# French bathing water quality in 2017





# BWD Report For the Bathing Season 2017 France

The report gives a general overview of information acquired from the reported data, based on provisions of the Bathing Water Directive<sup>1</sup>. The reporting process is described below, as well as state and trends of bathing water quality in France.

#### 1. BWD reporting in the season 2017

In the 2017 bathing season, 3379 bathing waters have been reported in France. For each bathing water, five groups of parameters have been delivered<sup>2</sup>:

- *identification data* including name, location, coastal, inland or transitional type of bathing water and availability to bathers;
- seasonal data including season start and end, national quality classification in the recent season, potential management measures and changes that are likely to affect the classification of the bathing water;
- monitoring results disaggregated numerical values
  of two microbiological parameters intestinal
  enterococci and Escherichia coli (also known as E.
  coli), recorded at each water sample taken;
- abnormal situation periods periods of an event or combination of events impacting on bathing water quality, during which monitoring calendar may be suspended; reporting is optional;
- short-term pollution periods measurable events of microbiological contamination; reporting is optional.

Coastal	2065
Inland	1314
Max season period	365 days
	1 Oct to 30 Sep
Samples taken	34441
Share of bathing waters	91 %
with good or excellent	
water quality	
Reporting under	2010
Directive 2006/7/EC since	

Bathing waters of France in 2017

3379

**Total reported** 

The authorities of France report data according to the new BWD (2006/7/EC) since the season 2010.

Altogether, **3379 bathing waters** have been reported – 15.5% of all bathing waters in Europe. 30 bathing waters have been newly reported in the recent season. 61% of bathing waters in France are of coastal type; the other 39% are inland. **34441 samples** were taken at bathing waters throughout the season – 10 per bathing water on average.

<sup>&</sup>lt;sup>1</sup> Directive BWD 2006/7/EC, available at <a href="http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=0]:L:2006:064:0037:0051:EN:PDF">http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=0]:L:2006:064:0037:0051:EN:PDF</a>

<sup>&</sup>lt;sup>2</sup> See the BWD Data Dictionary for detailed explanations: <a href="http://dd.eionet.europa.eu/datasets/3294#tables">http://dd.eionet.europa.eu/datasets/3294#tables</a>

The maximum bathing season period was from 1 October to 30 September, i.e. throughout the year accounting for overseas territories. Season duration varies depending on bathing water.

Detailed information on bathing waters is available from national portal at <a href="http://baignades.sante.gouv.fr/baignades/editorial/en/accueil.html">http://baignades.sante.gouv.fr/baignades/editorial/en/accueil.html</a>.

#### 2. Assessment methodology<sup>3</sup>

During the bathing season, water samples are taken and analysed for two bacteria, *Escherichia coli* and intestinal enterococci which may indicate the presence of pollution, usually originating in sewage, livestock waste, bird faeces etc. The results of the analysis are used to assess the quality of the bathing waters concerned and to provide information to the public on the quality of water in the bathing sites concerned.

The monitoring requirements under the Directive are:

- taking a pre-season sample (taken shortly before the start of the bathing season) 4;
- a minimum of four samples per season<sup>5</sup>;
- a minimum of one sample per month<sup>6</sup>.

If these rules are satisfied, the bathing water is categorised as 'sampling frequency satisfied'. If not all monitoring requirements are fulfilled the bathing water is categorised as 'not enough samples'. 96.7% of bathing waters met the described monitoring requirements set by the Directive, while the rest did not satisfy monitoring requirements for different reasons: being new; having changed environmental conditions that might affect water quality classification; closed; not monitored due to legal issues, physical inaccessibility to the site etc. Table 1 shows the statistics of bathing waters according to monitoring requirements.

