

# European waters — Assessment of status and pressures

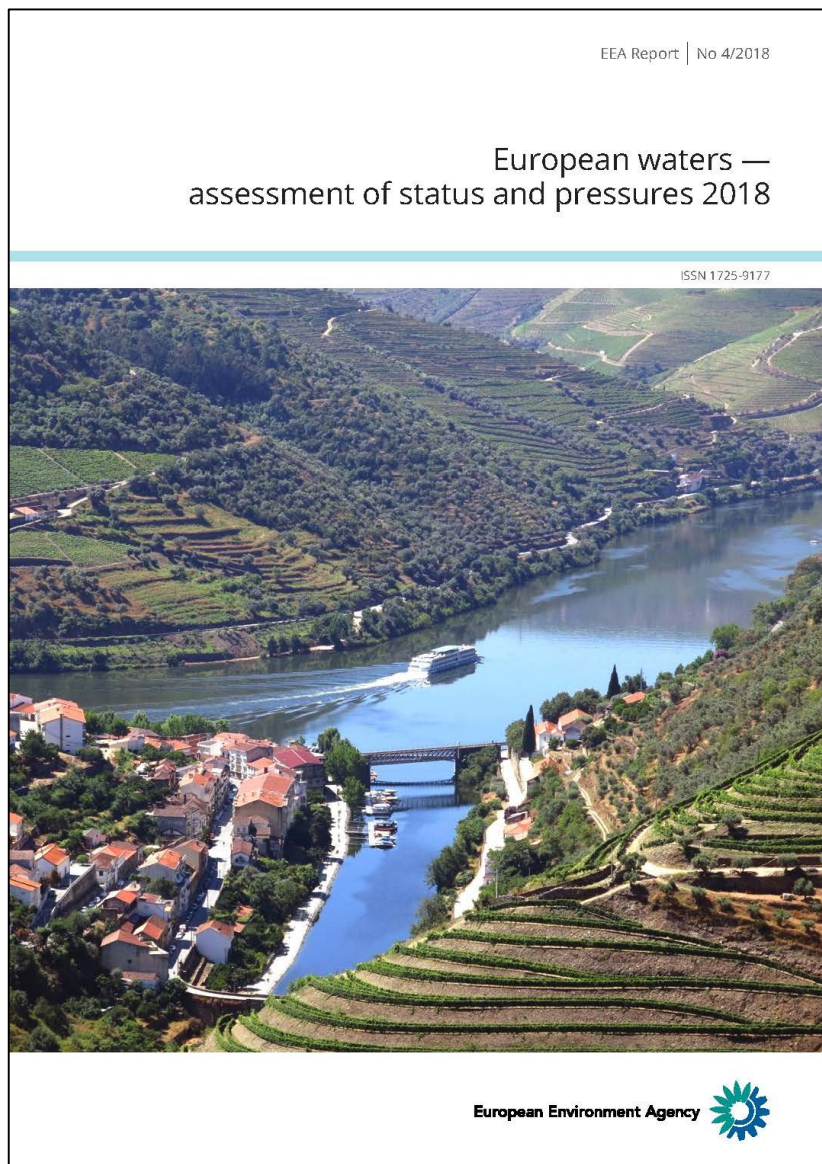


# Content

1. EEA State-of-Water report and WISE visualisation tool
2. Background
3. Current status
4. Looking ahead
5. Fitness check of WFD and floods directive, evaluation of WFD implementation

# **1. EEA State of Water report and WISE-WFD visualisation tool**

# European waters — Assessment of status and pressures 2018



## Key messages

- This report presents results on the status of EU waters based on the second River Basin Management Plans (RBMPs, 2010-2015).
- Since the first RBMPs our knowledge of Europe's waters has grown significantly, providing a better understanding of the status and the pressures causing failure to achieve good status.
- Nevertheless European waters remain under pressure from water pollution, over-abstraction and structural change from a range of human activities.



# What information is our report based on?



- **25 EU Member States and 160 River Basin Management Plans reported to Water Information System for Europe (WISE).**
- **89 000 river water bodies — 1.2 million km, avg. length 13 km**
- **18 000 lake water bodies — 2/3 from Sweden and Finland, avg. area 4.9 km<sup>2</sup>**
- **800 transitional water bodies — avg. area 19 km<sup>2</sup>)**
- **2 800 coastal water bodies — avg. area 102 km<sup>2</sup>**
- **13 400 groundwater bodies — 4.3 million km<sup>2</sup>**

# WISE-Freshwater WFD visualisation tool +150 dashboards



European Environment Agency



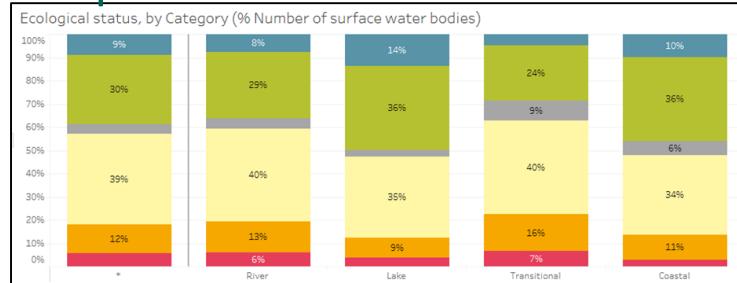
Download

- European water: [13.3 MB]

## Tables

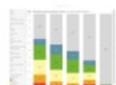
Surface water bodies: Number and Size, by Chemical status							
Show:		Number	% Number (pane)	Length	% Length (pane)	Area	
Management plan (RBMP)		Good	Failing to achi.	Good	Failing to achi.	Good	Failing to achi.
2nd	2nd	42 065	99 966	45.2%	54.8%	630 058	380 680
						62.3%	37.7%
						241 992	159 423
Water bodies		Number	% Number (pane)	Length	% Length (pane)	Area	
(All)		42 065	100.0%	32 278	100.0%	122	100.0%
Filter by:							
BE	12	541	2.2%	97.8%	9 346	100.0%	14
BG	322	25	92.8%	7.2%	22 358	92.0%	61
CY	173	7	96.1%	3.9%	1 560	96.3%	870
CZ	768	349	68.8%	31.2%	6 343	65.0%	203
DE	9 808		100.0%		137 160	100.0%	26 179
DK	72	62	53.7%	46.3%	38	150	22 245
EE	73	15	83.0%	17.0%	1 783	53	12 136
ES	4 476	329	93.2%	6.8%	75 735	92.8%	7 017
FI	3 366	3 440	49.3%	50.5%	24 806	30.3%	63 698
FR	7 181	1 814	79.8%	20.2%	146 560	38 071	27 213
HR	1 443	129	91.8%	8.2%	17 338	1 736	9 131
HU	493	84	85.4%	14.6%	9 891	2 759	78 26
IT	6 152	733	89.4%	10.6%	69 436	89.5%	1 447
LU	110	110	100.0%		1 214	100.0%	
LV	50	22	69.4%	30.6%	1 656	453	156
MT	10	9	52.6%	47.4%	3	100.0%	0
NL	279	368	43.1%	56.9%	1 570	2 585	37 8
PL	3 331	1 489	69.1%	30.9%	75 326	36 071	67.6%
Sub-unit							
(All)							
Notes:							

## Graphs



## Related content

Data references Data visualisations Figures used News and articles See also



Quality element status



Ecological status of surface water



Delineation of water bodies



Chemical status of surface water

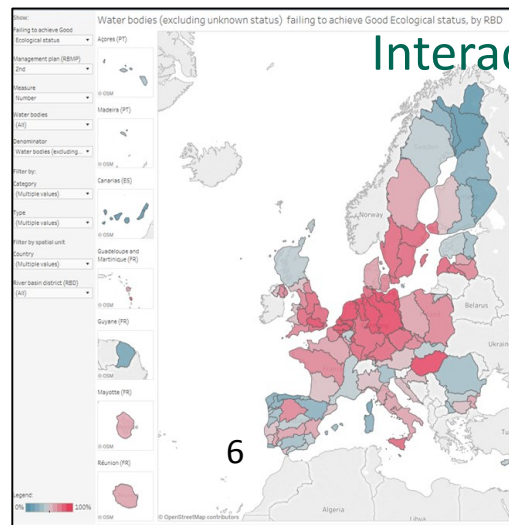


Groundwater quantitative and qualitative status



Pressures and impacts

## Interactive maps



<https://www.eea.europa.eu/publications/state-of-water>

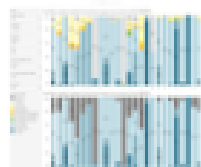


# Six thematic web pages with dashboards

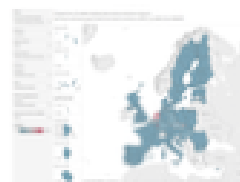
Data visualisations   News and articles   Related data   Related publications



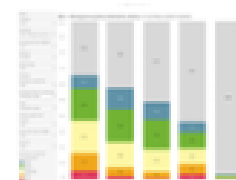
**Pressures and impacts**



**Delineation of water  
bodies**



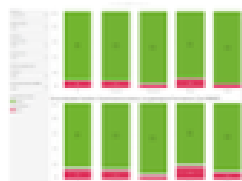
**Chemical status of  
surface water bodies**



