

Overview of JASPERS' checklist tool for assessing WFD compliance

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JASPERS Networking Platform webinar on
Updated JASPERS WFD checklist

9 June 2022

JASPERS Checklist Tool

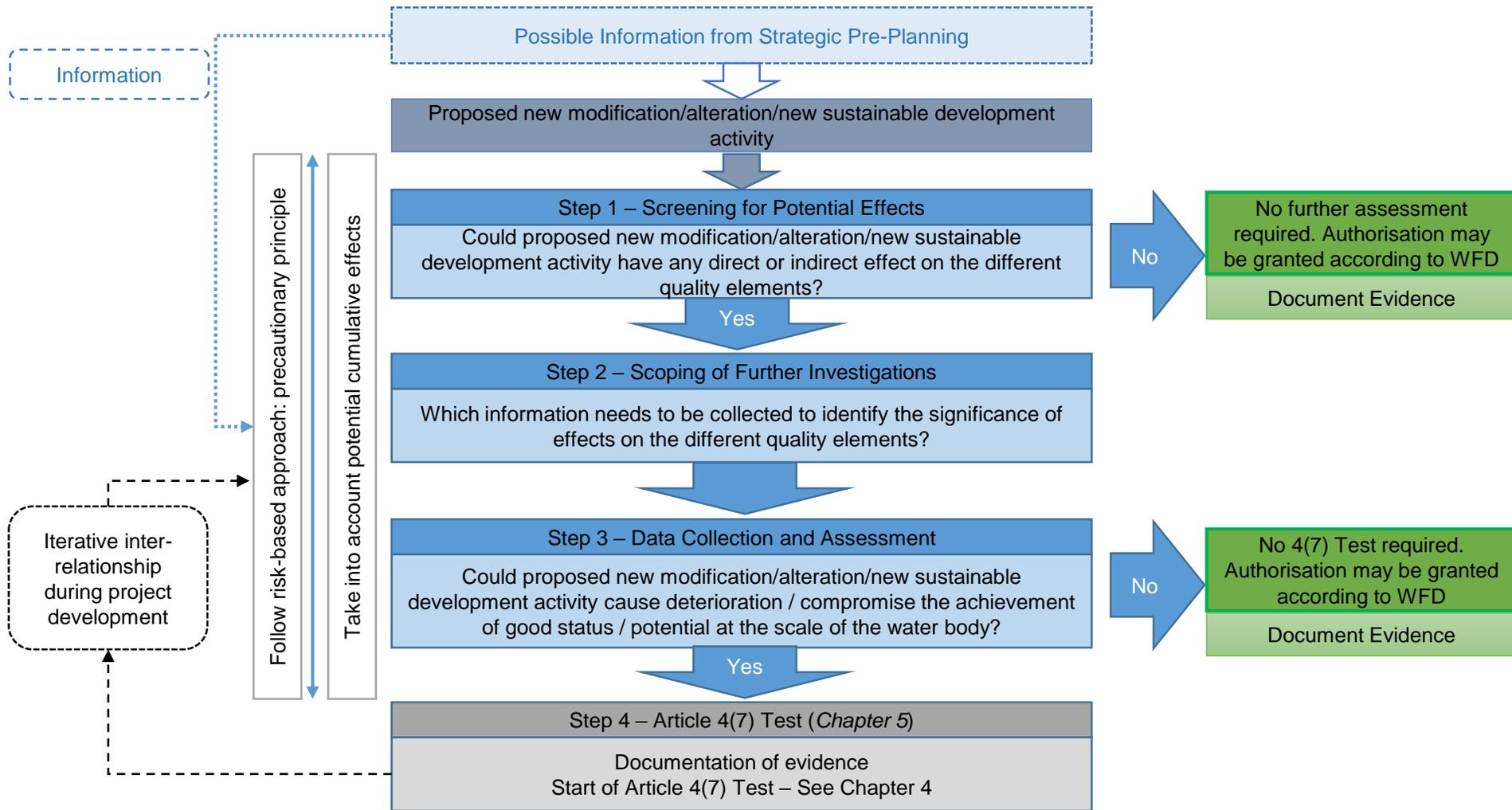
Four main steps:

1. Context and screening: is there a causal mechanism for a direct or indirect effect on status at element level?
2. Scoping: consider if an effect is temporary, its significance in the context of the water body level, and alone or in-combination effects
3. Data collection and investigations
4. Application of Article 4(7) tests: mitigation measures, alternatives, overriding public interest, inclusion in RBMP; also Articles 4(8) and 4(9)

- *Checklist tool was developed in parallel, and is consistent, with CIS Guidance 36*
- *Steps 1-3 are equivalent to the 'Article 4(7) Applicability Assessment'*



