 3 and 4).

In addition, however, the Water Framework Directive aims to enhance protection and improve the aquatic environment. If a project can contribute to an improvement in water body status, this should also be recognised. Whereas this checklist tool is primarily intended to identify and mitigate adverse effects, it can also be used to highlight anticipated improvements in one or more of the WFD elements.

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[8] However, for surface water bodies, if the quality element concerned is already in the lowest class, case-law indicates that any degradation of this element constitutes a deterioration (see judgment of 4 May 2016, Commission v Austria, C–346/14, EU:C:2016:322, paragraph 59); also cases C-461/13 and C-525/20

[9] Article 11(1) of the WFD requires Member States to identify and implement programmes of measures for the achievement of the objectives set in Article 4. Accordingly, Article 11(3) requires the Member States to establish controls and authorisations for water uses including abstraction, discharge, recharge … and for other activities such as physical modification which may have a significant impact on water body status. In practice, this means that before the national competent authority authorises a water use or other relevant activity it should be satisfied that the use / activity is not likely to cause deterioration or jeopardise the achievement of the environmental objectives in the water body(ies) affected, subject to the application of the derogation/exemption provisions set out in Article 4.

[10] A residual effect being an effect on status that remains even with all practicable mitigation measures in place

3.4. Understanding what type of activity can affect water body status

Any type of project can potentially affect a WFD water body – not only flood defence, navigation, hydropower, wastewater treatment or other projects directly involved with water management, but also transport, energy, agriculture or other types of infrastructure or land-use projects [28]. For example, a road, rail, or urban development project might require the realignment of, or otherwise impact on, a surface water body; an irrigation project may affect a river's downstream flow rates. Figure 2 illustrates a selection of physical modification examples.

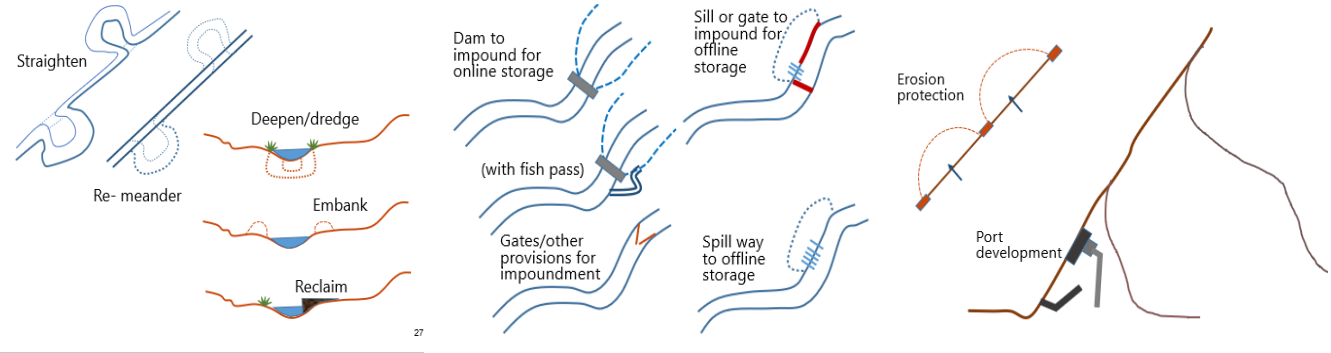


Figure 2: Examples of physical modifications

It is important to recognise that it is not necessarily the scale of the physical modification that matters [594], but rather the extent of its anticipated effects [1656].

Water abstraction is a key pressure affecting the status of groundwater bodies but other infrastructure developments can also affect groundwater status. For example, certain construction or mining activities might not be possible without prior drawdown, or the viability of a tunnel might depend on long-term management of water levels.

Table 2 in CIS Guidance Document 36 illustrates the different situations in which physical modifications to surface water bodies, alterations to the level of groundwater bodies or new sustainable developments in high status water bodies can directly or indirectly affect status and summarises those to which Article 4(7) might apply [662].

3.5. Maintenance activities

'Maintenance' projects can sometimes affect the status of a WFD water body.

When physical modifications to surface water bodies are proposed in order to reinstate engineered conditions such as water body depth or width that previously existed to support a use(s) many years ago, this may be viewed as 'maintenance' from an engineering point of view. However, from a WFD

perspective, the ecological and/or chemical status of the water body may have recovered or stabilised in the period since the original modifications were made. The current status of the water body is what is important as the baseline for the WFD compliance assessment. If the current status could be detrimentally affected, the proposed works should be assessed in the same way as a 'new' project, irrespective of whether the engineering objective is the reinstatement of previous dimensions or conditions [695].

Conversely, if maintenance activities have been carried out regularly including in recent years, any associated deterioration or prevention of achievement of WFD objectives should have been considered in designating the water body as heavily modified. In these cases, the WFD objective, good ecological potential, should already take into account both the current use of the water body and the maintenance upon which that use depends.

Whenever a project (or a programme of works) involves an element of maintenance works, a case-specific consideration is therefore recommended.

4. Important considerations when assessing new projects for WFD compliance

4.1. Provisions in the WFD

As mentioned above, new projects must comply with the WFD's objectives. In cases where mitigation measures cannot prevent status being affected, Article 4(7) of the WFD makes provision, via an exemption, for the authorisation of projects that would have a residual effect on the status of one or more water bodies. However, this exemption can only be applied if [551, 554]:

- a new modification(s) to the physical characteristics of a surface water body [592, 634] or an alteration to the level of a groundwater body [610, 642] will directly or indirectly affect the status of the water body

OR

- a surface water body that is currently at high status will deteriorate to good status as the result of a new sustainable human development activity [614, 645]

AND

the following conditions (tests) are **all** met:

- all practicable **mitigation measures** are in place
- the reasons for the modification or alteration are set out in the relevant River Basin Management Plan (or it can be demonstrated that the proposed project has been subject to at least as much **public consultation** as is the case for the RBMP and the project will be reported in the next RBMP)

- the modification or alteration can be demonstrated to be of **overriding public interest**, **or** its benefits to human health, safety or sustainable development can be shown to outweigh the benefits of maintaining or improving water body status (a **balancing test)**
- it can be demonstrated that there are no technically feasible and not disproportionately costly **alternatives** that are **significantly better** from an environmental perspective.

If these conditions are not met, the proposed project cannot be authorised [1380].

4.2. New sustainable development in high status water bodies

The second provision of Article 4(7), relating to water bodies at high status, can only be applied in specific situations.

New modifications to the physical characteristics of a surface water body, along with new alterations to the level of groundwater bodies, are always dealt with under the first provision of Article 4(7) [657]. Moreover, there is no definition of 'high' status from which WFD chemical status or groundwater status could deteriorate [664] so the second provision cannot be applied to groundwater bodies or to surface water bodies where chemical status would be affected.

The application of this second provision would therefore cover projects such as new wastewater treatment plants in high status water bodies, where inputs of other types of pollutants (including nutrients, specific pollutants, etc. covered under the WFD physico-chemical supporting elements) could be authorised as long as the development does not drive water body status to below good [653].

The JASPERS' checklist tool can be used for the assessment of these developments, but it should be noted that such projects can be complex in terms of establishing WFD compliance. If a project other than a physical modification is proposed in a water body that is currently at high status (i.e. close to pristine conditions), it is strongly recommended that advice be sought via early discussions with the relevant WFD competent authority.

4.3. Role of mitigation measures in WFD compliance

It is not the intention of the WFD to stop projects going ahead. Rather the WFD aims to prevent deterioration in the status of water bodies. Mitigation measures can therefore play a vital role in ensuring that projects are WFD-compliant.

The first of the Article 4(7) tests ensures that all practicable mitigation measures are in place. This emphasises the important role of mitigation measures. If proven and effective mitigation measures have already been identified and

implemented, such that there will be no residual effect on water body status, and this decision is well-justified based on a thorough assessment, the project will not need to go through the Article 4(7) tests. This is illustrated by the feedback loop in Figure 6 in CIS Guidance Document 36 [1426].

Effort spent identifying and implementing mitigation options is therefore effort well-spent. Furthermore, as elaborated in Note (q), WFD mitigation can be delivered in a number of different ways: the WFD is not as prescriptive in this regard as some of the other EU environmental directives.

Only projects with a **residual** adverse effect on the status of one or more WFD elements (due to a new physical modification(s) or an alteration to the level of a groundwater body, etc.) will therefore need to demonstrate that they meet the Article 4(7) tests.

In these cases, the Article 4(7) exemption is 'there to be used'.

4.4. Residual effects on WFD hydromorphological supporting elements

By implication, the WFD assumes that a deterioration in one or more of the supporting hydromorphological elements is likely to result in an adverse consequence (i.e. deterioration) for one or more of the biological quality elements.

Therefore, a residual effect on a hydromorphological supporting element that leads to a change in its status class or in the status class of a biological quality element would trigger the application of Article 4(7).

Figure 3 presents a situation where the residual effect of a proposed flood protection project will lead to the physical loss of a small area of riparian habitat in a water body at moderate status. For the riparian zone structure and condition hydromorphological supporting elements, no status class boundaries below the good-moderate boundary have been set, so moderate is therefore the lowest status class. Under the Weser ruling (Case C-461/13 [779]), any degradation of a quality element already in the lowest class (in this case 'moderate'), would in principle be considered as deterioration. However, as in this example, if the Applicability Assessment process demonstrates that the effect on the BQE would not result in actual deterioration (because the change remains within the same boundaries of the (moderate) status class), the residual degradation of the hydromorphological supporting element would not result in the need to apply Article 4(7).

	Biological quality element(s) (say, aquatic flora)		Hydromorphological quality element(s) (say, riparian zone structure and condition)	
	Pre-project status	Post project status	Pre-project status	Post project status
High/ Maximum				
Good				
Moderate	X	X	X	X
Poor				
Bad				

Figure 3: Residual effects of a flood protection project

4.5. Relevance of Article 4(7) to new inputs of pollutants

As indicated in Table 2 of CIS Guidance Document 36 [661], Article 4(7) **cannot be used to exempt** new, point source or diffuse **inputs of pollution** in any of the following situations:

- In all water bodies, where a direct input of a priority or priority hazardous substance(s) causes a **chemical status deterioration** (i.e. a deterioration in relation to one or more priority or priority hazardous substance) [757]

- **In water bodies currently at good status or below**, where an input of other pollutants affects status at element level. Pollutants in this case cover the general physico-chemical conditions (nutrients) and the specific physico-chemical conditions (synthetic or non-synthetic pollutants) [757]

- **In high status water bodies**, where deterioration caused by the input of any pollutant drives status to below good [653].

Put another way, it appears that a new wastewater treatment works can **only** be constructed if one of the following applies:

- An exemption is not needed because there will be no deterioration or other effect on status at element level in the water body into which the discharge is taking place. This might be a function of the type of

treatment of the effluent and/or the size of the receiving water body [755]; or of measures taken to reduce the contaminant load from other discharges into the same water body

- The construction of the WWTP will lead to an overall improvement in status [755]
- The affected water body is currently at high ecological status and the WWTP will not cause the water body to deteriorate to below good ecological status [653]. In this case the Article 4(7) exemption can be used.

If a project is likely to have an adverse effect on water body status due to an input of pollutants, it is strongly recommended that advice be sought via early discussions with the relevant WFD competent authority(ies).

4.6. Relevance of the other WFD exemptions to new projects

Articles 4(4) and 4(5) provide the possibility for Member States to extend deadlines or set less stringent targets in relation to the existing status of water bodies. They are not generally intended for use with new projects but there may be some cases where the application of Article 4(4) or 4(5) exemptions can be justified *following* the successful application of an Article 4(7) exemption and the modification of a water body [1877]. For example, if natural conditions mean that the recovery of the ecosystem (either naturally or following the implementation of mitigation measures) will take a long period of time to reach good ecological potential, an extended deadline might need to be set under Article 4(4).

If a project that passes the Article 4(7) tests is likely to rely on a subsequent exemption under Article 4(4) or 4(5)[11], early discussion with the relevant WFD competent authority(ies) is recommended to check if this approach is relevant.

