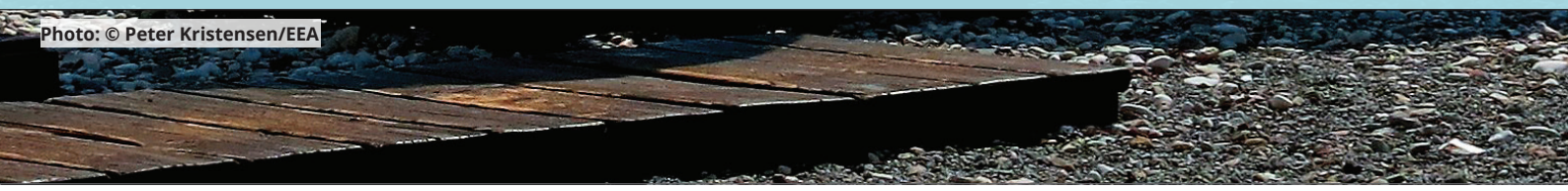
Country report

Bulgarian bathing water quality in 2018

Bulgaria

June 2019



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Bathing Water Quality in the Season 2018

Bulgaria

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, Bulgaria identified and reported **95 bathing waters**, which is 0.4% of all bathing waters in Europe. No bathing waters in Bulgaria have been newly identified for the season 2018.

Bathing waters of Bulgaria in the season 2018	
Total reported	95
Coastal	91
Inland	4
Total reported samples	816

Bathing water quality in the season 2018	
Excellent	50 (52.6%)
Good	36 (37.9%)
Sufficient	7 (7.4%)
Poor	1 (1.1%)
Not classified	1 (1.1%)

The bathing waters are quality classified according to the two microbiological parameters (Escherichia coli and Intestinal enterococci) defined in the Bathing Water Directive. 97.9% 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 Bulgaria is available 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 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 Bulgaria, monitoring calendar for 2018 was not implemented at three 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.	92	96.80%
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.	3	3.20%

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.	94	98.90%
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.	1	1.10%
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 Bulgaria 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.