CIS 36 - 4(7)Applicability Assessment

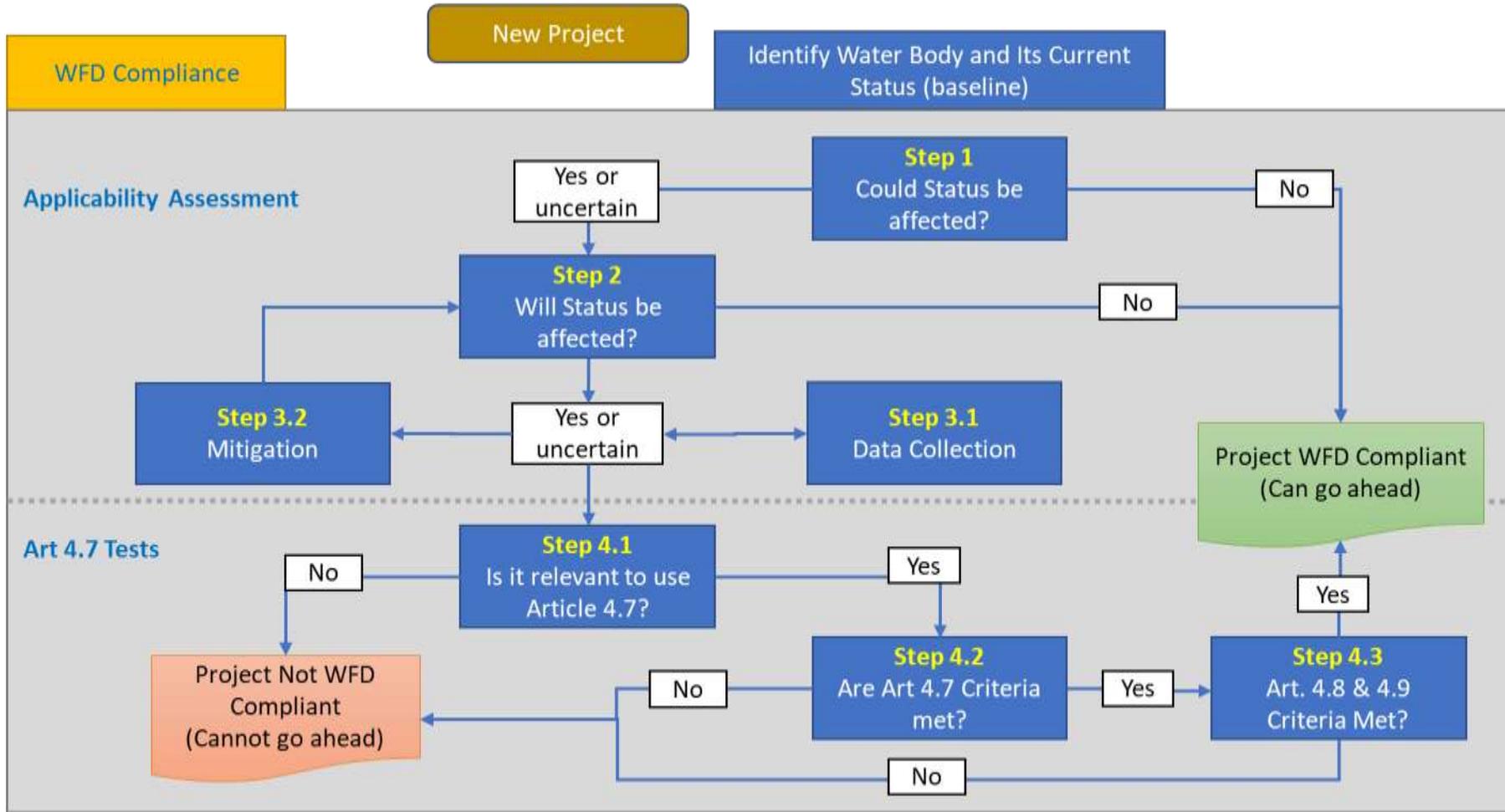
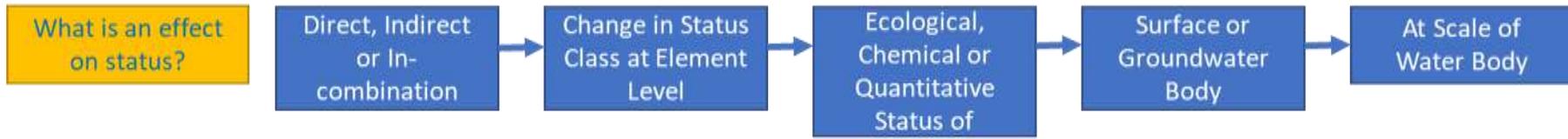


Note that for groundwater different criteria are applied to determine the status of the groundwater body

Checklist Tool Contents

- Introduction: background and key considerations when using tool
- Step One: context and screening
- Step Two: scope
- Step Three: data collection or investigations
- Step Four: the Article 4(7) tests
- Representative generic case studies presented throughout
- Tables 1a to 1e: cause-and-effect mechanisms (one each for rivers, lakes, coastal, transitional, groundwater); Tables 2a to 2e: scoping tables (as above)
- *Checklist can be applied to any project (i.e. development, activity, infrastructure works or components of works' programme) with the potential to affect water body status*
- *Steps One to Three can be used for any type of project; Step Four can only be used for projects within the scope of Article 4(7)*

WFD Project Assessment Flow Chart



Step One: Context and Screening (1)

1.1 Collate **information on project** including location, characteristics

1.2 – 1.4 Identify **potentially affected water bodies**; record their type; and size/scale. Include any water-dependent EU protected areas

1.5 For each water body, note its main features. Identify any **designations** under WFD Article 4(3) i.e. heavily modified or artificial water bodies. Provide equivalent information for potentially affected **protected areas**

1.6 Record the **current ecological and chemical status** of each water body and each protected area

1.7 For each water body, record **future WFD status objectives** and any derogations already applied (e.g. under Article 4(4) or 4(5)). Include similar information for relevant EU protected areas