Article 4(6) provides an exemption for a temporary deterioration in the status or potential of a water body only in the case of natural causes or "force majeure". This exemption applies **only** to events (such as prolonged floods or droughts) that are exceptional or could not reasonably have been foreseen [717]. If a project is intended to make good the damage caused by such an event, it is important to ensure that the provisions of Article 4(6) have been applied by the WFD competent authority *before* work commences to assess the potential effects of the project.

[11] Note that Article 4(4) cannot be used to extend deadlines beyond 2027. Rather Member States should have included the measures needed to achieve good status in their 2021-2027 RBMPs (even if natural recovery rates mean good status will not be achieved until after 2027) or set a less stringent target if justified under Article 4(5). For further information on the use of Articles 4(4) and 4(5), see the Annex of Supporting References

4.7. Transboundary considerations

A project might affect surface or ground water bodies on both sides of an administrative or even a national border. Procedures for assessing project compliance may differ between different Member States or sometimes different administrations. In transboundary situations, the WFD project assessment process – including the application of Article 4(7) if appropriate – will need to be coordinated, and common methodologies (and, where appropriate, thresholds) will need to be agreed with the respective WFD competent authorities. Where relevant, transboundary river basin commissions might act as facilitators of such coordination [1939].

4.8. Multiple WFD competent authorities

In addition to the transboundary situations discussed above, it may also be the case that there are different WFD competent authorities for different water body types (e.g. for coastal/marine waters, or for ground waters). A project can sometimes affect a number of water body types. For example, the construction (or removal) of a barrier on a river may affect sediment supply to the coast; or excavation works associated with a development in a surface water may impact on ground water bodies. In these cases, it will be important to ensure all the WFD competent authorities with responsibility for potentially affected water bodies are engaged, as appropriate, in the project compliance assessment process.

4.9. Streamlining WFD assessment with EIA and Habitats Directive Assessments

The requirements of the WFD are subtly different from those of EIA or assessments under the Habitats Directive, for example in terms of the particular parameters to be assessed or the level of detail of evaluation needed[12]. That said, once the scope of the respective assessments has been determined individually, there may be opportunities [1264, 1317] to explore synergies during the data collection and assessment and possibly also the public consultation stages amongst others. Thereafter, the specific 'significance' tests required under each of the individual Directives must be applied.

[12] For FAQ and other references discussing the links between the WFD and the Nature Directives, see the Annex of Supporting References

4.10. Engagement with stakeholders

Various European and international instruments (e.g. the Aarhus Convention) anticipate the engagement of interested parties (stakeholders) in the project development process. Such instruments provide the overarching context within which WFD project compliance is assessed.

Furthermore, if an Environmental Impact Assessment is being undertaken for the project, the EIA Directive (Directive 2011/92/EU as amended) requires the environmental authorities, the public, and where relevant affected Member States, to be informed and consulted.

CIS Guidance Document 36 confirms the specific expectation that WFD stakeholders will be consulted, either directly or through the required consultation on the River Basin Management Plan, if the provisions of Article 4(7) need to be applied. However, in situations where the Article 4(7) tests do not need to be applied, it can similarly be considered good practice to ensure the decision-making process is transparent such that WFD compliance can be demonstrated to interested parties including other competent authorities [1137].

It should also be recognised that early engagement, including during the project development process, can have number of benefits. For example, stakeholder engagement can help in identifying alternatives (at an early enough stage that there are still options available) and, in due course, in highlighting possible mitigation measures or opportunities whereby the project might contribute to achieving a net improvement in water body status.

5. Other relevant strategies and policies

The assessment of whether a project is compliant with the WFD, or whether the Article 4(7) tests need to be applied should wherever possible make reference to strategic level information. This includes Strategic Environmental Assessments (which should in any case have made some initial assessment of possible WFD implications [428]) as well as relevant policies and policy integration considerations [119]. Such cross-referencing is especially important in the event that 'alternative means' test needs to be applied under Article 4(7).

5.1 The EU Green Deal and strategies implementing it

In addition to other Directives that apply specifically to projects such as Environmental Impact Assessment (Directive 2011/92/EU as amended) and Appropriate Assessments under the Habitats Directive (92/43/EEC as amended)

(see below), the WFD sits within a wider environmental policy context including, since 2019, the EU Green Deal.

The overarching goal of the Green Deal Is to make the European Union climate neutral by 2050 while its wider aims encompass a number of related policies covering the health and well-being of EU citizens and future generations through the protection and improvement of air, water, soil and biodiversity (also encompassing buildings, food, transport, energy, waste and industry).

Examples of related policies of particular relevance to this checklist are those linked to water and biodiversity[13], viz:

- Biodiversity Strategy for 2030[14]
- Zero Pollution Action Plan[15]
- Chemicals Strategy[16]
- The EU taxonomy regulation[17].

5.2 InvestEU

Also in this wider policy context, the WFD forms part of the legal compliance framework in the environmental dimension of sustainability-proofing for InvestEU (alongside climate and social dimensions). Sustainability proofing aims at identifying the project's impacts and relevant prevention and mitigation measures, but also promotes the opportunities to go beyond simple mitigation by addressing residual impacts to add value beyond simply complying with legislation. For direct financing, implementing partners are expected to verify compliance with the following Directives, on the basis of authorisations, permits, licences, etc. provided by the project promoters[18].

For many projects, the **Environmental Impact Assessment Directive** (Directive 2011/92/EU as amended by Directive 2014/52/EU) will form a key input into this process, along with the **Strategic Environmental Assessment Directive** (Directive 2001/42/EC). Depending on the nature of the project, (assessments under) some or all of the following will be among the input-data needed to demonstrate sustainability proofing, including meeting the Do No Significant Harm criteria:

- **Habitats Directive** (Council Directive 92/43/EEC of 21 May 1992) and **Birds Directive** (Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009)
- **Water Framework Directive** (Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000)

[13] https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal/protecting-environment-and-oceans-green-deal_en
[14] https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1590574123338&uri=CELEX:52020DC0380
[15] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52021DC0400&qid=1623311742827
[16] https://ec.europa.eu/environment/pdf/chemicals/2020/10/Strategy.pdf
[17] https://ec.europa.eu/info/law/sustainable-finance-taxonomy-regulation-eu-2020-852_en
[18] Commission Notice Technical guidance on sustainability proofing for the InvestEU Fund (2021/C 280/01)

- **Industrial Emissions Directive** (Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010)
- **Waste Framework Directive** (Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008)
- **Seveso III Directive** (Directive 2012/18/EU of the European Parliament and of the Council of 4 July 2012)

N.B. The Technical Support Document for Environmental Proofing of Investments funded under the InvestEU Programme acknowledges the JASPERS checklist tool as providing "an equivalent (if not higher) level of proofing" to that recommended for the other elements of natural capital (air, land and biodiversity). However, it goes on to encourage additional monetary valuation for the water environment for InvestEU assessment purposes "only where [such] valuation would be expected to provide reasonably robust results".

PART II
WFD compliance checklist tool

6. WFD compliance checklist tool

The WFD compliance checklist tool introduced and described in the remainder of this document sets out a four-step process to assist in identifying whether and how a project might affect water body status and, depending on the outcome of the process, whether compliance with the WFD can be demonstrated. In common with the requirements for EIA, the tool is intended to be used by competent experts.

In line with the 'Applicability Assessment' described in CIS Guidance Document 36, Steps 1 to 3 of the checklist may be used for assessing any type of project that could lead to deterioration or compromise the achievement of the WFD objectives. This includes projects that are not new modifications to the physical characteristics of surface water bodies, alterations to the level of groundwater, or new sustainable human development activities), and are therefore beyond the scope of Article 4(7), but may nonetheless affect the status of water bodies because they can cause deterioration or compromise the achievement of the WFD objectives [751].

Step 4 can only be used for projects that are within the scope of Article 4(7) of WFD.

Application of the checklist tool is recommended in situations where a project:

- Could directly, indirectly or cumulatively, affect the biology, hydrology, morphology or physico-chemical status of one or more surface water bodies
- Could directly, indirectly or cumulatively, affect the groundwater resource or impact on groundwater-dependent surface water bodies or terrestrial ecosystems through changes in quantity, flow or saline intrusion
- Could affect existing contamination levels in surface or ground water bodies, for example by disturbing already-contaminated sediments or if groundwater drawdown increases concentrations of contaminants already in the system
- Could result in a new or increased input of contaminants (priority or priority hazardous substances) to surface or ground waters
- Is taking place in or close to a pristine (i.e. undisturbed) surface water body (river, lake, estuary, coast).

Figure 4 summarises Steps 1-4 in flowchart format, highlighting the routes through the process that establish whether a project is or is not WFD-compliant.

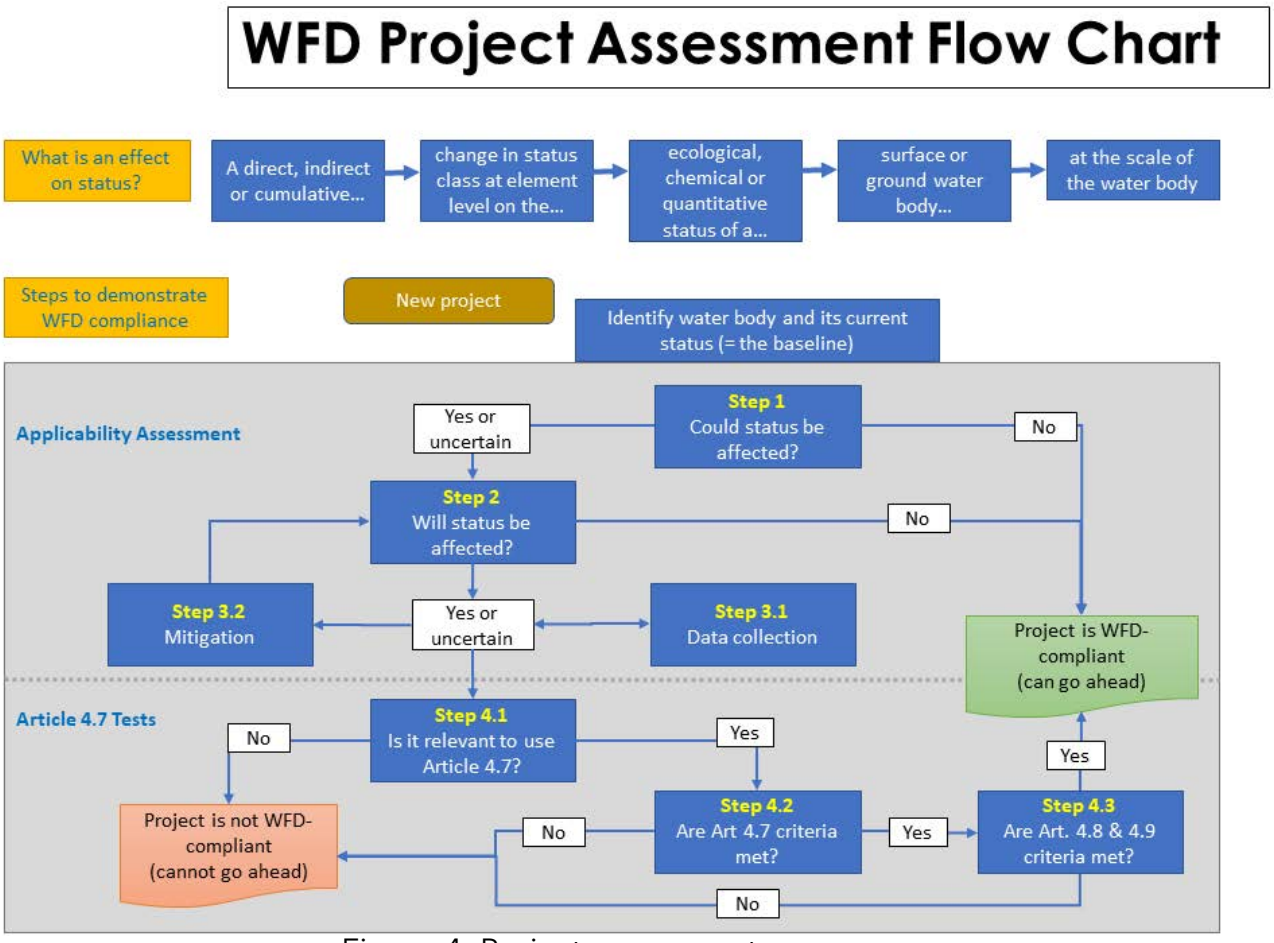


Figure 4: Project assessment process

Member States' internal procedures for determining whether or not the Article 4(7) tests need to be applied may differ from those described in CIS Guidance Document 36 and reflected in this JASPERS' checklist tool. However, the nature of the specific procedure used is less important that its outcomes. This checklist tool, via its links to the CIS Guidance Document 36, represents current good practice in both determining whether (and why) Article 4(7) is applicable and – where appropriate – whether the Article 4(7) tests are met. However, its use is not mandatory.

