The contents of the second river basin management plans – from analysis to main topics of the review process



Workshop Flussgebietsmanagement, 21. – 22. November 2018, Essen



Content

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

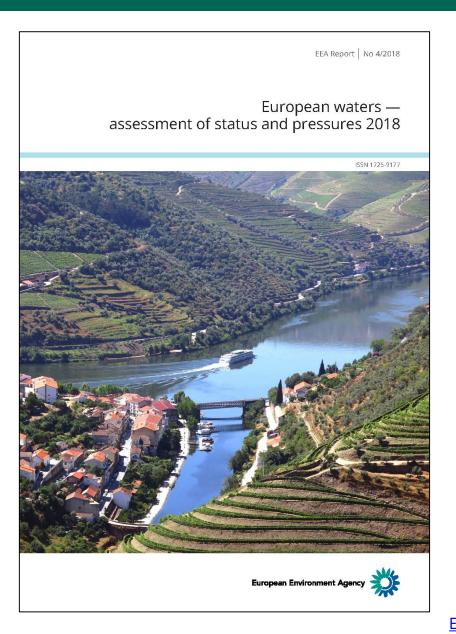
WFD Article 18: The EU Commission shall publish a report on the implementation of the directive two years after the Member States have delivered the RBMPs.

The report shall include **a review of the status of surface water and groundwater** in the Community undertaken in coordination with the European Environment Agency (EEA).



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 km²
- **800 transitional water bodies** avg. area 19 km²)
- 2 800 coastal water bodies avg. area 102 km²
- 13 400 groundwater bodies 4.3 million km²

WISE-Freshwater WFD visualisation tool +150 dashboards



Six thematic web pages with dashboards



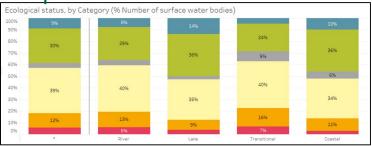


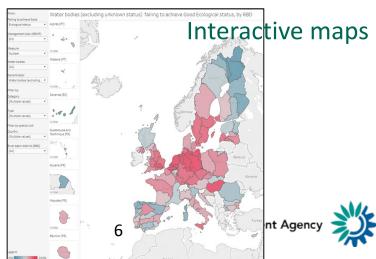
https://www.eea.europa.eu/publications/state-of-water

Tables

Show:			Number Good Failing to achi		% Number (pane) Good Failing to achi		Length Good Failing to achi		% Length (pane) Good Failing to achi		Area Good Failing to achi.	
		RBMP ±+										
Management plan (RBMP 2nd	-	2nd	42 065	50 966	45,2%	54,8%	630 058	380 680	62,3%	37,7%	241 992	193 423
			Number		% Number (pane)		Length		% Length (pane)		Area	
Water bodies		NUTSO=	Good Failing to ach		Good Failing to ach		Good Failing to ach		Good Failing to ach		Good Failing to ach	
(All)		AT		8 127		100.0%		32 278		100.0%		522
		BE	12	541	2.2%	97,8%		9 346		100.0%	14	1 501
Filter by:		BG	322	25	92,8%	7.2%	22 358	1940	92.0%	8,0%	512	254
Chemical status		CY	173	7	96.1%	3.9%	1560	61	96,3%	3,7%	870	
(Multiple values)	*	CZ	768	349	68,8%	31,2%	11799	6 343	65,0%	35,0%	203	60
		DE		9 808		100.0%		137 160		100.0%		26 179
Category		DK	72	62	53,7%	46,3%	38	150	20,1%	79,9%	22 245	4 3 7 4
(All)	•	EE	73	15	83.0%	17.0%	1783	53	97.1%	2.9%	12 196	11 000
Type		ES	4 476	329	93,2%	6,8%	75 735	5 912	92,8%	7,2%	15 168	787
(All)	*	FI	3 366	3 440	49,5%	50,5%	24 906	10 848	69,7%	30,3%	51 636	9 697
		FR	7 181	1814	79,8%	20,2%	146 560	38 071	79,4%	20,6%	27 213	3 560
Filter by spatial unit:		HR	1 443	129	91,8%	8,2%	17 338	1736	90,9%	9,1%	13 211	852
Country		HU	493	84	85,4%	14,6%	9891	2 759	78,2%	21,8%	746	131
(All)		IT	6 152	733	89,4%	10,6%	59 436	7 008	89,5%	10,5%	11 447	5 029
(All)		LU		110		100,0%		1214		100,0%		
River basin district (RBD)		LV	50	22	69,4%	30,6%	1656	453	78,5%	21,5%	156	2 398
(All)	*	MT	10	9	52,6%	47,4%	3		100,0%		0	399
		NL	279	368	43,1%	56,9%	1570	2 585	37,8%	62,2%	379	6 924
Sub-unit (All)		PL	3 331	1 489	69,1%	30,9%	75 326	36 071	67,6%	32.4%	1 573	831

