German bathing water quality in 2021

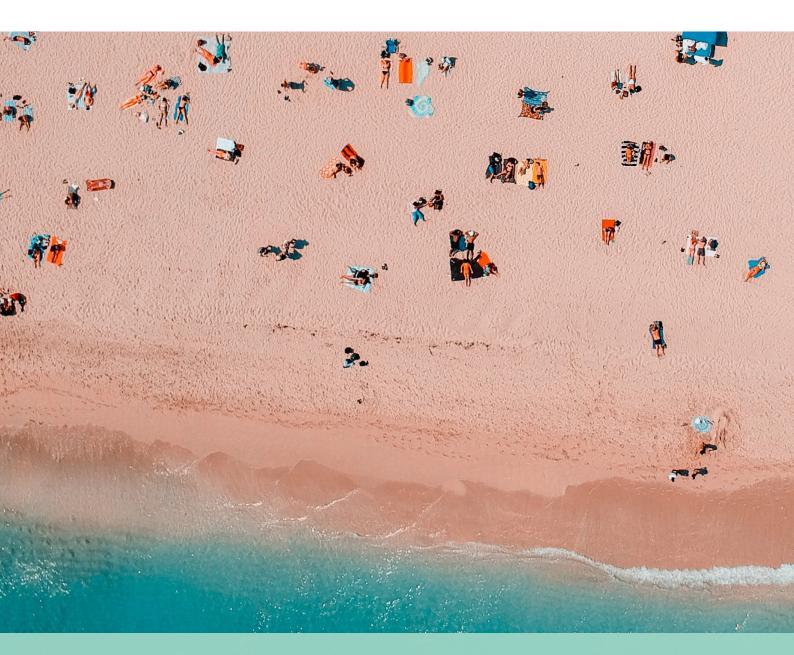




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European Environment Agency



Bathing water quality in the season of 2021

Germany

Under the provisions of the <u>Bathing Water Directive</u>, about 22 thousand 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 29 reporting countries in Europe, to be assessed for the annual European report and more detailed national reports.

1. BWD reporting in the season of 2021

Bathing waters in the season 2021					
Total reported	2291				
Coastal	363				
Inland	1928				
First identified in 2021	2				
Delisted in 2021	16				
Total reported samples	12948				

Bathing water quality in the season of 2021

Excellent	2071 (90.4%)
Good	130 (5.7%)
Sufficient	38 (1.7%)
Poor	14 (0.6%)
Not classified	38 (1.7%)

The bathing waters are quality classified according to the two microbiological parameters (Escherichia coli and intestinal enterococci) defined in the Bathing Water Directive. 97.7% of all reported bathing waters (includes those that could not be quality classified due to lack of samples) are in line with the minimum quality standards of the Directive, thus classified "sufficient" or better.

More information at the **national bathing water portal**:

https://www.umweltbundesamt.de/wasserqualitaet-in-badegewaessern

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 preseason 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 (Table 1).

Table 1: Bathing waters in 2021 according to implementation of the monitoring calenda

	Count	Share of total [%]
Monitoring calendar implemented A bathing water satisfies monitoring calendar conditions listed above.	2238	97.70%
Monitoring calendar not implemented A bathing water does not satisfy monitoring calendar conditions listed above. It may be quality-classified if enough samples are available in the last assessment period.	53*	2.30%*

Note: * Due to misreported data (the date of collected sample) and subsequent dataset corrections/updates after the finalisation of the annual assessment, the number of bathing waters with a monitoring calendar '*Not implemented*' has decreased to 52.

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 2018–2021

	Count	Share of total [%]
Continuously monitored A bathing water has been monitored in each bathing season of the last assessment period.	2220	96.9%
Newly identified A bathing water was identified for the first time within the last assessment period. Such status is assigned for full four years after reported.	41	1.8%
Quality changes A bathing water was subject to changes described in BWD Art. 4.4 within the last assessment period. Such status is assigned for full four years after reported.	5	0.2%
Monitoring gap A bathing water was not monitored for at least one season in the last assessment period. No quality classification is	25	1.1%



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. The quality trend for is shown in Figure 1. Number of bathing waters by quality class for the last assessment period 2018–2021 is given in Annex I.

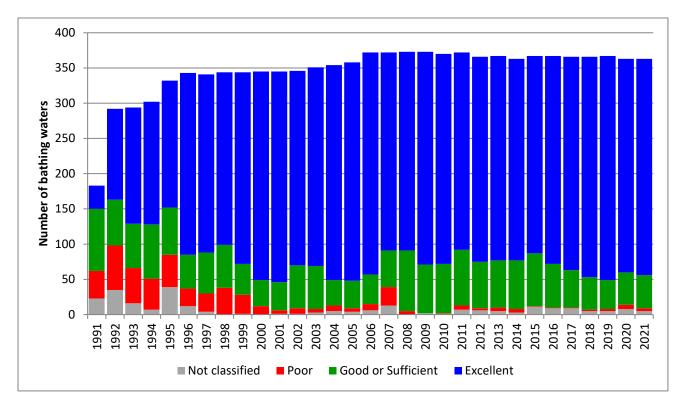


Figure 1: Trend of coastal bathing water quality. Notes: Each column represents an absolute number of bathing waters in the season. Quality classes "good" and "sufficient" are merged for comparability with the classification of the preceding Bathing Water Directive 76/160/EEC.

