Workshop: Exemptions in the Water Framework Directive

Latest developments about article 4.7 and practical application in Belgium

Tour & Taxis | 16.10.2018

belini

Agenda ..

9:30	Word of introduction by the hosting project BELINI	Lindsay Geerts (VMM)
9:40	Reminder of the WFD's objectives and how surface waterbodies are assessed o WFD's objectives of good status o Quality elements and assessment methods	Nicolas Fermin (DGO3) Martin Binon (BE-LB)
10:00	The different types of "exemptions" in the sense of WFD o Art 4.4 to 4.7 of the WFD o Focus on art 4.7 o Links with other environmental directives	Michel Boucneau (VMM)
10:20	Situation in the Belgian River basin management plans (RBMP 2016-2021) o Assessment of the Belgian water bodies and the use of the exemptions	Michel Boucneau (VMM) Nicolas Fermin (DGO3) Martin Binon (BE-LB)
11:00	COFFEE BREAK	
11:20	New clarification on article 4.7 : the "Weser" judgement of EUCJ of 1 July 2015	Michel Boucneau (VMM)

Agenda ..

11:40	Potential Belgian case(s) of “Weser”/article 4.7? o Project presentation o Current development with the regions	Michel Boucneau (VMM) Nicolas Fermin (DGO3) Martin Binon (BE-LB
12:00	Conclusions and discussions	
12:30	LUNCH	

Word of introduction by the hosting project BELINI

Lindsay Geerts (VMM)

What is Belini? .....

Belgian **ini**tiative making a leap forward towards a good status in the river basin district of the Scheldt

LIFE Belini is being carried out with the support of the European Commission through the LIFE Integrated Projects programme.

8 Belgian partners

Life Integrated Project

Period 2017–2026

Basins of the Zenne, Dyle and Demer rivers

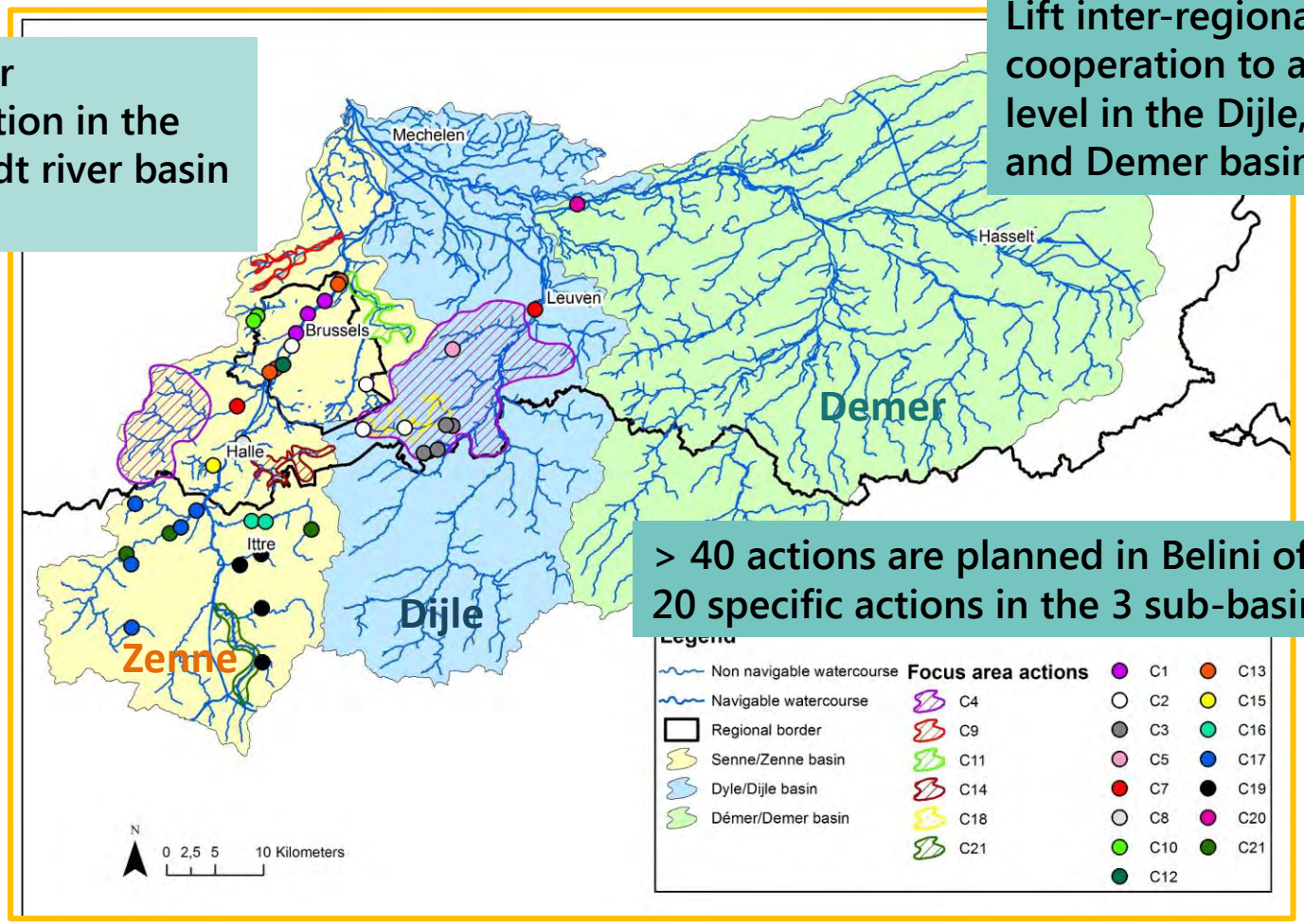
Total budget €18,111,366

More than 40 actions

What is Belini ?.....

Miniature for implementation in the whole Scheldt river basin district

Lift inter-regional cooperation to a higher level in the Dijle, Zenne and Demer basin

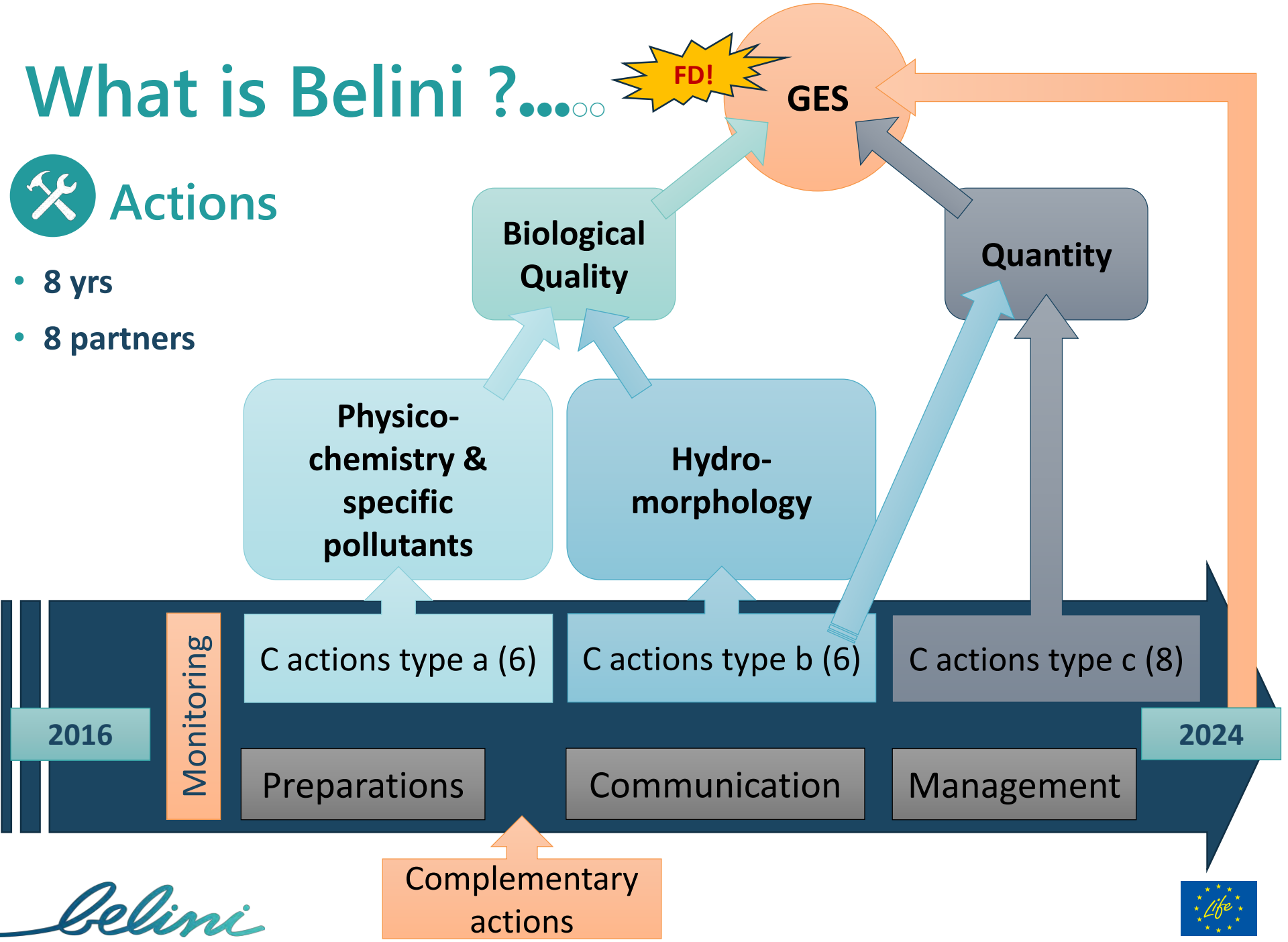


> 40 actions are planned in Belini of which 20 specific actions in the 3 sub-basins

What is Belini ?....

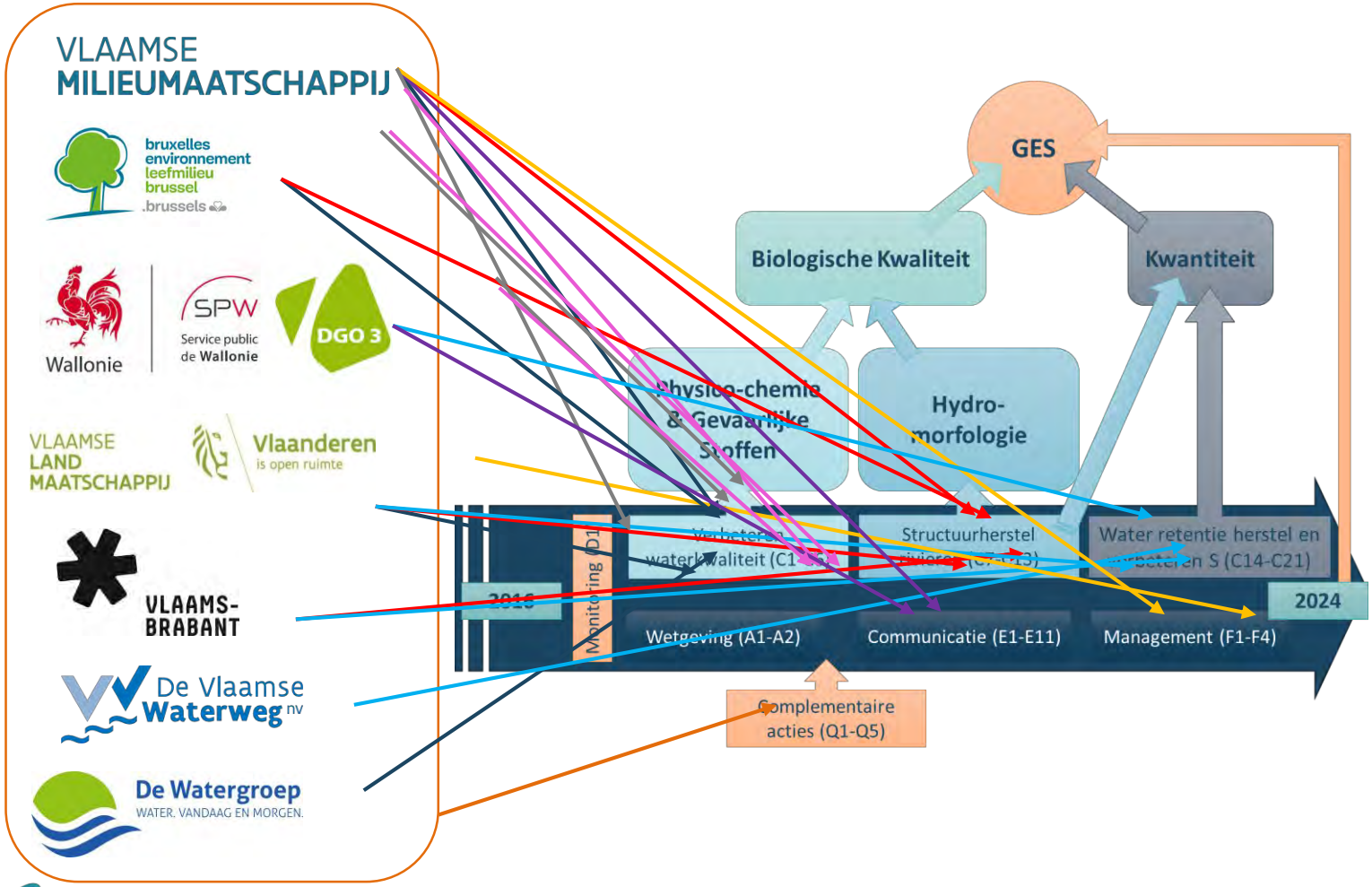
Actions

- 8 yrs
- 8 partners



What is Belini ?.....

Partners



What is Belini ?.....

3 thematic expert groups

- River Basin Specific Pollutants
- GAP Agri
- Workshop Exemptions

VLAAMSE
MILIEUMAATSCHAPPIJ

Wallonie | SPW Service public de Wallonie | DGO 3

bruxelles environnement leefmilieu brussel .brussels

belini

belini

Over ons | Thema's en acties | Nieuws en evenementen | Publicaties | Contact | NL

Thema's en acties

Acties

Structuurkwaliteit

De voorbije decennia werden heel wat waterlopen rechtgetrokken, ingedijkt of zelfs ingebuisd. Met een aantal specifieke acties

Waterkwaliteit

De waterkwaliteit in het projectgebied wordt beïnvloed door verschillende bronn van verontreiniging zoals huishoudens,

belini

Over ons | Thema's en acties | Nieuws en evenementen | Publicaties | Contact | NL

Thema's

Beleid

Vlaanderen, Brussel en Wallonië zijn elk afzonderlijk en op een zelfde niveau bevoegd voor de uitvoering van de kaderrichtlijn Water. Een betere samenwerking tussen de gewesten moet leiden tot betere resultaten.

Monitoring

We gaan na in welke mate de acties bijdragen tot het bereiken van de doelstellingen geformuleerd in de kaderrichtlijn Water (KRW). .

belini

PROJECT LIFE BELINI

INFO@LIFE-BELINI.BE

PRIVACY POLICY

Schrijf je in op onze nieuwsbrief

E-MAIL ADRES

VERSTUUR

Life

belini

www.life-belini.be

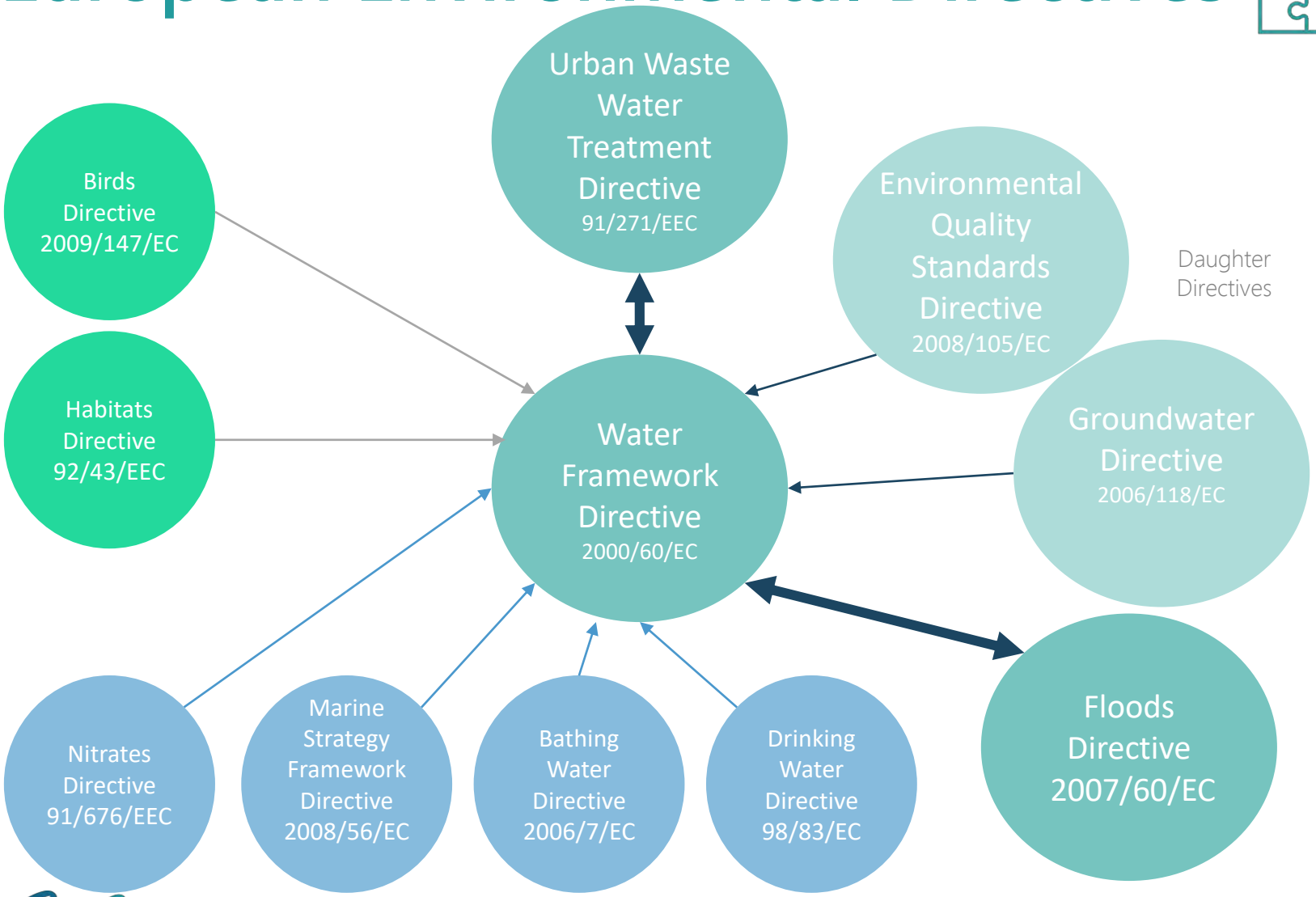
Reminder of the WFD's objectives and how surface waterbodies are assessed

WFD's objectives of good status
Quality elements and assessment methods

Martin Binon (BE-LB)

Nicolas Fermin (DGO3)

The WFD interactions with other European Environmental Directives



WFD main objectives..