Table 1: Bathing waters in 2017 according to compliance with BWD monitoring provisions

	Count	Share of total [%]	
BWs with sampling frequency satisfied (and are not new, are not subject to changes or were not closed in 2017)			
These bathing waters have been monitored according to provisions and	3267	96.7%	
have complete dataset from the last assessment period. They have been			
quality-classified (excellent, good, sufficient, poor).			
BWs with sampling frequency not satisfied (and are not new, are not			
subject to changes or were not closed in 2017)			
These bathing waters exist throughout the last assessment period but have	20	0.9%	
not been monitored throughout the period according to provisions for	30	0.9%	
various individual reasons. They may be quality-classified if there is an			
adequate volume of samples available for credible classification.			

<sup>&</sup>lt;sup>3</sup> The methodology used by the EC and the EEA is described here, while results of assessment by national authorities may differ in individual cases.

<sup>&</sup>lt;sup>4</sup> A pre-season sample is taken into a sum of samples per season.

<sup>&</sup>lt;sup>5</sup> Three samples are sufficient if the season does not exceed eight weeks or the region is subject to special geographical constraints.

<sup>&</sup>lt;sup>6</sup> If, for any reason, it is not possible to take the sample at the scheduled date, a delay of four extra days is allowed. Thus, the interval between two samples should not exceed 31 + 4 days.

BWs that are new, subject to changes or closed in 2017  These bathing waters do not have complete dataset for the last assessment period because they are new, have been subject to changes (that are likely to affect the classification of the bathing water) or have been closed. They cannot be quality-classified.	82	2.4%
Total number of bathing waters in 2017	3379	100%

Bathing waters where sampling frequency was not satisfied can still be quality assessed if at least four samples per season (three samples if the season does not exceed eight weeks or the region is subject to special geographical constraints) are available and equally distributed throughout the season. Assessment of bathing water quality is possible when the bathing water sample dataset is available for four consecutive seasons. Bathing waters are accordingly classified to one of the bathing water quality classes (excellent, good, sufficient, or poor).

The classification is based on pre-defined percentile values for microbiological enumerations, limiting the classes given in Annex I of the Directive. The Directive defines different limit values for coastal and inland waters.

Quality assessment is not possible for all bathing waters. In these cases, they are instead classified as either:

- not enough samples<sup>7</sup>;
- new8;
- changes<sup>9</sup>;
- closed<sup>10</sup>.

### 3. Bathing water quality

The results of the bathing water quality in France throughout the past period are presented in Figure 1 (for coastal bathing waters) and Figure 2 (for inland bathing waters). The previous reports are available on the European Commission's bathing water quality website<sup>11</sup> and the European Environment Agency's bathing water website<sup>12</sup>.

<sup>&</sup>lt;sup>7</sup> Not enough samples have been provided throughout the last assessment period (the last four bathing seasons or, when applicable, the period specified in Article 4.2 or 4.4).

<sup>&</sup>lt;sup>8</sup> Classification not yet possible because bathing water is newly identified and a complete set of samples is not yet available.

<sup>&</sup>lt;sup>9</sup> Classification is not yet possible after changes that are likely to affect the classification of the bathing water.

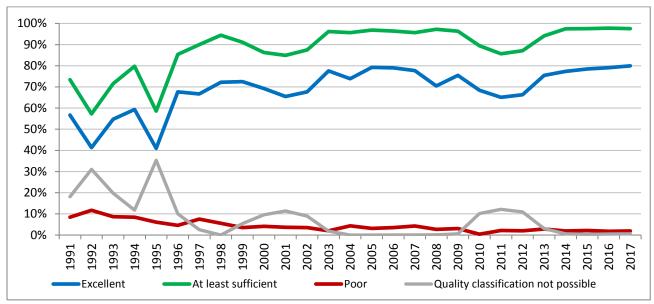
<sup>&</sup>lt;sup>10</sup> Bathing water is closed temporarily or throughout the bathing season.