Graphs

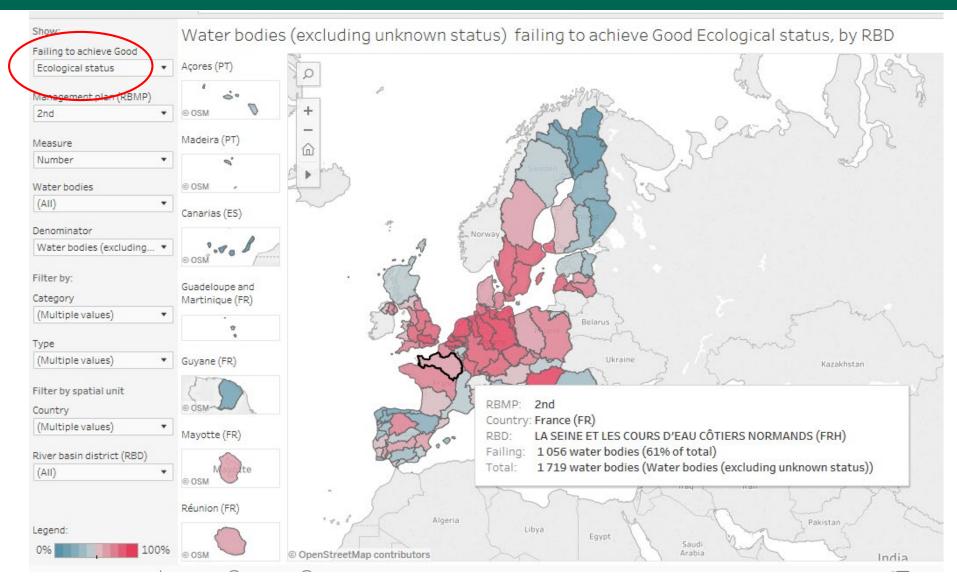




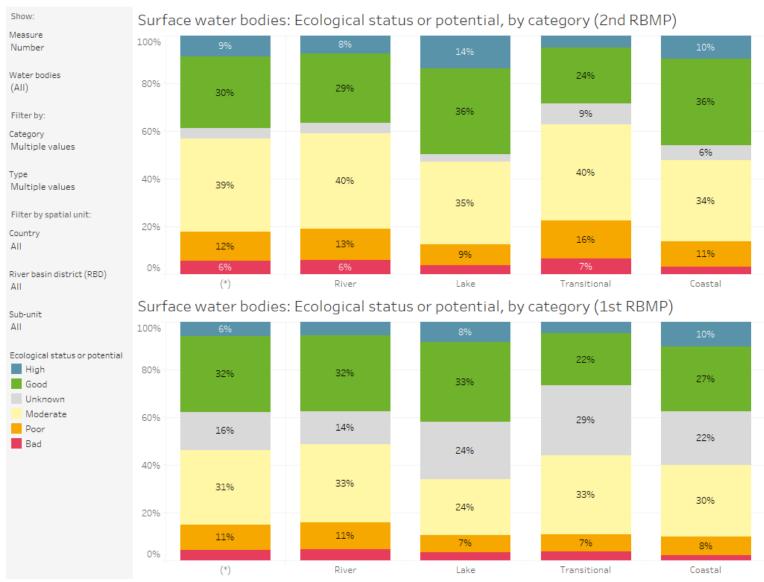
WISE-Freshwater WFD - Template for tables