- Art 1 :

"The purpose of this Directive is to establish a framework for the protection of inland surface waters, transitional waters, coastal waters and groundwater which:

(a) prevents further deterioration and protects and enhances the status of aquatic ecosystems and, with regard to their water needs, terrestrial ecosystems and wetlands directly depending on the aquatic ecosystems(...)"

WFD main objectives ●●

In making operational the programmes of measures specified in the river basin management plans:

(a) for surface waters

Member States

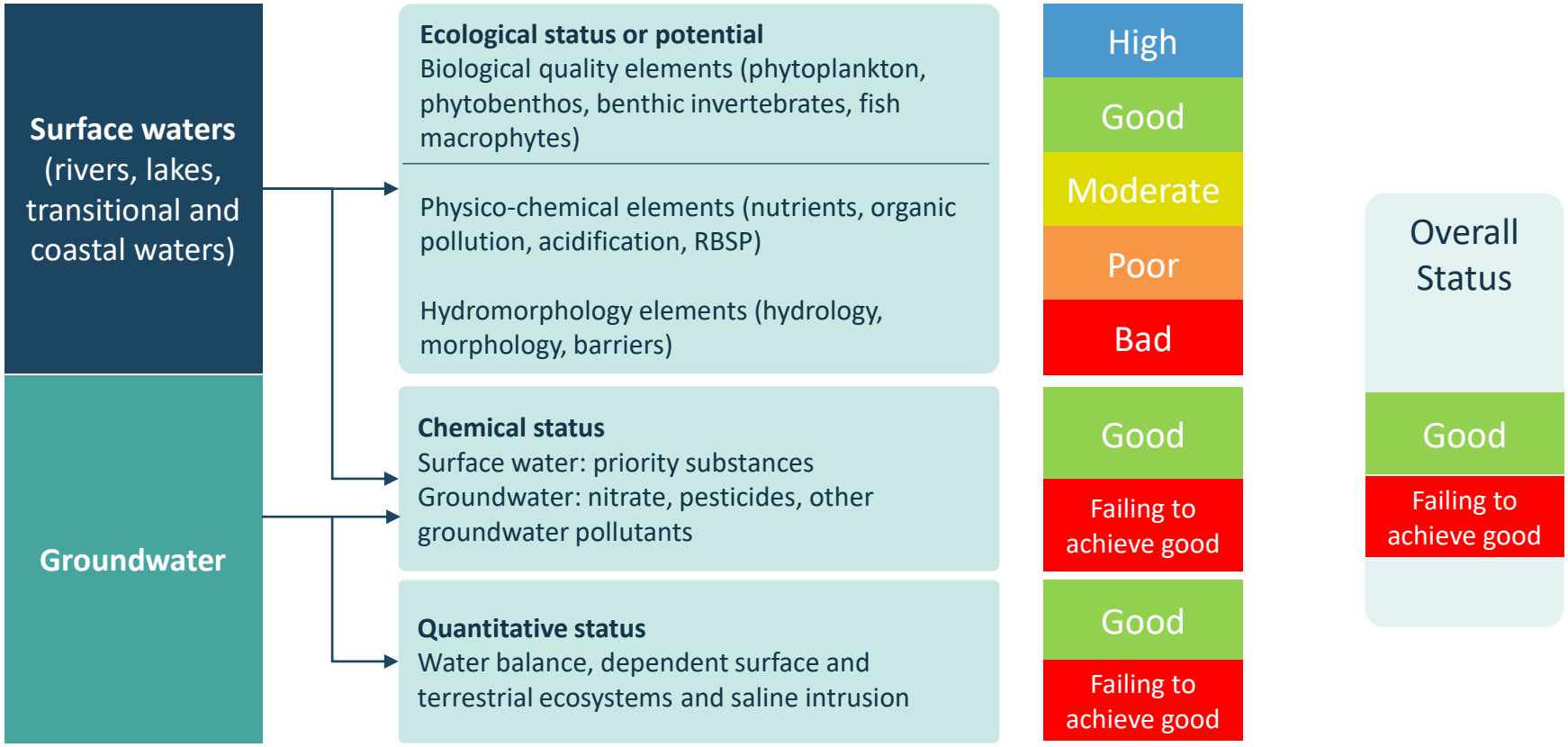
i.

shall implement the necessary measures to **prevent deterioration of the status of all bodies of surface water**, subject to the application of paragraphs 6 and 7 and without prejudice to paragraph 8

ii.

shall **protect, enhance and restore all bodies of surface water**,(…) with the aim of achieving **good surface water status/ecological potential** at the latest 15 years after the date of entry into force of this Directive, in accordance with the provisions laid down in Annex V, subject to the application of extensions determined in accordance with paragraph 4 and to the application of paragraphs 5, 6 and 7 without prejudice to paragraph 8

The WFD's objectives of good status



Assessment of status of surface waters and groundwater according to the WFD

WFD's objectives and good status

Ecological status

Aggregation of the different quality elements

Biological status : worst quality element

	Fish	phytoplankton	Aquatic flora	Benthic invertebrates	Diatoms	Final biological status
Ex. 1	Good	Good	Good	Good	Good	Good
Ex. 2	Good	Good	Good	Moderate	Good	Moderate
Ex. 3	Poor	Good	Good	Moderate	Good	Poor
Ex. 4	Good	Good	Good	Good	Bad	Bad

WFD's objectives and good status

Ecological status

Aggregation of the different quality elements

Physico-chemical status : different methods

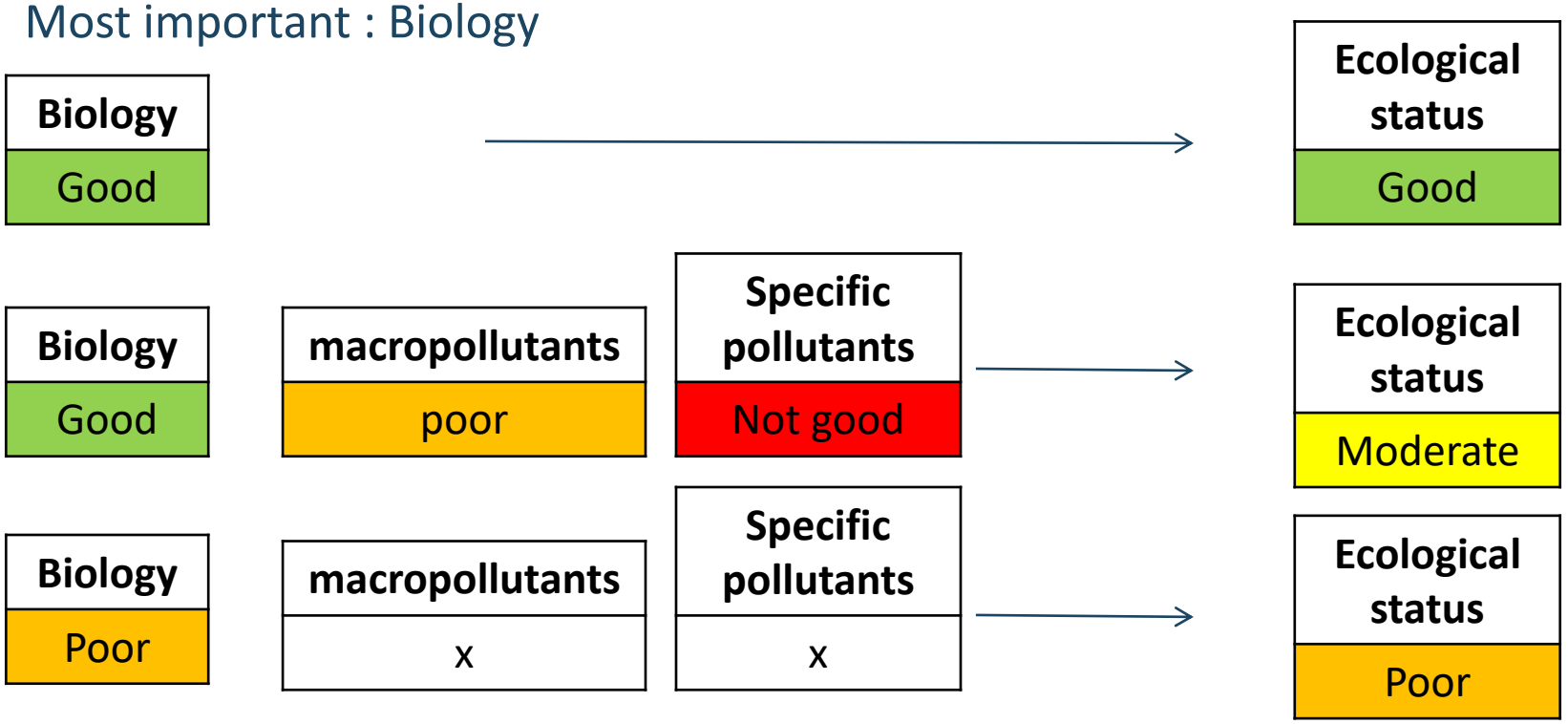
	oxygenation	Suspended matters	acidification	Nitrogen matters	Final phys-che status
Worst Q-E	Good	Good	Poor	Moderate	Poor
Worst Q-E	Good	Good	Poor	Good	Poor
Penultimate Q-E	Good	Good	Poor	Moderate	Moderate
Penultimate Q-E	Good	Good	Poor	Good	Good

WFD's objectives and good status

Ecological status

Aggregation of the different "sub-status"

Most important : Biology



WFD's objectives and good status

Ecological status: Differences between Regions

For biological "status":

Kwaliteitselement Elément de qualité	Fytoplankton Phytoplancton	Diatomeeën Diatomées	Macroinvertebraten Macroinvertébrés	Vis Ichtyofaune	Macrofyten Macrophytes
W	niet relevant/ non pertinent	IPS	IBGN / IBGA**	IBIP	IBMR***
BR	Van Tendeloo et al., 2004	Van Tendeloo et al., 2004	IBGN et MMIF	IBIB	MMRB
VL	A-B: nvt/na; C-D: Van Wichelen et al., 2008; E: Speybroeck, 2008	A-D: Hendrickx & Denys, 2005; E: nvt/na	A-D: MMIF; E: Speybroeck, 2008	IBI (Belpaire et al., 2000; Breine et al. 2004; Breine et al., 2007, 2010)	Leyssen et al., 2005; E: Speybroeck, 2008

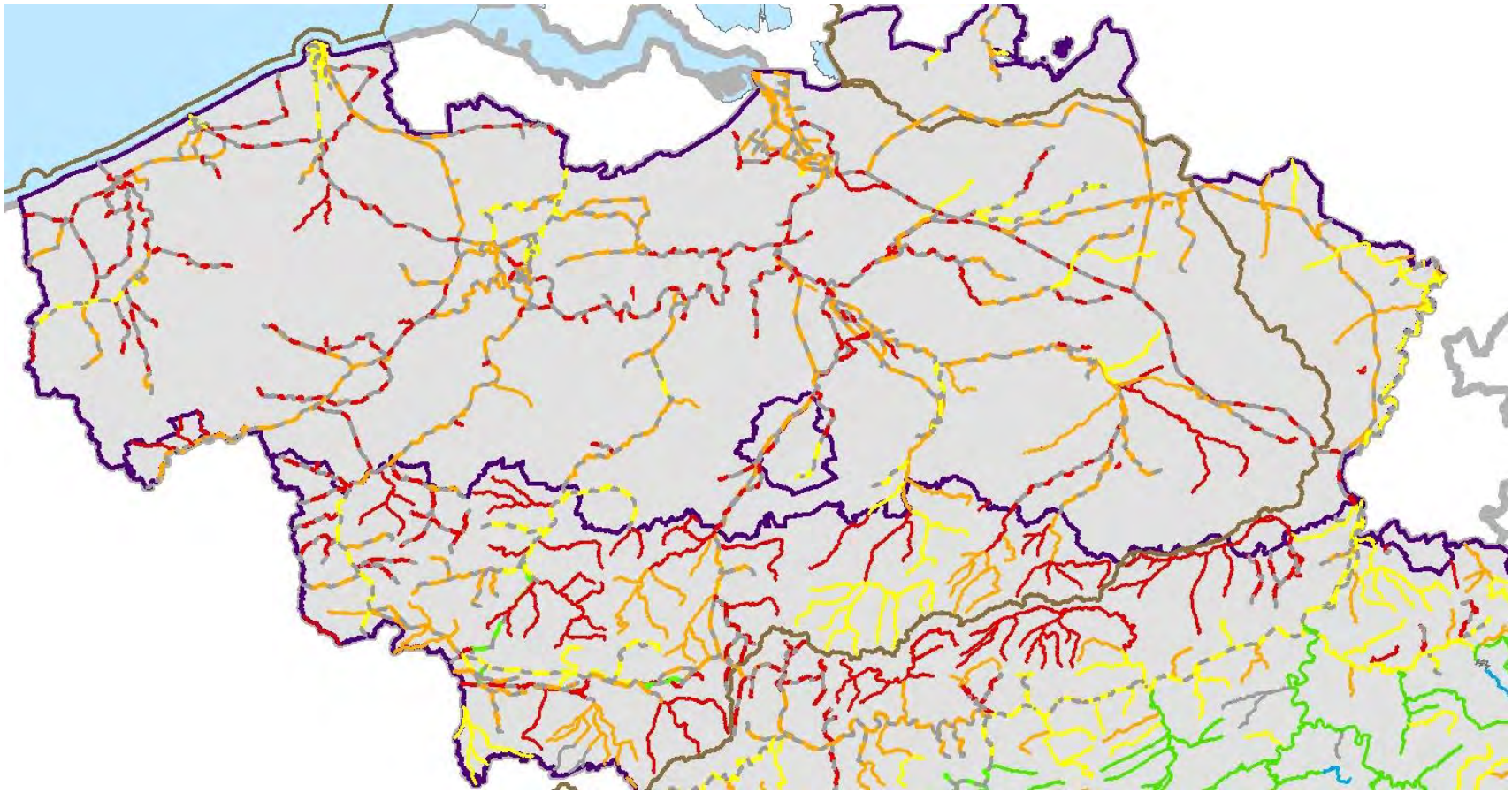
Physico-Chemical Assessment methodology

	VL	BXL	WAL
Number of parameters	12 for general physio-chemistry Up to 79 different specific pollutants, but depending on the risk to the water body	18 for general physio-chemistry 5 specific pollutants	17 for general physio-chemistry 52 specific pollutants
P-90, maximum or mean depending on parameters Along the year, or only during the "summer period"	P-90, maximum or mean depending on parameters Along the year, or only during the "summer period"	P-90 and mean depending on parameters	P-90 for general parameters mean standard and maximum standard for specific pollutants
Aggregation methodology for general physio-chemistry	one out - all out principle	one out - all out principle	Penultimate alteration for each year where data are available Expert advice on all yearly physio-chemistry status : final status for general physio-chemistry
Aggregation methodology for specific pollutants	one out - all out principle	one out - all out principle	one out - all out principle
Monitoring frequency	12 measures by year each year Monitoring cycle varies: from yearly monitoring to each 3 years	12 measures by year each year	from 13 measures by year each year to 6 measures by year each 3 years

WFD's objectives and good status

Ecological status

Differences between Regions



The different types of "exemptions" in the sense of WFD

Art 4.4 to 4.7 of the WFD
Focus on art 4.7

Michel Boucneau (VMM)

Belini

The different types of exemptions: Art 4.4 to 4.7

WFD Exemptions

4.4 

Extension of the deadline: Good Status/potential to be achieved by ***2021*** or ***2027 at the latest*** or as soon as the natural conditions permit after 2027

4.5 

Achievement of less stringent objectives under certain conditions

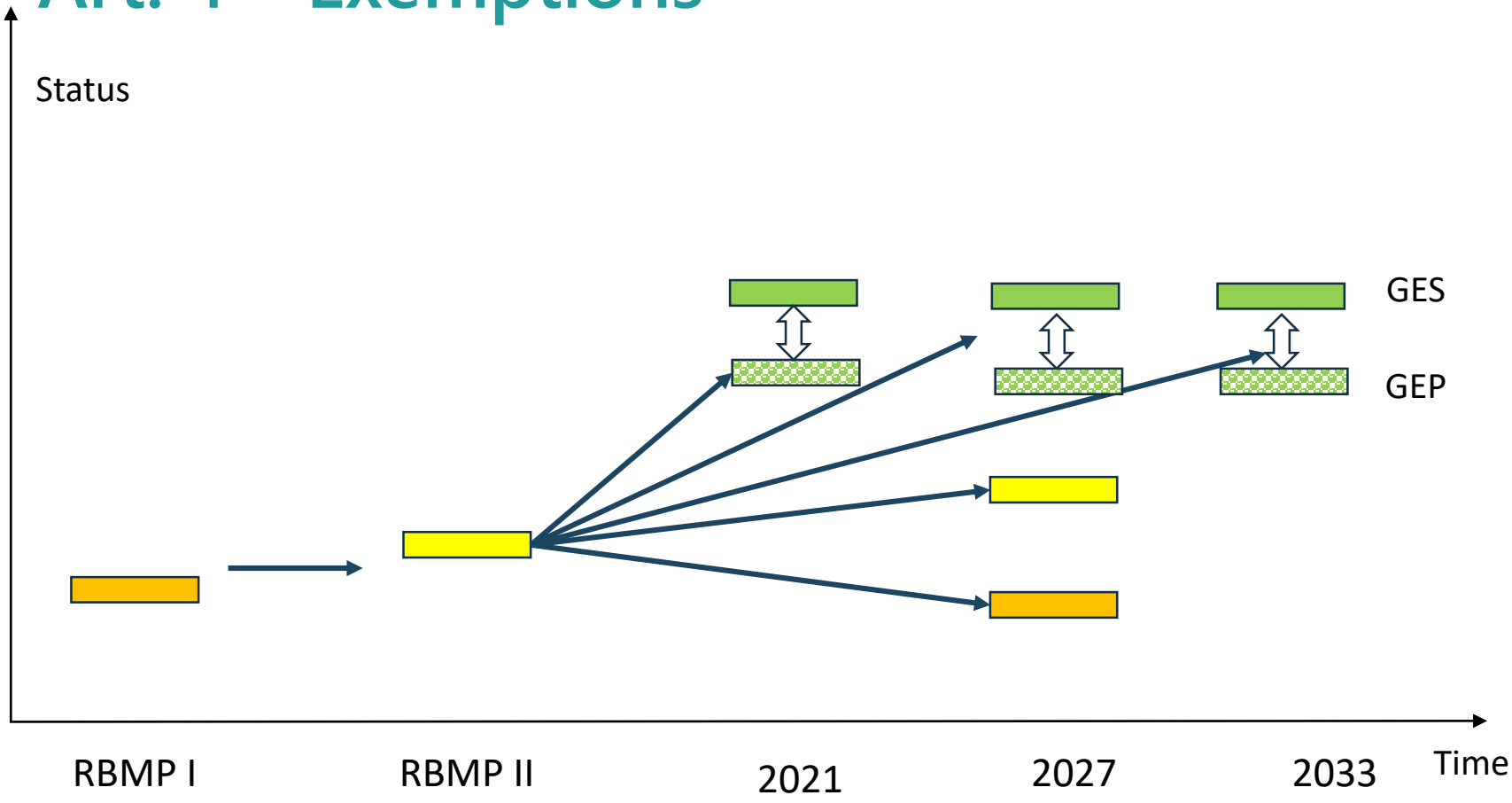
4.6 

Temporary deterioration of the status /potential in case of natural cause or « force majeure »

4.7 

Deterioration or failure to achieve good status/potential as a result of ***new modifications to the physical characteristics*** of a surface water body or alterations to the level of bodies of groundwater; or status deterioration of a body of surface water from high status to good status as a result of ***new sustainable human development activities***.