NOTE TO THE USERS: If the project that is being assessed for Water Framework Directive compliance is relatively straightforward, or where existing supporting information can be referenced, it is possible to use this checklist tool directly by filling in the boxes provided.

Otherwise, it is recommended that a separate document be prepared, using the numbers given below to ensure each step in the process is completed.

STEP ONE: CONTEXT AND SCREENING

Step 1.1 Collate information about the proposed project. Include the project name and location, the alternatives considered and where applicable, other physical modifications to surface water bodies or other activities leading to a change in the level of groundwater that are part of the same overall programme.

Step 1.1

Don't forget!

Note (a) Any new modification or development of the physical characteristics of a surface water body [592] or alteration to the level of groundwater [610] has the potential to affect the status of the water body. This does not mean that Article 4(7) always needs to be applied; rather that evidence is required to demonstrate whether or not status will be affected.

Step 1.2 Which water bodies could potentially be affected by the modification(s), alteration(s) or human activities? Identify all water bodies including upstream and downstream surface water bodies and groundwater bodies. Water body information can be found in the relevant River Basin Management Plan or obtained from the appropriate WFD competent authority.

Step 1.2

Don't forget!

Note (b) All water bodies potentially affected by the project need to be included in the assessment [1021, 1409]. This is important because Article 4(8) does not allow the authorisation of projects that compromise status in water bodies elsewhere (i.e. in cases where the conditions of Article 4(7) are not met for these other water bodies) [1004]

Step 1.3 Record the type and size/scale of each potentially affected water body. Include maps as needed. This is important because any potential effect on a WFD quality element needs to be assessed in the context of the water body [722, 734].

Step 1.3

Step 1.4 List any potentially relevant water-dependent EU protected areas in or adjacent to each water body. Consider the full range of protected area types defined in WFD Annex IV (Directives 2006/7/EC (Bathing Waters); 91/271/EEC (Urban Waste Water Treatment); 91/676/EEC (Nitrates); 2021/2184/EU (Drinking Water); and 92/43/EEC and 2009/147/EC (Nature)). Include maps as needed. Information about protected areas can be obtained from the appropriate WFD competent authority or from the relevant agency.

Step 1.4

Step 1.5 Note the main characteristics of each surface water body, including whether the water body is designated as heavily modified or artificial under Article 4(3). Refer to the River Basin Management Plan to identify and record the main WFD characteristics of groundwater bodies, groundwater-dependent terrestrial ecosystems, relevant wetlands, etc. Provide similar information for potentially affected protected areas.

Step 1.5

Step 1.6 Indicate the current ecological and chemical status[19] of each potentially affected water body (chemical and quantitative status for groundwater bodies [542]). In each water body, record the individual elements that are failing to meet their WFD objectives, including the reasons for failure where known. Pay particular attention to elements that are close to the status class boundary [1085], or are already in the lowest status class [779, 811]. Include the current status of relevant EU protected areas. Information from Step 1.6 will be needed to inform decisions in STEP TWO.

Step 1.6

Don't forget!

Note (c) Deterioration in status can be more likely if an element is already close to a status class boundary (i.e. a relatively small change might trigger a deterioration in status). Further, for elements that are already in the lowest status class, case law [779][20] indicates that any observable or measurable [813, 822] change constitutes deterioration. Information about the current status of the water body can be sourced from the latest River Basin Management Plan, from more recent WFD monitoring (if publicly available) or obtained from the appropriate WFD competent authority.

Step 1.7 Record the future ecological and chemical status objectives for each relevant surface water body (chemical and quantitative status for groundwater bodies). Highlight any exemptions (derogations) already applied to the water body under Article 4(4) or 4(5) and the associated deadlines where relevant. Include similar information for relevant EU protected areas. Information from Step 1.7 will be needed to inform decisions in STEP TWO.

[19] Throughout this checklist, the reference to water body or element level 'status' or to an 'effect on status' should be interpreted as including (effect on) 'potential' if the water body in question is designated as heavily modified or artificial.

[20] See also Cases C–346/14 and C-525/20

Step 1.7

Don't forget!

Note (d) Information about the expected future status of the water body can be sourced from the relevant River Basin Management Plan (RBMP).

Wherever an improvement in status is foreseen, the RBMP should include details about the measures that are proposed to deliver the improvement. Mitigation measures intended to deliver an improvement in ecological potential should also be listed for heavily modified or artificial water bodies.

The RBMP should similarly provide an explanation for any derogations already applied in the water body, for example an extended deadline under Article 4(4) or a less stringent objective under Article 4(5).

Moreover, as demonstrating compliance with relevant plans is often a necessary step in the project authorisation and financing process for EU funded projects, the user of this checklist tool will in any case need to familiarise themselves with the RBMP to be able to elaborate and satisfy this requirement.

Step 1.8 Compile a list of the measures identified in the River Basin Management Plan as being required (or already in place) to ensure that WFD objectives are met in each potentially affected water body. This information will be needed to inform decisions in STEP TWO.

Step 1.8

Step 1.9 Projects can affect the status of a water body alone or cumulatively with other projects, activities or works [1041]. For each water body, identify any other planned, proposed or already under construction projects, activities, etc. that could affect water body status and collate available information noting: the nature and scale of each project/activity; its (proposed) timescales; the main construction and operational characteristics relevant to the potentially affected WFD water bodies; and similar. This information will be needed to inform decisions in STEP TWO.

Step 1.9

Step 1.10 Taking into account the size[21] and current status of each water body, use the Table 1 relevant to the water body type to identify if the proposed project could directly or indirectly [596] affect the ecological or chemical status of a surface water body or the chemical or quantitative status of a groundwater body [542], or compromise the status of a water-dependent EU protected area. In other words, establish whether possible cause-and-effect mechanism(s) exist [1203]. Tables 2 to 9 in CIS Guidance Document 36 provide some useful examples of how WFD status can be affected.

Don't forget!

Note (e) In WFD terminology, an effect on water body status means either [1121]:

- a **deterioration** [508,555] across a status class boundary at the scale of the water body (for example from good to moderate; or from moderate to poor; or from good or pass to fail) of an individual element or substance [776]; or any deterioration if the element is already in the lowest status class [779, 811] OR
- a modification or alteration, which prevents or **compromises the achievement of an improvement in status** [508, 768] at element level [1234] that could otherwise reasonably be expected (e.g. because of measures proposed in the River Basin Management Plan).

❖ Examples: Direct vs. Indirect effects

A new dredge is proposed in a transitional water body. There is a mechanism for a <u>direct</u> effect on depth or on the benthic invertebrates that will be

[21] If the water body has not been properly delineated, it can be difficult to determine whether a project will cause deterioration or affect the ability of the water body to achieve its WFD objective [734]. A precautionary approach should be applied in such cases.

physically removed from the affected area. In addition, however, the deepening could indirectly affect flow characteristics, salinity and intertidal zone structure amongst other elements, with potential consequences for the affected BQEs.

The pipework to abstract water from a river to supply a new irrigation project may involve only a small physical modification with a local effect on benthic invertebrates and aquatic flora. However, the consequential change in flow (hydrology) downstream of the abstraction might indirectly affect fish and, via changes in sediment dynamics (i.e., hydromorphology), benthic invertebrates and aquatic flora over a much larger area.

A new watersports-and-angling centre is proposed in a currently undeveloped (undisturbed) lake. The physical modifications include a slipway to enable boats and watercraft from outside the local area to access the lake. In addition to the direct effects of infrastructure construction, consideration needs to be given to the possible introduction of invasive alien species (IAS) via recreational craft and angling equipment. Whereas the WFD does not focus explicitly on IAS, these clearly have the potential to adversely affect ecological status[22] as is recognised by both the 2030 Biodiversity Strategy and the EU Marine Strategy Framework Directive.

- Examples of activities with the potential to affect water-dependent protected areas, under:
  - Directive 2006/7/EC (Bathing Waters): a new WWTP discharge in vicinity of a bathing water or an infrastructure construction project changing the flow characteristics around an existing outfall
  - Directive 91/676/EEC (Nitrates): a new WWTP discharge or a project supporting new agricultural intensification in or near a Nitrate Sensitive Area or vulnerable zone
  - Directive 2021/2184/EU (Drinking Water): a new WWTP or industrial discharge, or a project supporting agricultural intensification in or near a Drinking Water Protected Area
  - Directives 92/43/EEC and 2009/147/EC (Nature): a project that physically modifies a protected water-dependent habitat or species, or changes hydromorphological processes (flow, erosion, accretion) to the detriment of these habitats or species

- Example: Compromising an expected improvement

A new impounding structure is proposed on a river with an existing but redundant sluice. The RBMP contains a measure to remove this existing sluice, restoring connectivity and enabling the water body to reach good status. The

[22] The 2022-2024 Work Programme of the WFD CIS ECOSTAT Working Group makes provision for additional activities (discussion papers, workshops, etc.) to facilitate information exchange *inter alia* covering invasive alien species.

new structure therefore has the potential to compromise the intended improvement.

Completing the relevant version of Table 1 (rivers, lakes, etc.) for each water body will ensure that all WFD elements are considered in identifying potential effects.

Don't forget!

Note (f) A potential effect on a hydromorphological or physico-chemical parameter may impact on more than one of the biological quality elements. In addition, particular care is required in water bodies already designated as HMWB or AWB to distinguish between the effects of an existing modification and those associated with the proposed change [925].

For each water body, if the completed table confirms that there is no potential causal mechanism, provide the evidence needed to support this conclusion and keep a record of the decision in Box 1.10. Where a project has been modified in some way to avoid effects on status, for example if mitigation measures have been added, the amended proposals should be re-run through STEP ONE **before** confirming this decision.

If Step 1.10 is completed, no further WFD assessment of the project is necessary in that water body.