	River		Lake		Transitional		Chastal	Chastal		Territorial		Unpopulated	
RBMP	total	% (col)	total	% (col)	total	% (coi)	results	% (col)	total	% (col)	total	% (cc	
2nd	89 097	100,0%	18 153	100,0%	782	100,0%	2 830	100,0%	45	100,0%	43	100,0	
	River		Lake		Transition		Coastal		Territorial		Unpopulated		
7	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%			
	873	1,0%	37	0,2%	28	3,6%	17	0,6%					
	174	0,2%		0,0%			22	0,8%					
	1 044	1,2%	77	0,4%		_		_					
	8 998	10,1%	730	4,0%	Men	nber	State res					i i	
DK	7 776	8,7%	856				119	4,2%	14	31,1%		i	
EE	645	0,7%	89		l down F	RBDs, s	subunits	0,6%	2	4,4%			
ES	4 390	4,9%	326	1,8%	186	23,8%	220	7,8%			40	93 <mark>,</mark> 0%	
	1913	2,1%	4 617	25,4%			276	9,8%					
	10 706	12,0%	435	2,4%	94	12,0%	179	6,3%					
					25	3,2%	26	0,9%				<u> </u>	
HU	963	1,1%	115	0,6%									
	7 493	8,4%	347	1,9%	172	22,0%	561	19,8%	8	17,8%			
	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%				, j	
145	4 586	5,1%	1 044	5,8%	9	1,2%	10	0.4%				- <u>- </u>	
	RBMP 2nd NUTSO: AT BE BG CY CZ DE DK EE ES FI FR HR HU IT LU LV	RBMP total 2nd 89 097 River total AT 8 065 BE 527 BG 873 CY 174 CZ 1044 DE 8 998 DK 7776 EE 645 ES 4 390 FI 1913 FR 10 706 HR 1 484 HU 963 IT 7 493 LU 110 LV 203	RBMP total %(col) 2nd 89 097 100,0% River total %(col) AT 8 065 9,1% BE 527 0,6% BG 873 1,0% CY 174 0,2% CZ 1044 1,2% DE 8 998 10,1% DK 7776 8,7% EE 645 0,7% ES 4390 4,9% FI 1913 2,1% FR 10 706 12,0% HR 1484 1,7% HU 963 1,1% IT 7 493 8,4% LU 110 0,1% LV 203 0,2%	RBMP total % (col) total 2nd 89 097 100,0% 18 153 River Lake NUTSO = total % (col) total AT 8 065 9,1% 62 BE 527 0,6% 18 BG 873 1,0% 37 CY 174 0,2% 8 CZ 1 044 1,2% 77 DE 8 998 10,1% 730 DK 7 776 8,7% 856 EE 645 0,7% 89 ES 4 390 4,9% 326 FI 1 913 2,1% 4 617 FR 10 706 12,0% 435 HR 1 484 1,7% 37 HU 963 1,1% 115 IT 7 493 8,4% 347 LU 110 0,1% LV 203 0,2% 259 <td>RBMP total %(col) total %(col) 2nd 89 097 100,0% 18 153 100,0% River total %(col) total %(col) AT 8 065 9,1% 62 0,3% BE 527 0,6% 18 0,1% BG 873 1,0% 37 0,2% CY 174 0,2% 8 0,0% CZ 1044 1,2% 77 0,4% DE 8 998 10,1% 730 4,0% DK 7776 8,7% 856 4,7% EE 645 0,7% 89 0,3 1 ES 4 390 4,9% 326 1,8% FI 1913 2,1% 4617 25,4% FR 10 706 12,0% 435 2,4% HR 1 484 1,7% 37 0,2% HU 963 1,1% 115 0,6% IT 7 493 8,4% 347 1,9% LV 203 0,2% 259 1,4%</td> <td> RBMP</td> <td>RBMP total % (col) total % (col) total % (col) 2nd 89 097 100,0% 18 153 100,0% 782 100,0% River Lake Transitional total % (col) 100,0% AT 8 065 9,1% 62 0,3% 100,0% 60 0,8% 0,0% 0,0% 0,0% 0,0% 0,0% 0,0% 0,0% 0,0%</td> <td> River</td> <td> RBMP</td> <td> RBMP</td> <td> RBMP</td> <td> RBMP</td>	RBMP total %(col) total %(col) 2nd 89 097 100,0% 18 153 100,0% River total %(col) total %(col) AT 8 065 9,1% 62 0,3% BE 527 0,6% 18 0,1% BG 873 1,0% 37 0,2% CY 174 0,2% 8 0,0% CZ 1044 1,2% 77 0,4% DE 8 998 10,1% 730 4,0% DK 7776 8,7% 856 4,7% EE 645 0,7% 89 0,3 1 ES 4 390 4,9% 326 1,8% FI 1913 2,1% 4617 25,4% FR 10 706 12,0% 435 2,4% HR 1 484 1,7% 37 0,2% HU 963 1,1% 115 0,6% IT 7 493 8,4% 347 1,9% LV 203 0,2% 259 1,4%	RBMP	RBMP total % (col) total % (col) total % (col) 2nd 89 097 100,0% 18 153 100,0% 782 100,0% River Lake Transitional total % (col) 100,0% AT 8 065 9,1% 62 0,3% 100,0% 60 0,8% 0,0% 0,0% 0,0% 0,0% 0,0% 0,0% 0,0% 0,0%	River	RBMP	RBMP	RBMP	RBMP	