**Quality element  
status**



**Ecological status of  
surface water bodies**



**Groundwater  
quantitative and  
qualitative status**

# WISE-Freshwater WFD - Template for tables

**Title**

Surface water bodies: Number or Size, by Category

**EU results**

RBMP	River		Lake		Transitional		Coastal		Territorial		Unpopulated	
	total	% (col)	total	% (col)	total	% (col)	total	% (col)	total	% (col)	total	% (col)
2nd	89 097	100,0%	18 153	100,0%	782	100,0%	2 830	100,0%	45	100,0%	43	100,0%

**Member State results**

**Drill down RBDs, subunits**

NUTS03	River		Lake		Transitional		Coastal		Territorial		Unpopulated	
	total	% (col)	total	% (col)	total	% (col)	total	% (col)	total	% (col)	total	% (col)
AT	8 065	9,1%	62	0,3%								
BE	527	0,6%	18	0,1%	6	0,8%	2	0,1%	1	2,2%		
BG	873	1,0%	37	0,2%	28	3,6%	17	0,6%				
CY	174	0,2%	8	0,0%			22	0,8%				
CZ	1 044	1,2%	77	0,4%								
DE	8 998	10,1%	730	4,0%	2	0,2%	75	2,7%				
DK	7 776	8,7%	856	4,7%			119	4,2%	14	31,1%		
EE	645	0,7%	89	0,5%			10	0,6%	2	4,4%		
ES	4 390	4,9%	326	1,8%	186	23,8%	220	7,8%			40	93,0%
FI	1 913	2,1%	4 617	25,4%			276	9,8%				
FR	10 706	12,0%	435	2,4%	94	12,0%	179	6,3%				
HR	1 484	1,7%	37	0,2%	25	3,2%	26	0,9%				
HU	963	1,1%	115	0,6%								
IT	7 493	8,4%	347	1,9%	172	22,0%	561	19,8%	8	17,8%		
LU	110	0,1%										
LV	203	0,2%	259	1,4%	3	0,4%	5	0,2%				
MT	3	0,0%	2	0,0%	5	0,6%	9	0,3%				
NL	246	0,3%	451	2,5%	5	0,6%	9	0,3%				
PL	4 586	5,1%	1 044	5,8%	9	1,2%	10	0,4%				

**Notes**

- 1) River basin districts and sub-units as reported in the 2nd RBMPs.
- 2) For river water bodies, the size value is the length (km). For other water body categories, the size value is the area (km<sup>2</sup>).
- 3) 'Unchanged' water bodies are water bodies that have not been redelineated between the 1st and 2nd RBMP.

**Filter, Selections e.g. 1st & 2nd RBMPs, Measure Category Spatial Status**

Show:

Management plan (RBMP)

2nd

Measure

Number

Water body (All)

Filter by:

Category (All)

Type (All)

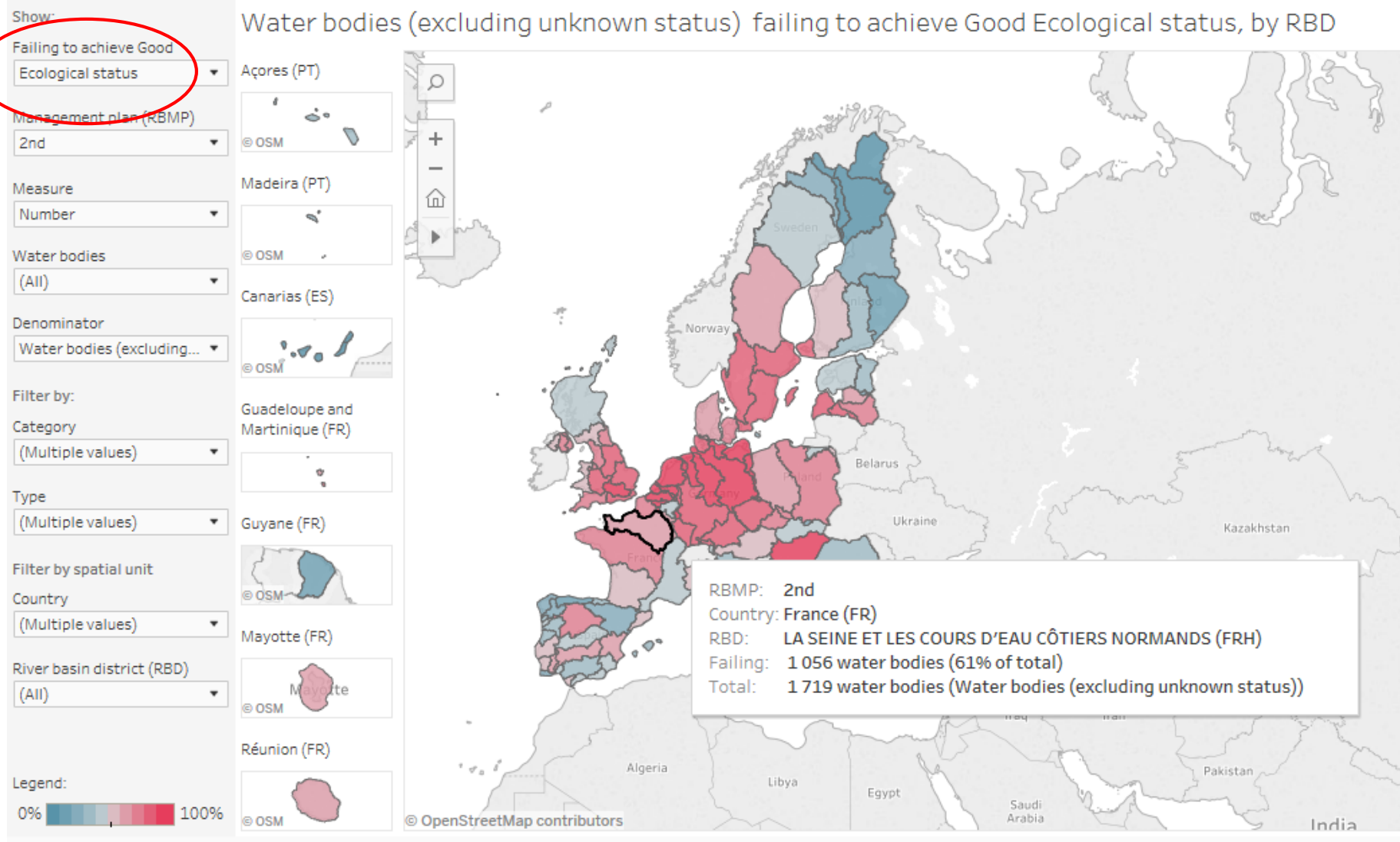
Filter by spatial unit:

Country (All)

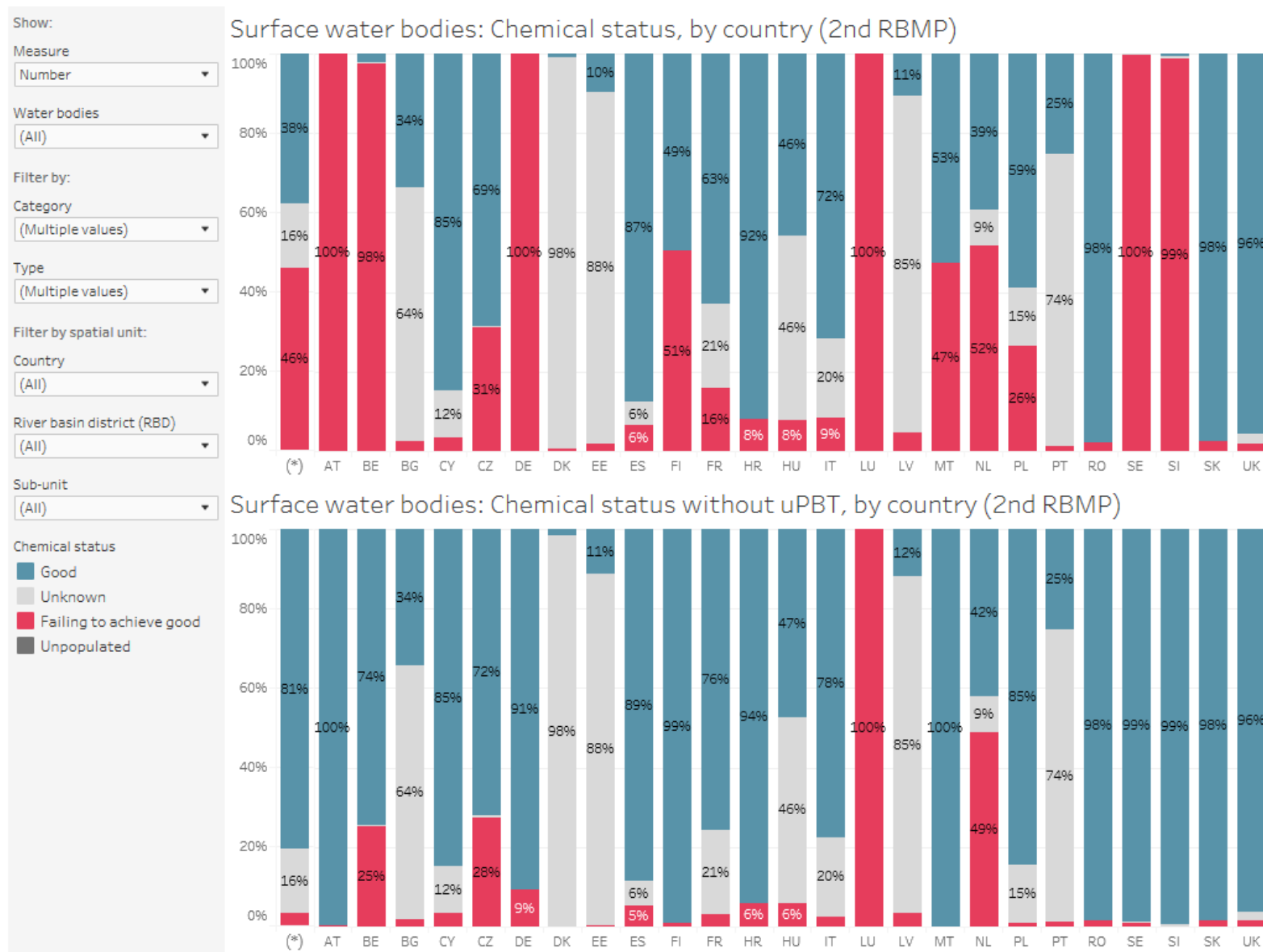
River basin district (RBD) (All)