1.8 For each potentially-affected water body, list the **measures already identified in the RBMP** that will deliver improvements in ecological or chemical status

Step One: Context and Screening (2)

1.9 For each water body, identify any **other planned, proposed, or already under-construction projects**, activities, etc. that could affect water body status

1.10 For each water body, identify **possible mechanisms for direct or indirect effects on status at element level**

- *Taking into account the information collated, consider possible effects on the ecological or chemical status of each surface water body, or on the chemical or quantitative status of a groundwater body, or adverse impacts on a water-dependent EU protected area*
- *Step One is a broad filter, designed only to screen out projects where there is no mechanism for an effect on status, or to identify the WFD elements where a cause-and-effect mechanism exists*

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

WFD elements ¹¹	Is there a possible causal mechanism for a direct effect on...? <i>Yes / No / Uncertain</i>	Is there a possible causal mechanism for an indirect effect on...? <i>Yes / No / Uncertain</i>
	Notes (a)(c)(e)(g) ¹²	Notes (a)-(c) and (e)-(g) ¹³
Hydromorphological supporting elements		
Hydrology: quantity and dynamics of flow		
Hydrology: connection to groundwaters		
River continuity		
Morphology: river depth and width		
Morphology: river bed structure, substrate		
Morphology: riparian zone structure		

⊕ **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)	✓ Will the effect be temporary ? <i>Yes / No / Uncertain</i>	Is the effect on the element insignificant in the context of the <u>water body</u> ? <i>Yes / No / Uncertain</i>	Can it be concluded that there are no potential in-combination effects ? <i>Yes / No / Uncertain</i>
	Note (i)	Notes (j) and (k)	Note (l)
Hydromorphological supporting elements			
Hydrology: quantity and dynamics of flow			
Hydrological regime: residence time			
Hydrology: connection to <u>groundwaters</u>			
Morphology: depth			
Morphology: quantity, structure, substrate of bed			
Morphology: structure of shore			

Step Two: Scope the Assessment (1)

2.1 Confirm which WFD elements require further consideration in each water body or protected area (i.e. elements where a potential cause-and-effect relationship has been identified, or where there is uncertainty)

2.2 Taking into account the information collated in 1.2 to 1.9, address the following questions:

- Will the effect be temporary?
- *New case law ... more on this later*
- Will the effect be insignificant in the context of the water body?
- *The spatial characteristics of the water body and the distribution of elements within it are relevant to this question*
- *It is the extent of the impact, not the footprint of the project, that is relevant to determining the effect on status*

Step Two: Scope the Assessment (2)

- Can it be concluded that there will be no potential in-combination effects on status?
- *A modification or alteration - on its own - might not affect water body status. However two or more project components, or two different projects, might cause deterioration or compromise an expected improvement in status*

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

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Morphology: structure of shore			

Step Two: Outcomes

Where, on a case-by-case basis, an effect is demonstrated to be temporary and/or insignificant in the context of the water body and there are no potential in-combination effects on status, no further assessment is needed for that element.

- *The evidence used to support this conclusion should be documented and the conclusion checked with the WFD competent authority*

2.3 Where an effect on an element is not temporary [or is temporary but with deterioration] and/or it is significant in the context of the water body and/or there are potential in-combination effects, or where there is uncertainty, the scope of further work on each element should be determined

