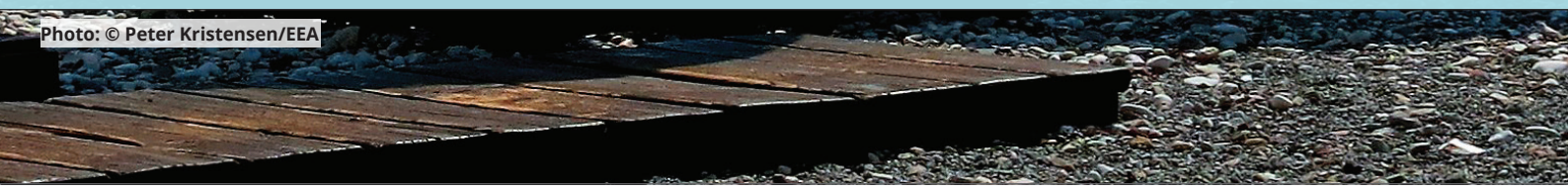
Country report

Belgian bathing water quality in 2018

Belgium

June 2019



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European Environment Agency

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Bathing Water Quality in the Season 2018

Belgium

Under the provisions of the Bathing Water Directive, more than 21 000 bathing waters are monitored in Europe each season. The monitoring data and other information regarding bathing water management are reported to the European Environment Agency by 30 reporting countries in Europe, to be assessed for the annual European report and more detailed national reports.

1. BWD reporting in the season 2018

In the season 2018, Belgium identified and reported **115 bathing waters**, which is 0.5% of all bathing waters in Europe. One bathing water in Belgium has been newly identified for the season 2018.

Bathing waters of Belgium in the season 2018	
Total reported	115
Coastal	42
Inland	73
Total reported samples	2223

Bathing water quality in the season 2018	
Excellent	101 (87.8%)
Good	10 (8.7%)
Sufficient	2 (1.7%)
Poor	1 (0.9%)
Not classified	1 (0.9%)

The bathing waters are quality classified according to the two microbiological parameters (Escherichia coli and Intestinal enterococci) defined in the Bathing Water Directive. 98.3% of reported bathing waters are in line with the minimum quality standards of the Directive, thus classified “sufficient” or better. One bathing water is of “poor” quality.

More detailed information on bathing waters of Belgium is available at the national bathing water portals http://www.kwaliteitzwemwater.be and http://environnement.wallonie.be/baignade.

2. BWD monitoring

Each bathing water that is identified by the reporting country needs to have a monitoring calendar established before the bathing season. The monitoring calendar requirements can be summarised as follows: (1) a pre-season sample is to be taken shortly before the start of each bathing season; (2) no fewer than four (alternatively, three for specific cases) samples are to be taken and analysed per bathing season; and (3) an interval between sampling dates never exceeds one month.

From the reported data, the assessment also designates effective implementation of the monitoring calendar. In Belgium, monitoring calendar for 2018 was implemented at all bathing waters.

Table 1: Bathing waters in 2018 according to implementation of the monitoring calendar

	Count	Share of total [%]
Monitoring calendar implemented A bathing water satisfies monitoring calendar conditions listed above.	115	100%
Monitoring calendar not implemented A bathing water does not satisfy monitoring calendar conditions listed above. They may be quality-classified if enough samples are available in the last assessment period.	0	0%

In addition to the monitoring calendar, management specifics of the last assessment period of four years are also assessed. The status primarily indicates whether the complete dataset of four seasons is available, but also points out the reasons as to why the bathing waters do not have the complete last assessment period dataset. The latter may indicate developing conditions at the site – most importantly, whether the bathing water has been newly identified within the period, or any changes have occurred that are likely to affect the classification of the bathing water.