Step 1.10

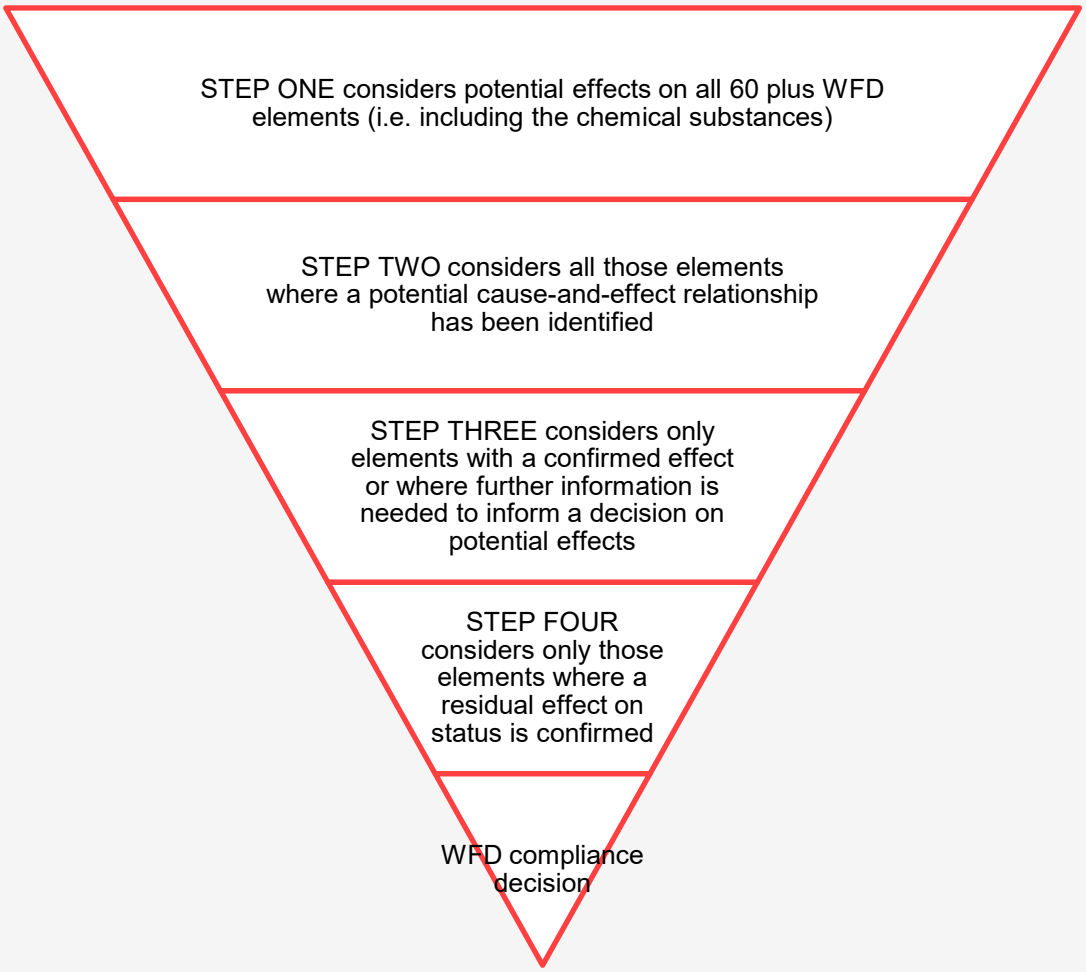
If Step 1.10 has been completed, it may be prudent to consult with the appropriate WFD competent authority(ies) to confirm the conclusion reached in Step 1.10.

Possible Stop Point!!

If a potential causal mechanism(s) is identified, or if it is uncertain whether status would be affected for any of the elements (for example because of proximity to a status class boundary), continue to STEP TWO.

Don't forget!

Note (g) This first step of the Checklist is only a broad filter [1173]. It is designed to 'screen out' projects that will clearly not affect the status of any WFD element at the scale of the water body, or to identify the elements that require further attention. The figure below illustrates how the checklist tool works, with progressively fewer elements requiring consideration at each Step.



❖ Examples: Step one outcomes

It is clear that a new tidal barrage will cause direct and indirect deterioration in the status of several BQEs and hydromorphological supporting elements. **Project continues to STEP TWO.**

There is a lack of data and much uncertainty about the possible effects of a proposed new hydropower project. **Project continues to STEP TWO.**

The pillars (abutments) for a new bridge will be constructed just outside of the area identified as flood plain. No mechanism for a direct or indirect effect on the ecological or chemical status of any water body is identified. The evidence to support this conclusion is recorded and the **project does NOT need to continue to STEP TWO.**

STEP TWO: SCOPE THE ASSESSMENT

Don't forget!

Note (h) STEP TWO is used to determine whether any further assessment is needed and, if so, which WFD elements should be investigated [1212]. If this step is applied sufficiently early in the project development process, it may be possible to combine subsequent WFD-related data collection or investigations with those needed under other instruments (e.g. Environmental Impact Assessment, or Appropriate Assessment under the Habitats Directive).

Step 2.1 For each water body where one or more potential causal mechanisms is identified or where there is uncertainty about whether status would be affected for any of the elements, refer to the completed Table(s) from 1.10. Place a tick in the relevant box(es) in the second column on the equivalent Table 2 to indicate the WFD elements identified in STEP ONE as possibly being affected by the proposed project. Include any implications for EU protected area characteristics.

Step 2.2 Consider the identified possible effects in the context of the information about the water body collated in Steps 1.2 to 1.9 above.

For each of the elements where a potential cause-and-effect relationship has been identified, refer to the relevant Table 2 and answer *all* of the following three questions (i.e. Steps 2.2(i), 2.2(ii) and 2.2(iii)).

Step 2.2(i) Will the effect be *temporary* and not lead to deterioration in the status of the water body?

Don't forget!

Note (i) The application of the Article 4(7) tests may not be needed if the status of a WFD element is affected only temporarily, without leading to a deterioration in the status of the water body, and if recovery is expected within a short period of time (either naturally or as a result of the implementation of mitigation measures [675]).

Temporary effects associated with the construction or establishment of the modification or there is no deterioration in the status of the element is expected. For major development projects where implementation will take

place over several years, however, it is strongly recommended that effects associated with project construction or establishment should be considered as 'long term'.

If the effects on the status of an element are expected to be permanent or to persist over a long period of time, the Article 4(7) tests may need to be applied to the project.

'Short' and 'long' periods of time are not defined in the CIS guidance but case law[23] has since determined that such decisions must be project- or activity-specific, and that temporary effects can be disregarded only if they do not lead to deterioration. Furthermore, the case law confirms that the monitoring frequency of WFD elements cannot be used as an indicator of whether a temporary effect may lead to deterioration. *It is anticipated that CIS Guidance Document 36 endorsed by Water Directors in December 2017 will need to be updated to reflect this ruling*.

Determining whether the status of the water body could deteriorate as the result of a temporary impact also requires consideration of the questions set out in Steps 2.2(ii) and 2.2(iii).

❖ Examples: Temporary effects

Existing models together with monitoring results from a previous dredge confirm that the increased levels of suspended sediment concentrations generated during a week-long dredging campaign will not exceed the relevant threshold and will revert to background concentrations within days of completing the dredge without leading to a deterioration in status class. **Conclusion:** the effect on the transparency supporting element is temporary

A river will be dredged and straightened to improve flood conveyance. Conclusion: the purpose of the project is to modify the hydromorphology of the river and the effect on several BQEs and hydromorphological supporting elements is NOT temporary

Whilst the demolition of a breakwater will take only a few days, the release of sediment trapped in the lee of the structure could lead to the smothering of seagrass beds in the vicinity, with potential long-term consequences**.** **Conclusion:** the potential effect on the angiosperms BQE may NOT be temporary; there may be deterioration

[23] Judgment of the Court (Second Chamber) of 5 May 2022. Association France Nature Environnement v Premier ministre and Ministre de la Transition écologique et solidaire.Case C-525/20.

Construction of a major road tunnel will involve the extensive drawdown of groundwater over a period of years. There is uncertainty over how long water level recovery will take.
Conclusion: It cannot be concluded that there will be no deterioration in the level of the groundwater body.

Major works aiming at protection against coastal erosion are planned to extend beyond a current RBMP planning cycle. The works will have adverse effects on macroinvertebrates. These species will recover naturally but the expected recovery period of several years is also likely to extend beyond the current planning cycle under the WFD.
Conclusion: the effect on the BQE benthic invertebrate fauna is NOT temporary.

Step 2.2(ii) Will the effect be insignificant in the context of the water body?

Don't forget!

Note (j) Particularly for the biological quality elements, the spatial characteristics of the element within the context of the water body need to be taken into account in determining whether an effect is insignificant at the scale of the water body [726]. Especially in large water bodies, the effects of a project may be relatively local in extent. A decision on whether such local effects are insignificant in the context of the water body can only be made with certainty if information about the locations of BQE species or their supporting habitats is also available. If there is uncertainty, it should not be concluded that effects are insignificant.

And remember:
It is the scale of the impact (e.g. changes to the flow regime (quantity), sediment dynamics (erosion, deposition, suspended sediment plume), saline intrusion extent) rather than only the physical footprint of the works, that determines whether or not status could be affected
Establishing whether a temporary impact may cause deterioration also requires consideration of the significance of the impact in the context of the water body, including cumulatively with other potential impacts (see below).

Don't forget!

Note (k) Even if it is demonstrated that a local effect will not affect WFD status at water body level, the same impacts may nonetheless still be important in the context of the Environmental Impact Assessment (and vice versa).

❖ Examples: Insignificant in the context of the water body

A 30 km^2 coastal water body currently has 350 ha of saltmarsh. A new flood embankment will lead to the direct loss of 0.8 ha of this saltmarsh. No other effects are identified.
Conclusion: the effect on the angiosperms BQE is insignificant in the context of the remaining saltmarsh within the water body (*but note this same loss is not necessarily also insignificant in Habitats Directive terms)

A 30 km^2 coastal water body currently has 1.5 ha of saltmarsh. A new flood embankment will lead to the direct loss of 0.8 ha of this saltmarsh. More than half of the existing saltmarsh will therefore be lost. Leaving aside the additional consideration of whether the remaining saltmarsh area may now be exposed to increased rates of erosion, this represents a significant impact.
Conclusion: the effect on the angiosperms BQE (deterioration) is NOT insignificant in the context of remaining saltmarsh within the water body.

A dredging and reclamation project over a 2km frontage in a small transitional water body will result in the permanent loss of 30% of the remaining mudflat and the temporary disturbance of a further 1%.
Conclusion: while the significance of the temporary disturbance is likely to require further investigation, it is already clear that the deterioration of the benthic invertebrates BQE associated with the permanent loss is NOT insignificant in the context of the water body.

Pipework for the abstraction of water to supply a new irrigation scheme might physically impact on only a very small part of a water body, but the indirect consequences for the water body and downstream water bodies can be significant if reduced flow rates impact on downstream ecology either directly because of changes in hydrology or indirectly (e.g. through modified sediment dynamics/hydromorphology).
Conclusion: the potential deterioration of several BQEs and supporting elements is NOT insignificant in the context of the potentially affected water bodies.

Step 2.2(iii) Can it be concluded that there are no potential cumulative effects?

Don't forget!

Note (l) Whereas a modification, alteration or development, on its own, might not affect water body status, it is possible that two or more components in the same programme of works, or two or more different projects, might cause deterioration or affect the ability of the water body to achieve its WFD objectives. Potential cumulative effects are also an important consideration in understanding the significance of temporary impacts. The information

collated in Step 1.9 should therefore be used to determine whether there is the potential for cumulative effects [1041] on water body status.

For projects that potentially affect a water body in several locations (e.g. a road or railway running along a river corridor) the cumulative impacts assessment should start with potential upstream effects and progress downstream.

For projects within their scope, the outputs of a Strategic Environmental Assessment or an EIA respectively may help in the understanding of such effects [1652].

If insufficient information is available to conclude whether or not cumulative effects might affect the status of one or more water bodies, further investigations will be required in STEP THREE.

❖ Example: Cumulative effects

The construction of an off-line water storage area is unlikely, alone, to affect the status of aquatic flora at the scale of the water body. However, a new bridge is being constructed less than 2km upstream. **It cannot be concluded that there are no cumulative effects, so further data collection is needed**

Where the answer to <u>all</u> of the above questions is 'yes' for a potentially affected element, no further assessment is necessary for that element. The same conclusion can be drawn when an effect is not temporary but it is nonetheless confirmed to be insignificant in the context of the water body, and no cumulative effects are identified.

Similarly, if there are no implications for a water-dependent EU protected area, no further assessment of that protected area is needed.

In all cases where is it concluded that no further assessment is needed, evidence to support the conclusion should be provided and a record kept of the decision.

If none of the elements require further assessment, record this conclusion along with the necessary supporting evidence in Box 2.2. If Box 2.2 is completed, no further WFD assessment of the project is necessary.

Note, however, that if the project has been modified in some way (e.g. to avoid effects on status by adding mitigation measures), the amended proposals must be re-run through STEP TWO **before** confirming this decision.

Step 2.2

If Box 2.2 has been completed, it may be prudent to consult with the appropriate WFD competent authority(ies) to confirm the conclusion reached in Step 2.2.

Possible stop point!!

For any water body where Table 2 identifies a potential effect on the status of one or more elements including through possible cumulative effects, or where there is uncertainty, or where there is the potential for the proposed project to compromise the achievement of water-dependent EU protected area objectives, continue to Step 2.3.