2.4 Agree the overall scope of further work with the WFD competent authority

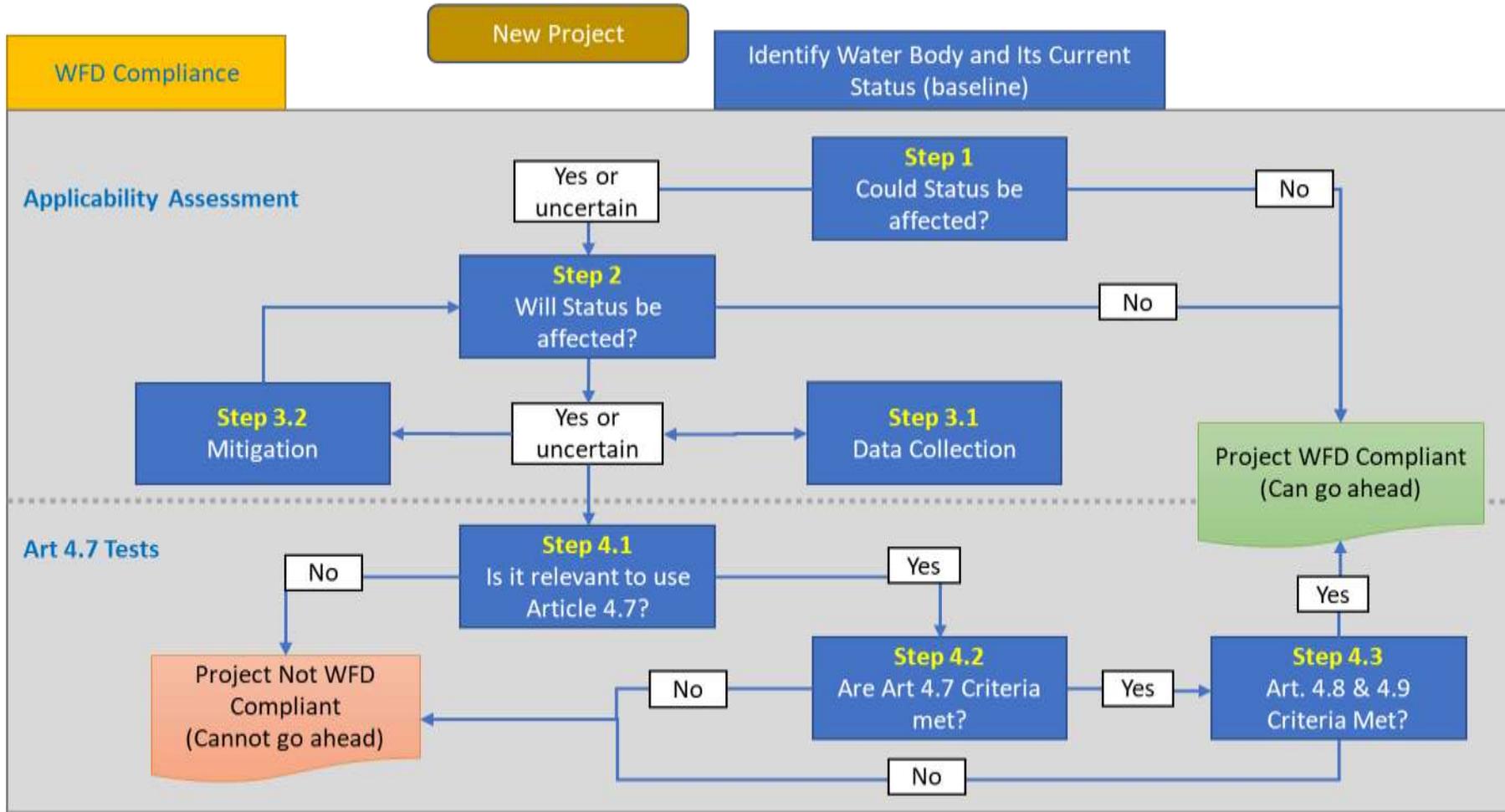
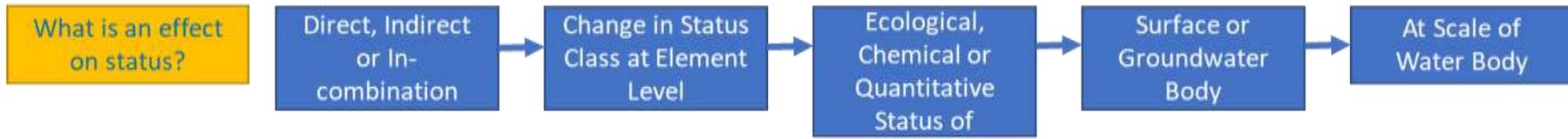
Step Three: Data Collection

3.1 Undertake data collection/investigations and review outcomes:

- 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 areas?
- Are in-combination effects on status possible?

If the answer to all of these questions is 'no' record the supporting evidence. No further WFD assessment of the project is needed and the Article 4(7) tests do not need to be applied

WFD Project Assessment Flow Chart



Step Three: Mitigation Measures

3.2 Where effects on status are expected, including in-combination effects, consider whether mitigation measures are available. Provide evidence to show how these measures will be integrated into project

- *WFD does not differentiate between mitigation and compensation: offsetting measures in another water body could be used to mitigate the effect in the water body to which the Article 4(7) tests might be applied*

3.3 – 3.5 With mitigation measures in place can it be concluded with sufficient certainty that the project will not cause deterioration or compromise the achievement of good status? Document the evidence used to support this decision and discuss conclusion with WFD competent authority

- *If competent authority agrees, no further WFD assessment is needed and the Article 4(7) tests do not need to be applied*
- *If there will be an effect on water body status, or if there is uncertainty, continue to Step Four*

Step Four: Article 4(7) Tests

1. All practicable steps are taken to mitigate possible effects on status
2. Reasons for the physical modification, alteration or development are set out in the RBMP
3. There are reasons of overriding public interest or the project benefits outweigh the WFD benefits foregone (the balancing test)
4. No technically feasible, not disproportionately costly, significantly environmentally better alternative exists

- *All criteria must be met*
- *Guidance document 36 and JASPERS checklist tool apply the tests in a different order for practical reasons*
- *Projects not meeting the 4(7) tests may not be authorized*

Step Four: Mitigation measures and alternatives

4.2 Identify any additional practicable steps to mitigate expected effects on status

- *Practicable suggests technically feasible, not disproportionately costly and compatible with the modification, alteration or use*

Return to 3.2 or *continue to 4.3*

4.3 Could the objectives be achieved by a technically viable and not disproportionately costly alternative means, representing a significantly better environmental option?

- *Disproportionality is a judgement informed by economic information but with political, technical and social dimensions*

Return to 1.6 or *continue to 4.4*

Step Four: Public Interest or Weighing of Benefits (the Balancing Test)

4.4 Are there reasons of overriding public interest why the modification, alteration or use should go ahead, or do the benefits of the project (to human health, safety or sustainable development) outweigh the benefits of achieving the WFD objectives?