<sup>11</sup> http://ec.europa.eu/environment/water/water-bathing/index\_en.html

<sup>12</sup> http://www.eea.europa.eu/themes/water/status-and-monitoring/state-of-bathing-water

#### 3.1 Coastal bathing waters

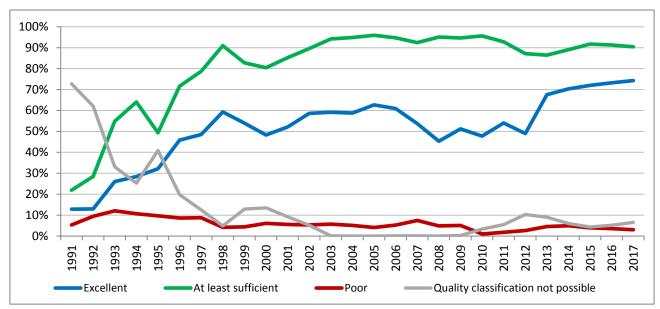
In France, 97.5% of all existing coastal bathing waters met at least sufficient water quality standards in 2017. See Appendix 1 for numeric data.



**Figure 1: Coastal bathing water quality trend in France.** Note: the "At least sufficient" class also includes bathing waters of "Excellent" quality class, the sum of shares is therefore not 100%.

#### 3.2 Inland bathing waters

90.4% of all existing inland bathing waters were of at least sufficient water quality in 2017. See Appendix 1 for numeric data.



**Figure 2: Inland bathing water quality trend in France.** Note: the "At least sufficient" class also includes bathing waters of "Excellent" quality class, the sum of shares is therefore not 100%.

#### 4. Information regarding management and other issues

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, macroalgae 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 2017 bathing season, 232 short-term pollution events were reported (at 180 bathing water sites), due to different reasons: waste and rainwater emissions, high tide, local releases, dry weather etc. Different measures such as temporary or permanent bathing prohibition were applied.

#### 5. Bathing water quality assessment presentation in online viewers

The European bathing water legislation focuses on sound management of bathing waters, greater public participation and improved information dissemination. More on the bathing and other water legislation can be found on the European Commission's website: <a href="http://ec.europa.eu/environment/water/index en.htm">http://ec.europa.eu/environment/water/index en.htm</a>.

The bathing water section of the Water Information System for Europe (WISE) which is accessible at the EEA bathing water website (<a href="http://www.eea.europa.eu/themes/water/interactive/bathing/state-of-bathing-waters">http://www.eea.europa.eu/themes/water/interactive/bathing/state-of-bathing-waters</a>) allows users to view the bathing water quality at more than 21 000 coastal and inland sites across Europe. The WISE bathing water quality data viewer combines text and graphical visualisation, providing a quick overview of the bathing water's locations and achieved quality. Having access to bathing water information, citizens are encouraged to make full use of it and participate with their comments.

## Appendix 1: Results of bathing water quality in France from 2014 to 2017

Table 2: Bathing waters in the season 2017 according to quality

		Total number of bathing waters	Excellent quality		At least sufficient quality		Poor quality		Quality classification not possible: not enough samples /new bathing waters/bathing waters subject to changes/closed	
			Count	%	Count	%	Count	%	Count	%
	2014	2038	1576	77.3	1986	97.4	40	2.0	12	0.6
Coastal	2015	2063	1619	78.5	2012	97.5	44	2.1	7	0.3
Coa	2016	2066	1634	79.1	2020	97.8	36	1.7	10	0.5
	2017	2065	1651	80.0	2014	97.5	40	1.9	11	0.5
	2014	1307	919	70.3	1164	89.1	65	5.0	78	6.0
Inland	2015	1292	930	72.0	1185	91.7	51	3.9	56	4.3
lul	2016	1293	947	73.2	1180	91.3	46	3.6	67	5.2
	2017	1314	976	74.3	1188	90.4	40	3.0	86	6.5
	2014	3345	2495	74.6	3150	94.2	105	3.1	90	2.7
ta	2015	3355	2549	76.0	3197	95.3	95	2.8	63	1.9
Total	2016	3359	2581	76.8	3200	95.3	82	2.4	77	2.3
	2017	3379	2627	77.7	3202	94.8	80	2.4	97	2.9

Note: the class "At least sufficient" also includes bathing waters which are of excellent quality, the sum of shares is therefore not 100%.

### Appendix 2: Bathing water quality map

Map 1: Bathing waters reported during the 2017 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.