Step 2.3 Use the outputs from 2.1 and 2.2 to establish the scope of the data collection or investigation needed to inform decisions on WFD-compliance [1212]. Consider how data might be collected and evaluated, or which modelling or evaluation methods might be appropriate, and use this information to define the scope of the required activity. If no additional data collection or further information is necessary (i.e. the project's effects on status are already clearly understood) proceed directly to Step 3.1.

Step 2.3

Don't forget!

Note (m) The level of detail of further data collection or investigations should be proportionate to the anticipated risk [1098].

Step 2.4 Confirm that the scope of the required WFD data collection or investigation has been agreed with the appropriate WFD competent authority.

Step 2.4

Step 2.5 Refer to Figure 5 in CIS Guidance Document 36 [1292] and consider whether the necessary data can be collected as part of another assessment – for example an Environmental Impact Assessment (EIA) [1295] or an assessment under the EU Habitats Directive [1344] or vice versa.

Then continue to STEP THREE.

Don't forget!

Note (n) In situations where a project falls below the relevant EIA 'threshold' meaning that an EIA is not being carried out, a dedicated but proportionate WFD project compliance assessment may still be needed.

Don't forget!

Note (o) The WFD is concerned with water-dependent, EU protected areas. However, if potential impacts on an EU protected area are properly assessed as part of the EIA, it is unlikely that further additional work will be required to satisfy the WFD. Early discussions about the scope of the EIA should therefore help to ensure its adequacy in this respect. The same applies to Habitats Directive assessments covering water-dependent features in protected areas. As long as such assessments have been scoped with the WFD requirements in mind, additional WFD-specific work may not be needed.

STEP THREE: FURTHER DATA COLLECTION OR INVESTIGATIONS AND MITIGATION

Don't forget!

Note (p) The WFD 'significance tests' used to determine whether status will be affected (see Note (e)) are subtly different from those for EIA or Habitats Directive assessments. Local effects deemed significant in EIA or Habitats Directive terms are not necessarily also significant under the WFD [1281], but in other cases small changes that are deemed negligible or insignificant in EIA terms can lead to a change in WFD status class (see Note (c)).

If data are to be collected or investigations undertaken as part of another assessment, care must therefore be taken to ensure they are 'fit-for-purpose' in WFD terms.

Step 3.1 Undertake any new data collection and/or commission the further investigation(s).

- Examples of additional data collection potentially needed to demonstrate wfd compliance

Notwithstanding the expectations set out in the Directive, BQE data for the affected water body are inadequate. The outcomes from Steps One and Two thus highlight several uncertainties associated with data gaps, including determining whether identified temporary impacts could lead to deterioration. The ongoing scoping for the project EIA and the Habitats Directive assessment offers an important opportunity for a combined baseline data collection exercise to address these gaps.

A project will lead to the loss of around 1 ha of saltmarsh, but there is little information about saltmarsh elsewhere in the extensive coastal water body. Before a decision can be reached on the significance of the expected project-related loss, data therefore needs to be collected to establish the extent and quality of the saltmarsh resource at the scale of the water body.

Step Two identifies a potential indirect impact on benthic invertebrate fauna and fish fauna due to changes in flow characteristics downstream of the proposed project but this potential impact on the downstream water body was not covered in a previously prepared EIA. Furthermore, no WFD monitoring of benthic invertebrates has been carried out in the downstream water body. Two investigations are therefore needed as part of Step Three: baseline data collection to establish the current status of benthic invertebrates; and hydromorphological modelling to identify the location, extent and significance of any post-project changes in erosion or deposition.

Step Two identifies the potential for a cumulative effect of Project A with another proposed project, Project B, in the same water body. The EIA and WFD compliance studies for Project B were completed one year ago, before Project A was elaborated. Project A on its own is not expected to affect water body status, but further investigations are required in order to establish whether there might be a cumulative effect on status and, if so, to explore possible mitigation measures.

Receive and review any such outcomes (alongside already available information) to understand:

Could the project have an effect on the status of one or more of the WFD elements at the scale of the water body?
Is the project expected to have an adverse effect on the water-dependent features of relevant EU protected area objectives?
Are significant cumulative effects on status possible?

If the answer to all of these questions is 'no' record this conclusion in Step 3.1 along with the necessary supporting evidence. If Box 3.1 is completed, no further WFD assessment of the project is necessary and the Article 4(7) tests do not need to be applied [1245].

Refer to Section 4.4 in Part I of the document if Step 3 identifies that a residual deterioration in the status of a hydromorphological supporting element is likely to trigger the application of Article 4(7).

Step 3.1

If Step 3.1 has been completed, it may be prudent to consult with the appropriate WFD competent authorities to confirm the conclusion reached in Step 3.1.

Possible stop point!!

Step 3.2 Where potential effects on the status of one or more WFD elements are identified, including possible cumulative effects, consider whether proven and effective mitigation measures [1432] can be integrated into the project design so as to avoid, minimise, reduce or offset the risk of the identified effect on status

(see Figure 5). Record the measures thus identified and provide evidence to explain how they will be implemented as part of the project.

Step 3.2

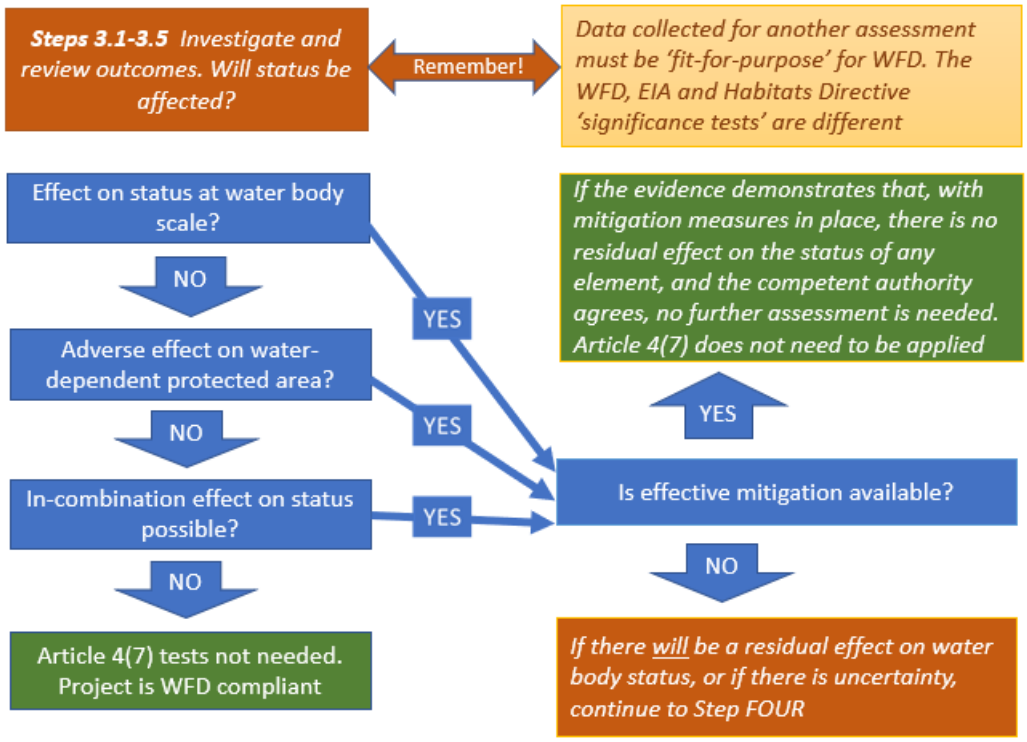


Figure 5: The important role of mitigation measures

Don't forget!

Note (q) Mitigating potential effects on water body status is a critical step for WFD compliance, but there are some subtle yet important differences between mitigation measures under the WFD and those required under other Directives.

The WFD does not differentiate between mitigation and compensation. There is no equivalent in the WFD of the requirement under Article 6(4) of the Habitats Directive to compensate for a residual effect; rather, if the Article 4(7) tests are met, the WFD accepts that there will be a residual effect [1461].

In the WFD, the objective of mitigation is only to avoid or reduce the identified possible effect on the status of a WFD element [1440]. Offsetting or compensatory measures, including measures taken in another water body [1499], could therefore be used for mitigation purposes as long as the outcome is to mitigate the effect on the water body in which the possible need to apply the Article 4(7) tests is being considered.

Mitigation measures will not necessarily be hydromorphological in nature [1514]. Operational or management changes may be used to reduce or eliminate an impact.

Notwithstanding the above, when options for mitigation are being evaluated, the mitigation hierarchy should be applied [1472], with measures taken on-site to avoid or reduce the problem being prioritised over rehabilitation on- or off-site. Offsetting measures can be used but other options should always be explored first.

In WFD terms, taking all practicable steps to mitigate an effect means that mitigation measures should be technically feasible, not disproportionately costly, and compatible with the proposed modification, alteration or sustainable use [1492]. The adaptive management concept (i.e. implementing mitigation measures in response to monitoring outcomes) can provide a useful way forward in situations where there is residual uncertainty about the precise implications of a modification or alteration, or about the adequacy of the proposed mitigation measures [1577]. An adaptive management approach to mitigation may also be useful in cases where the uncertainty is linked to climate change.

In some cases, the implementation of mitigation measures may mean that a project results in a net (overall) improvement in the status of one or more WFD elements, in turn contributing to the WFD objective to enhance protection and improve the aquatic environment for this element. Such opportunities should always be acknowledged and exploited as they can add value to a project. They may also be useful if the Article 4(7) tests need to be applied because of residual adverse effects on other elements - for example they may be mentioned as part of the balancing test described in Step 4.4.

❖ Example: Offsetting measure

Even with a screen in place, a new water intake will have a small residual adverse effect on fish mortality. An opportunity exists to enhance nursery habitat for this species in an upstream water body. The offsetting mitigation measure will deliver an overall increase in fish populations in the affected water body even though some individuals may still be entrained.

❖ Examples: Adaptive management

A newly developed seed product is to be trialled. The establishment of vegetation will be carefully monitored. If monitoring identifies that the new method is not performing satisfactorily, proven seedling planting techniques will also be used to ensure that deterioration is avoided.

Ecologically sensitive resources exist within 2 km of a capital dredging project. Modelling investigations indicate it is unlikely the plume will affect these resources, but real-time techniques will be used to monitor suspended sediment levels. If an agreed threshold is exceeded, dredging will temporarily be stopped. If the threshold is exceeded too frequently, a change to a less productive dredging method that generates less suspended sediment will be required to ensure deterioration is avoided.

Step 3.3 With mitigation measures in place, can it be concluded with sufficient certainty [572] that the project will not cause deterioration or compromise the achievement of good status[24]? If the project will result in a net improvement in the status of certain elements, this can also be noted here.

Step 3.3

Don't forget!

Note (r) 'Sufficient certainty' is not defined in the CIS guidance; rather this decision should be made in collaboration with the appropriate WFD competent authority and should be based on sound science with expert judgement where appropriate.

Step 3.4 Confirm that the appropriate WFD competent authorities agree with the conclusion from Step 3.3 about whether or not the status of the water body will be affected.

Step 3.4

[24] Refer to Section 4.4 of Part I if the only residual effect(s) likely to trigger the application of Article 4(7) concerns the deterioration in the status of a hydromorphological supporting element

Step 3.5 If the appropriate WFD competent authorities agree that there will be no adverse effect on the status of the water body, record this conclusion in Box 3.5 and provide the necessary supporting evidence. If Box 3.5 is completed, no further WFD assessment of the project is necessary and the Article 4(7) tests do not need to be applied. Otherwise continue to STEP FOUR.

Step 3.5

Possible stop point!!

- Examples: There will be no effect on status so the article 4(7) tests do not need to be applied

A port fairway is to be deepened from 11.0m to 12.5m over 6 km in a 70 km^2 coastal water body. Effects on the 'transparency' supporting element are shown to be temporary and these will not result in a deterioration in status; the effects on hydrology and morphology are insignificant in the context of the water body. In STEP THREE, data collection on sediment quality and a study of the possible implications for a European protected area both confirm no effect on status. All the identified effects are thus local or temporary, without any effect on water body status**.**
Conclusion: the project can be authorised; the Article 4(7) tests do not need to be applied.