WISE-Freshwater WFD - maps



Ecological status or potential in the 2nd and 1st RBMPs



2. Background

Water management — investing in natural capital

Sustainability

1st phase

1970-2000

- Treatment and sanitation
- Flood defence
- Drainage

2nd phase

2000-2015 **1st and 2nd RBMPs**

- Existing policies

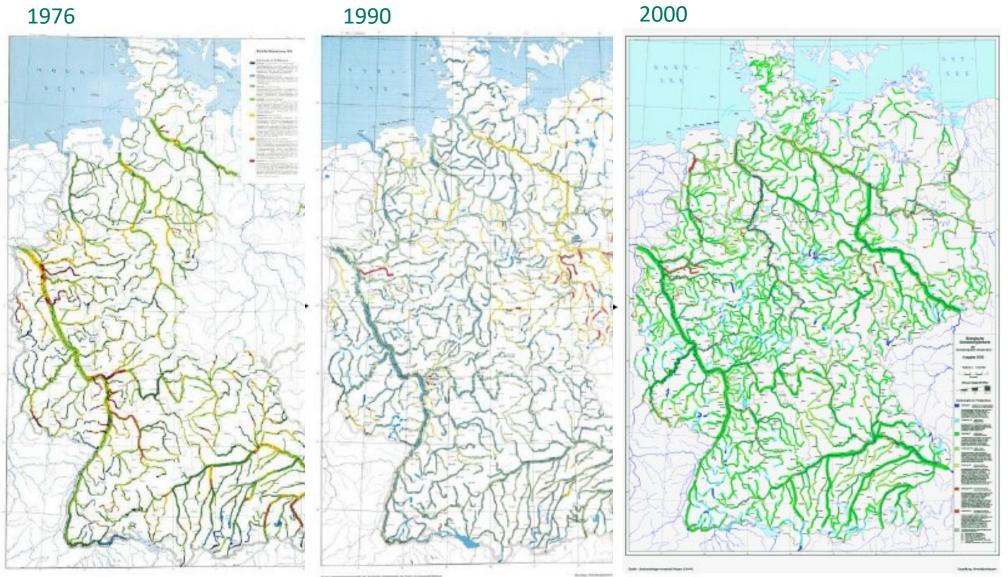
 (wastewater
 treatment,
 Nitrates Directive)
- River restoration