- *Evidence needs to be presented; this is not just a statement*
- *Assessment to be as simple as possible but as detailed and comprehensive as necessary*
- *Qualitative, quantitative and monetised information can all be used*
- *Need for clarity on the residual effects on WFD status that triggered the Article 4(7) tests*
- *Balancing test is especially useful where most effects are mitigated but a relatively minor residual effect is a potential showstopper*

Step Four: Project in RBMP

4.5 Are the reasons for the modification, alteration or development explained in the RBMP?

- *If the project is proposed within a WFD planning cycle (i.e. is not included in the RBMP) the public must be given an opportunity to comment which is at least equivalent to that provided for comments on the RBMP*
- *The modification, alteration or development must then be reported in the next RBMP*
- *Public consultation on SEA or EIA might be relevant, but it may be helpful to carry out a supplementary WFD-specific consultation*

Step Four: Articles 4(8) and 4(9)

- *Even if the Article 4(7) tests are met, this exemption can only be used if the tests in Articles 4(8) and 4(9) are also passed*

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

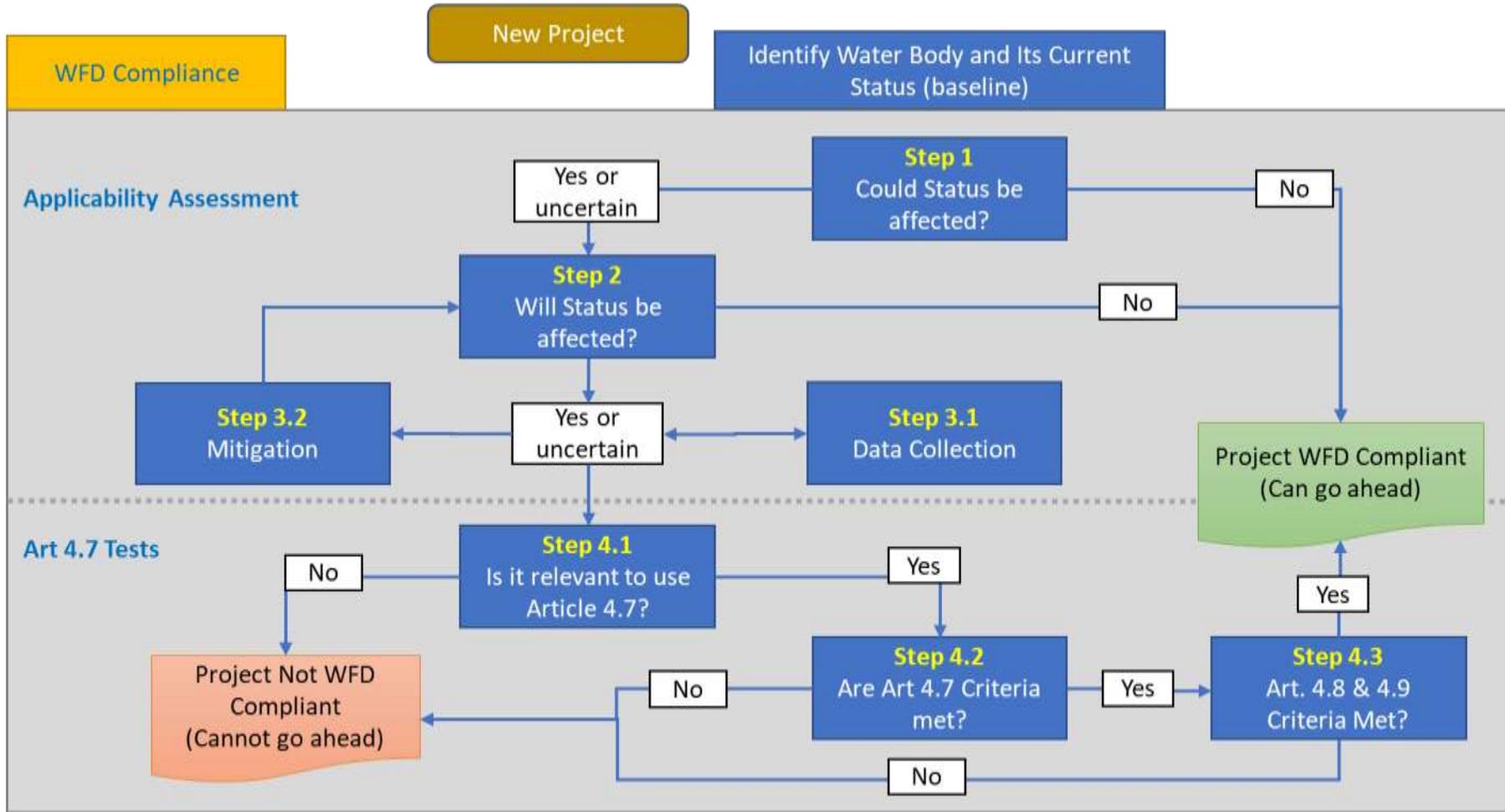
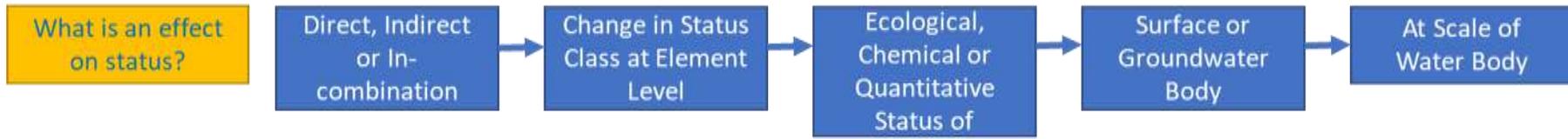
4.7 Does the project pass all four Article 4(7) tests and the 4(8) and 4(9) tests?

