French bathing water quality in 2018







Bathing Water Quality in the Season 2018

France

Under the provisions of the <u>Bathing Water Directive</u>, 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, France identified and reported **3351 bathing waters**, which is 15.1% of all bathing waters in Europe. 14 bathing waters in France have been newly identified for the season 2018. 38 bathing waters reported in the preceding seasons have not been reported any more in 2018.

Bathing waters of France in the season 2018		Bathing water quality in the season 2018			
Total reported	3351	Excellent	2640 (78.8%)		
Coastal	2041	Good	461 (13.8%)		
Inland	1310	Sufficient	116 (3.5%)		
		Poor	54 (1.6%)		
Total reported samples	34110	Not classified	80 (2.4%)		

The bathing waters are quality classified according to the two microbiological parameters (Escherichia coli and Intestinal enterococci) defined in the Bathing Water Directive. 96% of reported bathing waters are in line with the minimum quality standards of the Directive, thus classified "sufficient" or better. 54 bathing waters are of "poor" quality.

More detailed information on bathing waters of France is available at the national bathing water portal http://baignades.sante.gouv.fr/baignades/editorial/en/accueil.html.

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 France, monitoring calendar for 2018 was not implemented at 42 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.	3309	98.70%
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.	42	1.30%

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.	3231	96.40%
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.	66	2%
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.	5	0.10%
Monitoring gap A bathing water was not monitored for at least one season in the last assessment period. No quality	49	1.50%



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 France 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.

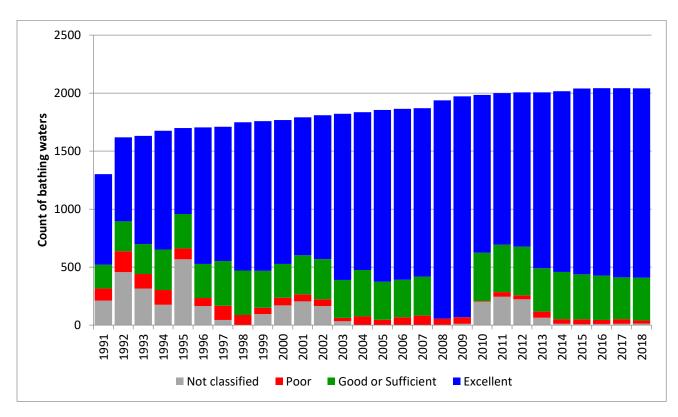


Figure 1: Trend of coastal bathing water quality in France. Notes: Each column represents an absolute count of bathing waters in the season. Quality classes "good" and "sufficient" are merged for comparability with classification of the preceding Bathing Water Directive 76/160/EEC.



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 France 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.

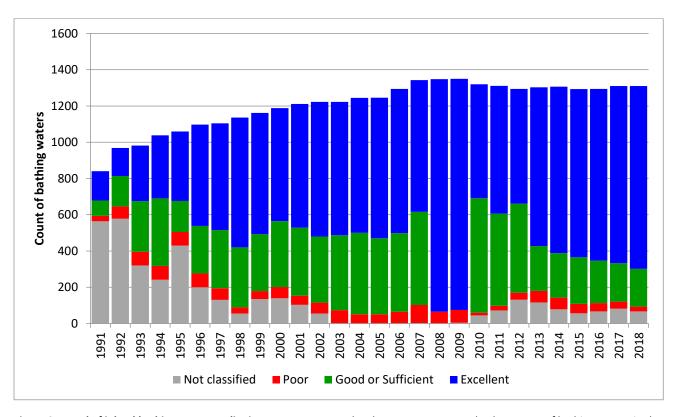


Figure 2: Trend of inland bathing water quality in France. Notes: Each column represents an absolute count of bathing waters in the season. Quality classes "good" and "sufficient" are merged for comparability with classification of the preceding Bathing Water Directive 76/160/EEC.