Sub-unit (All)

# WISE-Freshwater WFD - maps



# Surface water chemical status, with and without uPBTs\*



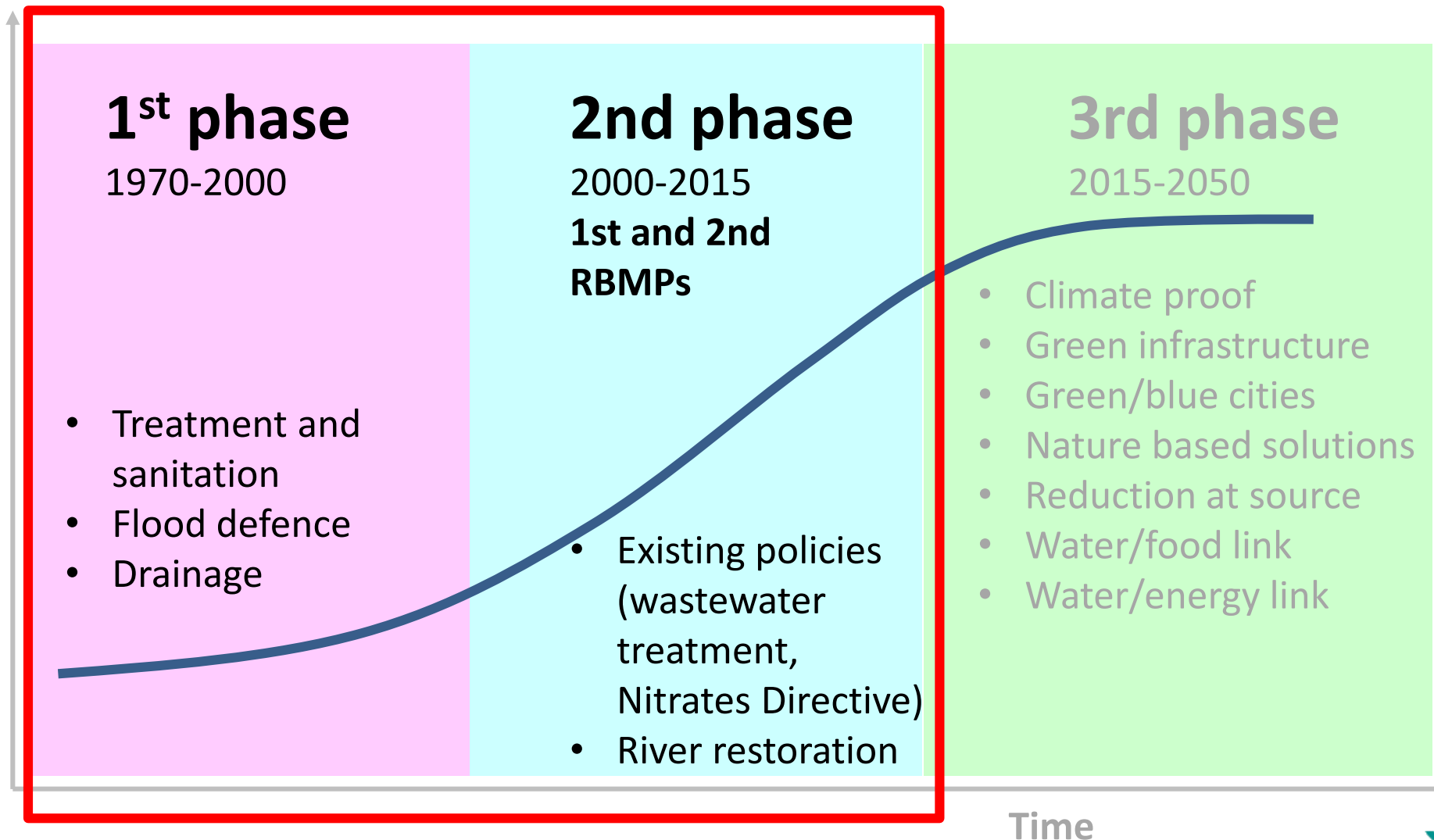
\*Subset of “ubiquitous, persistent, bioaccumulative and toxic” priority substances

- Chemical status with and without uPBT by country

## 2. Background

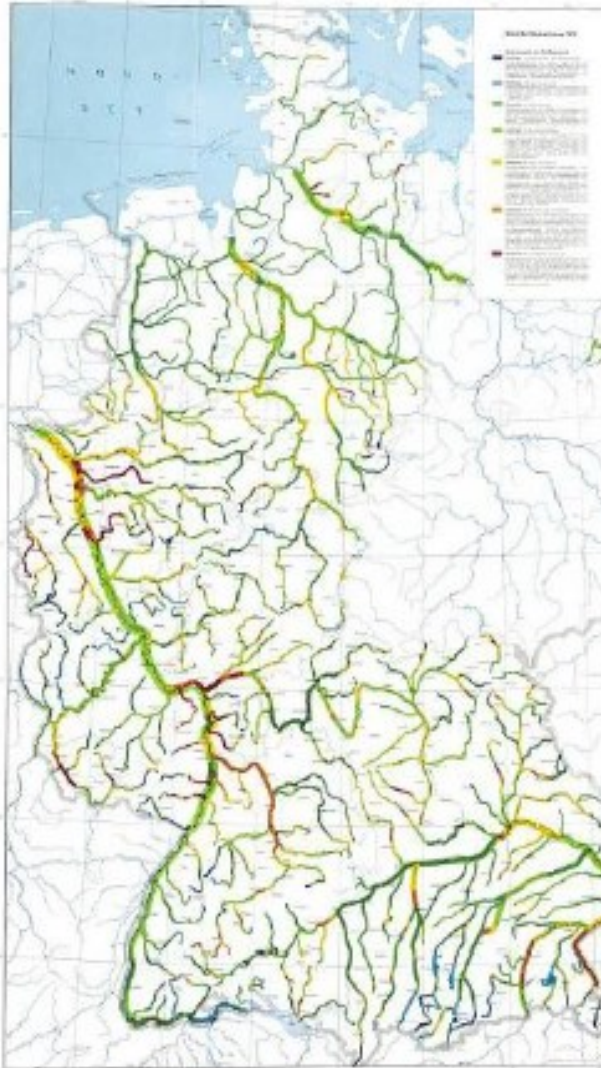
# Water management — investing in natural capital