Art. 4 – Exemptions



GEP: Good Ecological Potential GES Good Ecological Status

Art. 4.4 : Extension of the deadline

a) *Member States determine that all necessary improvements in the status of bodies of water cannot reasonably be achieved within the timescales set out in that paragraph for at least one of the following reasons:*
   - i. *the scale of improvements required can only be achieved in phases exceeding the timescale, for reasons of technical feasibility;*
   - ii. *completing the improvements within the timescale would be disproportionately expensive;*
   - iii. *natural conditions do not allow timely improvement in the status of the body of water.*

Art. 4.4 : Extension of the deadline

a) *Member States determine that all necessary improvements in the status of bodies of water cannot reasonably be achieved within the timescales set out in that paragraph for at least one of the following reasons:*

   i. ***technical feasibility***
   ii. ***disproportionately expensive***
   iii. ***natural conditions***

Art. 4.4 : Extension of the deadline

<u>Conditions</u>:

- *No further deterioration*
- *Explained in the RBMP*
- *Review in updates of RBMP*
- *Limited to a maximum of two further updates of the river basin management plan except in cases of "natural conditions"*

Art. 4.5 : Less stringent objectives

Member States may aim to achieve less stringent environmental objectives [..] for specific bodies of water when they are so affected by human activity [..] or their natural condition is such that the achievement of these objectives would be infeasible or disproportionately expensive,

and all the following conditions are met:

Art. 4.5 :
Less stringent objectives

.. the achievement of these objectives would be
infeasible or disproportionately expensive *..*

and all the following conditions are met:

Art. 4.5 : Less stringent objectives

Conditions:

- *No further deterioration*

- *Explained in the RBMP*
- *Review in updates of RBMP*

- *the environmental and socioeconomic needs served by such human activity cannot be achieved by other means, which are a significantly better environmental option not entailing disproportionate costs*
- *New objective: status "as high as possible given to the nature of the human activity or pollution"*

Art. 4.5 : “Less stringent objectives”

Example: UK - http://environment.data.gov.uk/catchment-planning

Water body classification

	2009 Cycle 1	2015 Cycle 2	Objectives
Overall Water Body	Poor	Poor	Poor by 2015
Ecological	Poor	Poor	Poor by 2015
Biological quality elements	Poor	Poor	Poor by 2015
Fish	-	Poor	Poor by 2015
Invertebrates	Poor	Moderate	Good by 2027
Macrophytes	-	-	-
Macrophytes and Phytobenthos Combined	-	Moderate	Moderate by 2015
Hydromorphological Supporting Elements	Supports good	Supports good	Supports good by 2015
Hydrological Regime	Supports good	Supports good	Supports good by 2015
Morphology	Does not support good	Does not support good	-
Physico-chemical quality elements	Moderate	Moderate	Moderate by 2015
Ammonia (Phys-Chem)	Good	High	Good by 2015
Biochemical Oxygen Demand (BOD)	-	High	-
Dissolved oxygen	High	High	Good by 2015
pH	High	High	Good by 2015

Art. 4.6 : Temporary deterioration

Temporary deterioration in the status of bodies of water shall not be in breach of the requirements of this Directive if this is the result of circumstances of natural cause or force majeure which are exceptional or could not reasonably have been foreseen, in particular extreme floods and prolonged droughts, or the result of circumstances due to accidents which could not reasonably have been foreseen,

when all the following conditions have been met:

Art. 4.6 : Temporary deterioration

Conditions:

- *All practicable steps are taken to prevent further deterioration in status and in order not to compromise the achievement of the objectives of this Directive in other bodies of water not affected by those circumstances*
- *Measures should not compromise the recovery of the quality of the body of water once the circumstances are over*
- *Restoring the body of water to its status prior to the effects of those circumstances as soon as reasonably practicable*

- *Explained in the RBMP and Programme of measures*

Art. 4.7 : New modifications or development activities

Member States will not be in breach of this Directive when:

- *failure to achieve good groundwater status, good ecological status or, where relevant, good ecological potential or to prevent deterioration in the status of a body of surface water or groundwater is the result of new modifications to the physical characteristics of a surface water body or alterations to the level of bodies of groundwater, or*
- *failure to prevent deterioration from high status to good status of a body of surface water is the result of new sustainable human development activities*

and all the following conditions are met

Art. 4.7 : New modifications or development activities

Conditions:

- *all practicable steps are taken to mitigate the adverse impact*
- *explained in the RBMP and the objectives are reviewed every six years;*
- *the reasons for those modifications or alterations are of overriding public interest and/or the benefits to the environment and to society of achieving the WFD-objectives set are outweighed by the benefits[..] to human health, to the maintenance of human safety or to sustainable development*
- *the beneficial objectives served by those modifications or alterations of the water body cannot for reasons of technical feasibility or disproportionate cost be achieved by other means, which are a significantly better environmental option.*

Art. 4.7 in RBMPs

Key Issue Paper 4.7 (December 2016)

- In the first cycle of the WFD, 12 RBMPs (10.3% of the assessed RBMPs) included a statement that Article 4(7) will be applied for specific projects and in 4 RBMPs it was unclear.
- The exemptions that have been most commonly applied under Article 4(7) were due to flood protection (7 cases) followed by navigation (6 cases) and port development (4 cases). Hydropower and other electricity generation facilities were mentioned in 3 and 2 RBMPs respectively.
- A first screening assessment of draft second RBMPs (dRBMPs) reveals that only a few river basin districts (RBDs) have applied Article 4(7) more often than in 2009

Art. 4.7 : New modifications or development activities

Provision for combining WFD with other (European) policy objectives ?

- *Energy*
- *Transport including navigation*
- *Flood protection and coastal defence*
- *Water supply and irrigation*

Not worded as a permit procedure, but an obligation during implementation of the WFD

Situation in the Belgian River basin management plans (RBMP 2016-2021)

Assessment of the Belgian water bodies and the use of the exemptions

Michel Boucneau (VMM)

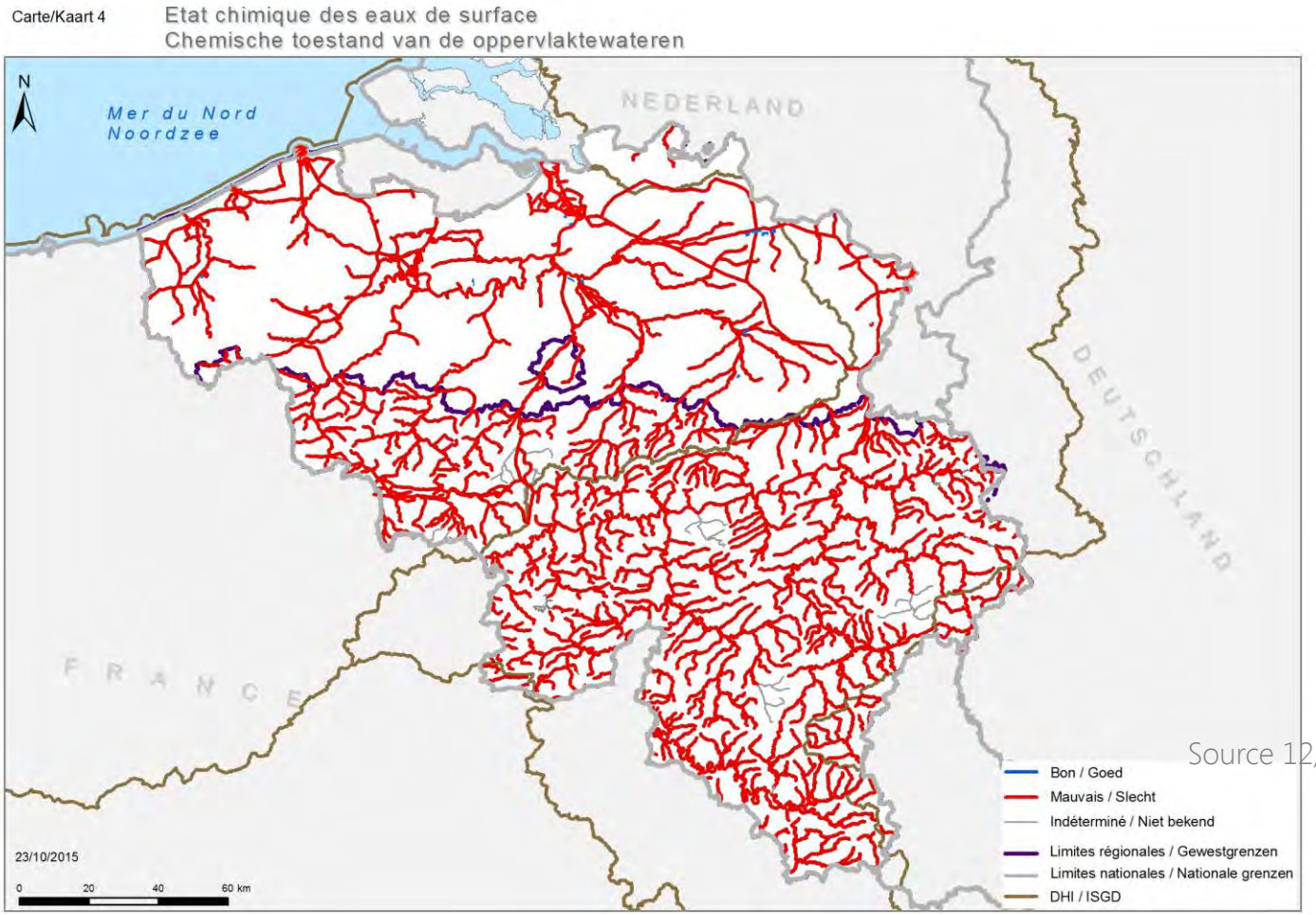
Nicolas Fermin (DGO3)

Martin Binon (BE-LB)

Ecological status and potential of surface water bodies (3 regions)

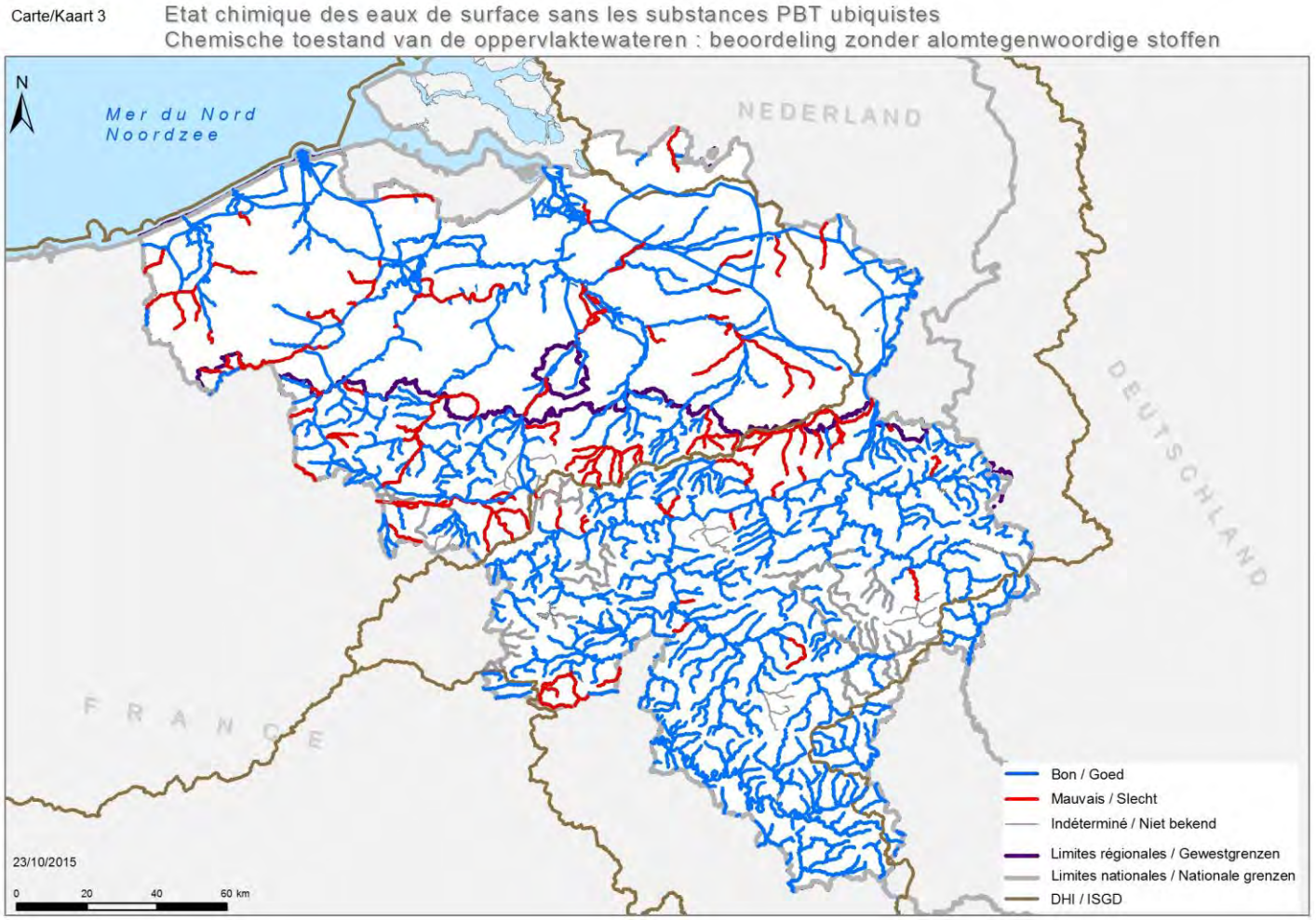
Source 12/10/2015

Chemical status of surface water bodies (3 regions)



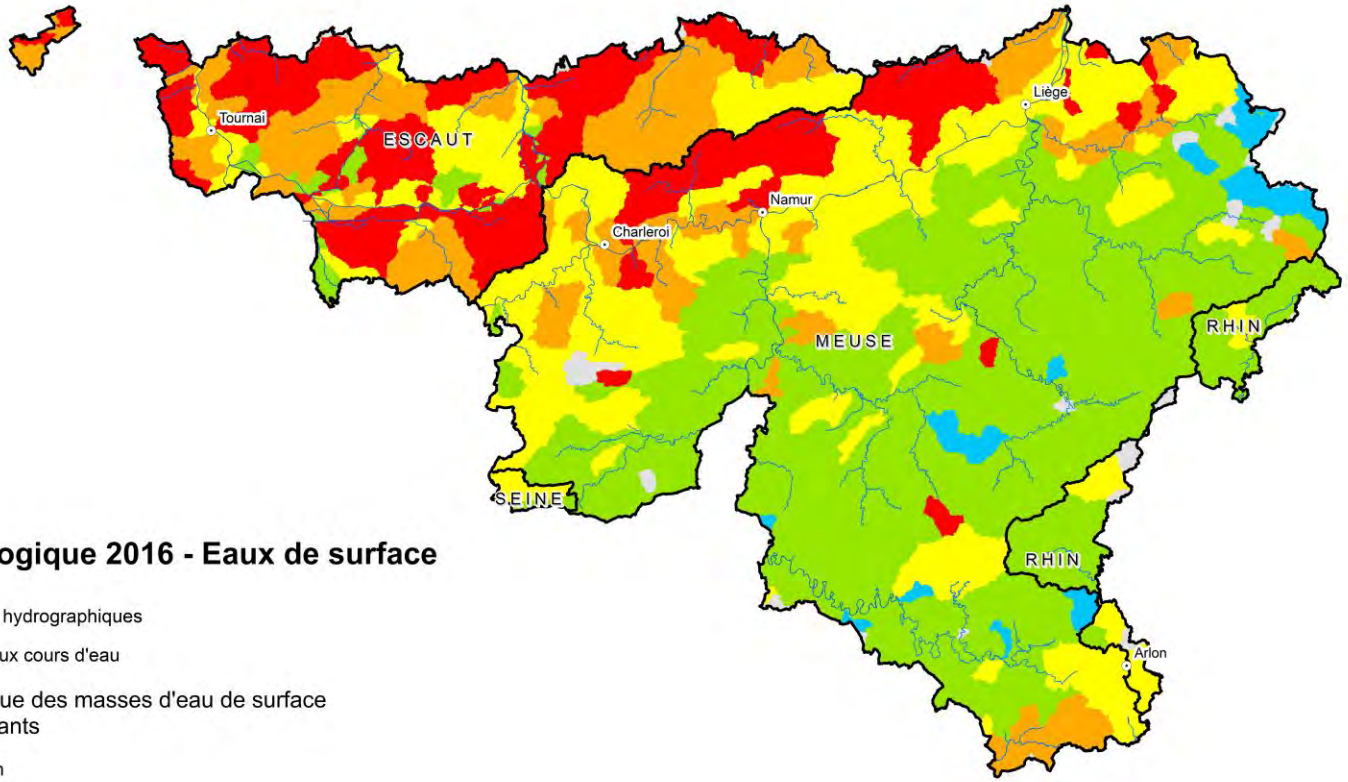
Source 12/10/2015

Chemical status of surface water bodies (3 regions)