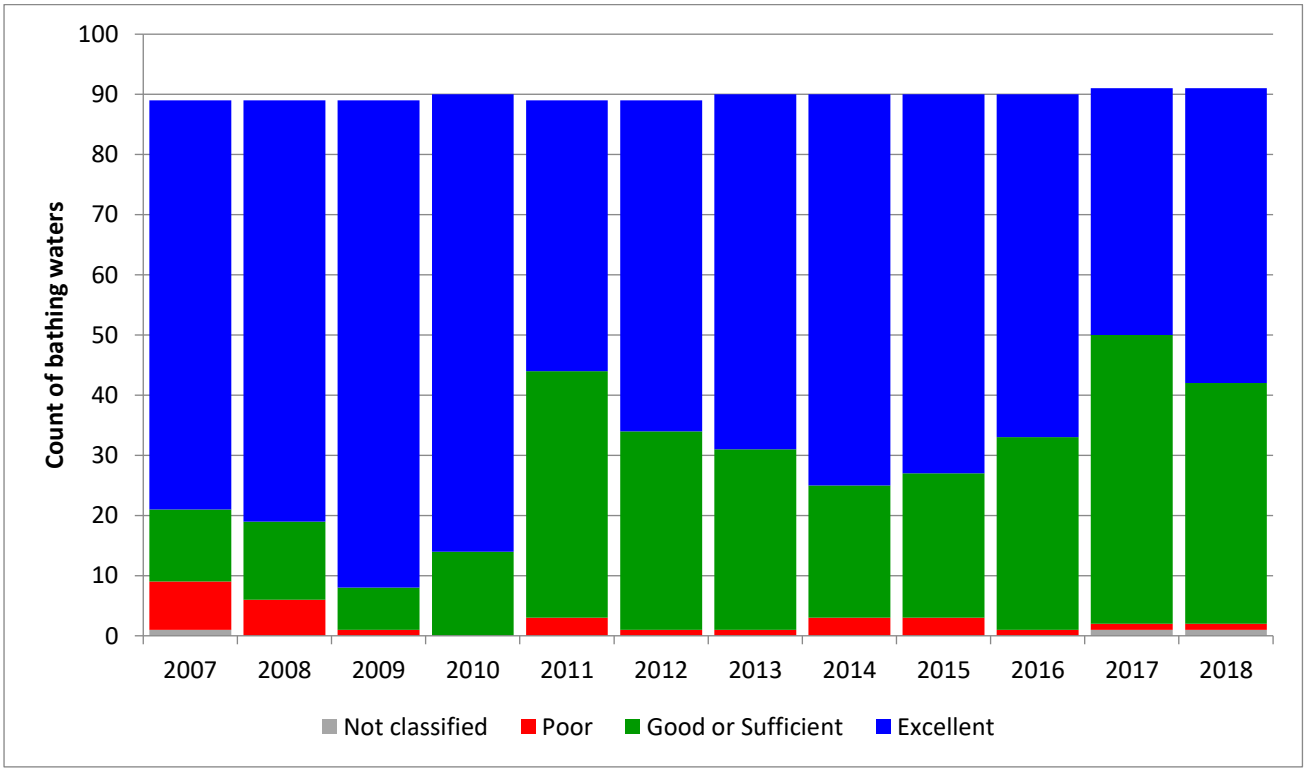


Figure 1: Trend of coastal bathing water quality in Bulgaria. Notes: Each column represents an absolute count of bathing waters in the season. Quality classes “good” and “sufficient” are merged for comparability with classification of the preceding Bathing Water Directive 76/160/EEC.

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 Bulgaria 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 Bulgaria in 2015–2018.

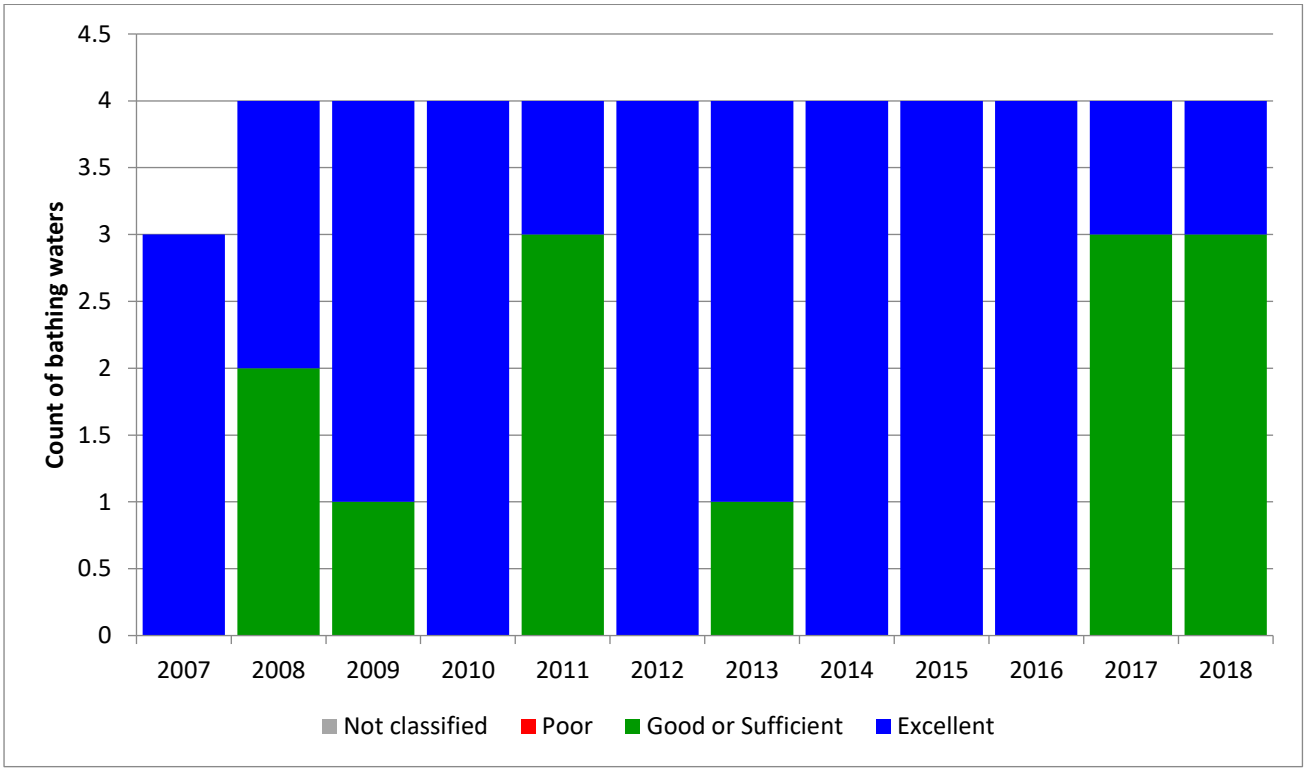


Figure 2: Trend of inland bathing water quality in Bulgaria. Notes: Each column represents an absolute count of bathing waters in the season. Quality classes "good" and "sufficient" are merged for comparability with classification of the preceding Bathing Water Directive 76/160/EEC.