Table 2: Management specifics in the last assessment period of 2015–2018

	Count	Share of total [%]
Continuously monitored A bathing water has been monitored in each bathing season in the last assessment period.	113	98.30%
Newly identified A bathing water was identified for the first time within the last assessment period. Such status is assigned until the complete four-year dataset is available, i.e. for three years after the first reporting.	2	1.70%
Quality changes A bathing water was subject to changes described in BWD Art. 4.4 within the last assessment period. Such status is assigned until the complete four-year dataset of samples taken after changes took effect is available.	0	0%
Monitoring gap A bathing water was not monitored for at least one season in the last assessment period. No quality	0	0%

classification is made if no samples are reported for the most recent season.		

3. Bathing water quality

3.1 Coastal bathing waters

Coastal bathing waters are situated on the sea or transitional water coastline, with respective parameter thresholds defined in Annex I of the Directive. They are subject to more strict thresholds than the inland bathing waters. Quality trend in Belgium for the period 1990–2018 if historical data are available is shown in Figure 1. Count of bathing waters by quality class for the last assessment period 2015–2018 is given in Annex I.

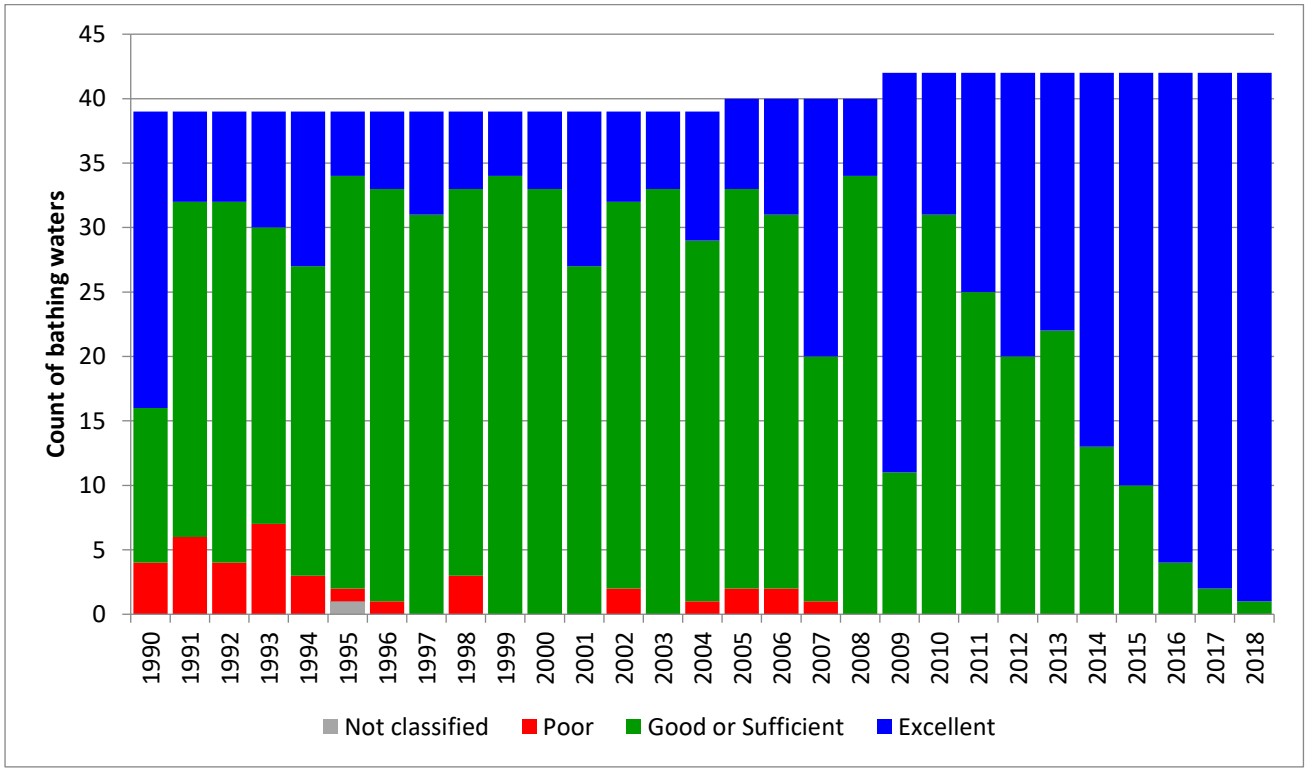

Figure 1: Trend of coastal bathing water quality in Belgium. Notes: Each column represents an absolute count of bathing waters in the season. Quality classes “good” and “sufficient” are merged for comparability with classification of the preceding Bathing Water Directive 76/160/EEC.

3.2 Inland bathing waters

Inland bathing waters are situated at rivers and lakes, featuring fresh water and with respective parameter thresholds defined in Annex I of the Directive. Quality trend in Belgium for the period 1990–2018 if historical data are available is shown in Figure 2. Count of bathing waters by quality class for the last assessment period 2015–2018 is given in Annex I Bathing water quality in Belgium in 2015–2018.

