Bulgarian bathing water quality in 2021

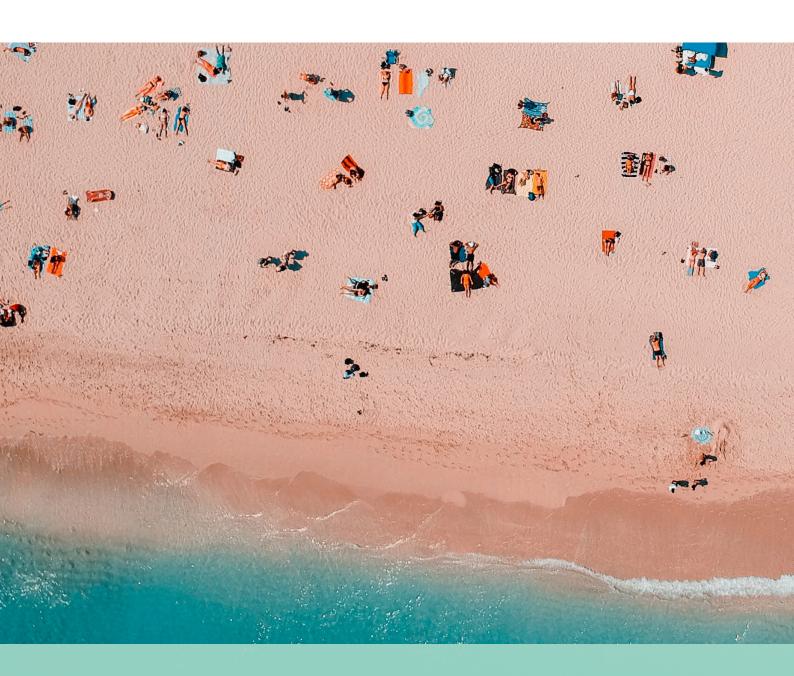




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Bathing water quality in the season of 2021

Bulgaria

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	96
Coastal	92
Inland	4
First identified in 2021	0
Delisted in 2021	0
Total reported samples	808

Bathing water quality in the season of 2021

Excellent	86 (89.6%)
Good	9 (9.4%)
Sufficient	1 (1%)
Poor	0 (0%)
Not classified	0 (0%)

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

More information at the national bathing water portal:

http://www.mh.government.bg/bg/administrativni-uslugi/registri/

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.	96	100.00%
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.	0	0.00%

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.	94	97.9%
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.	1	1.0%
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.	1	1.0%
Monitoring gap A bathing water was not monitored for at least one season in the last assessment period. No quality classification is made if not enough samples are reported for the most recent season.	0	0.0%

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.

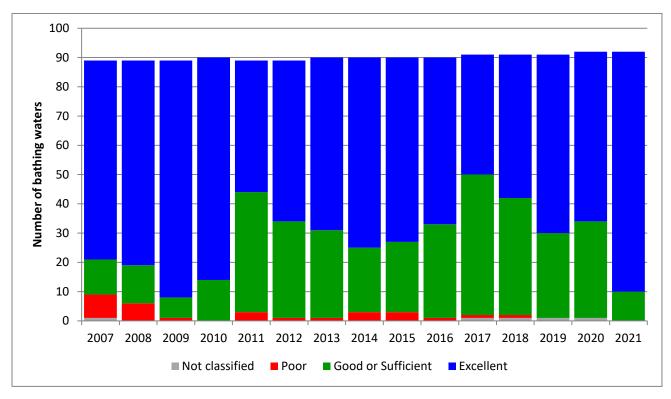


Figure 1: Trend of coastal bathing water quality. Notes: Each column represents an absolute number of bathing waters in the season. Quality classes "good" and "sufficient" are merged for comparability with the classification of the preceding Bathing Water Directive 76/160/EEC.



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.

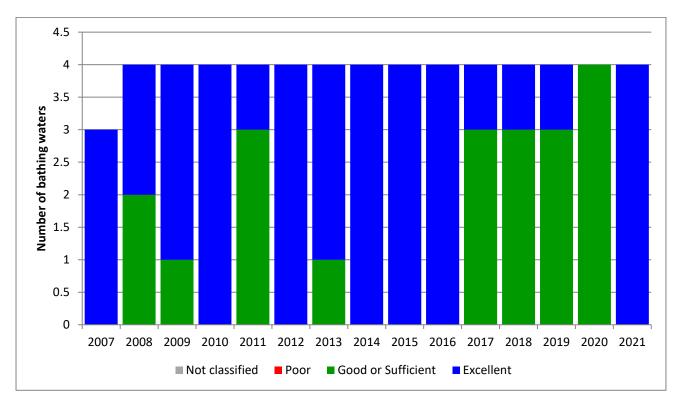


Figure 2: Trend of inland bathing water quality. Notes: Each column represents an absolute number of bathing waters in the season. Quality classes "good" and "sufficient" are merged for comparability with the classification of the preceding Bathing Water Directive 76/160/EEC.



Annex I Bathing water quality in 2018–2021

Table 3: Bathing water quality by water category and season

		Total	Exce	llent	Go	Good		Sufficient		or	Not classified	
k		number of bathing waters	Count	%	Count	%	Count	%	Count	%	Count	%
Coastal	2018	91	49	53.8%	33	36.3%	7	7.7%	1	1.1%	1	1.1%
	2019	91	61	67.0%	25	27.5%	4	4.4%	0	0.0%	1	1.1%
	2020	92	58	63.0%	33	35.9%	0	0.0%	0	0.0%	1	1.1%
	2021	92	82	89.1%	9	9.8%	1	1.1%	0	0.0%	0	0.0%
Inland	2018	4	1	25.0%	3	75.0%	0	0.0%	0	0.0%	0	0.0%
	2019	4	1	25.0%	3	75.0%	0	0.0%	0	0.0%	0	0.0%
	2020	4	0	0.0%	4	100.0%	0	0.0%	0	0.0%	0	0.0%
	2021	4	4	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Total	2018	95	50	52.6%	36	37.9%	7	7.4%	1	1.1%	1	1.1%
	2019	95	62	65.3%	28	29.5%	4	4.2%	0	0.0%	1	1.1%
	2020	96	58	60.4%	37	38.5%	0	0.0%	0	0.0%	1	1.0%
	2021	96	86	89.6%	9	9.4%	1	1.0%	0	0.0%	0	0.0%

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 Bulgaria



Quality classification not possible

Source: National boundaries: EEA; Large rivers and lakes: EEA, WFD Article 3; Rivers in Western Balkan: TC Vode; Bathing waters data and coordinates: Bulgarian authorities; Digital Elevation Model over Europe (EU-DEM): EEA.