A new WWTP will involve a direct, point source discharge into a large coastal water body currently at good status. The STEP THREE data collection shows that the proposed level of treatment and the scale of the water body combine to mean no change in WFD status is expected**.**
Conclusion: the project can be authorised; Article 4(7) is not relevant.

A new WWTP is proposed in a water body that is currently at poor status because of the discharge from an existing WWTP nearby. Once the new WWTP is constructed, this old treatment plant will be decommissioned Notwithstanding that the new facility will treat effluent from a larger number of households, the intended level of treatment is such that there will be an overall improvement in status. The physical modification required for the new outfall structure is insignificant in the context of the 12km long water body and the new works will not affect the status of the water body in any other way.
Conclusion: the project can be authorised; Article 4(7) is not relevant.

STEP FOUR: THE ARTICLE 4(7) TESTS

Don't forget!

Note (s) The Article 4(7) exemption can only be applied if WFD ecological status will be affected as a result of new modifications to the physical characteristics of a surface water body, or if alterations to the level of a groundwater body will affect its status, or if chemical status will be indirectly affected by such changes, or if new sustainable human development activities will cause deterioration from high to good status [662]. Projects not meeting at least one of these criteria may not be authorised [757], so early discussion with the appropriate WFD competent authority is recommended in such cases.

As explained in Section 4.5 of Part I, Article 4(7) cannot be applied to a project involving a new (i.e. point source or diffuse) input of pollutants other than in high status water bodies in accordance with the second provision of Article 4(7).

Step 4.1 Is it relevant to apply the Article 4(7) tests [1373]? If no, record the reasons supporting this decision in Step 4.1. If Step 4.1 is completed, this will usually indicate that the project does not comply with the requirements of the WFD. In this case it is unlikely that the project will be able to go ahead.

Step 4.1

Possible stop point!!

- Example: There will be an effect on status but the article 4(7) exemption cannot be used

A new WWTP involving a direct, point source discharge into a surface water body that is currently at moderate status will cause a deterioration to poor status. This deterioration is the result of the discharge, not of a new physical modification or an alteration to the level of groundwater..
Conclusion: the Article 4(7) exemption cannot be used.

A project will lead to a change in temperature, salinity or another physico-chemical supporting element (for example a proposed discharge into a water

body may affect its temperature). This situation could be covered by an Article 4.7 exemption only if it is shown to be a sustainable development leading to a change from high to good status.

Conclusion: the Article 4(7) exemption cannot be used in other situations where there would be deterioration to below good in a physico-chemical supporting element with the potential to affect associated BQEs**.** There is no exemption route if a project would cause a deterioration from (say) moderate to poor status.

Don't forget!

Note (t) Decisions on the applicability or otherwise of Article 4(7) will be site-specific. If mitigation measures can be designed-in to a project such that there will be no measurable or observable residual effect on the status of any element at water body level, Article 4(7) will not need to be applied [1535]. In cases where there is significant uncertainty, however, the Article 4(7) tests should be applied [1111].

If Article 4(7) does need to be applied, *all four tests must be met:*

- all practicable **mitigation measures** are in place
- the reasons for the modification or alteration are set out in the relevant River Basin Management Plan (or it can be demonstrated that the proposed project has been subject to at least as much **public consultation** as is the case for the RBMP and the project will be reported in the next RBMP)
- the modification or alteration can be demonstrated to be of **overriding public interest**, **or** its benefits to human health, safety or sustainable development can be shown to outweigh the benefits of maintaining or improving water body status (a **balancing test)**
- it can be demonstrated that there are no technically feasible and not disproportionately costly **alternatives** that are **significantly better** from an environmental perspective.

If it is necessary and relevant to apply the Article 4(7) tests, continue to Step 4.2[25].

Step 4.2 Identify and record any additional practicable mitigation measures that could be applied to the modification, alteration or sustainable new development in order to reduce or eliminate the expected effects on status. The identification of mitigation measures is often an iterative process [1552], therefore if additional mitigation measures are identified in Step 4.2, return to Step 3.2 of this checklist. Otherwise confirm that no such measures exist and continue to Step 4.3.

[25] As explained in CIS Guidance Document 36 [1395], for practical reasons the order of application of the tests from 4.2 to 4.5 inclusive does not strictly follow the order of the text in the Directive

Step 4.2

Step 4.3 Could the project objectives be achieved by alternative means that are technically viable, not disproportionately costly and represent a significantly environmentally better option [1616]? Provide evidence to support the arguments used. If a significantly environmentally better alternative is identified, record this in Box 4.3 and return to Step 1.10. Otherwise confirm that no such alternatives exist and continue to Step 4.4.

Step 4.3

Don't forget!

Note (u) Alternatives need to be considered at a strategic level as well as at the level of the project or its components. As with the requirements under other Directives, alternative solutions as well as alternative locations, designs, methodologies or processes should be considered.

For projects under their scope, the outputs of a Strategic Environmental Assessment [1652] or an EIA [1625] may help in the identification of alternatives. However, note that in the specific case of the WFD, the focus is on determining whether an option exists that is *significantly* better from an environmental perspective.

Don't forget!

Note (v) Disproportionality is a judgement, which has a political, technical and social dimension, and is informed by economic information and analysis of costs and benefits [1628].

Step 4.4 Are there reasons of overriding public interest why the modification, alteration or use should go ahead [1678] and/or do the benefits of the proposed project to human health, human safety or sustainable development outweigh the benefits that would otherwise be delivered by achieving the objectives of

the WFD (the balancing test [1733])? Provide evidence to support the arguments used.

Step 4.4

Don't forget!

Note (w) Overriding in this case means that the benefits of the project are shown to override the achievement of the relevant WFD objectives [1682]. A simple statement is unlikely to sufficient to demonstrate that public interest is overriding: rather a well-grounded, evidence-based assessment informed by broad and transparent discussions will usually be needed [1720].

Don't forget!

Note (x) The balancing test [1733] can be especially useful in cases where most effects have been mitigated but the residual effects on the status of a WFD element represent a potential 'showstopper'. Agreeing on the specific WFD benefit that will be foregone if the project is progressed (i.e. understanding the nature and relative magnitude of the residual effect that triggered the application of the Article 4(7) tests) and comparing this to the benefits to human health, safety and/or sustainable development [1750] expected to result from the proposed modification or alteration, can help in reaching a common understanding.

Assessing different types of costs and benefits is not only a monetary exercise [1764]. A proportionate mix of qualitative, quantitative and monetised information, supported by expert judgement, will often be needed to inform a judgement for the balancing test.

Don't forget!

Note (y) Throughout the application of the Article 4(7) tests, the analysis should be as simple and clear as possible but at the same time as detailed and comprehensive as necessary to reach reasonable results [1382]. In other words, the analysis should be proportionate to the level of risk associated with the project.

Step 4.5 Article 4(7) anticipates that the reasons for the modification, alteration or deterioration due to a new sustainable development should be set out and explained in the River Basin Management Plan. This is a reporting requirement, which it may be possible to meet retrospectively as long as the project has been subject to an equivalent level of public consultation as the RBMP, for example

as part of an EIA [1801]. In the latter case, a short WFD-specific consultation exercise may be a necessary or useful supplementary exercise.

If the proposed project is not already explained in the RBMP, record how this obligation has been or will be met.

Step 4.5

Don't forget!

Note (z) If a project fails the Article 4(7) tests it cannot be authorised.

❖ Examples: there will be an effect on status and the article 4(7) tests are met

A new flood defence scheme will affect morphology (the depth and substrate supporting elements) and hydrology (the flow supporting element) in a populated area over 10 km in a 30 km river water body. There will be permanent consequences for aquatic flora and fauna. The Article 4(7) tests therefore need to be applied. All possible mitigation options are considered, including upstream measures and floodplain reconnection, and it is confirmed there are no additional practicable measures. It is satisfactorily demonstrated that no significantly environmentally better alternative exists. An extended cost benefit analysis, undertaken with the proper involvement of stakeholders [1721], supports the argument that improved flood protection to the safety of a city of 45,000 people represents an overriding public interest.
Conclusion: the Article 4(7) tests are applied and are met.

An extensive programme of measures including ecological enhancement works will mitigate the effects on WFD status of a major coastal erosion control project. However, the implementation of the full programme of works will take several years and there is uncertainty about ecological recovery timescales. This uncertainty triggers application of the Article 4(7) tests. No additional mitigation measures or significantly environmentally better alternatives are identified, and the balancing test demonstrates that the benefits of the coast protection clearly outweigh the possible delay in the return to WFD good ecological status.
Conclusion: the Article 4(7) tests are applied and are met.

A new wastewater treatment plant (WWTP) involves a direct, point source discharge into a high status surface water body. The STEP THREE data collection shows that, with an appropriate level of treatment, the water body will deteriorate to good status but not below. Article 4(7) can be used. All practicable mitigation measures are in place, there is no significantly

environmentally better option (such as discharging into a larger river where status might not be affected at all) and the benefits to human health outweigh the deterioration to good status.
Conclusion: the Article 4(7) tests are applied and are met.

❖ Examples: there will be an effect on status and the article 4(7) tests are not met

Even with mitigation measures in place, it is concluded that a small hydropower project will cause the deterioration of a river water body because of residual effects on the status of the continuity (hydromorphological) supporting element and the fish BQE. Although not within the ownership of the project promoter, there are several other possibilities to develop small hydropower facilities on nearby water bodies of less importance for a key species of migratory fish, so significantly environmentally better alternatives do exist. Further, although renewable energy is a priority policy of the Member State Government, the small scale of the project relative to its implications for WFD status means that neither overriding public interest nor a favourable outcome of the balancing test can be demonstrated**.**
Conclusion: the tests are not met so the Article 4(7) exemption cannot be used.

A proposed new irrigation scheme would abstract water from a river just upstream of a catchment and administrative boundary. Typical flows in the river have already been substantially reduced as a result of similar abstractions further upstream. Investigations in STEP THREE identify that, even with mitigation measures in place, there would be implications for downstream flow rates (hydrology) and sediment dynamics (morphology). Discussions with the competent authority in the neighbouring catchment confirm that such changes would adversely impact on aquatic plants and fish downstream of the abstraction point.
Conclusion: the tests are not met so the Article 4(7) exemption cannot be used. Furthermore, the proposal would likely fail the requirements of Article 4(8).

❖ Examples: other situations

STEPS ONE to THREE confirm that construction of a road tunnel will both affect the level of the groundwater body (through drawdown) and impact on a groundwater-dependent terrestrial ecosystem (via changes in mineral content due to flow / changes in residency times). In addition, some realignment of a river water body is required at the tunnel entrance, with residual effects on hydrology, morphology and several BQEs.
Conclusion: even though this is not a 'water' project, the Article 4(7) tests need to be applied.

A new WWTP will involve a direct, point source discharge into a watercourse that is typically dry during the summer months. The assessment identifies several potential effects on status, related to hydrology (introduction of year-round

flow); ecology (species that are adapted to or depend on a dry environment for part of the year); and the introduction of contaminants affecting the WFD physico-chemical supporting element.
Conclusion: the Article 4(7) exemption can be used only if the deterioration is from high to good status. In other cases, while advice may be sought from the appropriate WFD competent authority, it is likely that the non-deterioration principle will apply.

Step 4.6 Even if the Article 4(7) tests are met, Articles 4(8) and 4(9) of the WFD [519] indicate that the Article 4(7) exemption can only be used if its application:

does not permanently exclude or compromise the achievement of WFD objectives in other water bodies in the same river basin district, and
is consistent with the implementation of other European Community legislation [1004], and
guarantees at least the same level of protection as other existing European Community legislation [390].

Confirm that this is the case (and provide supporting evidence) and/or describe any issues raised by this requirement.

Step 4.6

Step 4.7 Does the project pass all four Article 4(7) tests and the Articles 4(8) and 4(9) tests? If no, record the reasons in Box 4.7. If Box 4.7 is completed, this will usually indicate that the project does not comply with the requirements of the WFD. In this case it is unlikely that the project will be able to go ahead: the conclusion should therefore be discussed with all the involved WFD competent authorities.