- *If no, it is unlikely that the project will be able to go ahead: this conclusion should be discussed with the WFD competent authority*

4.8 Does the WFD competent authority agree that all the necessary tests are met?

- *If yes, it can be concluded that the project is WFD compliant*

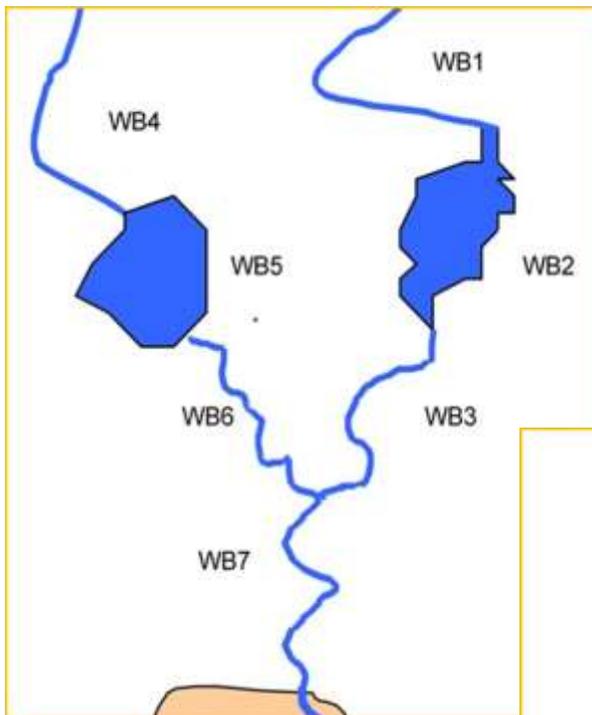
WFD Project Assessment Flow Chart



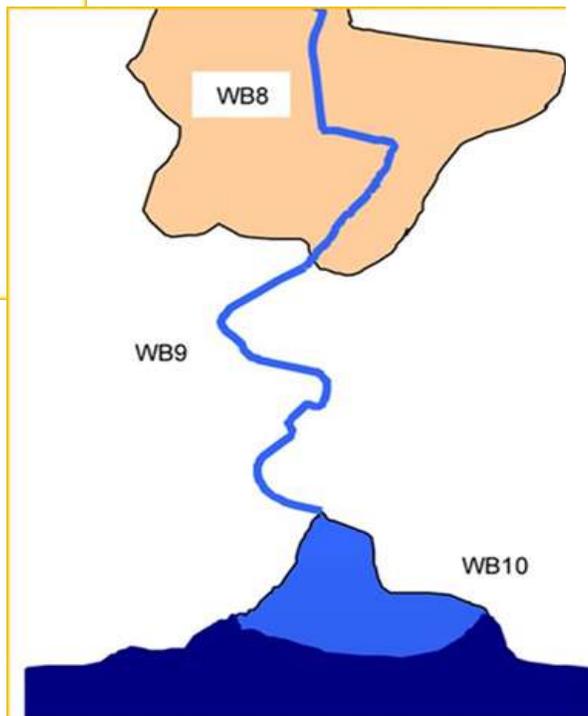
Questions ?

Changes made in response to feedback

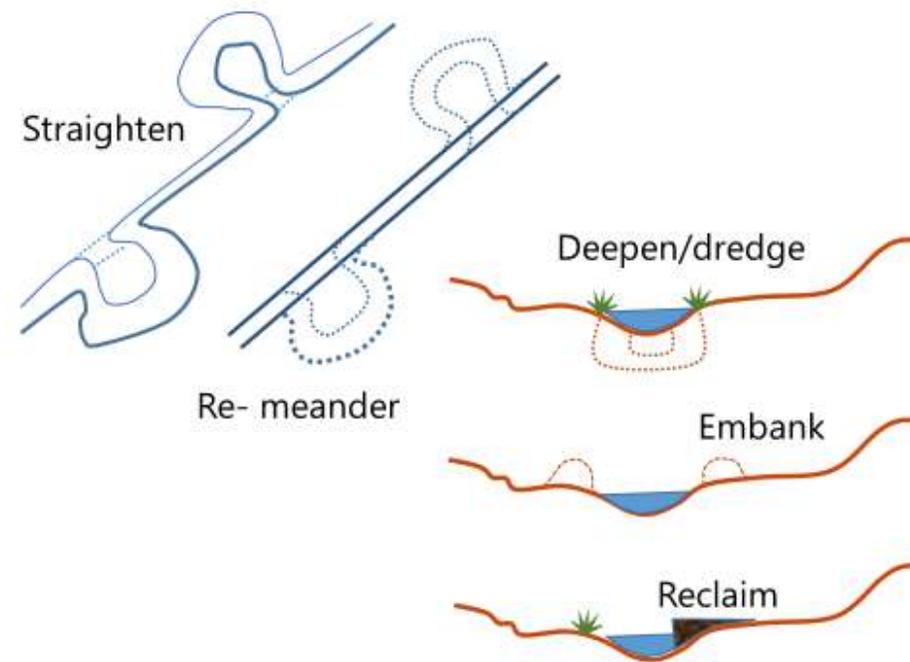
- Added brief introduction to Directive 2000/60/EC, the Water Framework Directive
- Broadened the list of uses, activities, etc. potentially affecting status to include mining, agriculture, urban development, land-use change
- Added possibility of undertaking supplementary WFD-specific consultation if relying on EIA consultation
- Some restructuring of document (introductory chapter; added table of contents; added list of acronyms)