Sustainability

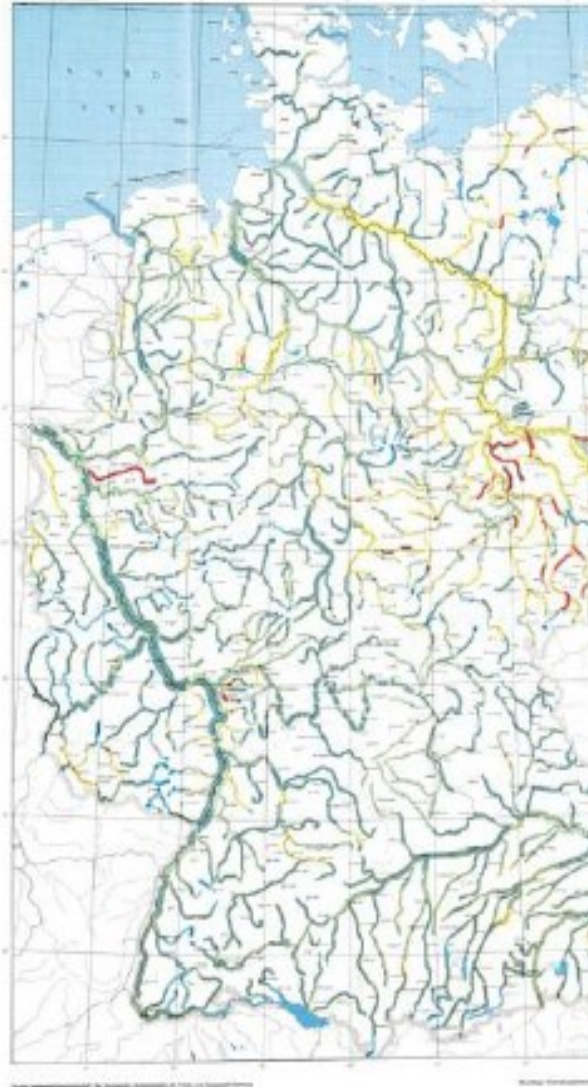


# From a water quality focus to integrated assessments

1976



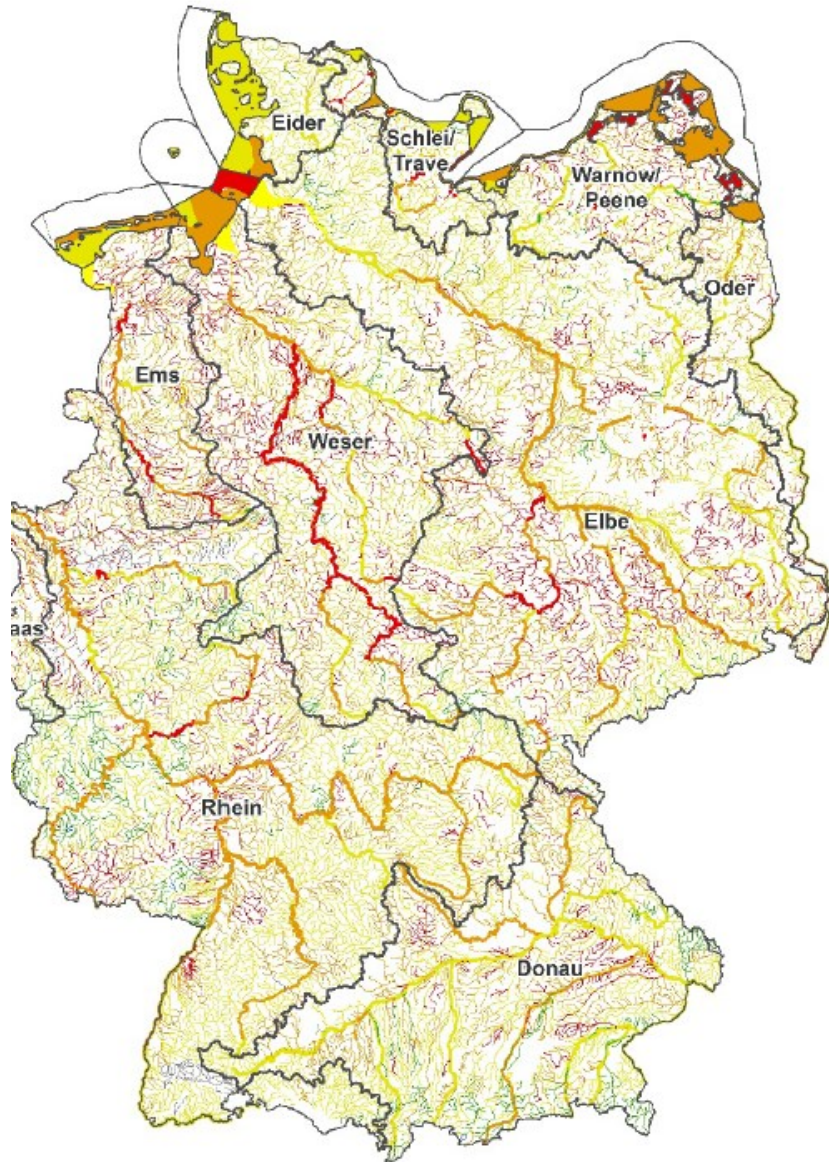
1990



2000



# Ecological status after Water Framework Directive



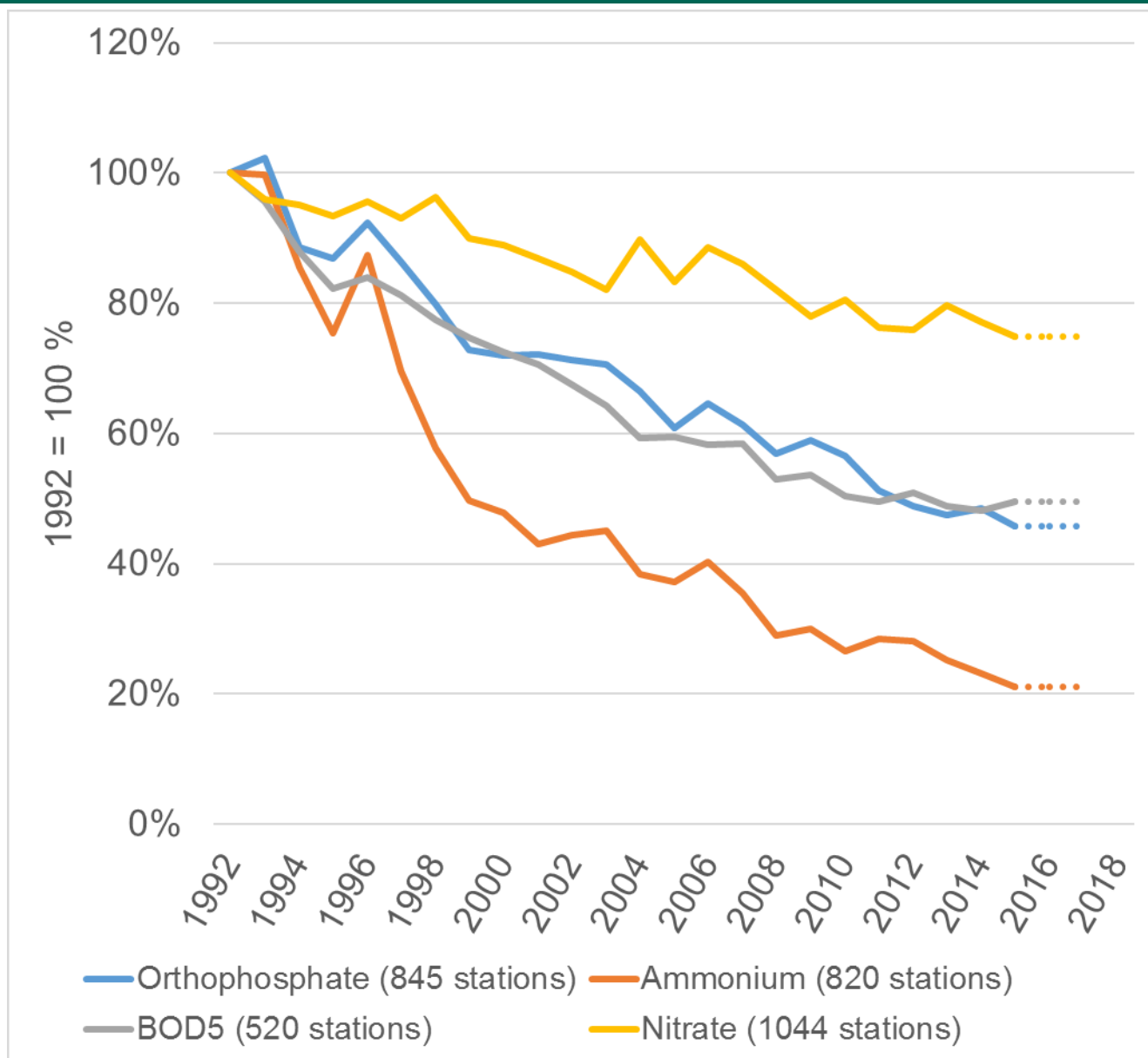
Ecological status  
2015

More pollutants

Ecosystem approach

One-out-all-out  
principle

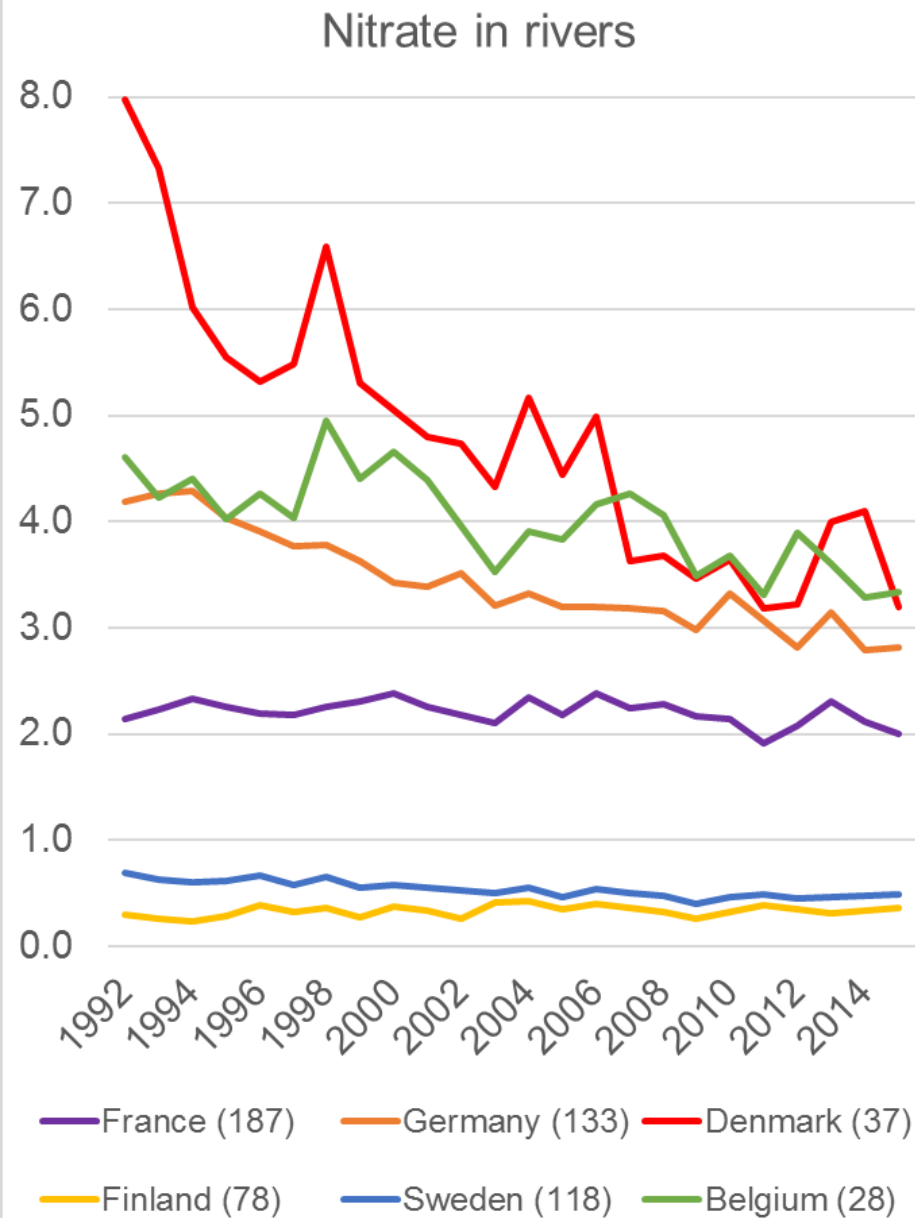
# Trends in European river water quality



Nitrate  
(from agriculture)  
BOD5\*  
Orthophosphate  
Ammonium  
(from waste water)