)/2015

Wallonia – Ecological status



Wallonie environnement SPW

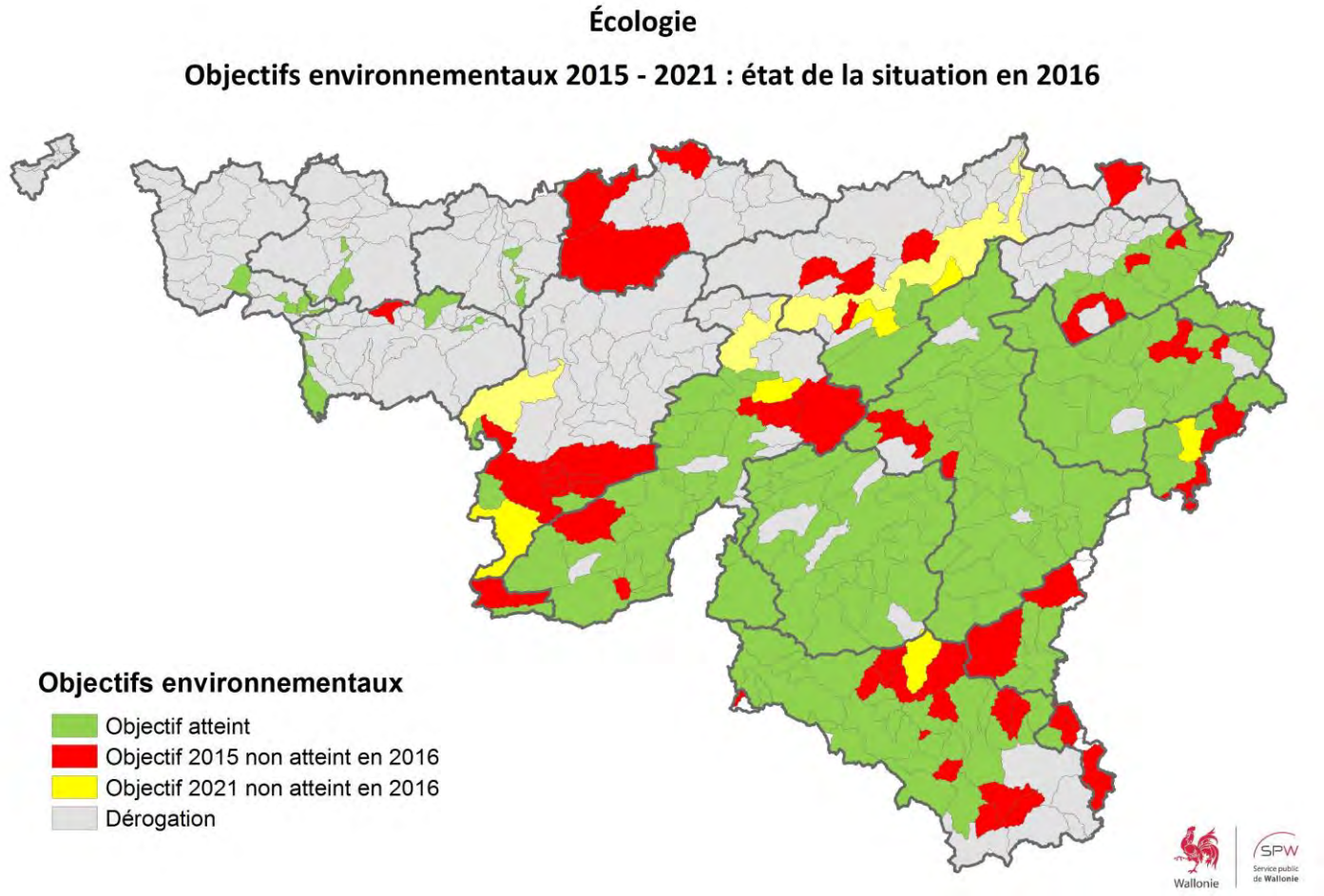
Wallonia – Ecological status
High status

Pearl mussel

- Natura 2000 species
- Complex life cycle
- Needs : cool water, good quality sediments, and Salmonidae

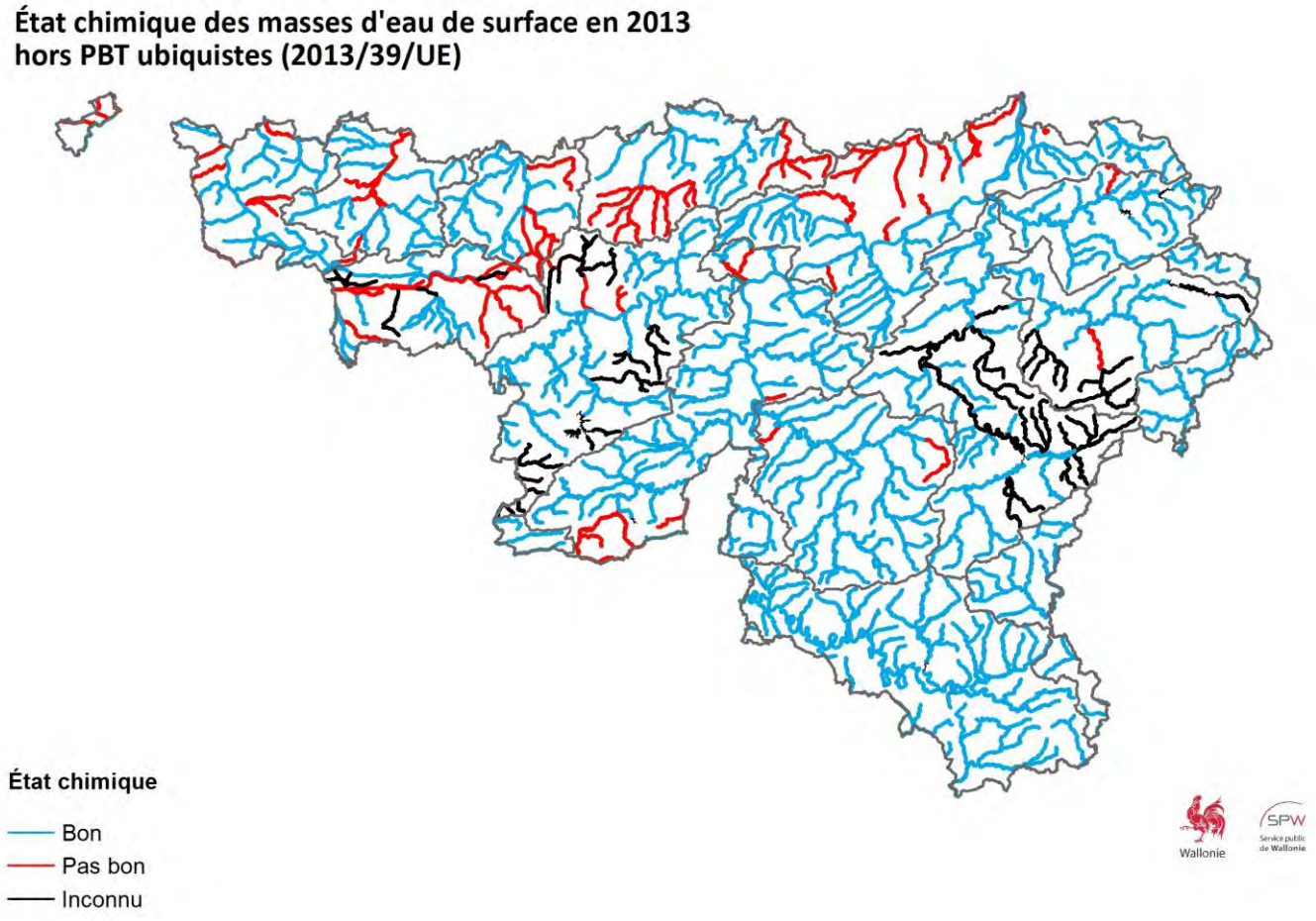
Source 12/10/2015

Wallonia – Ecological status
Environmental objectives



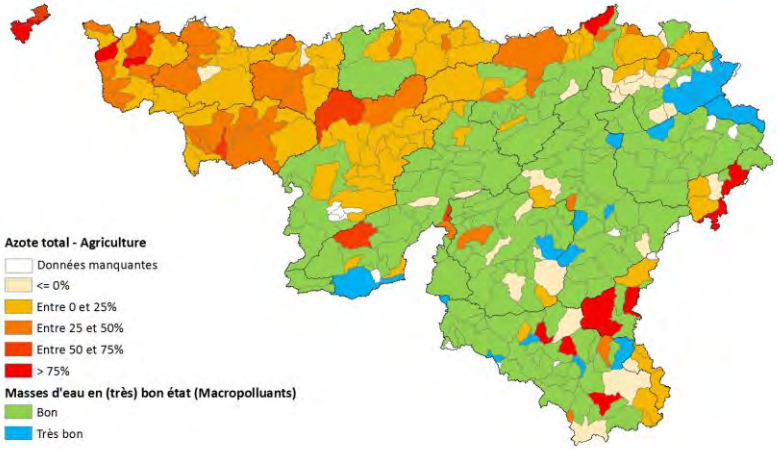
Source 12/10/2015

Wallonia – Chemical status without ubiquitous substances

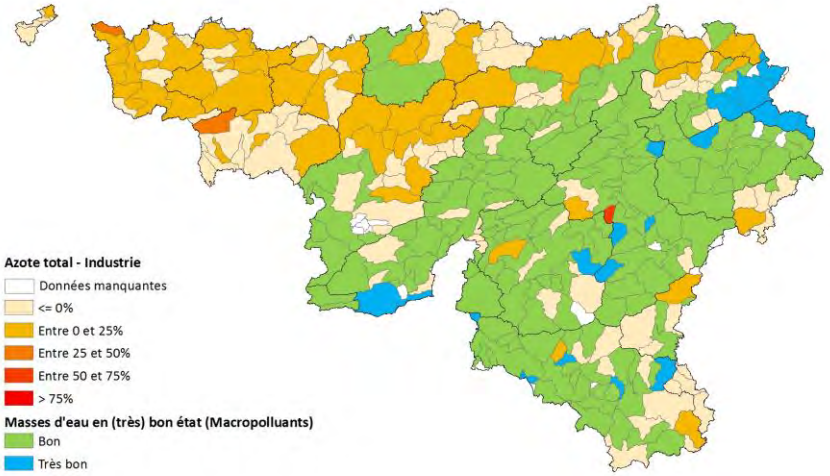


Wallonia – efforts to make

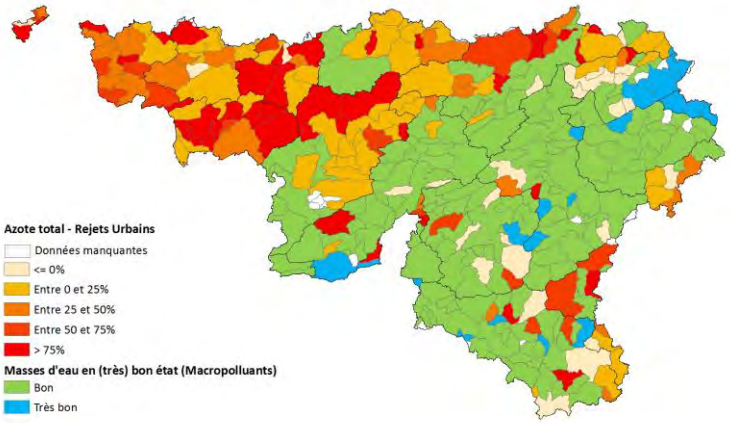
Effort à fournir en azote total pour la force motrice agriculture



Effort à fournir en azote total pour la force motrice industrie



Effort à fournir en azote total pour la force motrice rejets urbains



RBMP 2016-2021 - Flanders

- Objectives surface water
  - 17 “Priority areas” (good in 2021) in 56 “Focus areas” (Good in 2027 or where strong local dynamics exist)
  - Extension of deadline until 2027 for the others

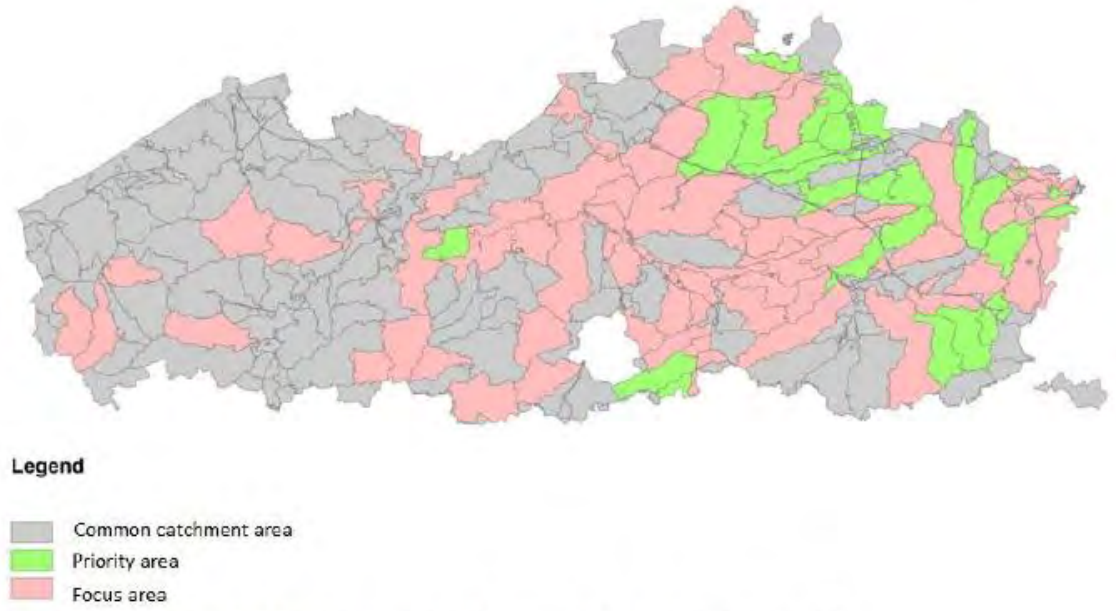
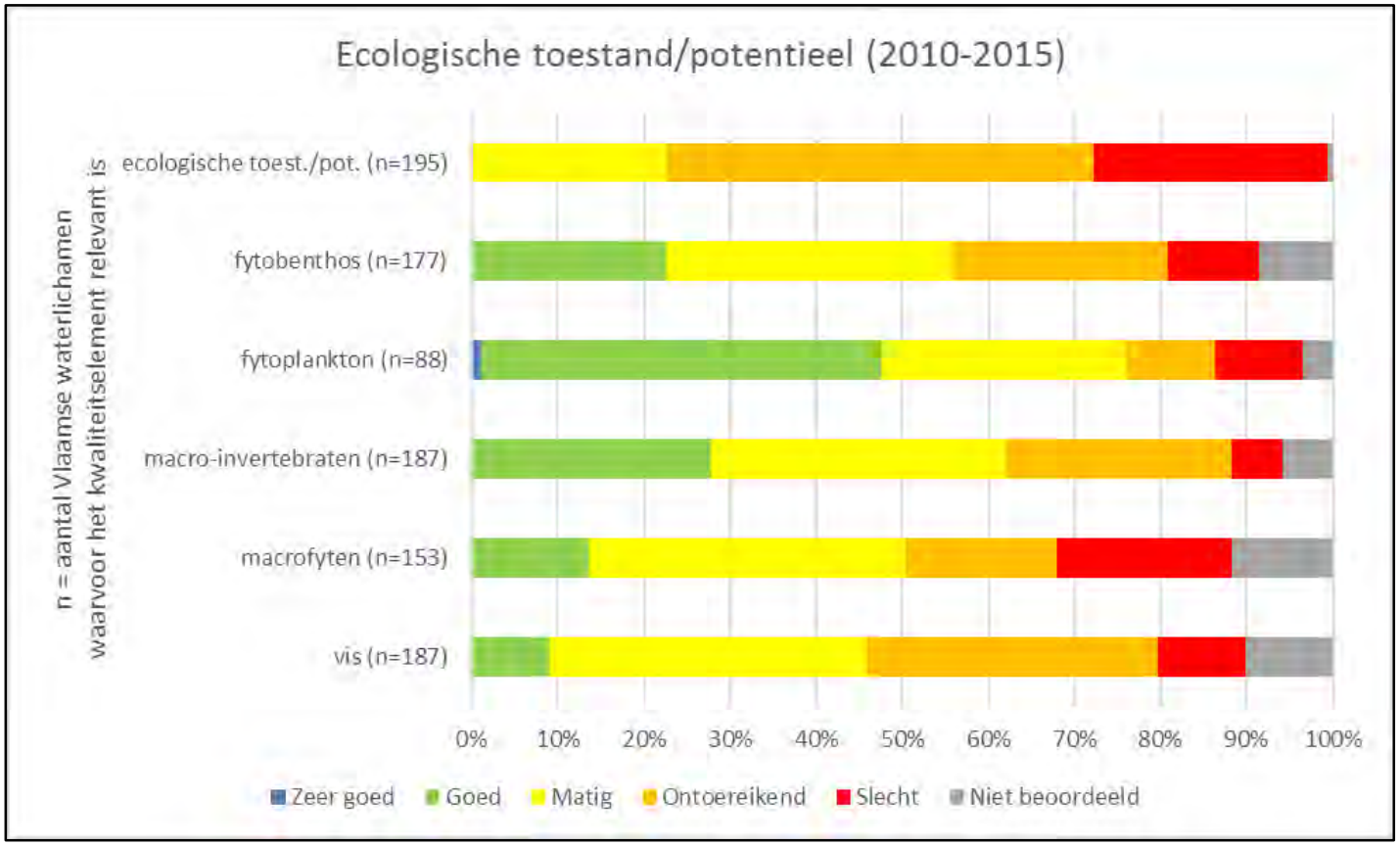


Figure 12: Location of priority areas and focus areas for surface water

RBMP 2016-2021 - Flanders

- **WUP2017 (water implementation programme)**



RBMP 2016-2021 - Flanders

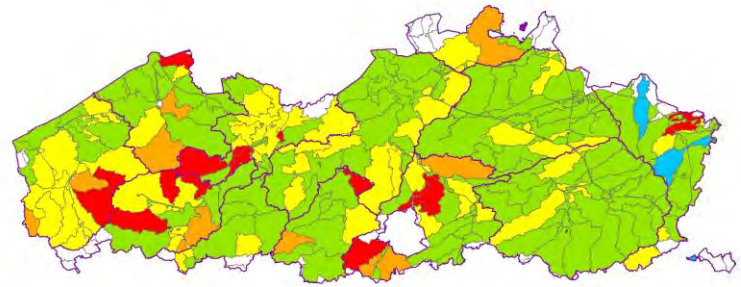
- **WUP2017 (water implementation programme)**