3rd phase

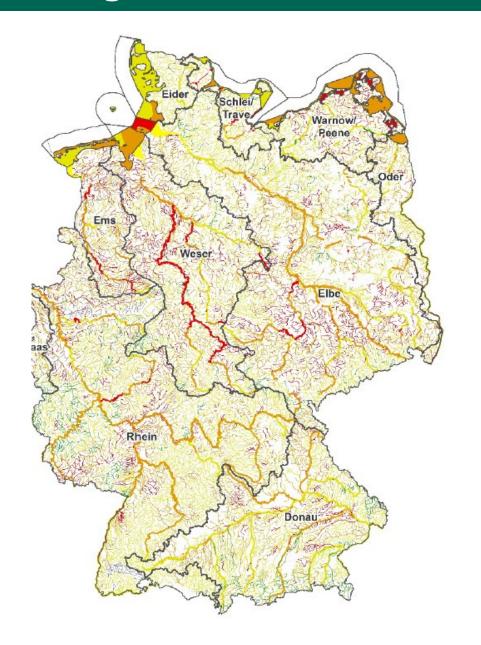
2015-2050

- Climate proof
- Green infrastructure
- Green/blue cities
- Nature based solutions
- Reduction at source
- Water/food link
- Water/energy link

From a water quality focus to integrated assessments



Ecological status after Water Framework Directive



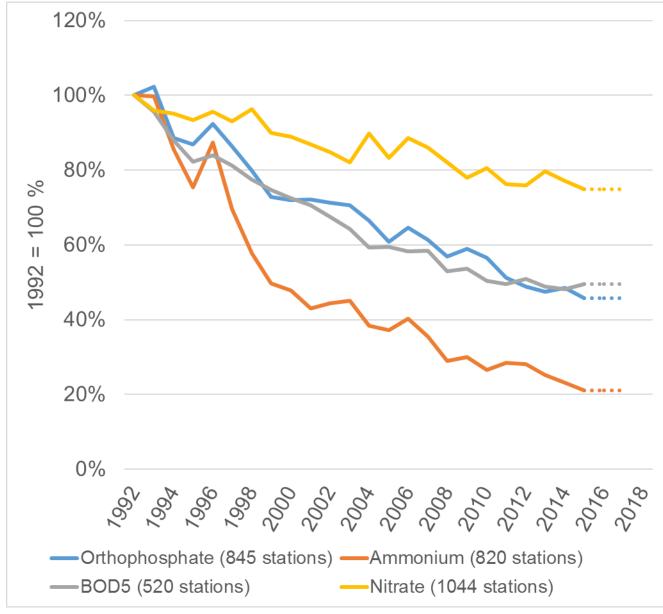
Ecological status 2015

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



Hydromorphological pressures are causing altered habitats and affecting the ecological status