\*5-day biochemical oxygen demand

# Trend in nitrate in rivers



# Hydromorphological pressures are causing altered habitats and affecting the ecological status



Barriers and transverse structure

Morphological changes

Abstraction and flow regulation and water level regulation

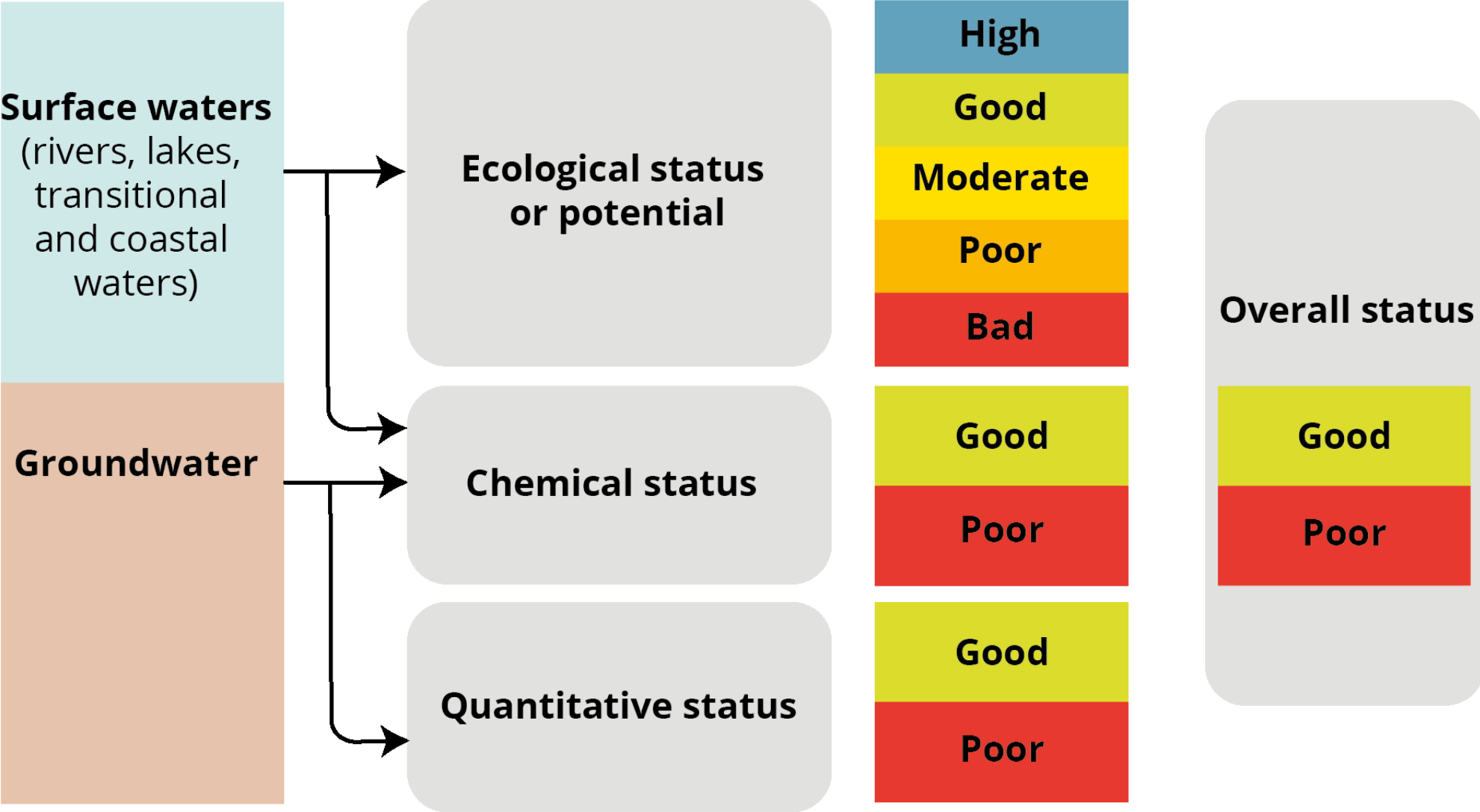


# Pressures

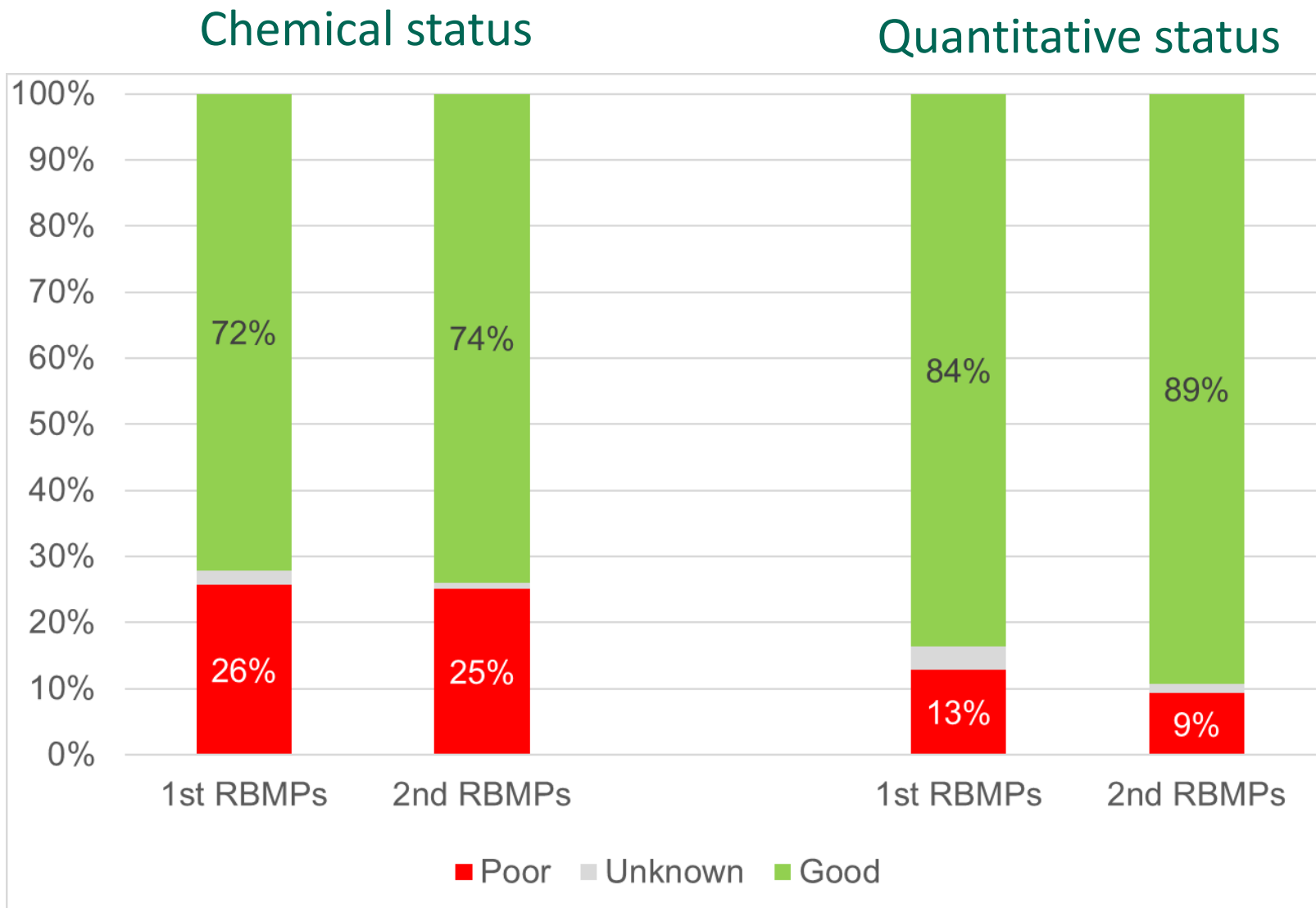


### **3. Current status**

# Four areas of assessment

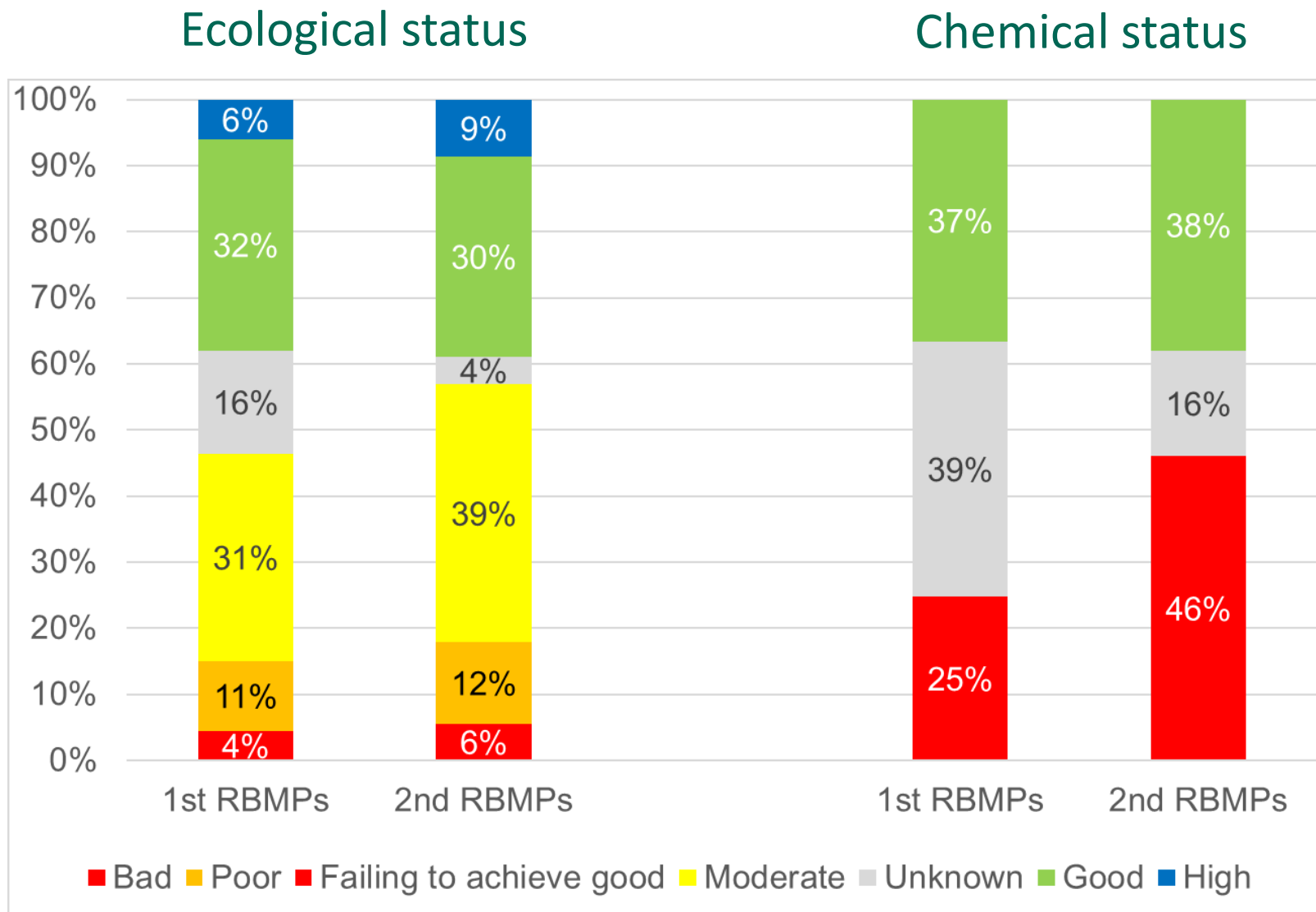


# Status of groundwater 1st and 2nd RBMPs



Source: Results from WFD first River Basin Management Plans (2009) and second River Basin Management Plans (2010-2015)