Aantal Vlaamse speerpuntgebieden	vis	macrofyten	macro-invertebraten	fytoplankton	fytobenthos
Zeer goed			1		
Goed	2	4	12		5
Matig	6	9	4		8
Ontoereikend	4	2			3
Slecht		2			
Niet beoordeeld	5				1
Niet relevant				17	
	17	17	17	17	17

RBMP 2016-2021 - Flanders

- **WUP2017 (water implementation programme)**

Beoordeling: Opgeloste zuurstof 2015-2017

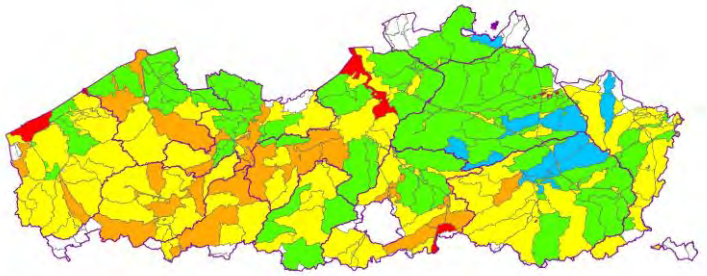


Legende

O2

- Geen beoordeling
- Zeer goed
- Goed
- Matig
- Ontoereikend
- Slecht

Beoordeling: Totaal stikstof 2015-2017

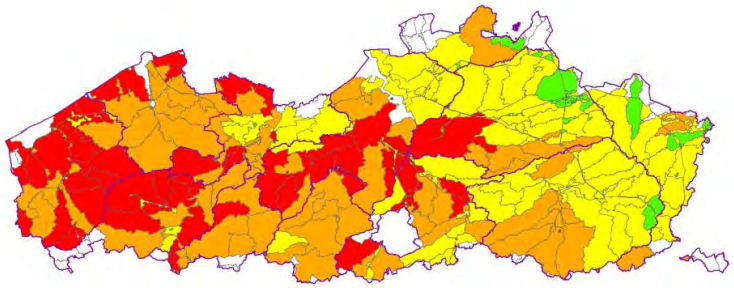


Legende

Nt

- Matig

Beoordeling: Totaal fosfor 2015-2017



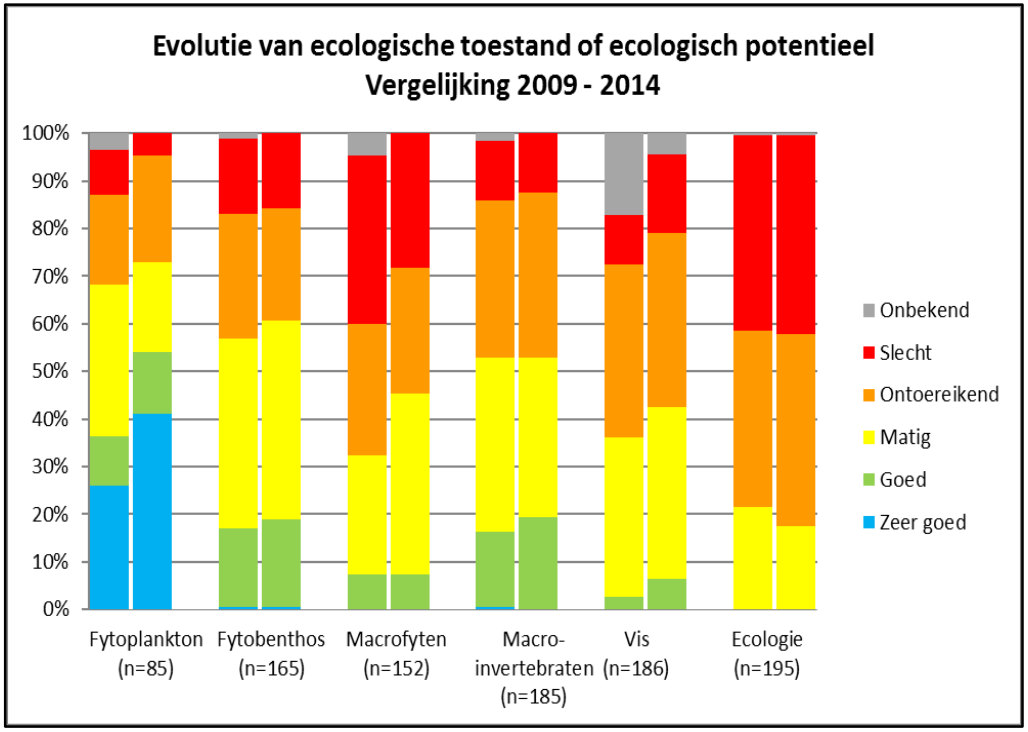
Legende

Pt

- Geen beoordeling
- Goed
- Matig
- Ontoereikend
- Slecht

RBMP 2016-2021 - Flanders

- Deterioration



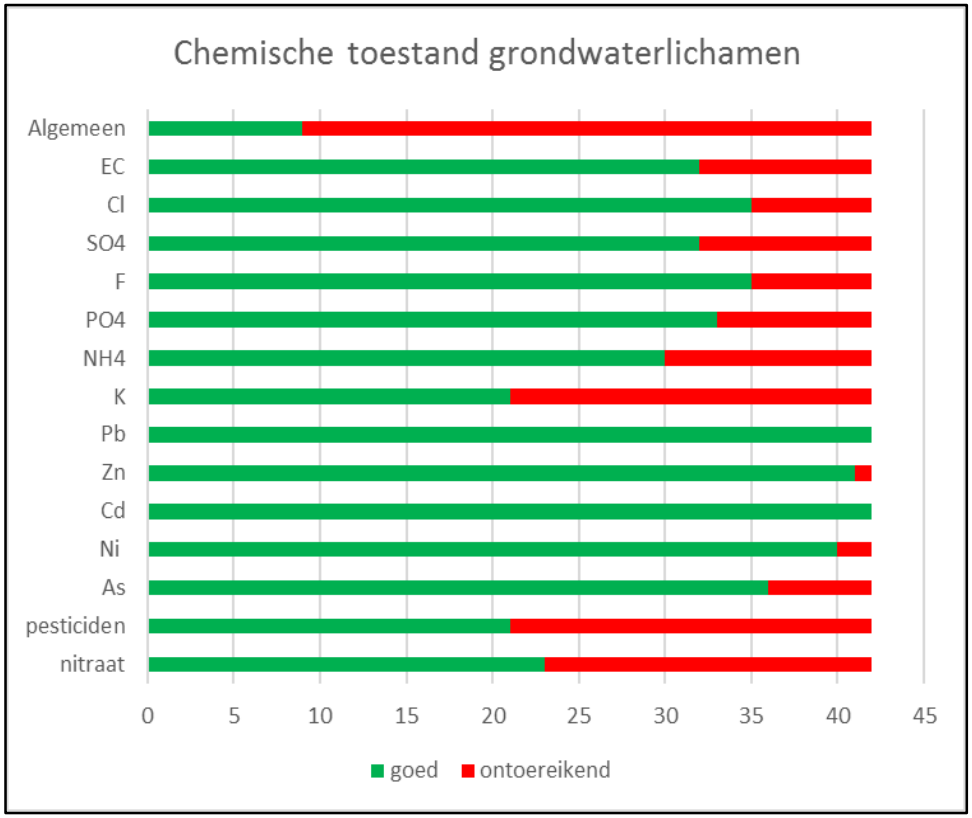
Bron: Stroomgebiedbeheerplannen Schelde en Maas 2016-2021

RBMP 2016-2021 - Flanders

- Objectives groundwater
  - Reaching (keeping) good status in 8 groundwater bodies by 2021
  - Extension of deadline until 2027 for the others

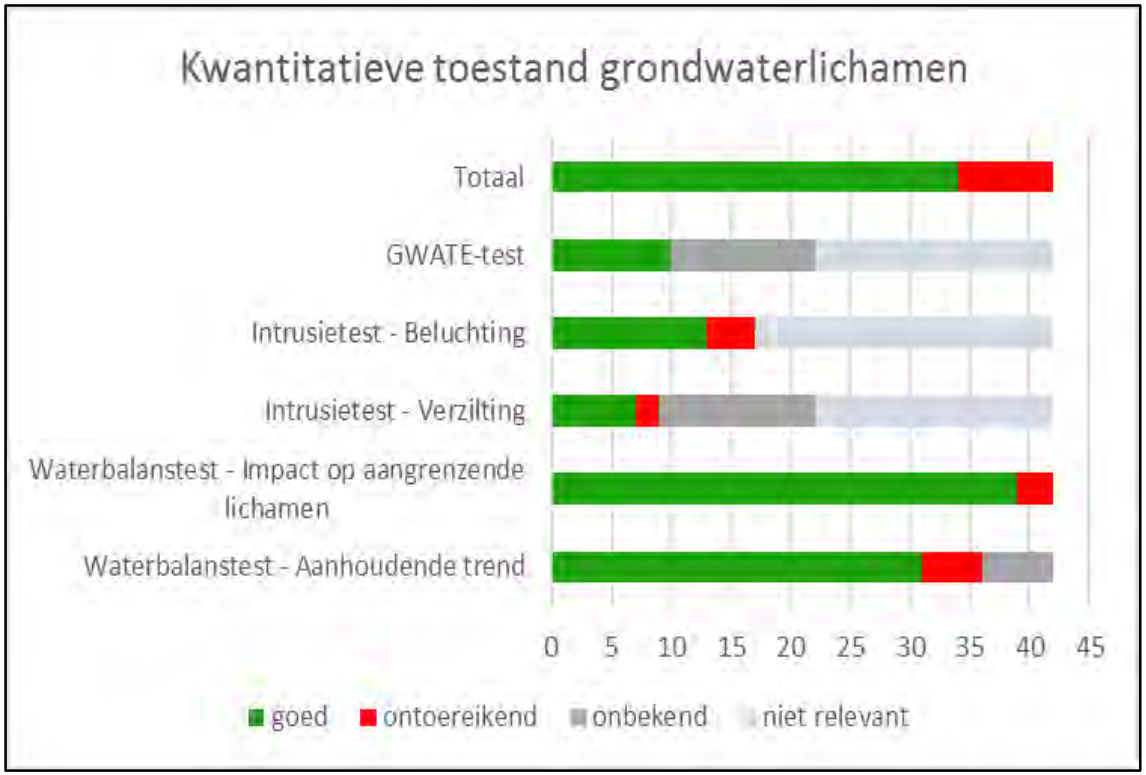
RBMP 2016-2021 - Flanders

- **WUP2017 (water implementation programme)**



RBMP 2016-2021 - Flanders

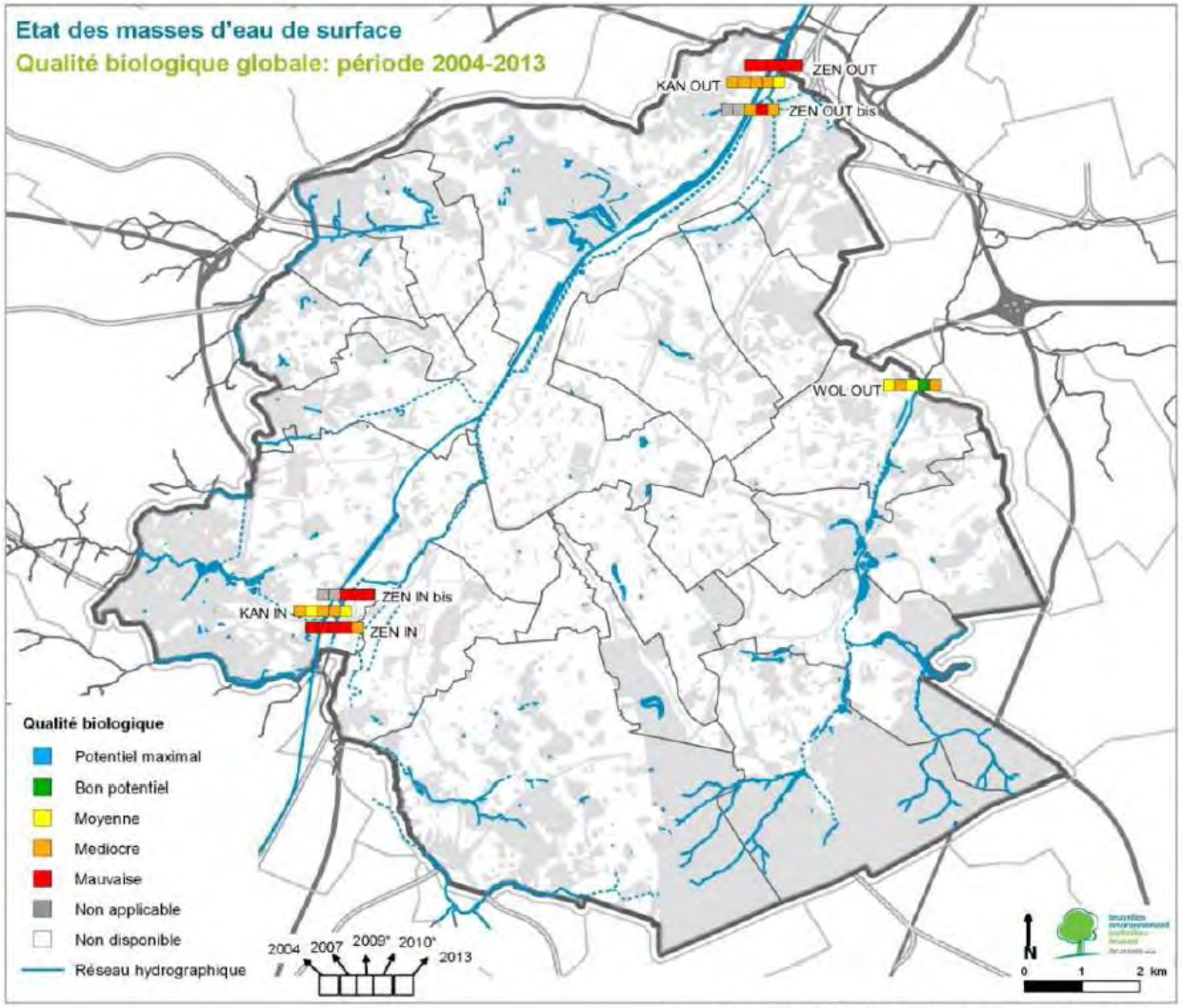
- **WUP2017 (water implementation programme)**



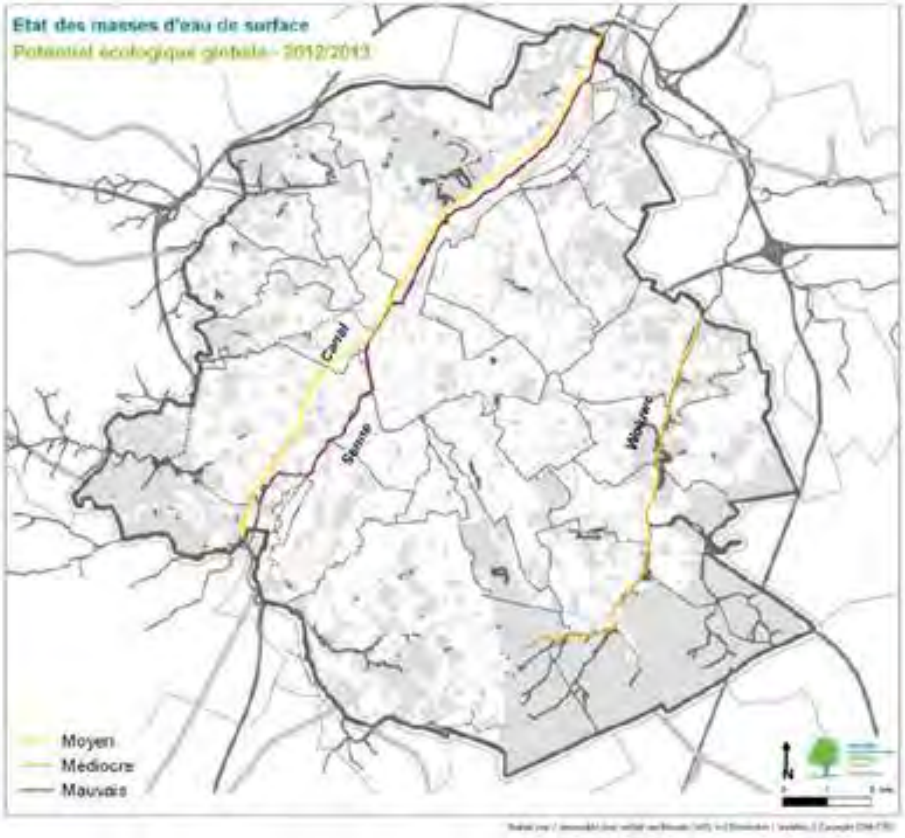
Brussels Capital Region

	Zenne		Kanaal		Woluwe	
	2009 *(2007)*	2012 *(2013)*	2009 *(2007)*	2012 *(2013)*	2009 *(2007)*	2012 *(2013)*
Ecologische kwaliteit	Slecht	Slecht	Ontoereikend	matig	Ontoereikend	Ontoereikend
Biologische parameters	Slecht (2 deklasserings-elementen)	Slecht (1 deklasseringselement)	Ontoereikend (1 deklasseringselement)	matig (3 deklasseringselementen)	Ontoereikend (1 deklasseringselement)	Ontoereikend (1 deklasseringselement)
Fysisch-chemische parameters	Slecht (5 deklasserings-parameters)	Slecht (3 deklasserings-parameters)	Slecht (1 deklasseringsparameter)	Slecht (1 deklasseringsparameter)	Goed	Goed
RBSP (specifieke verontreinigende stoffen)	Slecht (2 deklasserings-parameters)	Slecht (2 deklasserings-parameters)	Goed	Slecht (1 deklasseringsparameter)	Goed	Goed
Chemische kwaliteit	Slecht	Slecht	Slecht	Slecht	Slecht	Slecht
Alle parameters	Slecht (3 deklasseringsparameters)	Slecht (1 deklasseringsparameter)	Slecht (1 deklasseringsparameter)	Slecht (1 deklasseringsparameter)	Slecht (1 deklasseringsparameter)	Slecht (1 deklasseringsparameter)
Zonder alomtegenwoordige stoffen	Goed	Goed	Goed	Goed	Goed	Goed