Barriers and transverse structure

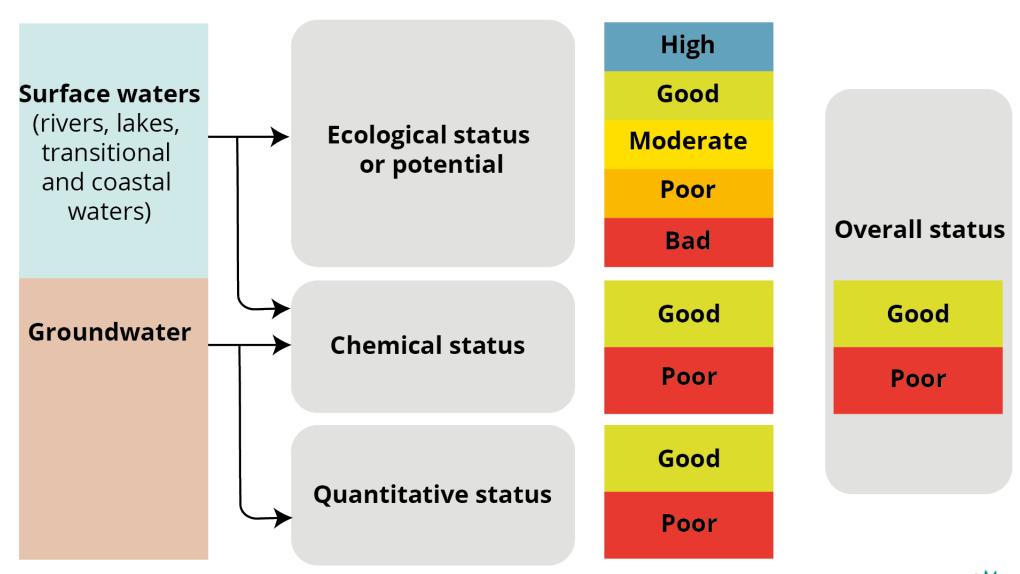
Morphological changes

Abstraction and flow regulation and water level regulation



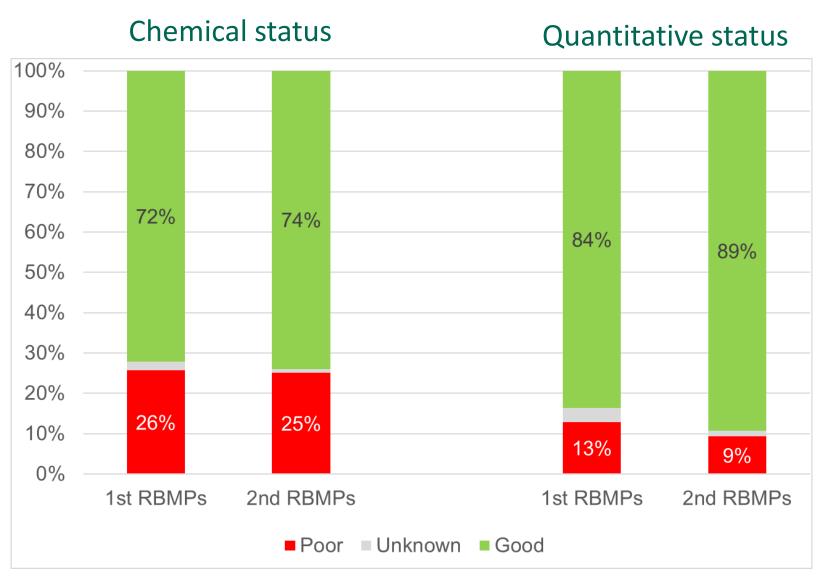
3. Current status

Four areas of assessment