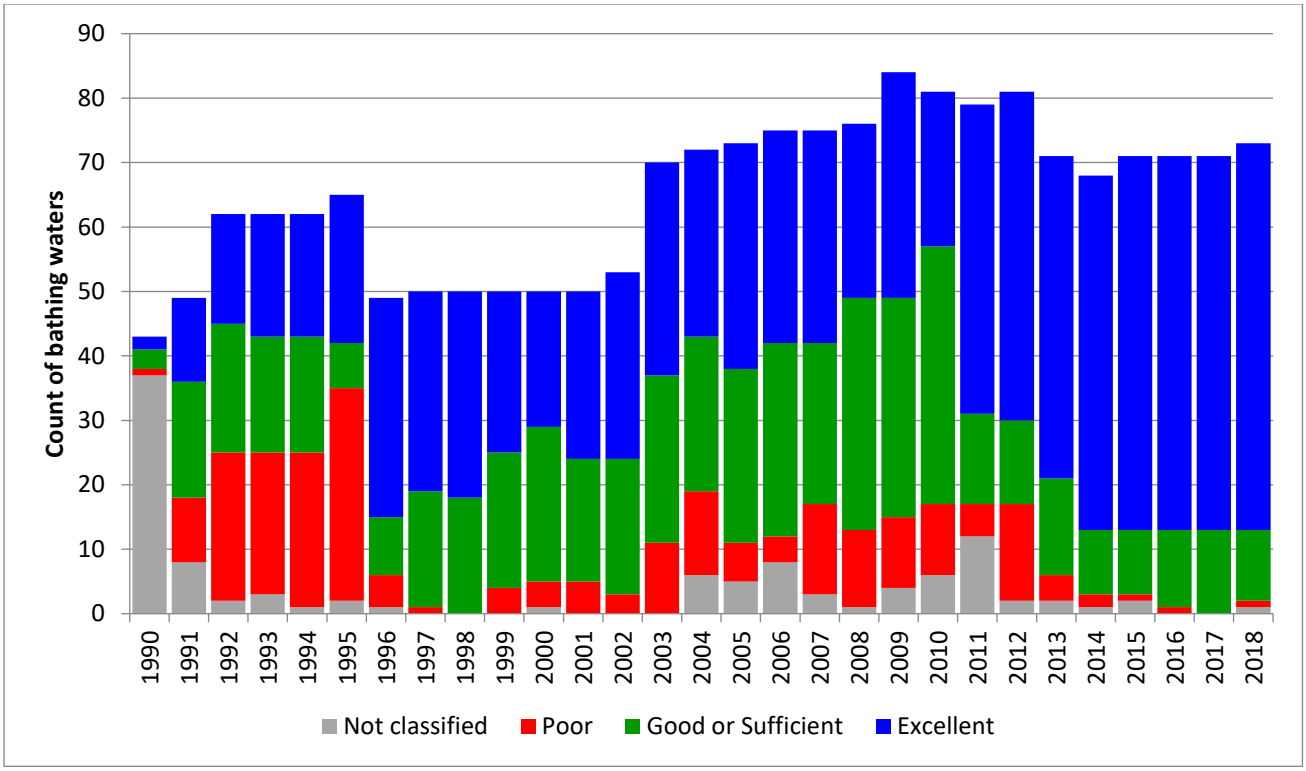

Figure 2: Trend of inland bathing water quality in Belgium. Notes: Each column represents an absolute count of bathing waters in the season. Quality classes "good" and "sufficient" are merged for comparability with classification of the preceding Bathing Water Directive 76/160/EEC.

4. Bathing water management in Belgium

In addition to monitoring data, reporting countries also provide information on bathing water management in the country. The information is used to exchange good practices, discuss issues on the European level, and understand the specifics of implementation of the Directive.

Flanders

In Flanders the current bathing water quality is displayed on the website www.kwaliteitzwemwater.be where the latest results can be seen during the season. The website is to be updated in 2019. Each bathing water has a detail page and the bathing water profile where the information on bathing water quality for the past four years is available. Boards with bathing water quality information are placed at bathing waters. In

case of problems with the bathing water quality, the necessary measures are taken on the basis of a decision tree. These range from taking extra samples to placing special signs (a visually clear system of smileys) by the rescuers on site. This image system includes four different stages (types of smileys) with meanings: 'no problem'; 'discouraged swimming for small children, the elderly and people with a decreased resistance'; 'the exceedance must still be confirmed by a control sample - until the result is known, swimming is not advised for small children, the elderly and people with a decreased resistance' and 'swimming prohibition'.
Most of inland sites in Flanders have no connection to the surface waters, therefore they are only fed by groundwater and rainwater. There are no direct discharges on the Belgian coast in Flanders. Nevertheless, after heavy rainfall, overflows can enter the harbour channels of Nieuwpoort, Oostende, Blankenberge and Zeebrugge together with untreated sewage and thus affect bathing water quality. Modelling study to assess impacts of such overflows and contamination spread was brought