Brussels Capital Region

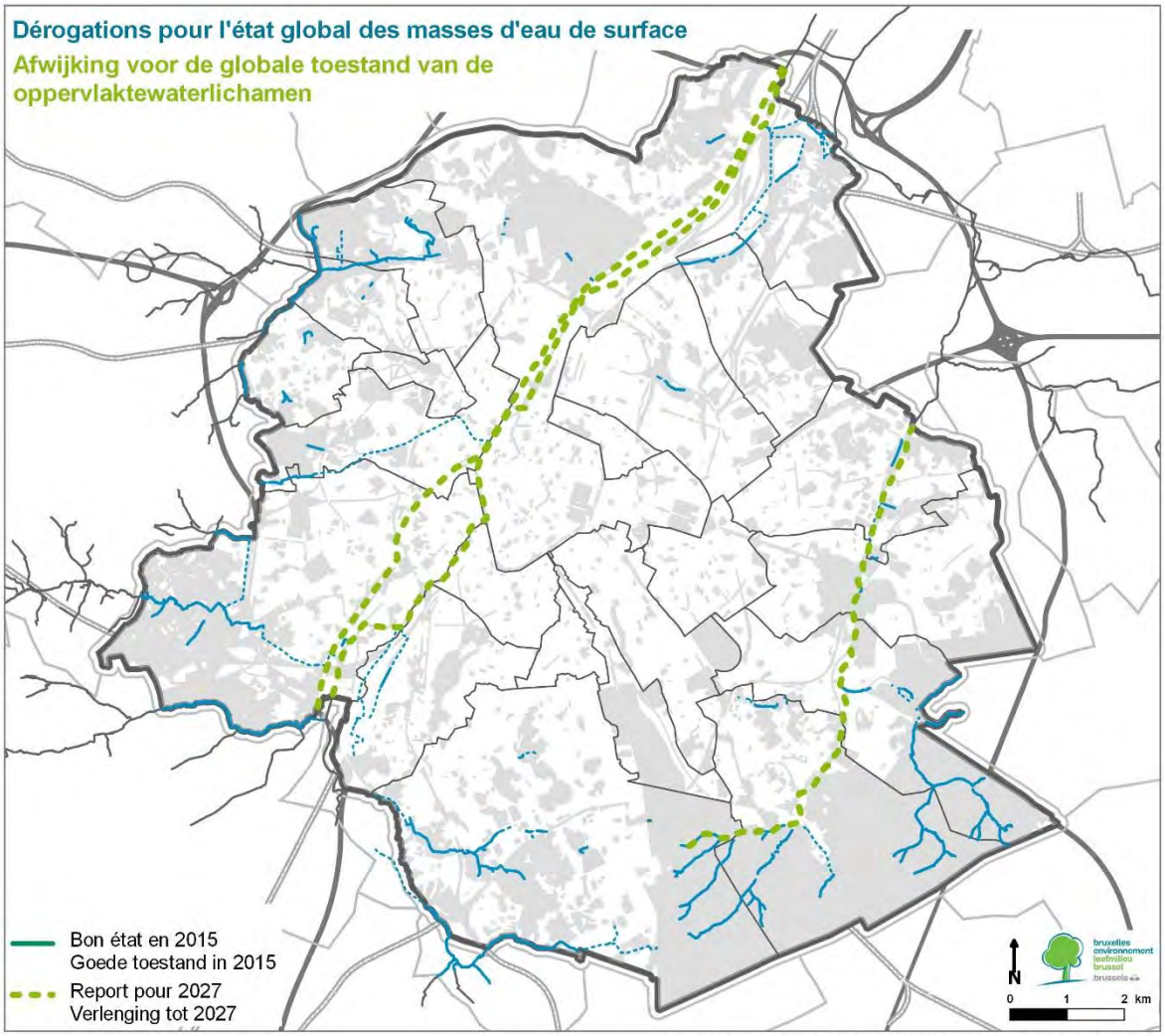


Brussels Capital Region



Source: Bruxelles Environnement, 2014

BCR exemptions



New clarification on article 4.7.
The "Weser" judgement of EUCJ of 1 July 2015

Michel Boucneau (VMM)

Belini

The Weser Case

Port of Bremerhaven : fourth-largest haven in Europe with 4.9 million twenty-foot equivalent units (TEU) of cargo handled in 2007 and 5,5 million in 2015 (Source: Wikipedia)

The Weser Case

- Case:
  - Planning permission for three projects (planning approval 15/07/2011) for a further deepening and developing of the river Weser.
  - Both developer and permitting authority were federal agencies.
  - The aim of the works was to enable larger container vessels to reach the port of Bremerhaven irrespective of the tide, and to reach Bremen and other ports more upstream depending on the tide.
  - Implementation of the projects at issue involves initial and regular dredging of the riverbed in the channels.
  - The project will have significant effects on the status of the water body (water quality (increase of salinity) and water quantity (increase of the speeds of water flows)) which for the most parts are classified as heavily modified water bodies

The Weser Case

- Approval challenged by Bund für Umwelt und Naturschutz Deutschland, a.o. based on WFD
- Wasser- und Schiffahrtsdirektion Nordwest: "*deterioration within a status class is not to be regarded as a deterioration of the ecological potential or the status of the body of water concerned*"
- German Court: case depends on interpretation of WFD
- 4 Questions to the Court of Justice of the European Union

The Weser Case

- Is Article 4(1)(a)(i) of Directive 2000/60 … to be interpreted as meaning that the Member States must — unless a derogation is granted — refuse to authorise a project if it may cause a deterioration in the status of a body of surface water, or is that provision merely a statement of an objective for management planning?
- Is the term "deterioration of the status" in Article 4(1)(a)(i) of Directive 2000/60 to be interpreted as covering only detrimental changes which lead to classification in a lower class in accordance with Annex V to the directive?
- If the second question is to be answered in the negative: under what circumstances does "deterioration of the status" within the meaning of Article 4(1)(a)(i) of Directive 2000/60 arise?
- Are the provisions of Article 4(1)(a)(ii) and (iii) of Directive 2000/60 to be interpreted as meaning that the Member States must — unless a derogation is granted — refuse to authorise a project if it jeopardises the attainment of good surface water status or of good ecological potential and good surface water chemical status by the date laid down by the directive, or are those provisions merely a statement of an objective for management planning?'

The Weser Case

- Is “deterioration” only a planning principle or also condition to check for every individual project ?
- Is “deterioration” to be evaluated only on the level of “overall ecological status” (incl. “one out, all out”) ?
- If not on the level of level of “overall ecological status”, then how ?
- Same question concerning “attainment of good surface water status or of good ecological potential and good surface water chemical status by the date laid down by the directive” - is it only a planning principle or also condition to check for every individual project ?

The Weser Case

the Court (Grand Chamber) hereby rules:

1. Article 4(1)(a)(i) to (iii) of Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy must be interpreted as meaning that the Member States are required — unless a derogation is granted — to refuse authorisation for an individual project where it may cause a deterioration of the status of a body of surface water or where it jeopardises the attainment of good surface water status or of good ecological potential and good surface water chemical status by the date laid down by the directive.
2. The concept of 'deterioration of the status' of a body of surface water in Article 4 (1)(a)(i) of Directive 2000/60 must be interpreted as meaning that there is deterioration as soon as the status of at least one of the quality elements, within the meaning of Annex V to the directive, falls by one class, even if that fall does not result in a fall in classification of the body of surface water as a whole.

   However, if the quality element concerned, within the meaning of that annex, is already in the lowest class, any deterioration of that element constitutes a 'deterioration of the status' of a body of surface water, within the meaning of Article 4(1)(a)(i).

The Weser Case

So ..

- All individual projects (only ?) and their permits
- Individual quality elements
- Lowest class means absolute limit
- 2 separate checks:
  Deterioration and attainment of objectives
- Derogation: conditions art. 4.7

Less so ..

- chemical status knows only 2 classes
- “supporting elements” as quality elements

The Weser Case

Second case: the Schwarze Sulm

Second case: the Schwarze Sulm

- C-346/14 on 4 may 2016
  Authorisation to construct a hydropower plant on the Schwarze Sulm River (Austria)
  - Status “high” .. or “good” .. or “high” ?
  - Use of derogation from the prohibition of deterioration laid down in Article 4(7) of Directive 2000/60 was justified by an overriding public interest
  - Commission: incorrect application of art. 4.7
  - “Weser logic” confirmed, but case dismissed by the Court because no specific complaints made by Commission
  - Case still active because of C-664/15: access by NGO’s

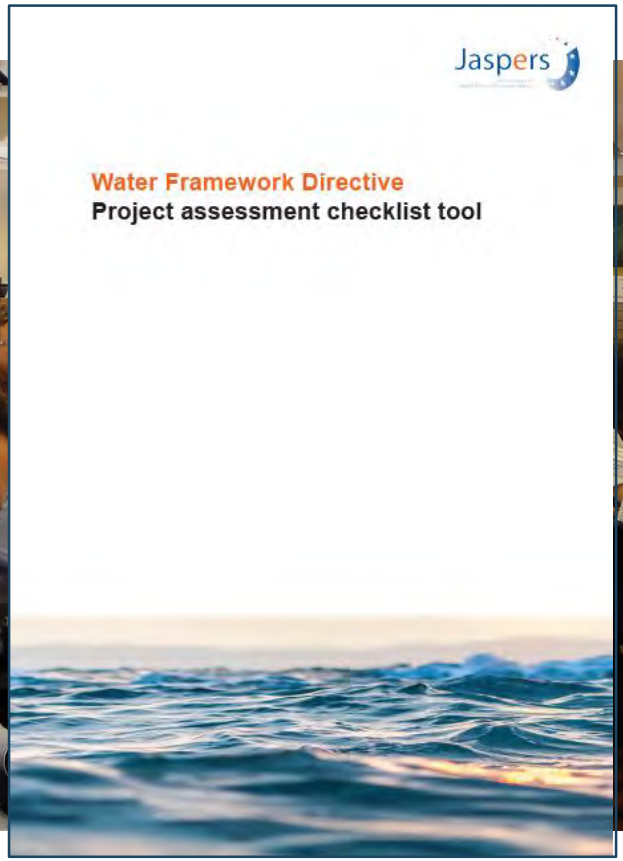
Second case: the Swarze Sulm

- C-346/14 on 4 may 2016
  - *Next, it should be noted that the construction of a hydropower plant, such as the one envisaged through the contested project, may in fact be an overriding public interest.*
    In that regard, the Member States must be allowed a certain margin of discretion for determining whether a specific project is of such interest
  - *Lastly, it should be noted that, in the present case, the national authorities weighed up the expected benefits of the contested project with the resulting deterioration of the status of the body of surface water of the Schwarze Sulm.*
  - *In disputing the merits of the assessment conducted by the Governor .. the Commission has not put forward any specific complaints showing, for example, how .. the conclusion must be that the Commission has failed to establish the infringement as alleged.*

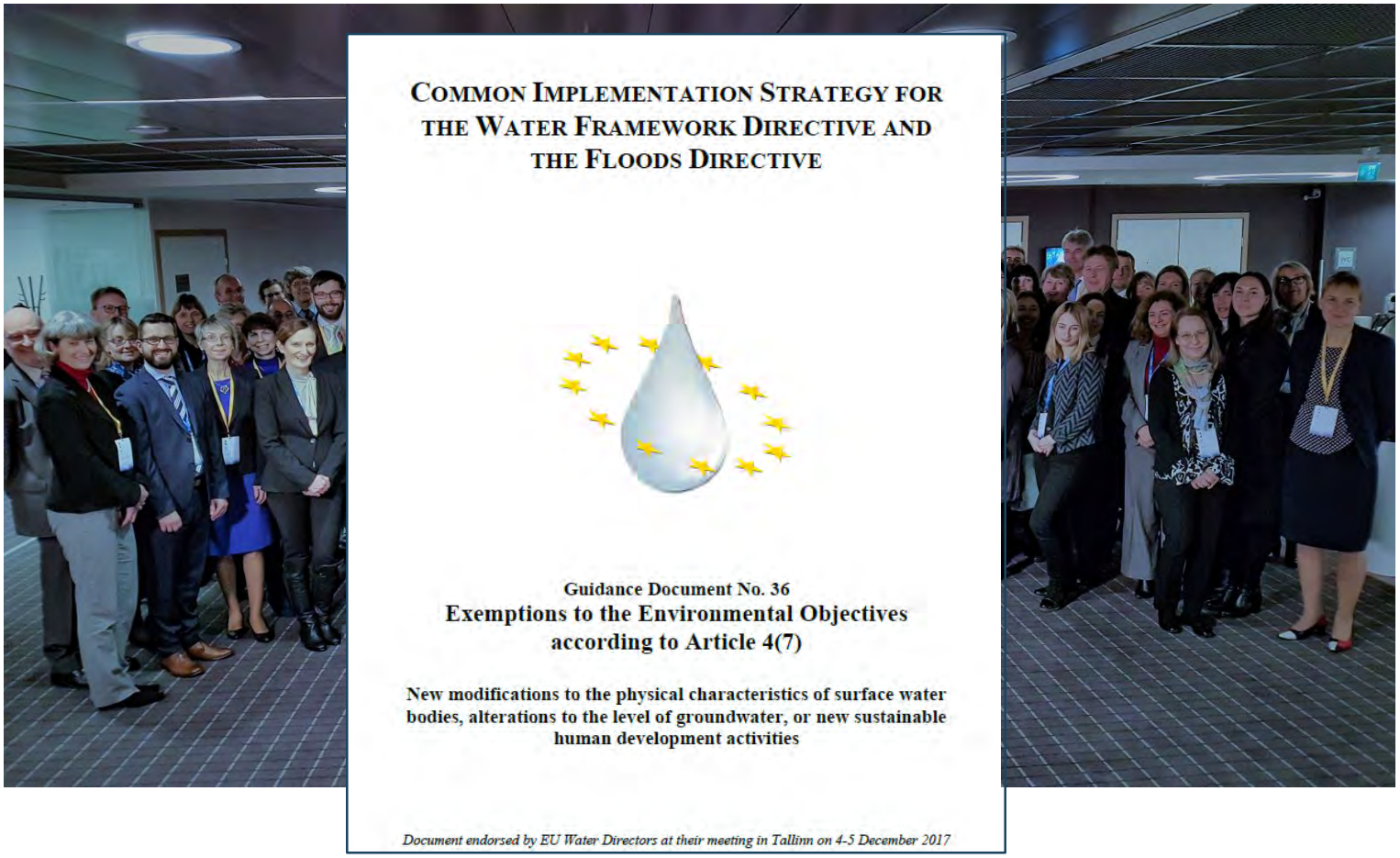
Reactions

- Lots of articles and reactions ..
- Common Implementation strategy: New Guidance Document

Jaspers:
Project assessment checklist tool



Guidance Document No. 36



COMMON IMPLEMENTATION STRATEGY FOR THE WATER FRAMEWORK DIRECTIVE AND THE FLOODS DIRECTIVE

Guidance Document No. 36

Exemptions to the Environmental Objectives according to Article 4(7)

New modifications to the physical characteristics of surface water bodies, alterations to the level of groundwater, or new sustainable human development activities

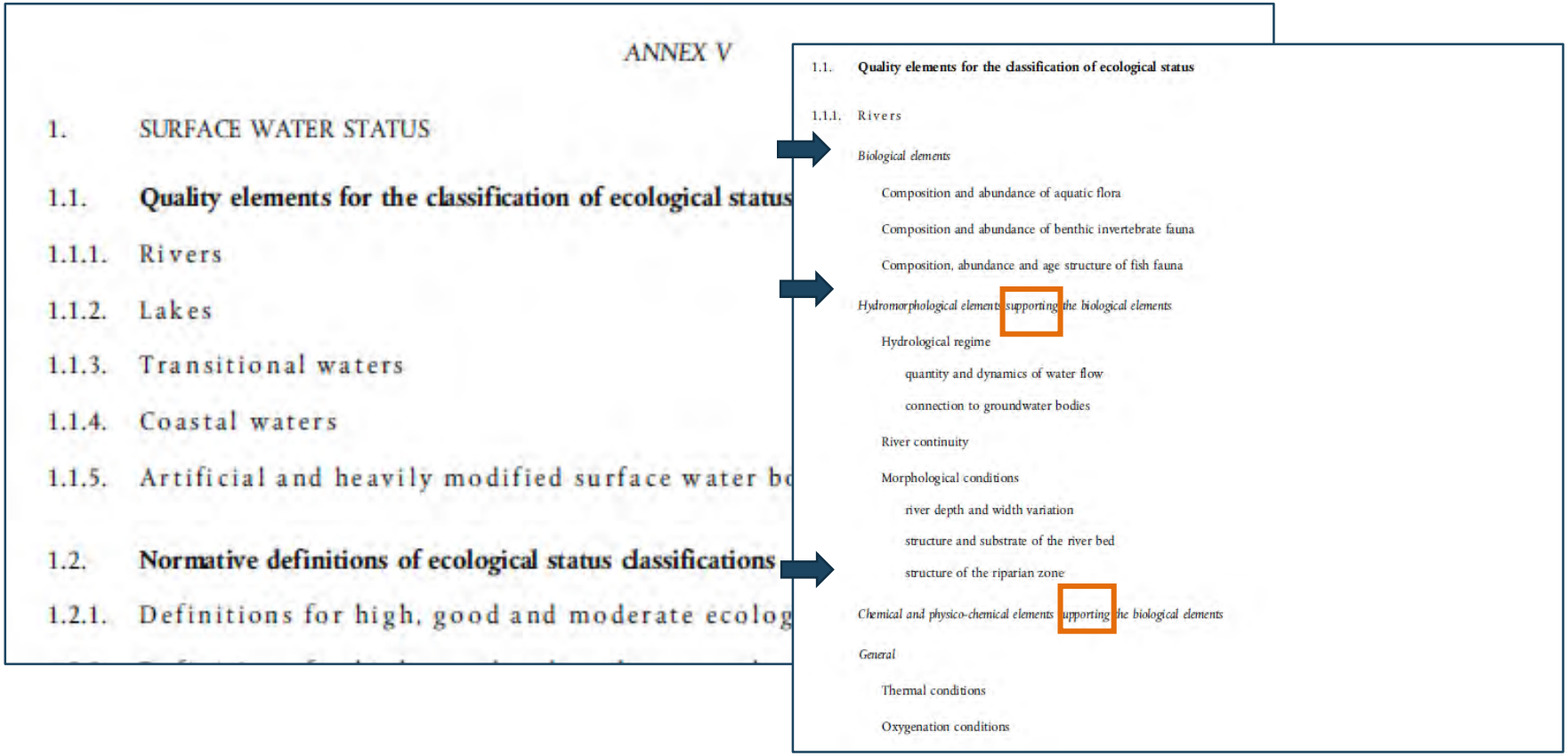
Document endorsed by EU Water Directors at their meeting in Tallinn on 4-5 December 2017

Use of art. 4.7

- Deterioration
- Attainment of good status
- Scope of art. 4.7
- Art. 4.7 Assessment

Deterioration in the WFD

" .. of the quality elements, within the meaning of Annex V to the directive .."