4. Bathing water management in France

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.

Bathing water monitoring

The samples are taken during the bathing season, under the aegis of the ARS services, or by laboratories approved by the Minister of Health. The monitoring period covers the entire bathing season when the bathing sites regularly receive visitors. It may vary from region to region, due to the differing climate condition. In mainland France, monitoring generally takes place from 15 June to 15 September, but may be shorter in freshwater bathing areas. In the overseas administrative units, monitoring is performed year-round.

If, during the season, a result shows a decline in the quality of bathing water, particularly if the imperative value requirement is not met, test samples are taken as quickly as possible, until the situation returns to compliance with the regulations in effect once again, so as to guarantee the absence of any health risk for the users. When dealing with seawater sites, certain coastal towns increase the sampling frequency beyond the minimum regulatory requirement, reaching over 20 samples per bathing season and thereby ensuring greater health safety.

Bathing water management

Each year municipalities identify bathing waters in their territory. These bathing waters can be managed by private owners or public institutions. Besides measurement of bacteria indicating faecal contamination, bathing waters are also inspected for litter (glass, plastic and other waste). Moreover, the person responsible for the bathing water is required to implement a daily visual surveillance during the bathing season and inspect bathing water for other abnormalities, such as cyanobacteria, macro-algae or marine phytoplankton etc.

Since 2011, the head of bathing water is also required to prepare vulnerability assessment of bathing sites with potential pollution risks. These profiles must precisely identify the factors which could deteriorate bathing water quality. If these conditions are met, bathing is temporarily prohibited. In sensitive areas or on the basis of the conclusions of the "profile", managers can also use preventive bans without preliminary assessment/analyses. Such actions are usually following particular events such as storms, malfunction of wastewater treatment plans etc. Along with monitoring data, content analysis is delivered to the European Commission including sources causes of pollution as well as action taken for problematic bathing waters.

For the 2018 bathing season, 100 short-term pollution events on 86 bathing waters were reported due to different reasons: waste and rainwater emissions, releases, dry weather etc. Different measures such as temporary or permanent bathing prohibition were applied.

General information including information on bathing water quality, legislation, monitoring and assessment is available at the Bathing water section at national webpage at:

http://baignades.sante.gouv.fr/baignades/editorial/en/accueil.html

Bathing waters in overseas territories

There are around 250 bathing waters identified by France each year that are situated in overseas territories. All these bathing waters are located in the Caribbean islands (190 bathing waters), French Guiana (12 bathing waters), Mayotte (26) and Reunion (21).

Due to favorable climate with constant warm temperatures of air and water, these bathing waters operate year-round. Bathing seasons of these bathing waters are thus considerably longer in comparison to bathing waters situated in Europe where bathing season usually lasts two to four months.

These bathing waters are often impacted by major weather of environmental events such as cyclones accompanied by heavy rains or the massive beaching of Sargassum algae, a phenomenon that appeared in 2014 and seems to be lasting. These phenomena do not necessarily affect the bathing water quality but can impact the management of the water quality control. During 2018 bathing season, two bathing waters have been affected by the Irma cyclone and its consequences while the Caribbean coastline faced the phenomenon of sargasse algae bloom. The accumulation of these algae can have significant consequences on the environment and economy and can pose serious risk to bather's health. Sargasse algae bloom impacted six bathing waters during 2018 bathing season.