# Status of surface water 1st and 2nd RBMPs

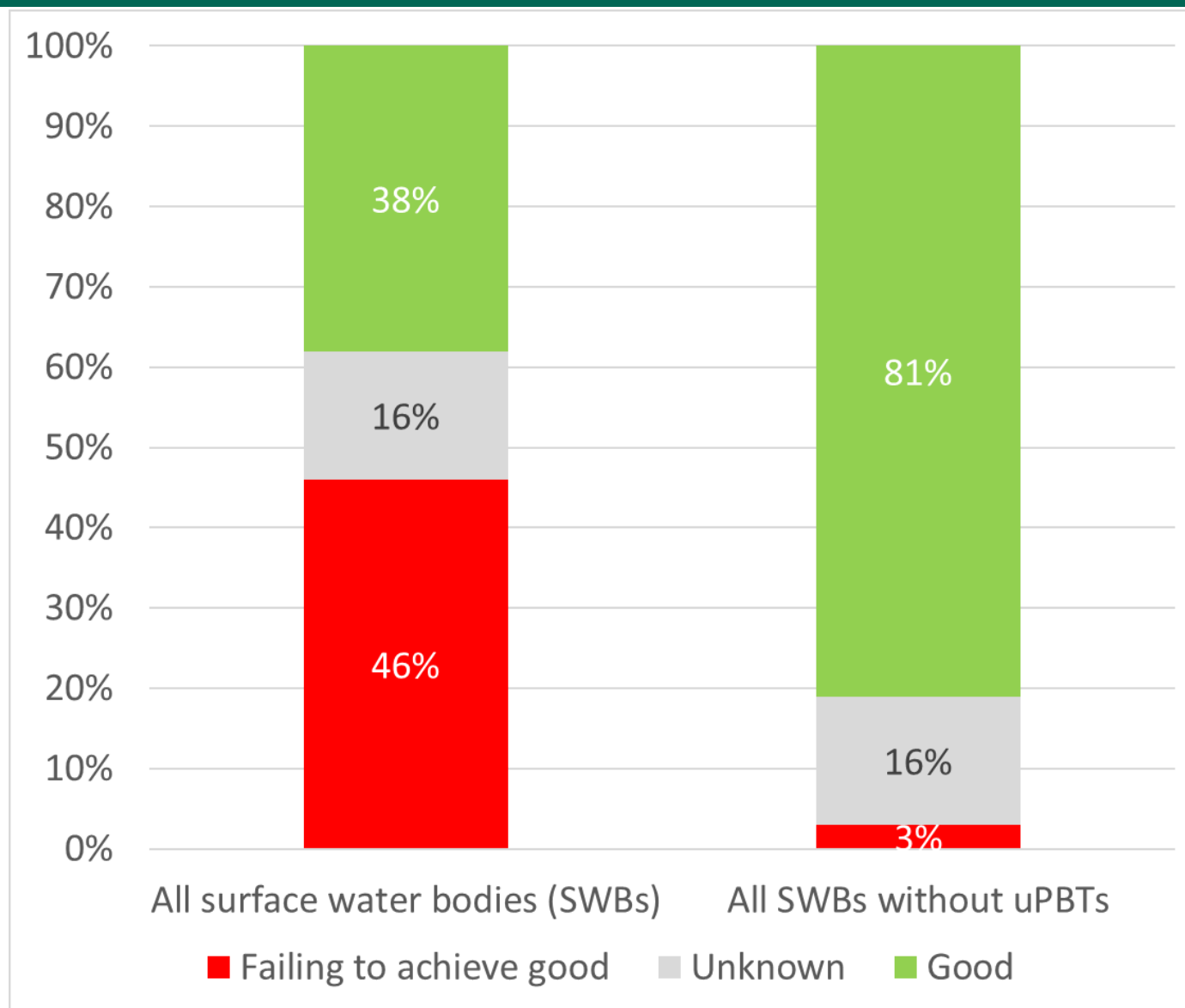


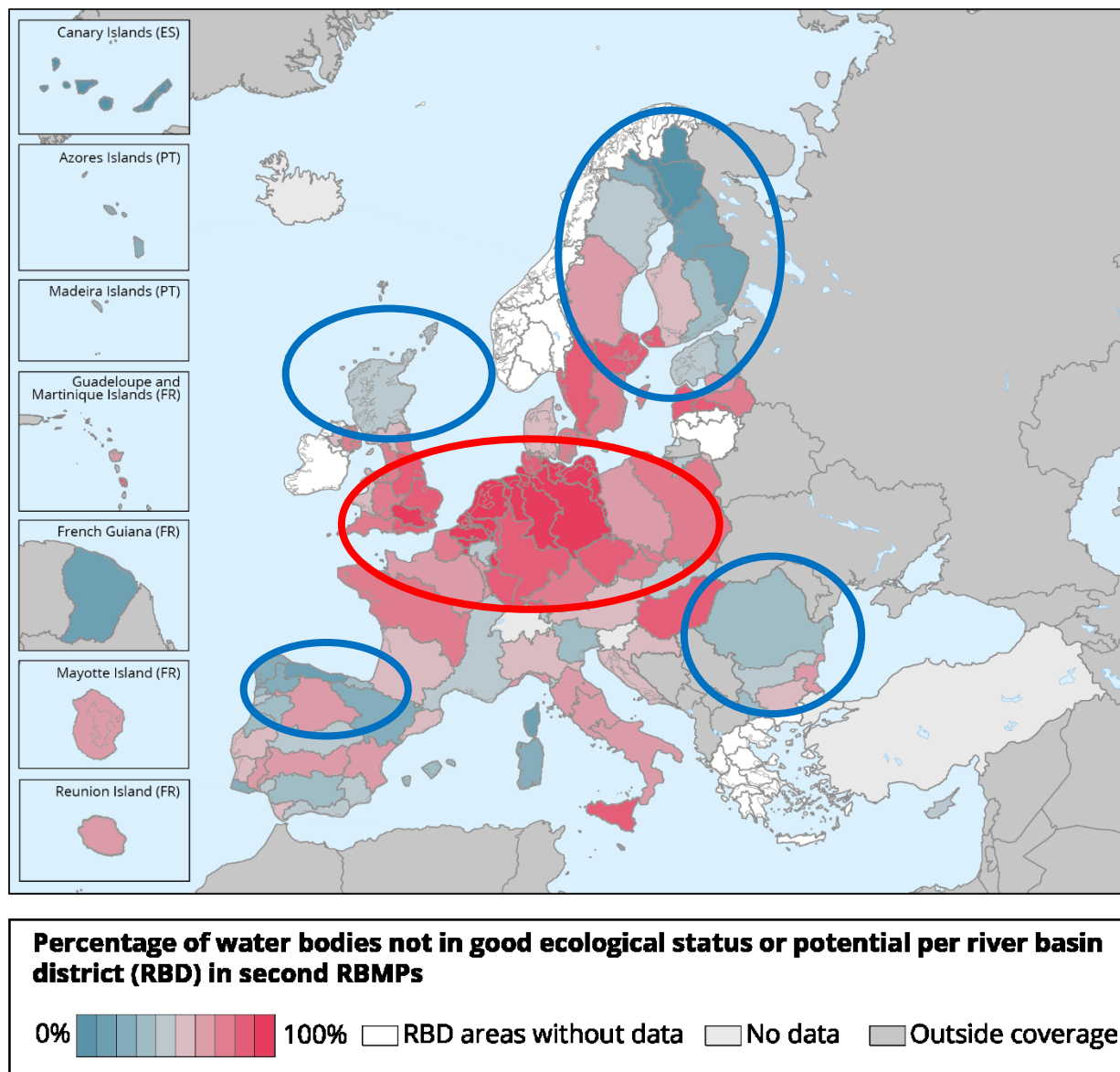
Source: Results from WFD first River Basin Management Plans (2009) and second River Basin Management Plans (2010-2015)