4. Bathing water management in Bulgaria

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.

During 2018 bathing season 91 coastal and four freshwater bathing zones were monitored. The limited number of Bulgarian freshwater bathing areas is due to several reasons – lack of interest by the communities to establish and maintain inland bathing waters zones according to all requirements, lack of tradition in the Bulgarian population to visit such places and very strict national legislation on Water Live Saving Service which prohibits bathing in all areas where there is no such service. Compared with the 2017 season the numbers of bathing areas are the same.

The competent authorities concerning bathing water are the Ministry of Health at national level and its 28 Regional Health Inspectorates that carry out sampling and monitoring of bathing waters. The samples are analyzed in the regional CA's laboratories and the analytical methods used are relevant to the methods laid down in the Annex I of the Directive 2006/7/EC – BDS EN ISO 9308-3 and BDS ISO EN 7899-1.

In 2018 Bulgaria reported for the fifth time under Directive 2006/7/EC. For the assessment of bathing water quality for 2018 Bulgaria uses monitoring date collected during four years – 2015-2018. The assessment is based on the Escherichia coli and Intestinal Enterococci results and is made using the rules of the Directive 2006/7/EC.

Information for the public

The results from bathing water quality monitoring are made public through websites of the regional CAs and through the media (local or national press, radio and TV). Information is also available on the website of Ministry of Health - http://www.mh.government.bg/bg/administrativni-uslugi/registri/.
During the bathing season every week the regional CAs give press conference incl. the current bathing water quality status on their territory.

Wastewater treatment and treatment of diffuse pollution

In order to achieve the objectives of the Urban Waste Water Treatment Directive 91/271 / EEC, the Republic of Bulgaria has developed an Implementation Program with a set of measures and deadlines. The implementation program shall be regularly updated, in accordance with the reporting procedure, identifying measures, expected investment needs and possible funding sources for all agglomerations which do not comply with the requirements of the Directive. Bulgaria has identified a part of the national territory as a sensitive area, including the entire Bulgarian Black Sea Region.
In line with the latest national reporting under Directive 91/271 / EEC in the Black Sea basin are identified 52 agglomerations above 2 000 p.e. during the process of development of the 3 regional feasibility studies (RFS) for the water supply and sewage sector. 38 agglomerations have treatment of the urban wastewater in 29 WWTPs. In 2019, it will start infrastructure projects with funding from the Cohesion Fund, which foresees measures for the reconstruction, rehabilitation or construction of a new UWWTP in 11 agglomerations and

measures in sewerage systems in most of the agglomerations. In the developed RFS for the water supply and sewage sector, measures have been identified to meet the requirements for urban waste water treatment for other agglomerations, with a load between 2000 and 10 000 p.e. One of the sources providing funding for projects in waste water collection and treatment, the Enterprise for the Management and Protection of the Environment (EMPE) has new funding priorities and new criteria for the evaluation of projects, ensuring some new finance sources for agglomerations between 2000 and 10 000 p.e. and for settlements at the Black Sea coast with less than 2000 inhabitants.
The necessary investment costs for the construction of wastewater collection systems and wastewater treatment plants, including several reconstruction projects, are estimated at € 3 035 million for the whole country, the status at 31.12.2016 reported under Directive 91/271 / EEC. Next report is expected in 2020.

Treatment of diffuse sources of pollution

For decreasing the diffuse pollution sources, Republic of Bulgaria provides a system of measures, aiming full implementation of Directive 91/676/EEC concerning the protection of waters against pollution caused by nitrates from agricultural sources.

Although significant pollution of the superficial waters and significant level of eutrophication have not been ascertained on the national territory, the above mentioned Action Program provides concrete measures for the prevention and the reduction of the surface waters' pollution from agricultural sources.

The Black Sea Coast Law establishes two kinds of protection zones (up to 2.1 km from the sea coast and alongside the whole Bulgarian coast's length) where the use of unregistered mineral fertilizers and plant protection products is forbidden.