Illustrative
 Figures
 added...



e.g. water
 body types



30

e.g. typical surface
 water body
 modifications

Effects, mitigation, improvements: clarifications

The scale of the (residual) impact is what determines whether status will be affected, not only the matters physical footprint of the work

- *For example, consider changes to the flow regime (quantity), sediment dynamics (erosion, deposition, suspended sediment plume), saline intrusion extent ... and any implications for the biological quality elements*

Mitigation measures play a vital role

- *However, if mitigation measures are added during Steps 1 or 2, that Step must be re-run before a conclusion can be drawn because the introduction of a mitigation measure may change the conclusion on other potential impacts*

WFD also aims to protect and improve the aquatic environment. Now also an emphasis on improvement in Green Deal and Biodiversity Strategy

- *If a project can contribute to an improvement in water body status, this should be recognised. The checklist tool can also be used to highlight anticipated improvements in one or more of the WFD elements*

Transboundary considerations: clarification

A project could 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*
- *The project assessment process, including the application of Article 4(7) if appropriate, needs to be coordinated, and common methodologies (and, where relevant, thresholds) need to be agreed with respective WFD competent authorities*
- *Where relevant, transboundary river basin commissions might act as facilitators of such coordination*

Multiple competent authorities: clarification

A project can affect different water bodies, for example

- construction or removal of a dam on a river may affect sediment supply to the coast
- excavation works associated with a surface water body development may impact on ground water quantitative status
- *There may be different WFD competent authorities for different water body types*
- *All competent authorities with responsibility for potentially affected water bodies must be engaged in the project compliance assessment process*

Overview of checklist process: reminder

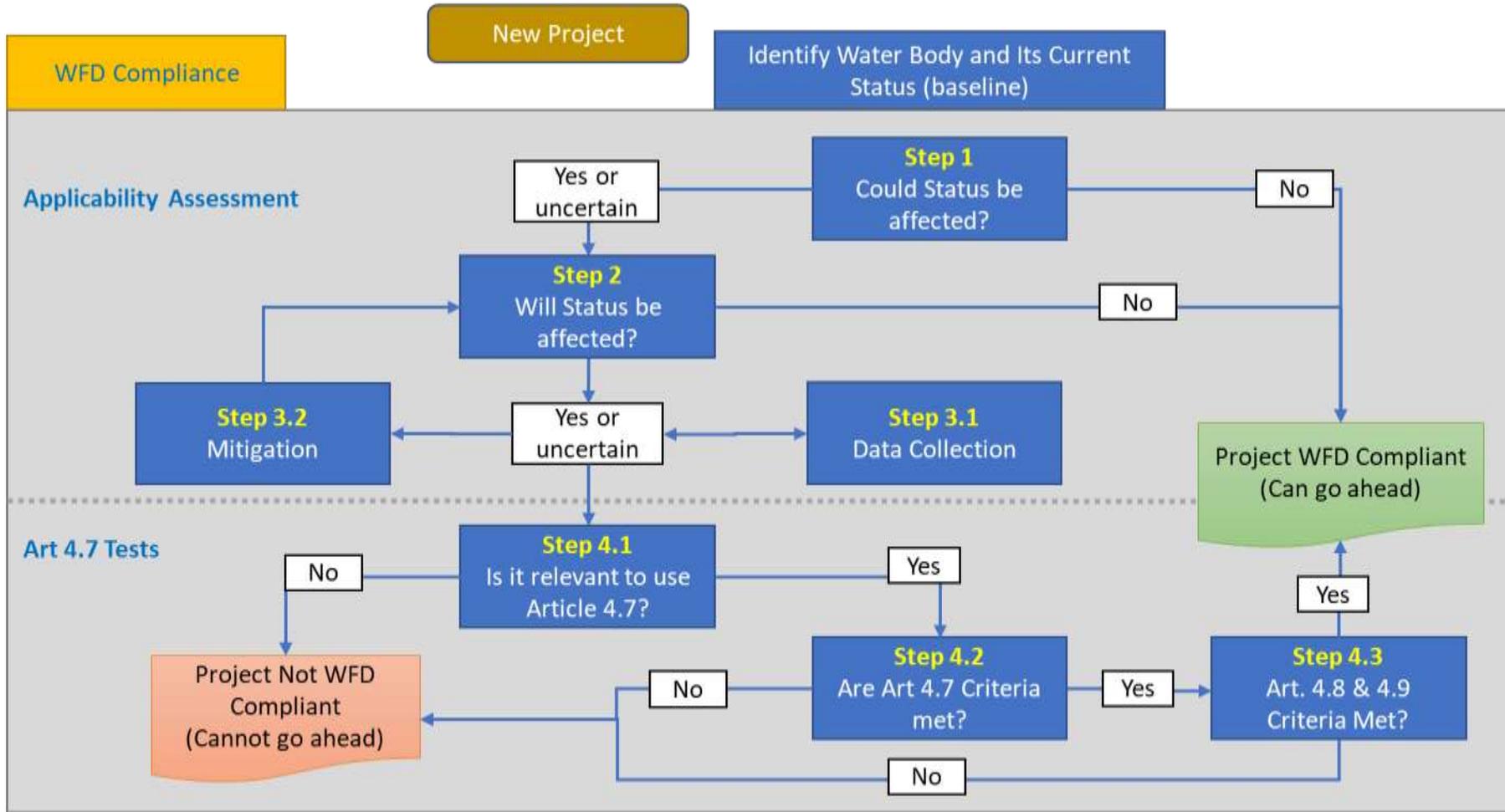
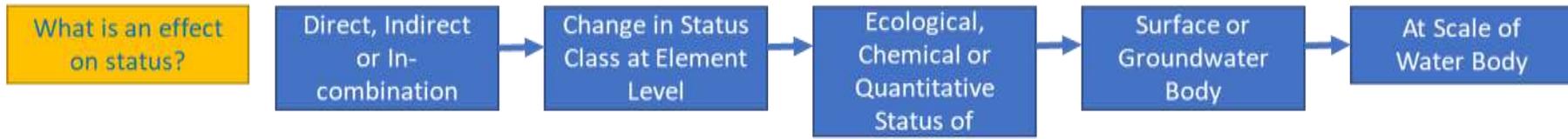
Steps 1 to 3 of the checklist may be used for assessing whether projects could lead to deterioration or compromise the achievement of the WFD objectives