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. The quality trend is shown in Figure 2. Number of bathing waters by quality class for the last assessment period 2018–2021 is given in Annex I.

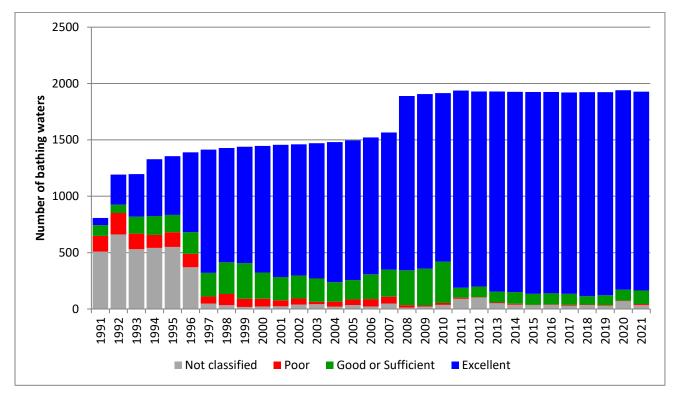


Figure 2: Trend of inland bathing water quality. Notes: Each column represents an absolute number of bathing waters in the season. Quality classes "good" and "sufficient" are merged for comparability with the classification of the preceding Bathing Water Directive 76/160/EEC.

Annex I Bathing water quality in 2018–2021

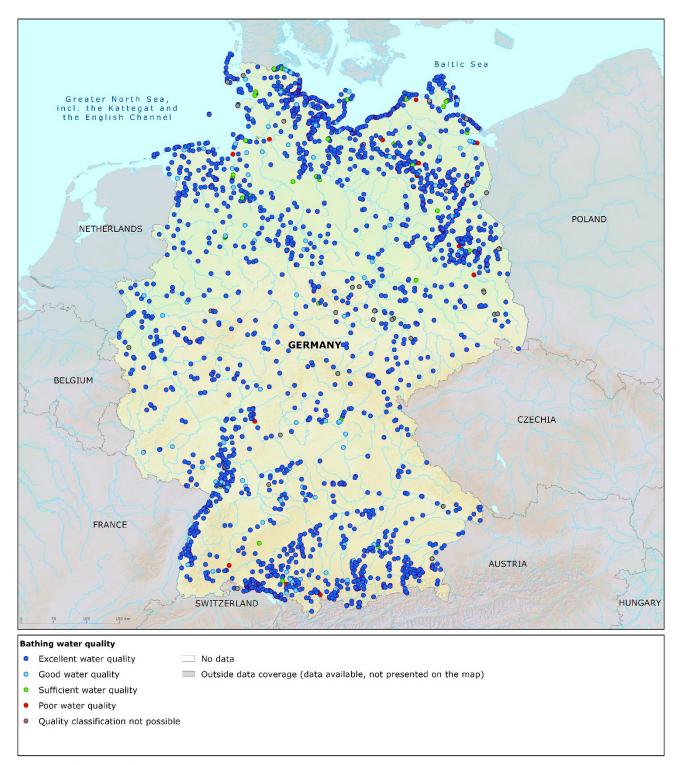
		Total	Exce	llent	Go	od	Suffic	cient	Ро	or	Not cla	ssified
		number of bathing waters	Count	%	Count	%	Count	%	Count	%	Count	%
Coastal	2018	366	313	85.5%	30	8.2%	16	4.4%	2	0.5%	5	1.4%
	2019	367	318	86.6%	30	8.2%	11	3.0%	3	0.8%	5	1.4%
	2020	363	303	83.5%	35	9.6%	11	3.0%	6	1.7%	8	2.2%
	2021	363	307	84.6%	30	8.3%	17	4.7%	4	1.1%	5	1.4%
Inland	2018	1923	1810	94.1%	63	3.3%	11	0.6%	4	0.2%	35	1.8%
	2019	1924	1802	93.7%	73	3.8%	16	0.8%	5	0.3%	28	1.5%
	2020	1941	1769	91.1%	78	4.0%	20	1.0%	5	0.3%	69	3.6%
	2021	1928	1764	91.5%	100	5.2%	21	1.1%	10	0.5%	33	1.7%
	2018	2289	2123	92.7%	93	4.1%	27	1.2%	6	0.3%	40	1.7%
Total	2019	2291	2120	92.5%	103	4.5%	27	1.2%	8	0.3%	33	1.4%
	2020	2304	2072	89.9%	113	4.9%	31	1.3%	11	0.5%	77	3.3%
	2021	2291	2071	90.4%	130	5.7%	38	1.7%	14	0.6%	38	1.7%

Table 3: Bathing water quality by water category and season

Note: Percentages may not total to 100 due to rounding.



Annex II Bathing water quality map



Map 1: Bathing waters reported during the 2021 bathing season in Germany

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