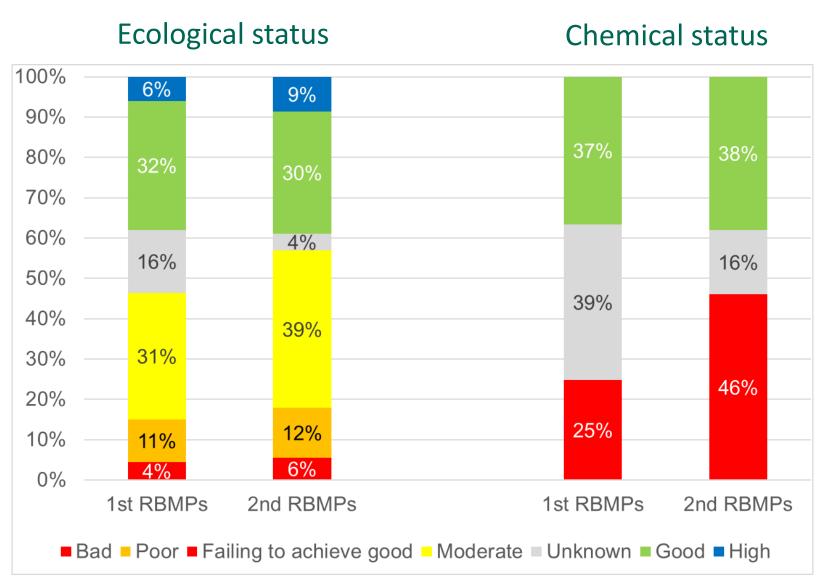


European Environment Agency

Status of groundwater 1st and 2nd RBMPs

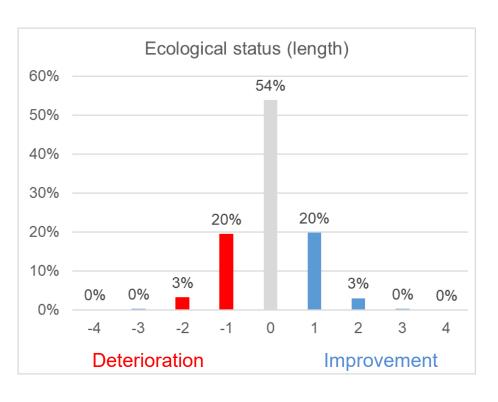


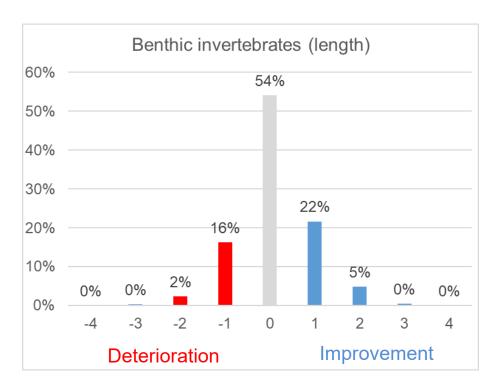
Status of surface water 1st and 2nd RBMPs