Step 4.7

Step 4.8 If all the involved WFD competent authorities agree that the necessary tests are met, record this conclusion in Box 4.8 below along with the necessary

supporting evidence. If Box 4.8 is completed, it can be concluded that the project is WFD compliant.

Step 4.8

Table 1a WFD compliance assessment cause-and-effect mechanisms (Rivers)

WFD elements[26]	Is there a possible causal mechanism for a direct effect on…? Yes / No / Uncertain Notes (a)(c)(e)(g)[27]	Is there a possible causal mechanism for an indirect effect on…? Yes / No / Uncertain Notes (a)-(c) and (e)-(g)[28]
Hydromorphological supporting elements		
Hydrology: quantity and dynamics of flow	Yes	Yes
Hydrology: connection to groundwaters	Yes	Yes
River continuity	Yes	Yes
Morphology: river depth and width	Yes	Yes
Morphology: river bed structure, substrate	Yes	Yes
Morphology: riparian zone structure	Yes	Yes
Physico-chemical supporting elements		
Thermal conditions	Yes	Yes
Oxygenation	Yes	Yes
Salinity	Yes	Yes
Acidification	Yes	Yes

[26] The text in column 1 could be colour-coded blue-green-yellow-orange-red (or using the relevant Member State convention if different) to identify the current status of each element.
[27] The scale or significance of any effect is not relevant at this step: the only question is whether a potential causal mechanism exists.
[28] The scale or significance of any effect is not relevant at this step: the only question is whether a potential causal mechanism exists.

Nutrient conditions	Yes	Yes
Specific synthetic pollutants[29]	Yes	Yes
Specific non-synthetic pollutants[30]	Yes	Yes
Biological quality elements		
Phytoplankton	Yes	Yes
Macrophytes and phytobenthos	Yes	Yes
Benthic invertebrate fauna	Yes	Yes
Fish fauna	Yes	Yes
Chemical status - see Directive 2008/105/EC amended by 2013/39/EU		
Priority substances	Yes	Yes
Priority hazardous substances)	Yes	Yes
EU protected areas (see WFD Annex IV)		
(…list all relevant areas)		

For each element where the answer is recorded 'yes' or 'uncertain', <u>proceed to STEP TWO</u>

[29] Refer to Footnote 3 in Part I, Section 3.2
[30] Refer to Footnote 3 in Part I, Section 3.2

Table 1b WFD compliance assessment cause-and-effect mechanisms (Lakes)

WFD elements[31]	Is there a possible causal mechanism for a direct effect on…? Yes / No / Uncertain Notes (a)(c)(e)(g)[32]	Is there a possible causal mechanism for an indirect effect on…? Yes / No / Uncertain Notes (a)-(c) and (e)-(g)[33]
Hydromorphological supporting elements		
Hydrology: quantity and dynamics of flow	Yes	Yes
Hydrological regime: residence time	Yes	Yes
Hydrology: connection to groundwaters	Yes	Yes
Morphology: depth	Yes	Yes
Morphology: quantity, structure, substrate (bed)	Yes	Yes
Morphology: structure of shore	Yes	Yes
Physico-chemical supporting elements		
Transparency	Yes	Yes
Thermal conditions	Yes	Yes
Oxygenation	Yes	Yes

[31] The text in column 1 could be colour-coded blue-green-yellow-orange-red (or using the relevant Member State convention if different) to identify the current status of each element.
[32] The scale or significance of any effect is not relevant at this step: the only question is whether a potential causal mechanism exists.
[33] The scale or significance of any effect is not relevant at this step: the only question is whether a potential causal mechanism exists.

Salinity	Yes	Yes
Acidification	Yes	Yes
Nutrient conditions	Yes	Yes
Specific synthetic pollutants[34]	Yes	Yes
Specific non-synthetic pollutants[35]	Yes	Yes
Biological quality elements		
Phytoplankton	Yes	Yes
Macrophytes and phytobenthos	Yes	Yes
Benthic invertebrate fauna	Yes	Yes
Fish fauna	Yes	Yes
Chemical status - see Directive 2008/105/EC amended by 2013/39/EU		
Priority substances	Yes	Yes
Priority hazardous substances	Yes	Yes
EU protected areas (see WFD Annex IV)		
(…list all relevant areas)		

For each element where the answer is recorded 'yes' or 'uncertain', proceed to STEP TWO

[34] Refer to Footnote 3 in Part I, Section 3.2
[35] Refer to Footnote 3 in Part I, Section 3.2

Table 1c WFD compliance assessment cause-and-effect mechanisms (Transitional waters)

WFD elements[36]	Is there a possible causal mechanism for a direct effect on…? Yes / No / Uncertain Notes (a)(c)(e)(g)[37]	Is there a possible causal mechanism for an indirect effect on…? Yes / No / Uncertain Notes (a)-(c) and (e)-(g)[38]
Hydromorphological supporting elements		
Morphology: depth variation	Yes	Yes
Morphology: bed structure, substrate	Yes	Yes
Morphology: intertidal zone structure	Yes	Yes
Tidal regime: freshwater flow	Yes	Yes
Tidal regime: wave exposure	Yes	Yes
Physico-chemical supporting elements		
Transparency	Yes	Yes
Thermal conditions	Yes	Yes
Oxygenation	Yes	Yes
Salinity	Yes	Yes
Nutrient conditions	Yes	Yes
Specific synthetic pollutants[39]	Yes	Yes

[36] The text in column 1 could be colour-coded blue-green-yellow-orange-red (or using the relevant Member State convention if different) to identify the current status of each element.
[37] The scale or significance of any effect is not relevant at this step: the only question is whether a potential causal mechanism exists.
[38] The scale or significance of any effect is not relevant at this step: the only question is whether a potential causal mechanism exists.
[39] Refer to Footnote 3 in Part I, Section 3.2

Specific non-synthetic pollutants[40]	Yes	Yes
Biological quality elements		
Phytoplankton	Yes	Yes
Macroalgae	Yes	Yes
Angiosperms	Yes	Yes
Benthic invertebrate fauna	Yes	Yes
Fish	Yes	Yes
Chemical status - see Directive 2008/105/EC amended by 2013/39/EU		
Priority substances	Yes	Yes
Priority hazardous substances	Yes	Yes
EU protected areas (see WFD Annex IV)		
(…list all relevant areas)		

For each element where the answer is recorded 'yes' or 'uncertain', proceed to STEP TWO

[40] Refer to Footnote 3 in Part I, Section 3.2

Table 1d WFD compliance assessment cause-and-effect mechanisms (Coastal waters)

WFD elements[41]	Is there a possible causal mechanism for a direct effect on…? Yes / No / Uncertain Notes (a)(c)(e)(g)[42]	Is there a possible causal mechanism for an indirect effect on…? Yes / No / Uncertain Notes (a)-(c) and (e)-(g)[43]
Hydromorphological supporting elements		
Morphology: depth variation	Yes	Yes
Morphology: bed structure, substrate	Yes	Yes
Morphology: intertidal zone structure	Yes	Yes
Tidal regime: dominant currents direction	Yes	Yes
Tidal regime: wave exposure	Yes	Yes
Physico-chemical supporting elements		
Transparency	Yes	Yes
Thermal conditions	Yes	Yes
Oxygenation	Yes	Yes
Salinity	Yes	Yes
Nutrient conditions	Yes	Yes

[41] The text in column 1 could be colour-coded blue-green-yellow-orange-red (or using the relevant Member State convention if different) to identify the current status of each element.
[42] The scale or significance of any effect is not relevant at this step: the only question is whether a potential causal mechanism exists.
[43] The scale or significance of any effect is not relevant at this step: the only question is whether a potential causal mechanism exists.

Specific synthetic pollutants[44]	Yes	Yes
Specific non-synthetic pollutants[45]	Yes	Yes
Biological quality elements		
Phytoplankton	Yes	Yes
Macroalgae	Yes	Yes
Angiosperms	Yes	Yes
Benthic invertebrate fauna	Yes	Yes
Chemical status - see Directive 2008/105/EC amended by 2013/39/EU		
Priority substances	Yes	Yes
Priority hazardous substances	Yes	Yes
EU protected areas (see WFD Annex IV)		
(…list all relevant areas)		

For each element where the answer is recorded 'yes' or 'uncertain', proceed to STEP TWO

[44] Refer to Footnote 3 in Part I, Section 3.2
[45] Refer to Footnote 3 in Part I, Section 3.2

Table 1e WFD compliance assessment cause-and-effect mechanisms (Groundwater bodies)

WFD elements[46]	Is there a possible causal mechanism for a direct effect on…? Yes / No / Uncertain Notes (a)(c)(e)(g)[47]	Is there a possible causal mechanism for an indirect effect on…? Yes / No / Uncertain Notes (a)-(c), (e) and (g)[48]
Quantitative status (see WFD Annex V 2.1.2 and CIS Guidance 18)		
Available groundwater resource	Yes	Yes
Groundwater dependent surface water bodies	Direct effects are not relevant: effects are associated with changes in level or flow	Yes
Groundwater-dependent terrestrial ecosystems	Direct effects are not relevant: effects are associated with changes in level or flow	Yes
Saline or other intrusions	Yes	Yes
Groundwater chemical status 996 (see WFD Annex V and Directive 2006/118/EC)		
(…list relevant substances)	Yes	Yes
	Yes	Yes
	Yes	Yes
	Yes	Yes
EU protected areas		
(…list relevant substances)		

[46] The text in column 1 could be colour-coded blue-green-yellow-orange-red (or using the relevant Member State convention if different) to identify the current status of each element.
[47] The scale or significance of any effect is not relevant at this step: the only question is whether a potential causal mechanism exists.
[48] The scale or significance of any effect is not relevant at this step: the only question is whether a potential causal mechanism exists.

	Yes			Yes	
	Yes			Yes	
	Yes			Yes	
	Yes			Yes	
	Yes			Yes	

For each element where the answer is recorded ‘yes’ or ‘uncertain’, proceed to STEP TWO

Table 2a WFD compliance assessment scoping table (Rivers)

Under each heading, identify the element(s) that could potentially be affected by the project (from Table 1a)	✓	2.2(i) Can it be concluded that the effect is temporary and will not lead to water body status deterioration? Yes / No / Uncertain Note (i)	2.2(ii) Is the effect on the element **insignificant** in the context of the water body? Yes / No / Uncertain Notes (j) and (k)	2.2(iii) Can it be concluded that there are no potential **cumulative effects** *Yes / No / Uncertain* Note (l)
Hydromorphological supporting elements				
Hydrology: quantity and dynamics of flow	☐	Yes	Yes	Yes
Hydrology: connection to groundwaters	☐	Yes	Yes	Yes
River continuity	☐	Yes	Yes	Yes
Morphology: river depth and width	☐	Yes	Yes	Yes
Morphology: river bed structure, substrate	☐	Yes	Yes	Yes
Morphology: riparian zone structure	☐	Yes	Yes	Yes
Physico-chemical supporting elements				
Thermal conditions	☐	Yes	Yes	Yes
Oxygenation	☐	Yes	Yes	Yes
Salinity	☐	Yes	Yes	Yes
Acidification	☐	Yes	Yes	Yes
Nutrient conditions	☐	Yes	Yes	Yes
Specific synthetic pollutants[49]	☐	Yes	Yes	Yes
Specific non-synthetic pollutants[50]	☐	Yes	Yes	Yes
Biological quality elements				

[49] Refer to Footnote 3 in Part I, Section 3.2

[50] Refer to Footnote 3 in Part I, Section 3.2

Phytoplankton	☐ Yes	Yes	Yes
Macrophytes and phytobenthos	☐ Yes	Yes	Yes
Benthic invertebrate fauna	☐ Yes	Yes	Yes
Fish fauna	☐ Yes	Yes	Yes
Chemical status - see Directive 2008/105/EC amended by 2013/39/EU			
Priority substances	☐ Yes	Yes	Yes
Priority hazardous substances	☐ Yes	Yes	Yes
EU protected areas (see WFD Annex IV)			
	Could the status of EU protected area(s) be compromised? Explain your response. Yes / No / Uncertain Note (o)		
Protected area (1) characteristics: - - - Protected area (2) characteristics: - - -	Yes		