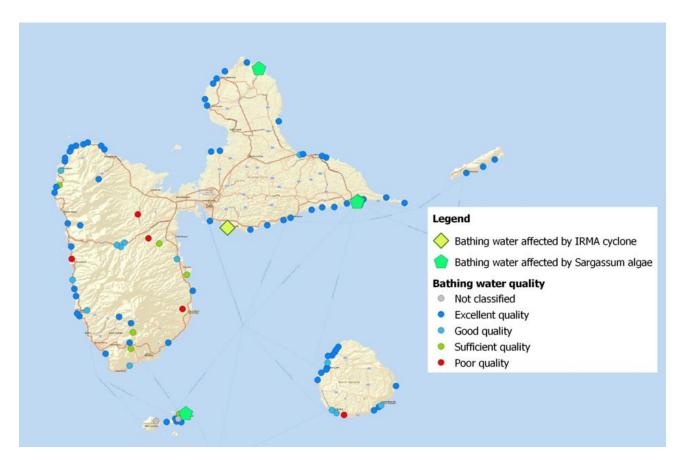


Figure 3: Bathing waters and their management specifics in the Guadeloupe (Caribbean islands).

Annex I Bathing water quality in France in 2015–2018

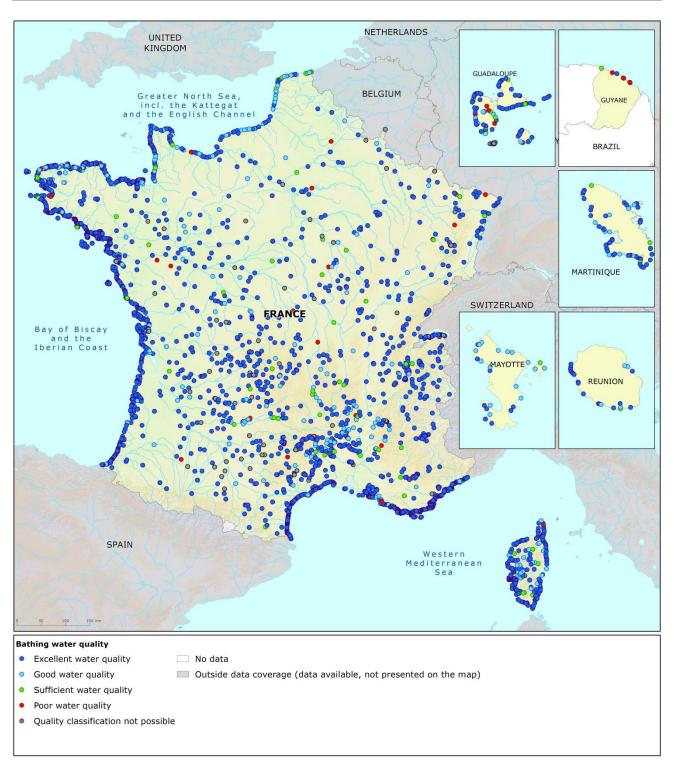
Table 3: Bathing water quality by water category and season

		Total	Exce	llent	Go	od	Suffi	cient	Po	or	Not cla	ssified
		count of bathing waters	Count	%	Count	%	Count	%	Count	%	Count	%
	2015	2040	1602	78.5	310	15.2	78	3.8	43	2.1	7	0.3
Coastal	2016	2043	1616	79.1	305	14.9	77	3.8	35	1.7	10	0.5
	2017	2043	1631	79.8	288	14.1	73	3.6	40	2.0	11	0.5
	2018	2041	1632	80.0	306	15.0	62	3.0	28	1.4	13	0.6
Inland	2015	1293	928	71.8	195	15.1	62	4.8	52	4.0	56	4.3
	2016	1294	947	73.2	174	13.4	60	4.6	46	3.6	67	5.2
	2017	1310	977	74.6	157	12.0	55	4.2	39	3.0	82	6.3
	2018	1310	1008	76.9	155	11.8	54	4.1	26	2.0	67	5.1
Total	2015	3333	2530	75.9	505	15.2	140	4.2	95	2.9	63	1.9
	2016	3337	2563	76.8	479	14.4	137	4.1	81	2.4	77	2.3
	2017	3353	2608	77.8	445	13.3	128	3.8	79	2.4	93	2.8
	2018	3351	2640	78.8	461	13.8	116	3.5	54	1.6	80	2.4



Annex II Bathing water quality map

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



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