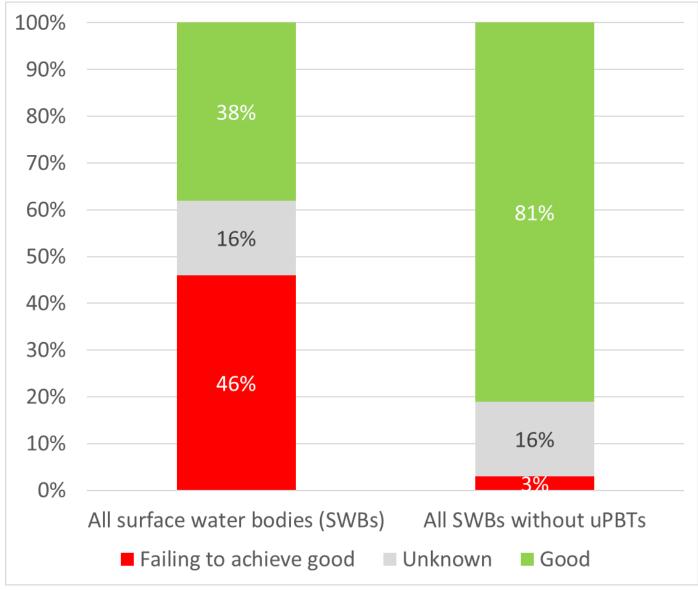


Change in river ecological status 1st and 2nd RBMPs

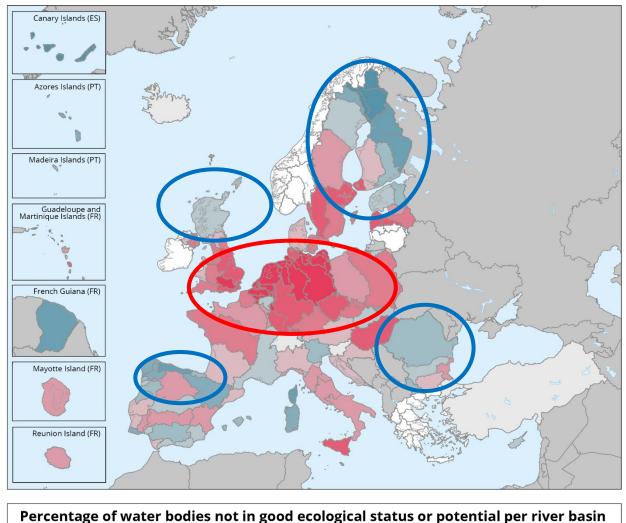


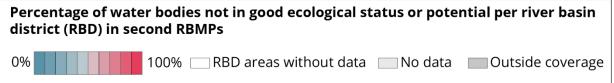


Surface water chemical status with and without uPBTs*



Ecological status — 2nd RBMPs (2010-2015)







Main pressures — 2nd RBMPs



4. Looking ahead

Water management — investing in natural capital

Sustainability

1st phase 1970-2000

- Treatment and sanitation
- Flood defence
- Drainage

2nd phase

2000-2015 **1st and 2nd RBMPs**

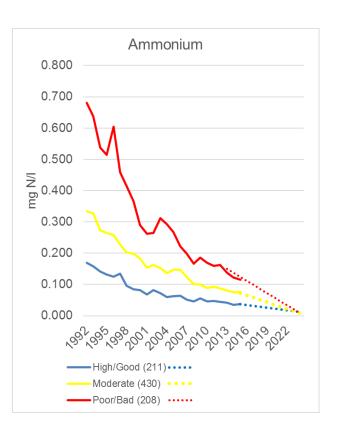
- Existing policies (wastewater treatment, Nitrate Directive)
- River restoration

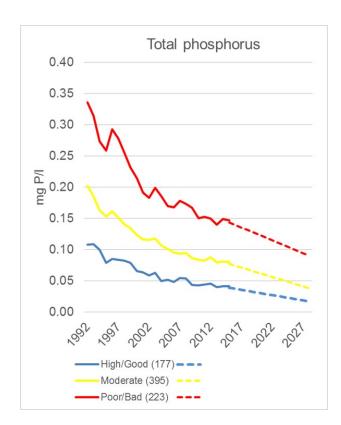
3rd phase

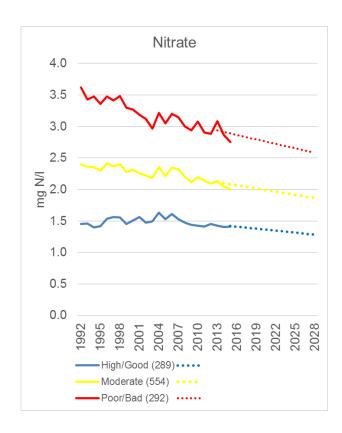
2015-2050

- Climate proof
- Green infrastructure
- Green/blue cities
- Nature based solutions
- Reduction at source
- Water/food link
- Water/energy link

Water quality by ecological status classes







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?



Water Directors "discussion" document on "The Future of the Water Framework Directive (WFD)".

Chapter 2. The WFD – current challenges and future options.

- 2.1 What will be beyond the 2027 deadline for achieving WFD's objectives?
- 2.2 Communication on progress to meeting WFD's objectives
- 2.3 Towards a user-friendly electronic reporting process
- 2.4 Improving RBMPs as tools for water management.
- 2.5 Transferring river basin specific pollutant to chemical status assessments.
- 2.6 Recovery of costs and the economic analysis.
- 2.7 Monitoring.
- 2.8 Public information and consulting streamlining the steps for involving the public.
- 2.9 Length of the management cycle.



Thanks for listening. Questions?









Peter.Kristensen@eea.europa.eu

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