ANNEX V

1. SURFACE WATER STATUS

1.1. **Quality elements for the classification of ecological status**

1.1.1. Rivers

1.1.2. Lakes

1.1.3. Transitional waters

1.1.4. Coastal waters

1.1.5. Artificial and heavily modified surface water bo

1.2. **Normative definitions of ecological status classifications**

1.2.1. Definitions for high, good and moderate ecolog

1.1. **Quality elements for the classification of ecological status**

1.1.1. Rivers

Biological elements

Composition and abundance of aquatic flora

Composition and abundance of benthic invertebrate fauna

Composition, abundance and age structure of fish fauna

Hydromorphological elements supporting the biological elements

Hydrological regime

quantity and dynamics of water flow

connection to groundwater bodies

River continuity

Morphological conditions

river depth and width variation

structure and substrate of the river bed

structure of the riparian zone

Chemical and physico-chemical elements supporting the biological elements

General

Thermal conditions

Oxygenation conditions

Deterioration in the WFD

Guidance Document No. 36

Table 3: Example 1 - Deterioration of overall status

Example 1 – Deterioration of overall status									
Starting point: Overall ecological status determined by quality element in worst condition (in this case moderate). **Effect due to modification**: Overall status may deteriorate due to deterioration of individual quality elements (in this example benthic invertebrate and fish fauna as an effect of deterioration of morphology), therefore triggering an Article 4(7) Test. The example includes in this case a change in overall status of the water body from moderate to poor.									
Quality elements	**Biological quality elements**			**Hydromorphological quality elements supporting the biological elements**			**Chem. and phys. chem. quality elements supporting the biological elements**		**Overall ecological status**
	Aquatic flora	Benthic invertebrate fauna	Fish fauna	Hydrology	Morphology	Continuity	General conditions	River basin specific pollutants	
Starting point	2	2	3	worse than 2**	2*	worse than 2**	2*	2	3
Effect due to modification	2	3	4	worse than 2**	worse than 2**	worse than 2**	2*	2	4

1: High; 2: Good; 3: Moderate; 4: Poor; 5: Bad

* Conditions consistent with the achievement of the values specified for good status of the biological quality elements

** Conditions not consistent with the achievement of the values specified for good status of the biological quality elements

Deterioration in the WFD

Guidance Document No. 36

Table 4: Example 2 – Overall status remains but deterioration of a biological quality element

Example 2 – Overall status remains but deterioration of a biological quality element									
Starting point: Overall ecological status determined by quality element in worst condition (in this case good).									
Effect due to modification: Overall ecological status maintained as good but one biological quality element may deteriorate, in this example fish fauna due to deterioration of the quality elements hydrology and continuity, therefore triggering an Article 4(7) Test.									
Quality elements	Biological quality elements			Hydromorphological quality elements supporting the biological elements			Chem. and phys. chem. quality elements supporting the biological elements		Overall ecological status
	Aquatic flora	Benthic invertebrate fauna	Fish fauna	Hydrology	Morphology	Continuity	General conditions	River basin specific pollutants	
Starting point	2	1	1	1	1	1	2*	1	2
Effect due to modification	2	1	2	2*	1	2*	2*	1	2

1: High; 2: Good; 3: Moderate; 4: Poor; 5: Bad

* Conditions consistent with the achievement of the values specified for good status of the biological quality elements

Deterioration in the WFD

Guidance Document No. 36

Table 6: Example 4 – Deterioration of a quality element of a surface water body which is already in the lowest class

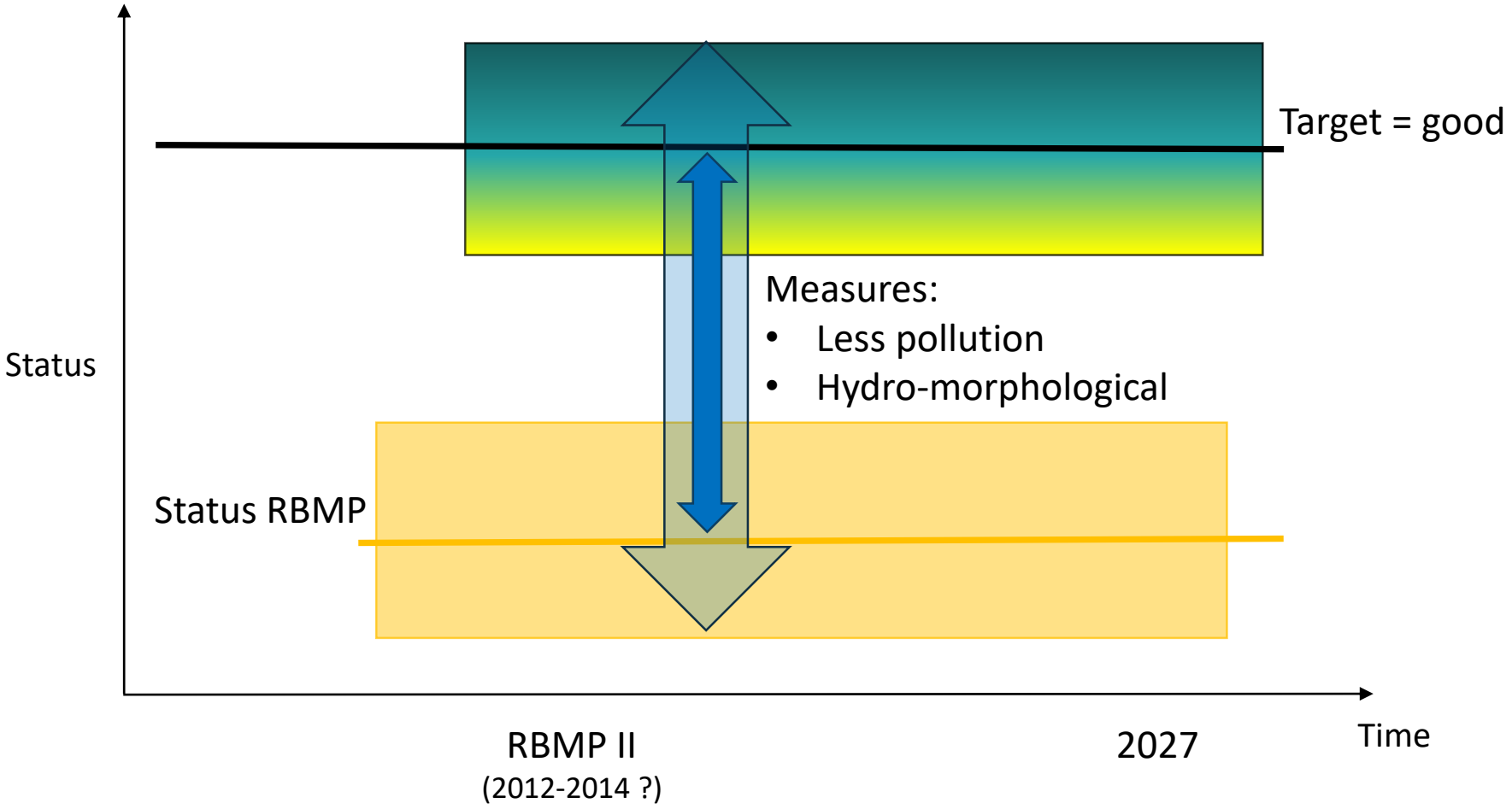
Example 4 – Deterioration of quality element which is already in the lowest class									
Starting point: Overall ecological status bad since one quality element in bad status class (fish fauna). **Effect due to modification**: The quality element which is already in the lowest class (bad) is further deteriorating (in this example e.g. further loss of composition or abundance of fish fauna due to morphological changes), therefore triggering an Article 4(7) test. Note that any further deterioration of a quality element which is already in the lowest class is considered as deterioration and drives the water body further away from achieving the WFD objectives.									
Quality elements	**Biological quality elements**			**Hydromorphological quality elements supporting the biological elements**			**Chem. and phys. chem. quality elements supporting the biological elements**		**Overall ecological status**
	Aquatic flora	Benthic invertebrate fauna	Fish fauna	Hydrology	Morphology	Continuity	General conditions	River basin specific pollutants	
Starting point	2	3	5	worse than 2**	2*	worse than 2**	worse than 2**	worse than 2**	5
Effect due to modification	2	3	5↓	worse than 2**	worse than 2**	worse than 2**	worse than 2**	worse than 2**	5

1: High; 2: Good; 3: Moderate; 4: Poor; 5: Bad

* Conditions consistent with the achievement of the values specified for good status of the biological quality elements

** Conditions not consistent with the achievement of the values specified for good status of the biological quality elements

Attainment of good status ?



Art. 4.7 Scope

Member States will not be in breach of this Directive when:

- *failure to achieve good groundwater status, good ecological status or, where relevant, good ecological potential or to prevent deterioration in the status of a body of surface water or groundwater is the result of new modifications to the physical characteristics of a surface water body or alterations to the level of bodies of groundwater, or*
- *failure to prevent deterioration from high status to good status of a body of surface water is the result of new sustainable human development activities*

Art. 4.7 Scope

- *modifications to the physical characteristics of a surface water body*
  - *Non-exhaustive examples can include hydropower plants, flood protection schemes, future navigation projects or abstractions which are covered by this provision.*
- *alterations to the level of bodies of groundwater*
  - *new groundwater abstractions new boreholes or increased abstractions from existing boreholes. Also modifications to surface waters can lead to alterations to the level of groundwater*
- *sustainable human development activities*
  - *In general, such activities cannot be defined per se ..*

Art. 4.7 Scope

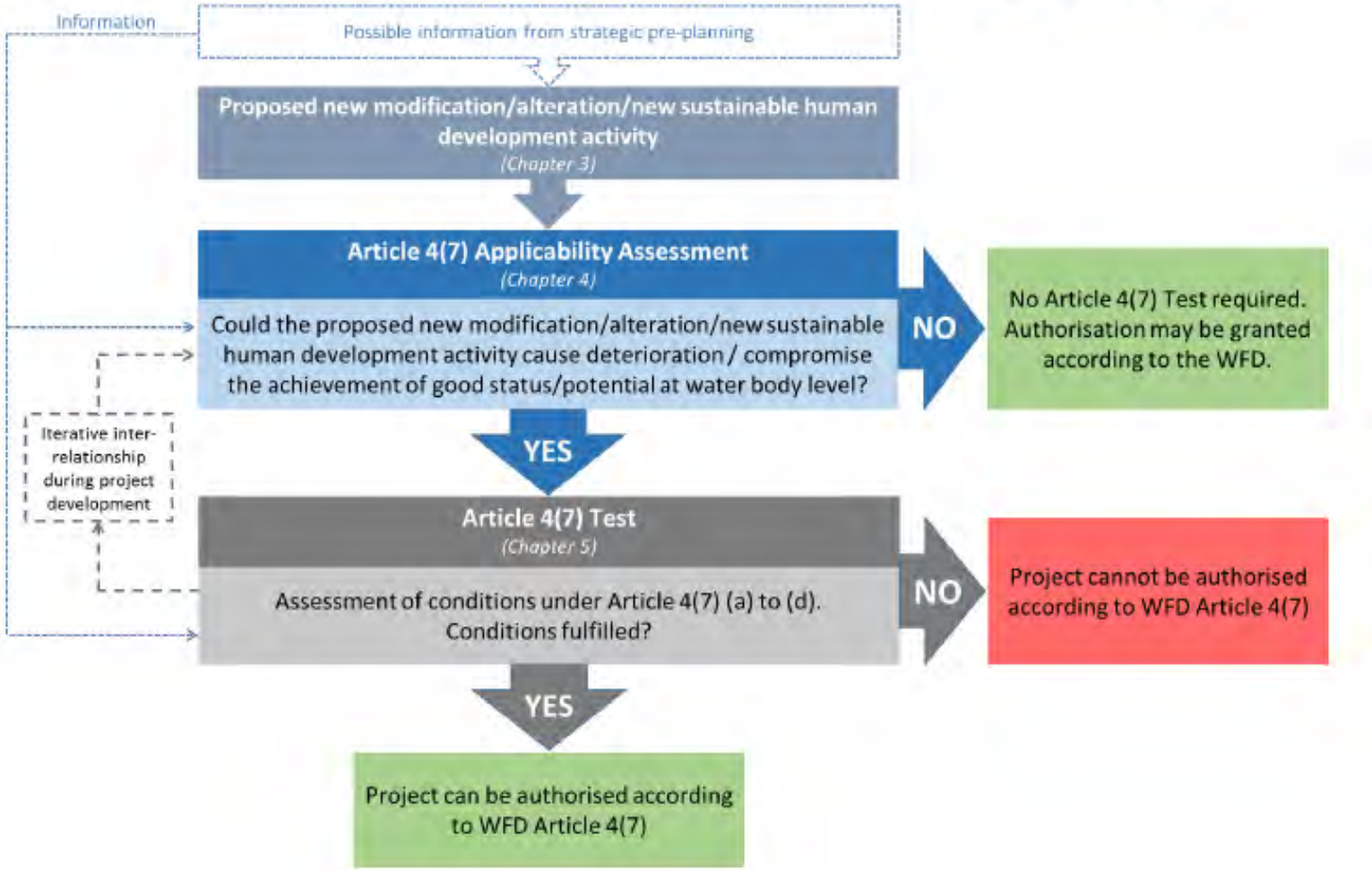
*Note that Article 4(7) does **not** provide an exemption if deterioration is caused by **inputs of pollutants from point or diffuse sources** drives the water body to a status below good*

Art. 4.7 Scope

Focus is on projects,
what happened to planning activities …

Art. 4.7 Assessment

Figure 1: Principle relationship between "Article 4(7) Applicability Assessment" and "Article 4(7) Test"



Art. 4.7 Assessment

Member States will not be in breach of this Directive when:

- *all practicable steps are taken to mitigate the adverse impact on the status of the body of water;*
- *the reasons for those modifications or alterations are specifically set out and explained in the river basin management plan required under Article 13 and the objectives are reviewed every six years;*
- *the reasons for those modifications or alterations are of overriding public interest and/or the benefits to the environment and to society of achieving the objectives set out in paragraph 1 are outweighed by the benefits of the new modifications or alterations to human health, to the maintenance of human safety or to sustainable development, and*
- *the beneficial objectives served by those modifications or alterations of the water body cannot for reasons of technical feasibility or disproportionate cost be achieved by other means, which are a significantly better environmental option.*

Do not forget art. 4.8 and 4.9 !

Family of assessments ?

Strongly linked with, but not the same as Strategic Environmental Assessment (SEA Directive), Environmental Impact Assessment (EIA) Directive and Appropriate Assessment of the Habitats Directive

The Weser Case

Summing up

- Broader interpretation of “deterioration”
- Extra framework for projects and plans
- 2 criteria: deterioration and objectives
- Very context dependent
  (size of WB, size of project, objective of WB ..)
- Derogations are possible (if necessary)
- Provide documentation/evidence

Potential Belgian case(s) of "Weser"/ article 4.7?

Project presentation
Current development within the regions

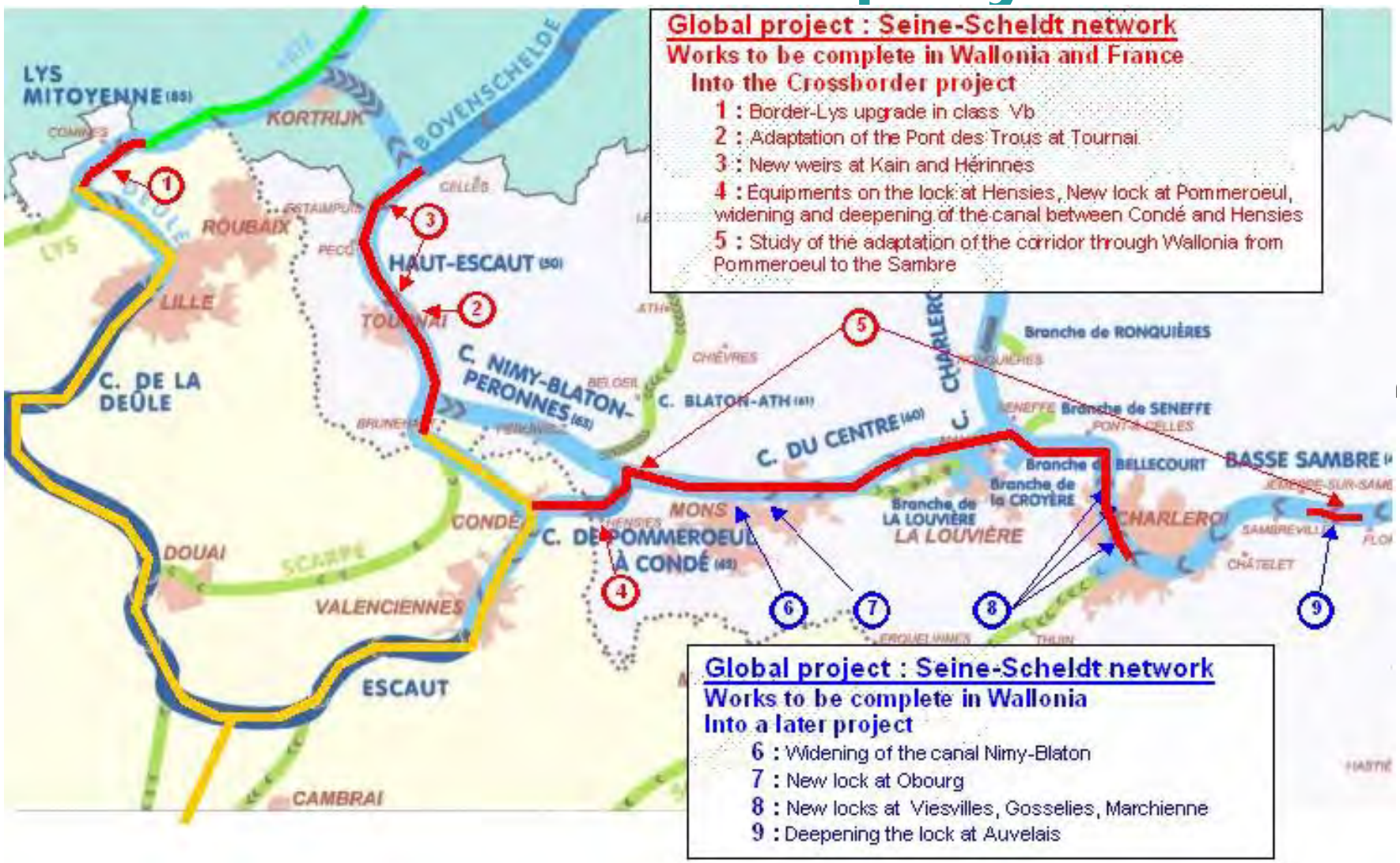
Michel Boucneau (VMM)