European Environment Agency

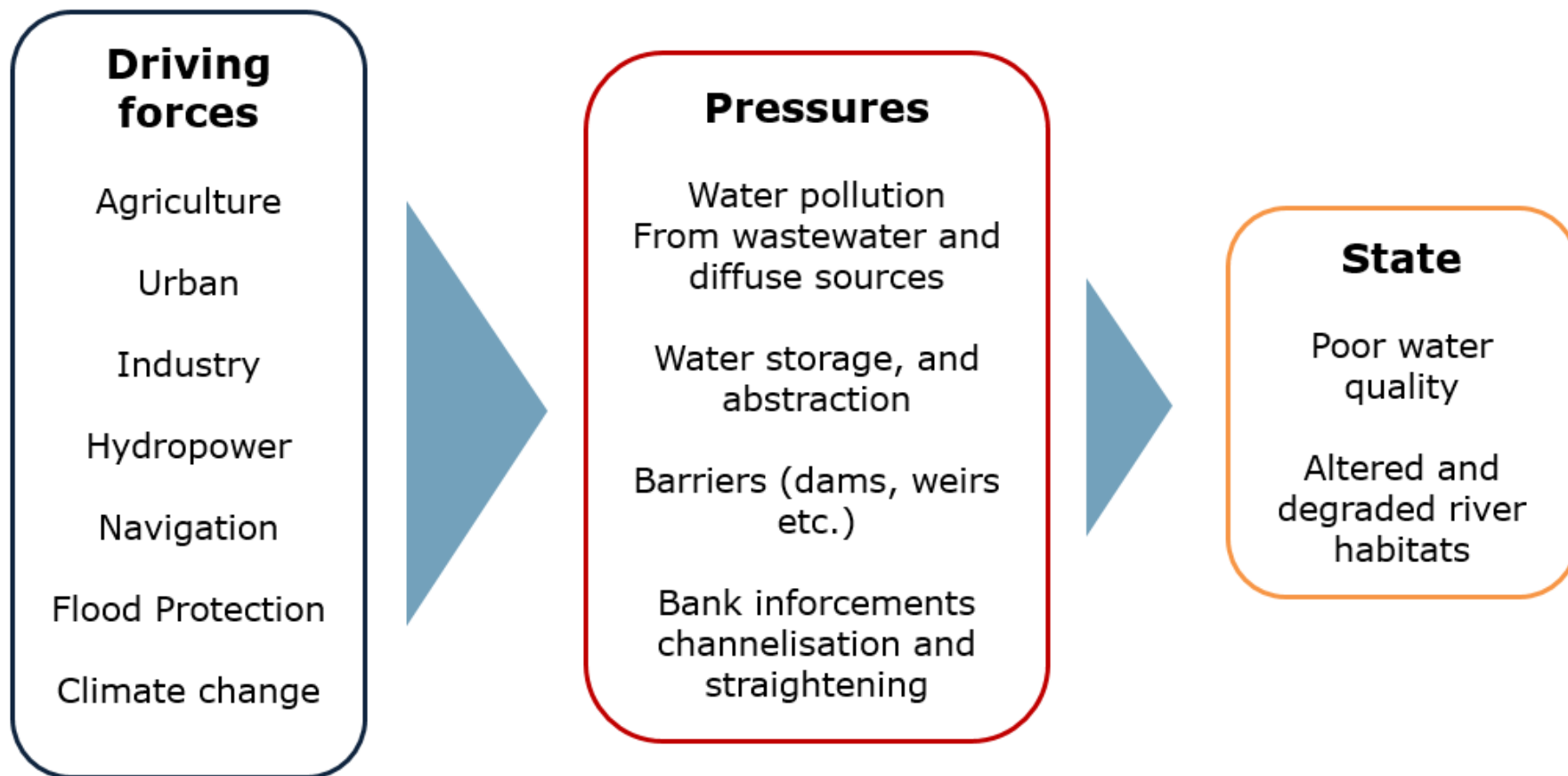


# Surface water chemical status with and without uPBTs\*





# Challenges remain



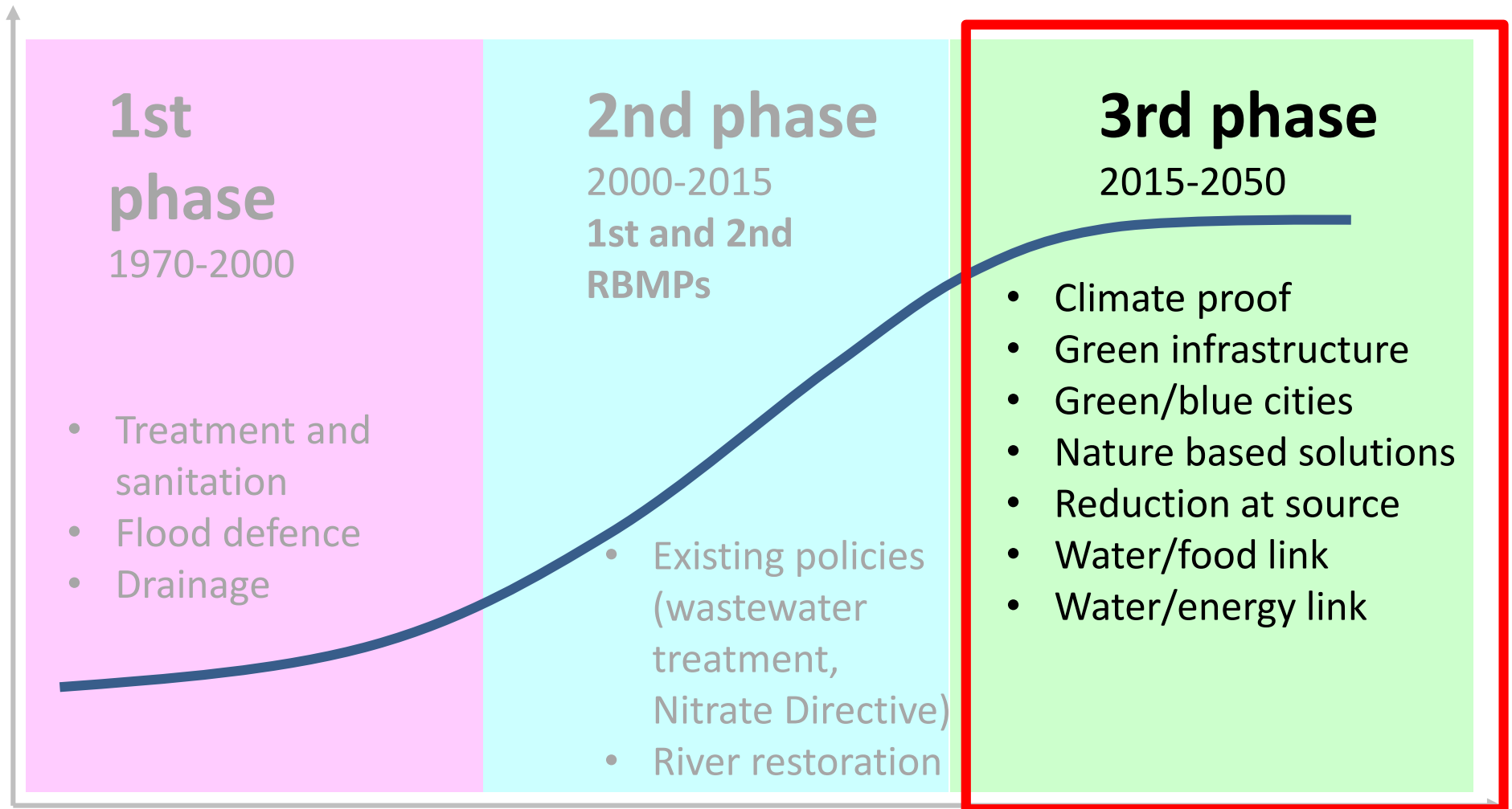
# Main pressures — 2nd RBMPs



## 4. Looking ahead

# Water management — investing in natural capital

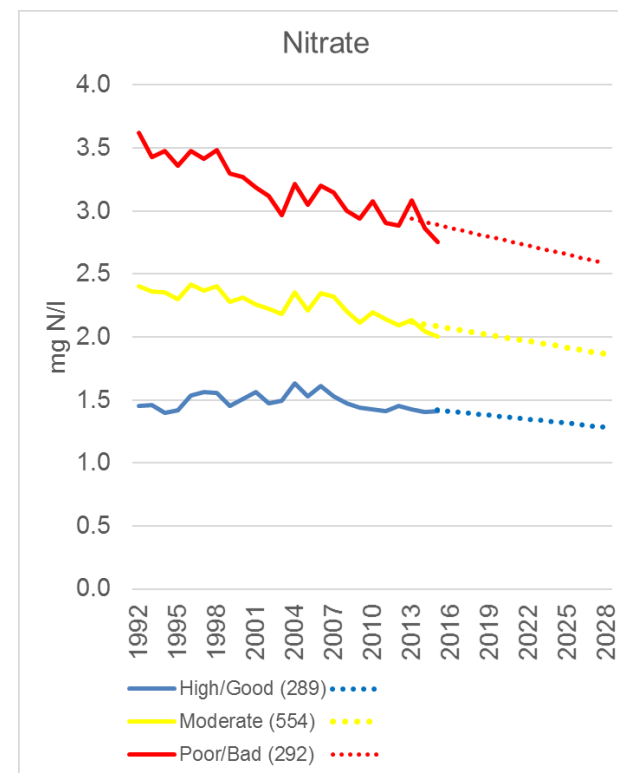
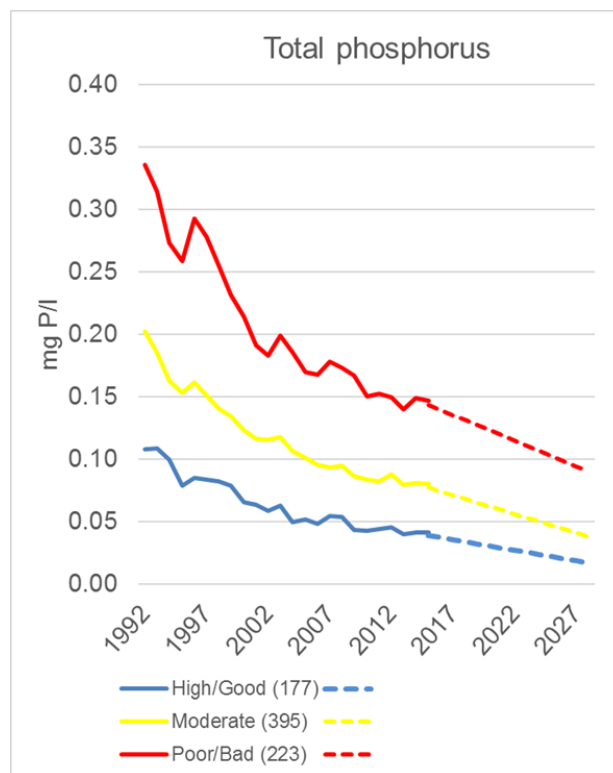
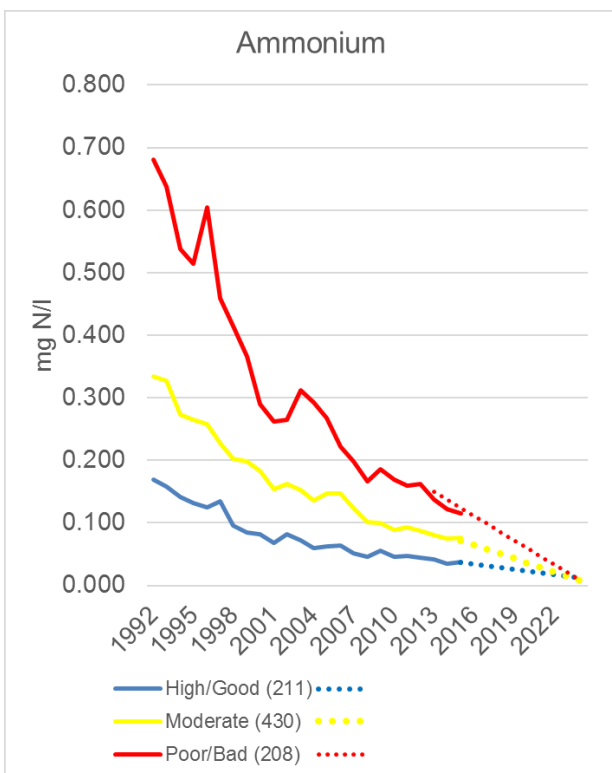
Sustainability



Time



# Water quality by ecological status classes



Source: EEA data reported by countries to WISE04 Water quality, 2016 and 2nd RBMPs

# Room for the river — working with nature

**Good water  
status**

**Flood  
regulations**



**Ecosystem  
services**

**Economic/  
recreational  
value**

**Aesthetic  
values**



# Pressures and challenges for European waters

- **Remain under pressure** from multiple sources: water pollution, over-abstraction and hydromorphological change;
- Challenges: **securing sustainable management** of water and dependent ecosystems; **ensuring availability** of sufficient high-quality water;
- Need to **improve implementation** of environmental policies for water protection and maximising synergies between them;
- **Economic sectors** e.g. agriculture, energy and transport need to adopt management practices which keep water ecosystems healthy and resilient;
- Through the **most extensive data gathering** exercise ever in Europe, we have found **weaknesses in reporting**.



## **5. Fitness check of WFD and floods directive, evaluation of WFD implementation**

# Evaluation of WFD and fitness check

- EEA state of water report
- Commission reports on implementation of WFD and Floods Directive (+55 products) - soon
  - Commission Communication
  - Commission Staff Working Documents – European overviews
  - (28) Member State specific in-depth assessments
  - Reports on international RBMPs
- Fitness check (website) consultation runs until 4 March 2019
- 22 December Member States to report progress in implementation of 2nd RBMPs Program of Measures
- 2019-2021 Drafting, consultation and publishing 3rd RBMPs
- Revision of WFD?

# Thanks for listening. Questions?



[Peter.Kristensen@eea.europa.eu](mailto:Peter.Kristensen@eea.europa.eu)

*Thanks to Member States, reporters, colleagues in DG Environment,  
ETC-ICM, IT consultants and at EEA*