into force. Actions intended to minimize the overflow times are proposed on this basis and consultation with various stakeholders (municipalities, sewage infrastructure companies etc.). Projects with aim to reduce the critical overflows are being carried out. The model operational function of the model will be enhanced in the future. Despite the fact that quality of coastal waters have improved, further research is needed since it is still not known how pollution spreads along the coast.

The Walloon region

The official list of bathing waters of Walloon region was submitted to the EC before the start of the 2018 bathing season on 14 June 2018. No new bathing waters have been identified in Wallon region 2018.
Due to improved bathing water quality, bathing water La Semois à Lacuisine has been re-opened for swimming. Since bathing water La Semois à Lacuisine was classified as 'poor' for five consecutive years, a permanent bathing prohibition or permanent advice against bathing was introduced from 2013 to 2018 in accordance with Article 5.4 of BWD. Due to numerous management measures such as drainage works, pollution control, construction of wastewater treatment plant the bathing water quality has been improved. Bathing water has been re-opened for swimming in 2018. Since not enough samples have been collected since then, this bathing water cannot be quality classified yet.

Bathing water "La Semois à Bouillon (pont de la Poulie)" has been prohibited for swimming for entire 2018 bathing season due to quality problems observed in 2018.

The website dedicated to bathing waters (http://environnement.wallonie.be/baignade) has been updated in 2018. In comparison with previous one it has responsive web design, dynamic map, it has an intuitive display and is more user friendly. It provides the results of the bacteriological analyses for the authorized zones and is regularly consulted by the population, the camping managers and environmental managers. The home page presents complete information, with direct links to a map showing the latest analysis results. It supports 3 national languages and English. Bathing water profiles are also available in pdf format on the website.