Nicolas Fermin (DGO3)

Martin Binon (BE-LB)

belini

Scheldt-Seine canal project



Scheldt-Seine canal project

Consideration of art. 4.7 in Wallonia

"Does the Action involve a new modification to the physical characteristics of a surface water body or alterations to the level of bodies of groundwater which deteriorate the status of a water body or cause failure to achieve good water status/potential ? "

Environmental impact assessment

Sources of possible impact:

- enlargement and deepening of water courses
- 2 new dams
- 4 new locks
- new banks : enrockment
- change of curving

Conclusions:

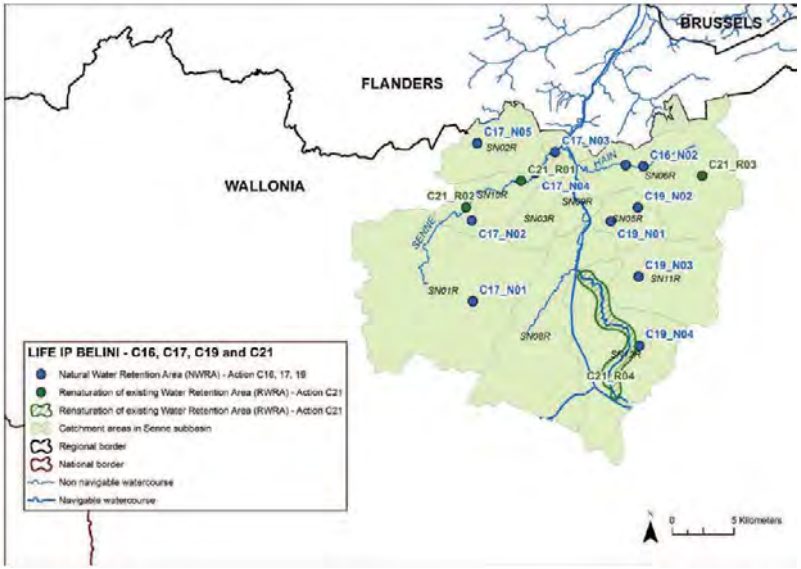
- negative impact on banks because of traffic increase
- sedimentation increase (dams and locks)
- increase of water consumption : Eau d'Heure lakes will be impacted
- Climate change : system functioning not guaranteed during droughts
- loss of riverbed biotopes and longitudinal continuity

Final conclusion : no impact on waterbodies status
No need to activate 4.7 exemptions

Floods protection

Before WFD:
Digging of riverbeds
Constructions of dykes
Constructions of dams/locks without fish passes

Floods protection



Coeurq – Temporary immersion zone

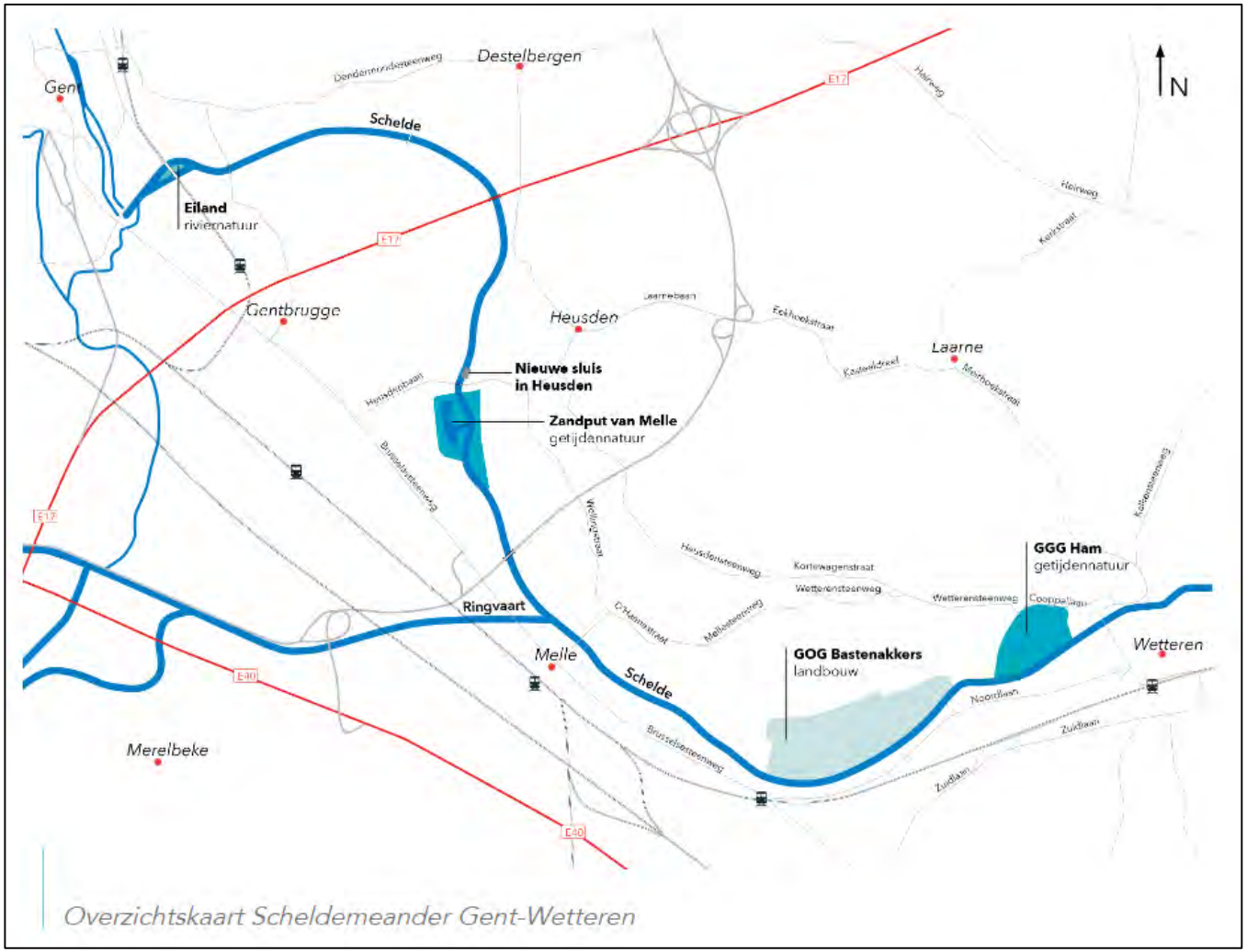
Bellini Life Project:
No permanent obstacle
Biological quality improvement
Ecosystem services supply

Ports and Shipping

- Realisation of extra container handling capacity in the Antwerp port area (ECA)
  - Procedure “complex project”

Figuur 6 Overzicht van de ligging van de verschillende bouwstenen en alternatieven

Sigmaproject
Scheldemeander Gent-Wetteren



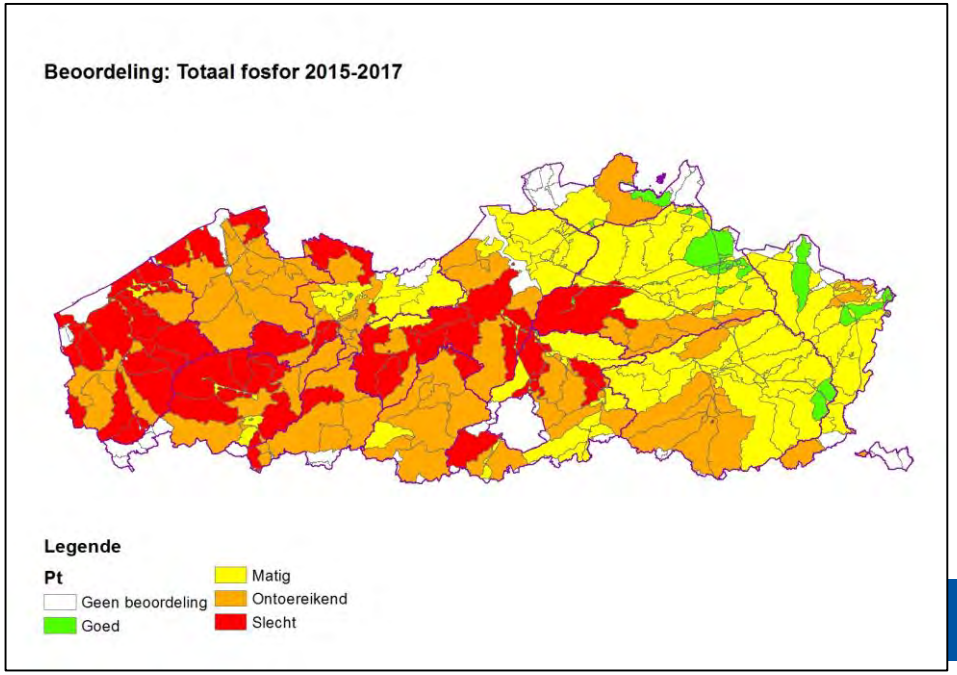
Overzichtskaart Scheldemeander Gent-Wetteren

Existing infrastructure and maintenance

- Heavily modified water bodies -"good potential"
- Changes to existing Infrastructure & Maintenance
  - Same procedure as "new" modification
  - Designate as Heavily Modified Water Bodies and/or change to "GEP"

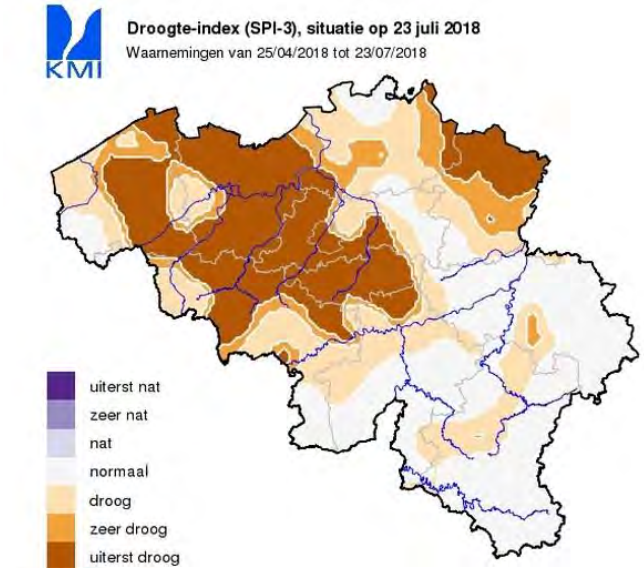
Discharges

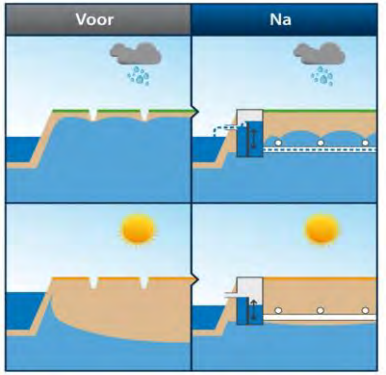
- No derogation under art. 4.7
- Chemical and physio-chemical elements: some in “lowest class”
- So …
  - Guidance for permit
  - Use a “Programmatic approach” ?



Water scarcity and droughts

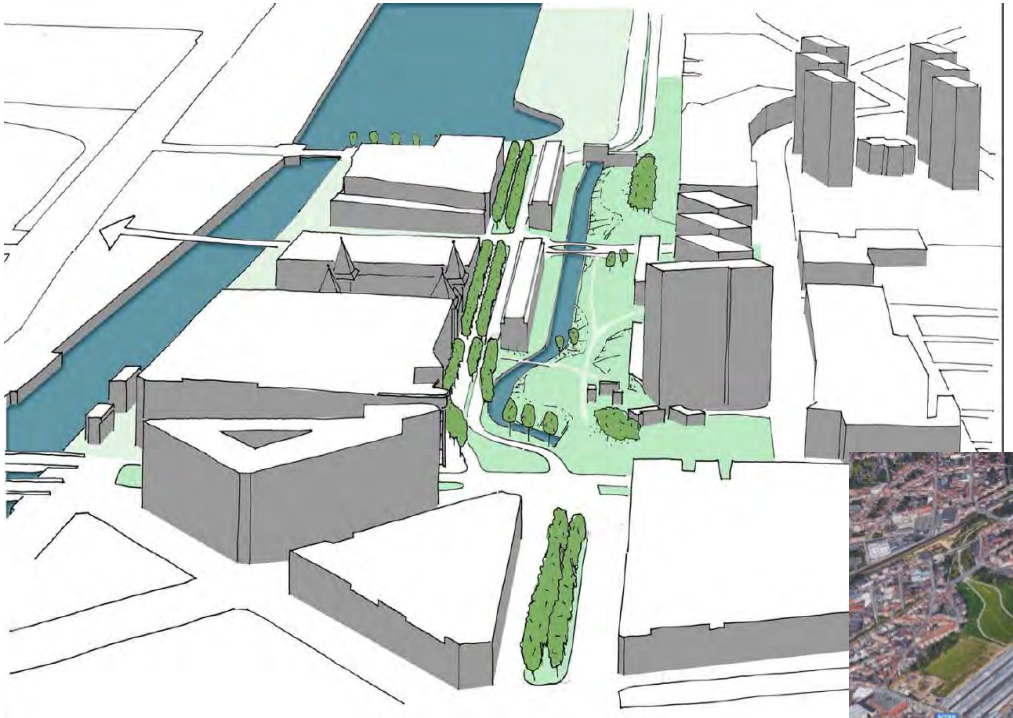
- Spring and summer drought of 2017 and 2018



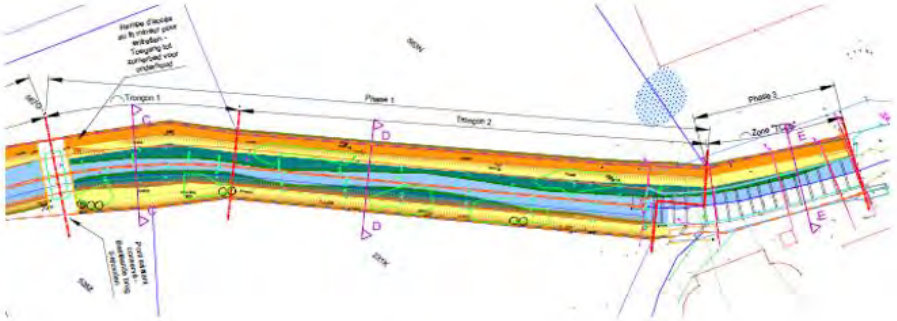


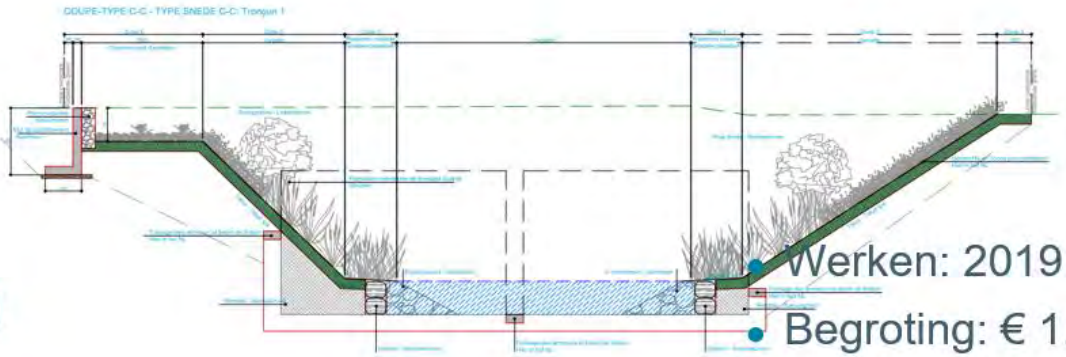
Peilgestuurde drainage

BCR: Zenne “daylighting” project



BCR: Zenne “daylighting” project





Werken: 2019

Begroting: € 1.500.000

Current development within the regions: Flanders

Weser-proofing the Flemish approach ?

Starting point: CIW and Water Check

- CIW (Coördinatiecommissie Integraal Waterbeleid)
  - Coordination Committee on Integrated Water Policy (2004)
  - Preparation, planning and monitoring of integrated water policy
  - Administrative entities of the Flemish region involved in water management, the representatives of the authorities of the water management at the local level and a representative of the water companies.
  - Secretariat, 9 Working groups

Current development within the regions: Flanders

Weser-proofing the Flemish approach ?

Starting point: CIW and Water Check

- Water check
  - Instrument for Governmental authority approving permits and plans since 2006
  - Check for adverse effects due to a change in water quality or quantity
    (although focus traditionally on flooding)
  - Conditions and mitigating measures, in exceptional cases refusal, worded in “Water paragraph” in decision

Current development within the regions: Flanders

CIW Ad hoc WG A&A (*)

- Ad hoc working group (2016)
- Examine how the assessment of projects should be carried out in relation to the objectives of the Water Framework Directive
- Follow-up of Ad hoc Task Group for guidance on the implementation of Article 4(7) on European level (CIS, Water Directors)
- Lots of meetings and information sharing
- No new formal instrument, make use of existing ones (water check, EIA, environmental permit, ..)

(*) Afwijkingen en Achteruitgang = Exemptions and Deterioration

Current development within the regions: Flanders

CIW AdHoc WG A&A

- No new formal instrument, make use of existing ones
  (water check, EIA, environmental permit, ..)
- CIW Guidance notes
- Proposals for better integration and refinement of procedures
- Still “work in progress”

Current development within the regions: Flanders

CIW Ad hoc WG A&A - Guidance notes

- Assessment of projects concerning hydromorphological changes
- Assessment of discharges
- Assessment of negative impact on groundwater
- Procedure and Argumentation of exemptions

Logic:
stepwise approach also used by CIS Guidance:
screening – assessment – check for conditions art. 4.7

Current development within the regions: Wallonia RBMP 2022-2027

- Upcoming public consultation on the *significant issues*
  - *Improve legislation control*
  - *Pool/optimize funding from other environmental policies (CAP, …)*
  - *Knowledge enhancement on emerging substances*
  - *Climate change…*
- Status assessment improvement
  - *Updating of new pesticides in specific pollutants list*
- Pressures analysis improvement
  - *Bottom-up measures*
  - *More fieldwork*

Conclusion and Discussion

Conclusion - Debate

- Do you think you are provided with enough **information** on the WFD principles (status, RBMPs, PoMs, etc…) ?
- If not, how can we improve **information exchange** (public consultations, workshops, expert meetings…) ?
- How to improve **coordination** on these topics between Regions/FED ? (cf Scheldt/Seine canal)
- How to improve **coordination** between services **within** Regions ?
- Beyond 4.7 issues, do you take into consideration other WFD **objectives** : non deterioration, etc… (Link to future work envisaged within Belini, Belgian coordination…)