- *In line with the 'Applicability Assessment' described in CIS Guidance Document 36, Steps 1 to 3 can be applied to projects that are not considered as new modifications to the physical characteristics of surface water bodies, alterations to the level of groundwater, or new sustainable human development activities but which may nonetheless affect the status of water bodies because they cause 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 WFD

A new Figure in the Checklist summarises Steps 1-4 in flowchart format; another shows how the tool works in terms of assessment effort

WFD Project Assessment Flow Chart





In which situations should checklist be applied?

Application of checklist tool recommended where a project:

- *Could directly, indirectly or in-combination, affect **biology, hydrology, morphology or physico-chemical** status of one or more surface water bodies*
- *Could directly, indirectly or in-combination, affect the groundwater resource or **groundwater-dependent** surface water bodies or terrestrial ecosystems*
- *Could affect existing **contamination** levels in surface or ground water bodies (e.g. disturbing contaminated sediments or contaminants already in the system)*
- *Could result in a new or increased **input of contaminants** (hazardous substances; pollutants) to surface or ground waters*
- *Is taking place in or close to a **pristine (i.e. undisturbed)** surface water body*

Voluntary nature of checklist tool

Member States' procedures may differ from those described in CIS Guidance Document 36 and reflected in this JASPERS' checklist but the specific procedure used is less important than its outcomes

- *The application of the JASPERS checklist tool is not mandatory!*

Additional illustrative case studies (all Steps)

- *Abstraction pipework for a new irrigation scheme physically impacts on only a very small part of a water body, but there may be indirect consequences for the water body and downstream water bodies. Typical river flows are already substantially reduced as a result of abstractions further upstream. Even with mitigation in place, there would be effects on downstream flow rates (hydrology) and sediment dynamics (hydro-morphology). Discussions with the competent authority in the neighbouring catchment confirm such changes would adversely impact on aquatic plants and fish downstream...*
- *A new watersports-and-angling centre is proposed in a currently undeveloped 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. The WFD does not currently focus explicitly on IAS, but these can adversely affect ecological status as recognised by both the 2030 Biodiversity Strategy and the EU Marine Strategy Framework Directive*

Examples of how water-dependent protected areas may be affected

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

Examples of Step 3 additional investigations

- *BQE data for affected water body are inadequate; Steps One and Two highlight several uncertainties. Data is needed. Scoping for the EIA is also beginning so there are possible synergies for baseline data collection*
- *A project will lead to the loss of 1 ha of saltmarsh, but there is no information about saltmarsh elsewhere in an extensive coastal water body. Data needs to be collected to establish the extent and quality of the saltmarsh resource and thus the effects in the context of the water body*
- *There are potential indirect impacts on benthic invertebrate fauna and fish fauna due to changes in flow characteristics downstream. Two types of investigation are needed: baseline data on the current status of benthic invertebrates; and hydromorphological modelling to identify the location and extent/significance of expected post-project changes in erosion or deposition*
- *Project A, on its own, is not expected to affect water body status, but the project team identify another planned project: project B. Further investigation is needed to establish whether there might be in-combination effects on status*

Deterioration – new Case Law

Judgement 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](#)

Case challenged CIS Guidance 36 position that temporary effects of short duration and without long term consequences can be ‘disregarded’ in assessing the impacts of a project on water body status

Main outcomes

- *Article 4(7) may need to be applied in situations where effects are temporary*
- *Temporary effects **can be disregarded only if they do not lead to deterioration in the status of the water body***
- *It is not appropriate to refer to the monitoring frequency of WFD elements as an indicator of **whether a temporary effect may lead to deterioration***
- *Exceptionally, on a case by case basis – a temporary effect may not cause a deterioration. In such cases, Article 4(7) does not need to be applied*

Questions ?

More Information

For info or further questions on this webinar please contact the JASPERS Networking Platform team:

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