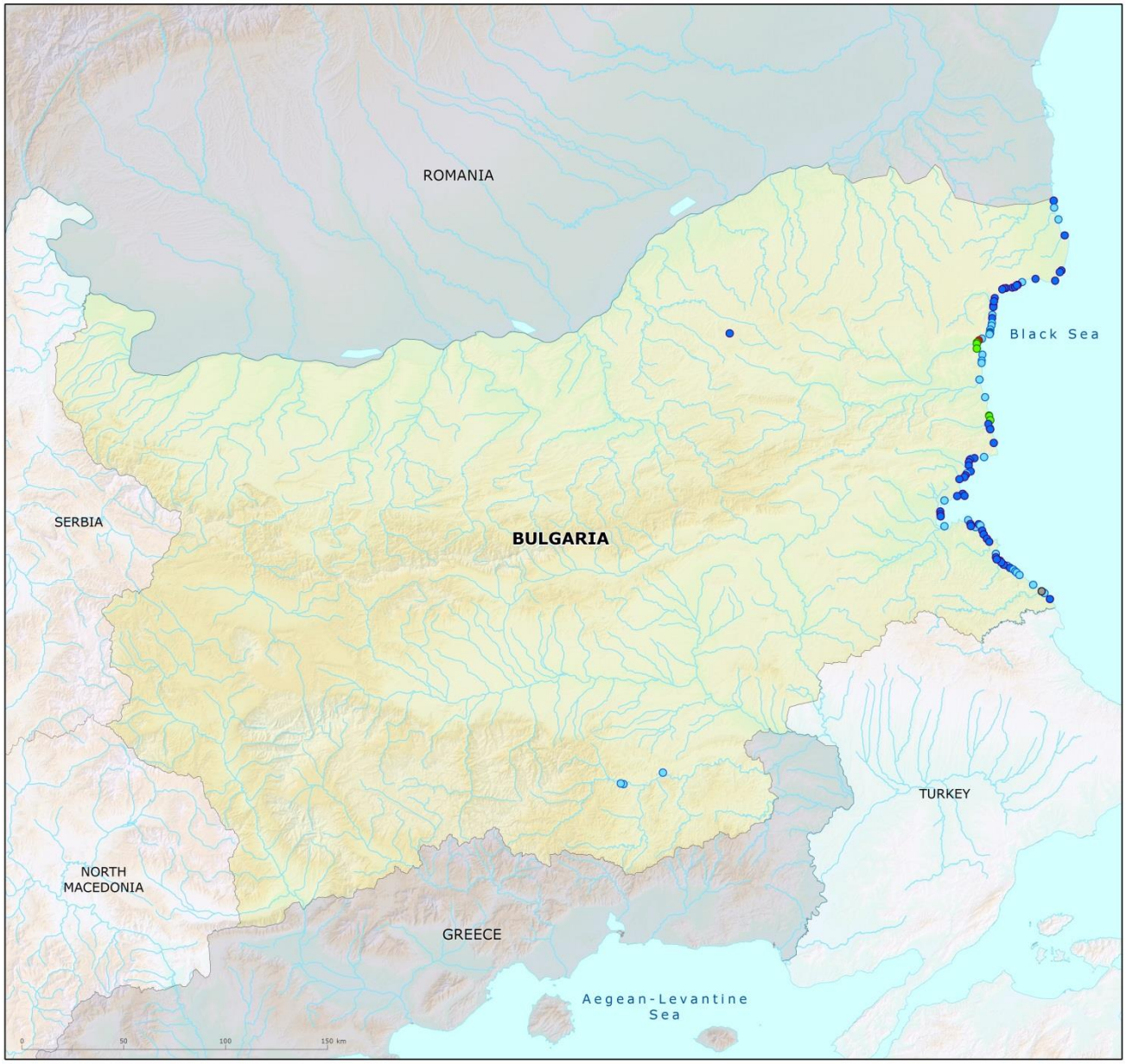
Annex I Bathing water quality in Bulgaria in 2015–2018

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	90	63	70.0	19	21.1	5	5.6	3	3.3	0	0.0
	2016	90	57	63.3	27	30.0	5	5.6	1	1.1	0	0.0
	2017	91	41	45.1	42	46.2	6	6.6	1	1.1	1	1.1
	2018	91	49	53.8	33	36.3	7	7.7	1	1.1	1	1.1
Inland	2015	4	4	100.0	0	0.0	0	0.0	0	0.0	0	0.0
	2016	4	4	100.0	0	0.0	0	0.0	0	0.0	0	0.0
	2017	4	1	25.0	3	75.0	0	0.0	0	0.0	0	0.0
	2018	4	1	25.0	3	75.0	0	0.0	0	0.0	0	0.0
Total	**2015**	94	67	71.3	19	20.2	5	5.3	3	3.2	0	0.0
	2016	94	61	64.9	27	28.7	5	5.3	1	1.1	0	0.0
	2017	95	42	44.2	45	47.4	6	6.3	1	1.1	1	1.1
	2018	95	50	52.6	36	37.9	7	7.4	1	1.1	1	1.1

Annex II Bathing water quality map

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



Bathing water quality

- Excellent water quality
- Good water quality
- Sufficient water quality
- Poor water quality
- Quality classification not possible
- No data
- Outside data coverage (data available, not presented on the map)

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.