The programme of actions

In 2016, the Walloon region established a specific program of actions based on the identification of a set of measures specific to the sanitation, agricultural and tourism sector. Implementation of the identified measures should improve the quality of bathing water on a sustainable basis. The action programme started

in autumn 2016 and will be subject to periodic evaluation. Given in numbers, 87% of the programme's actions concern sanitation and 13% for other sectors (agriculture, tourism).
In regards to sanitation, treatment program for discharges collective and autonomous zone to improve and maintain the bacteriological quality of bathing water has been implemented in Walloon region. Between 2000 and 2009 a total of € 49 million was provided. The programme running between 2010 and 2014 included an additional € 13 million. The program was extended to 2015-2016, with various priority actions to be carried out on non-compliant bathing water for a budget of € 9 million. Three new sewage treatment plants, built in the catchments of bathing waters Trois-Ponts, Rendeux and Chiny started to operate before the 2016 bathing season. Other projects, among them the construction of 5 treatment plants, are in progress.

Wastewater treatment facilities are implemented on almost all camping sites situated upstream of bathing waters. A decree allowing each farmer to get a grant to cover part of the costs associated with the installation of fences and water troughs has also been adopted by Walloon government.

Public participation

The regional regulations provide the possibility for any person to address observations concerning the revision of the list of bathing waters and the management of the quality of the bathing waters at the Public Service of Wallonia (DGARNE, Department of Environment and Water). The Administration takes into account the relevant comments received in the drafting of its annual report, which the Government takes into account in the development of its policy on bathing water quality management.

Cyanobacteria

The proliferation of cyanobacteria affects some bathing waters in closed environments.
The Region is monitoring the cyanobacteria and eutrophication of water bodies, by visual observations but also laboratory identifications, as well as quantifications of chlorophyll-a and toxins produced by cyanobacteria (microcystins).

In 2018, most of the encountered problems were related to proliferation of cyanobacteria which has been spotted on eight bathing waters. Based on the results of bacteriological tests and cyanobacteria, a temporary bathing ban can be imposed.

In addition, other actions were carried out or are scheduled such as the control of farms, campsites or parks adjacent to the lake, etc. to better understand where the nutrients come from and how to fix them.

Annex I Bathing water quality in Belgium in 2015–2018

Table 3: Bathing water quality by water category and season

		Total count of bathing waters	Excellent		Good		Sufficient		Poor		Not classified	
			Count	%	Count	%	Count	%	Count	%	Count	%
Coastal	2015	42	32	76.2	10	23.8	0	0.0	0	0.0	0	0.0
	2016	42	38	90.5	4	9.5	0	0.0	0	0.0	0	0.0
	2017	42	40	95.2	2	4.8	0	0.0	0	0.0	0	0.0
	2018	42	41	97.6	1	2.4	0	0.0	0	0.0	0	0.0
Inland	2015	71	58	81.7	6	8.5	4	5.6	1	1.4	2	2.8
	2016	71	58	81.7	10	14.1	2	2.8	1	1.4	0	0.0
	2017	71	58	81.7	10	14.1	3	4.2	0	0.0	0	0.0
	2018	73	60	82.2	9	12.3	2	2.7	1	1.4	1	1.4
Total	**2015**	113	90	79.6	16	14.2	4	3.5	1	0.9	2	1.8
	2016	113	96	85.0	14	12.4	2	1.8	1	0.9	0	0.0
	2017	113	98	86.7	12	10.6	3	2.7	0	0.0	0	0.0
	2018	115	101	87.8	10	8.7	2	1.7	1	0.9	1	0.9

Annex II Bathing water quality map

Map 1: Bathing waters reported during the 2018 bathing season in Belgium

Source: National boundaries: GISCO; Large rivers and lakes: EEA, WFD Article 3; Bathing waters data and coordinates: Belgian authorities; Digital Elevation Model over Europe (EU-DEM): EEA.