For each element where the answer is recorded 'no' or 'uncertain', proceed to Step 2.3

Table 2b WFD compliance assessment scoping table (Lakes)

Under each heading, identify the element(s) that could potentially be affected by the project (from Table 1b)	✓	2.2(i) Can it be concluded that the effect is temporary and will not lead to water body status deterioration? Yes / No / Uncertain Note (i)	2.2(ii) Is the effect on the element **insignificant** in the context of the water body? Yes / No / Uncertain Notes (j) and (k)	2.2(iii) Can it be concluded that there are no potential **cumulative effects** *Yes / No / Uncertain* Note (l)
Hydromorphological supporting elements				
Hydrology: quantity and dynamics of flow	☐	Yes	Yes	Yes
Hydrological regime: residence time	☐	Yes	Yes	Yes
Hydrology: connection to groundwaters	☐	Yes	Yes	Yes
Morphology: depth	☐	Yes	Yes	Yes
Morphology: quantity, structure, substrate of bed	☐	Yes	Yes	Yes
Morphology: structure of shore	☐	Yes	Yes	Yes
Physico-chemical supporting elements				
Transparency	☐	Yes	Yes	Yes
Thermal conditions	☐	Yes	Yes	Yes
Oxygenation	☐	Yes	Yes	Yes
Salinity	☐	Yes	Yes	Yes
Acidification	☐	Yes	Yes	Yes
Nutrient conditions	☐	Yes	Yes	Yes

Specific synthetic pollutants[51]	☐	Yes	Yes	Yes
Specific non-synthetic pollutants[52]	☐	Yes	Yes	Yes
Biological quality elements				
Phytoplankton	☐	Yes	Yes	Yes
Macrophytes and phytobenthos	☐	Yes	Yes	Yes
Benthic invertebrate fauna	☐	Yes	Yes	Yes
Fish fauna	☐	Yes	Yes	Yes
Chemical status - see Directive 2008/105/EC amended by 2013/39/EU				
Priority substances	☐			
Priority hazardous substances	☐	Yes	Yes	Yes
EU protected areas (see WFD Annex IV)				
		Could the status of EU protected area(s) be compromised? Explain your response. Yes / No / Uncertain Note (o)		
Protected area (1) characteristics: - - - Protected area (2) characteristics: - - -		Yes		

For each element where the answer is recorded 'no' or 'uncertain', proceed to Step 2.3.

[51] Refer to Footnote 3 in Part I, Section 3.2

[52] Refer to Footnote 3 in Part I, Section 3.2

Table 2c WFD compliance assessment scoping table (Transitional waters)

Under each heading, identify the element(s) that could potentially be affected by the project (from Table 1c)	✓	2.2(i) Can it be concluded that the effect is temporary and will not lead to water body status deterioration? Yes / No / Uncertain Note (i)	2.2(ii) Is the effect on the element **insignificant** in the context of the water body? Yes / No / Uncertain Notes (j) and (k)	2.2(iii) Can it be concluded that there are no potential **cumulative effects** *Yes / No / Uncertain* Note (l)
Hydromorphological supporting elements				
Morphology: depth variation	☐	Yes	Yes	Yes
Morphology: bed structure, substrate	☐	Yes	Yes	Yes
Morphology: intertidal zone structure	☐	Yes	Yes	Yes
Tidal regime: freshwater flow	☐	Yes	Yes	Yes
Tidal regime: wave exposure	☐	Yes	Yes	Yes
Physico-chemical supporting elements				
Transparency	☐	Yes	Yes	Yes
Thermal conditions	☐	Yes	Yes	Yes
Oxygenation	☐	Yes	Yes	Yes
Salinity	☐	Yes	Yes	Yes
Nutrient conditions	☐	Yes	Yes	Yes
Specific synthetic pollutants[53]	☐	Yes	Yes	Yes

[53] Refer to Footnote 3 in Part I, Section 3.2

Specific non-synthetic pollutants[54]	☐	Yes	Yes	Yes
Biological quality elements				
Phytoplankton	☐	Yes	Yes	Yes
Macroalgae	☐	Yes	Yes	Yes
Angiosperms	☐	Yes	Yes	Yes
Benthic invertebrate fauna	☐	Yes	Yes	Yes
Fish	☐	Yes	Yes	Yes
Chemical status - see Directive 2008/105/EC amended by 2013/39/EU				
Priority substances	☐	Yes	Yes	Yes
Priority hazardous substances	☐	Yes	Yes	Yes
EU protected areas (see WFD Annex IV)				
		Could the status of EU protected area(s) be compromised? Explain your response. Yes / No / Uncertain Note (o)		
Protected area (1) characteristics: - - - Protected area (2) characteristics: - - -	☐	Yes		

For each element where the answer is recorded 'no' or 'uncertain', <u>proceed to</u> Step <u>2.3</u>.

[54] Refer to Footnote 3 in Part I, Section 3.2

Table 2d WFD compliance assessment scoping table (Coastal waters)

Under each heading, identify the element(s) that could potentially be affected by the project (from Table 1d)	✓	2.2(i) Can it be concluded that the effect is temporary and will not lead to water body status deterioration? Yes / No / Uncertain Note (i)	2.2(ii) Is the effect on the element **insignificant** in the context of the water body? Yes / No / Uncertain Notes (j) and (k)	2.2(iii) Can it be concluded that there are no potential **cumulative effects** *Yes / No / Uncertain* Note (l)
Hydromorphological supporting elements				
Morphology: depth variation	☐	Yes	Yes	Yes
Morphology: bed structure, substrate	☐	Yes	Yes	Yes
Morphology: intertidal zone structure	☐	Yes	Yes	Yes
Tidal regime: direction of dominant currents	☐	Yes	Yes	Yes
Tidal regime: wave exposure	☐	Yes	Yes	Yes
Physico-chemical supporting elements				
Transparency	☐	Yes	Yes	Yes
Thermal conditions	☐	Yes	Yes	Yes
Oxygenation	☐	Yes	Yes	Yes
Salinity	☐	Yes	Yes	Yes
Nutrient conditions	☐	Yes	Yes	Yes
Specific synthetic pollutants[55]	☐	Yes	Yes	Yes
Specific non-synthetic pollutants[56]	☐	Yes	Yes	Yes

[55] Refer to Footnote 3 in Part I, Section 3.2

[56] Refer to Footnote 3 in Part I, Section 3.2

Biological quality elements			
Phytoplankton	☐ Yes	Yes	Yes
Macroalgae	☐ Yes	Yes	Yes
Angiosperms	☐ Yes	Yes	Yes
Benthic invertebrate fauna	☐ Yes	Yes	Yes
Chemical status - see Directive 2008/105/EC amended by 2013/39/EU			
Priority substances	☐ Yes	Yes	Yes
Priority hazardous substances	☐ Yes	Yes	Yes
EU protected areas (see WFD Annex IV)			
	Could the status of EU protected area(s) be compromised? Explain your response. Yes / No / Uncertain Note (o)		
Protected area (1) characteristics: - - - Protected area (2) characteristics: - - -	☐ Yes		

For each element where the answer is recorded 'no' or 'uncertain', proceed to Step 2.3.

Table 2e WFD compliance assessment scoping table (Groundwater bodies)

WFD elements (criteria)	✓	2.2(i) Can it be concluded that the effect is temporary and will not lead to water body status deterioration? Yes / No / Uncertain Note (i)	2.2(ii) Is the effect on the element **insignificant** in the context of the water body? Yes / No / Uncertain Note (k)	2.2(iii) Can it be concluded that there are no potential **cumulative effects** *Yes / No / Uncertain* Note (l)
Quantitative status				
Available groundwater resource	☐	Yes	Yes	Yes
Groundwater dependent surface water bodies	☐	Yes	Yes	Yes
Groundwater-dependent terrestrial ecosystems	☐	Yes	Yes	Yes
Saline or other intrusions	☐	Yes	Yes	Yes
Groundwater chemical status (see WFD Annex V and Directive 2006/118/EC)				
(…list relevant substances)	☐	Yes	Yes	Yes
		Yes	Yes	Yes
		Yes	Yes	Yes
		Yes	Yes	Yes
		Yes	Yes	Yes

EU protected areas (see WFD Annex IV)			
		Could the status of EU protected area(s) be compromised? Explain your response. Yes / No / Uncertain Note (o)	
Protected area (1) characteristics: - - - Protected area (2) characteristics: - - -	☐	Yes	

For each element where the answer is recorded 'no' or 'uncertain', proceed to Step 2.3.

Annex - Supporting References

Potentially relevant WFD CIS Guidance and related policy documents (formal European Commission guidance to assist Member States with the interpretation of the provisions of the WFD; documents prepared by Member States, COM and stakeholders under the Common Implementation Strategy (CIS))

N° 2 – Identification of Water Bodies (2003)

N° 4 – Identification and Designation of Heavily Modified and Artificial Water Bodies
(2003)

N° 8 - Public Participation in Relation to the Water Framework Directive
(2003)

N° 11 - Planning Processes (2003)

N° 20 - Exemptions to the environmental objectives (2009)

No. 24 River Basin Management in a changing climate (2009)

N° 31 – Ecological Flows (final version) (2015)

N° 36 - Article 4(7) Exemptions to the Environmental Objectives (2017)

Also available in other languages at https://circabc.europa.eu/ui/group/9ab5926d-bed4-4322-9aa7-9964bbe8312d/library/ef4bb326-ccef-4f90-a283-7bea542c7e48?p=1&n=10&sort=modified_DESC

N° 37 - Steps for defining and assessing ecological potential for improving comparability of Heavily Modified Water Bodies (2020)

Also available in other languages at https://circabc.europa.eu/ui/group/9ab5926d-bed4-4322-9aa7-9964bbe8312d/library/68a7807a-7d17-4c7f-94e7-ab3994336430?p=1&n=10&sort=modified_DESC

N° 37 - Mitigation Measures Library (2020)

Policy Document on Natural Water Retention Measures (2014)

WFD and other Directives (formal European Commission documents addressing some of the Frequently Asked Questions about the relationships between the following Directives)

Overview on the main provisions of the Water Framework Directive, the Marine Strategy Framework Directive, the Birds and Habitats Directives, and the Floods Directive: similarities and differences. A starter's guide (2016) http://ec.europa.eu/environment/nature/natura2000/management/docs/starter_guide.pdf

Links between the Water Framework Directive (WFD 2000/60/EC) and Nature Directives (Birds Directive 2009/147/EC and Habitats Directive 92/43/EEC). Frequently Asked Questions (2011) http://ec.europa.eu/environment/nature/natura2000/management/docs/FAQ-WFD%20final.pdf

Links between the Marine Strategy Framework Directive (MSFD 2008/56/EC) and the Nature Directives (Birds Directive 2009/147/EEC (BD) and Habitats Directive 92/43/EEC (HD)) (2012) http://ec.europa.eu/environment/nature/natura2000/marine/docs/FAQ%20final%202012-07-27.pdf

Working towards creating synergies between WFD, MSFD and the Habitats and Birds Directives. Selected case studies (2015) http://ec.europa.eu/environment/nature/natura2000/management/docs/Compilation%20WF D%20MSFD%20HBD.pdf
Article 4(4) and 4(5) latest position (in early 2022)

Clarification on the application of WFD Article 4(4) time extensions in the 2021 RBMPs and practical considerations regarding the 2027 deadline https://circabc.europa.eu/ui/group/9ab5926d-bed4-4322-9aa7-9964bbe8312d/library/ec82ede0-f00a-4155-9096-c197a5f384c0/details
Water Directors, Malta, June 2017

Natural conditions Main document https://circabc.europa.eu/ui/group/9ab5926d-bed4-4322-9aa7-9964bbe8312d/library/8009f747-e609-4e13-b8a9-160bce467820/details Water Directors, Tallinn, November 2017

Natural conditions Annex https://circabc.europa.eu/ui/group/9ab5926d-bed4-4322-9aa7-9964bbe8312d/library/18dd26f0-9640-4506-b4e3-a3570213b82f/details Water Directors, Tallinn, November 2017