

Bathing water results 2008 – Bulgaria

1. Introduction

This report gives a general overview of bathing water quality in Bulgaria during the 2008 bathing season.

Bulgaria reported 14 parameters under the Directive 76/160/EEC (1 Total coliforms, 2 Faecal coliforms, 3 Faecal streptococci, 4 Salmonella, 6 pH, 7 Colour, 8 Mineral oils, 9 Surface-active substances reacting with methylene blue, 10 Phenols (phenol indices), 12 Dissolved oxygen, 13 Tarry residues and floating materials, 14 Ammonia, 17 Heavy metals, 19 Nitrates and phosphates).

The parameters to be taken into account for assessment according to the assessment rules of the Directive 76/160/EEC are microbiological (1 Total coliforms, 2 Faecal coliforms) and physico-chemical (8 Mineral oils, 9 Surface-active substances reacting with methylene blue, 10 Phenols (phenol indices)).

The bathing waters are classified in the following categories:

- Compliant with mandatory values of the Directive for the 5 parameters (class CI)
- Compliant with mandatory and more stringent guide values of the Directive for the 5 parameters (class CG)
- Not compliant with mandatory values of the Directive for the 5 parameters (class NC)
- Banned (temporarily closed) or closed throughout the season (class B)

2. Length of bathing season and number of bathing waters

The bathing season started from 15 May to 1 July and ended from 31 August to 30 September 2008 for coastal bathing waters. The bathing season lasted from 1 June to 1 or 15 September 2008 for freshwater bathing waters.

A total of 93 bathing waters were monitored in Bulgaria during the 2008 bathing season, of which 89 were coastal bathing waters and 4 freshwater bathing waters on lakes.

With 93 bathing waters Bulgaria accounts for about 0.4% of the reported bathing waters of the European Union.

The number of freshwater bathing waters (4) is very low compared to the number of coastal bathing waters reported. The limited number of Bulgarian freshwater bathing waters 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.

The evolution of the reported number of bathing waters since monitoring of the water quality began under the Directive 76/160/EEC is presented in Table 1. The number of coastal bathing waters is the same as in the first year of the reporting in 2007. In 2008, one freshwater bathing water was added to the list compared to the previous year.

3. Results of bathing water quality

The results of the bathing water quality in Bulgaria for the 2007 bathing season as reported in 2008 report and for the bathing season of 2008 are presented in Figure 1.

The graphs show, for coastal and freshwater bathing waters separately:

- The percentage of bathing waters that comply with the guide values (class CG, blue line)
- The percentage of bathing waters that comply with the mandatory values (class CI, green line)
- The percentage of bathing waters that do not comply with the mandatory values (class NC, red line)

- The percentage of bathing waters that are banned (temporarily closed) or closed throughout the season (class B, grey line)

Table 1 and Table 2 show the same information in absolute numbers and in percentages separately for coastal and freshwater bathing waters. Table 3 shows the bathing water quality results for 2008 season in Bulgaria for all bathing waters.

Map 1 shows the location of the reported bathing waters in Bulgaria. The location of the bathing waters is based on the geographic coordinates reported by the Bulgarian authorities.

Figure 1: Results of bathing water quality in Bulgaria in 2007 and 2008

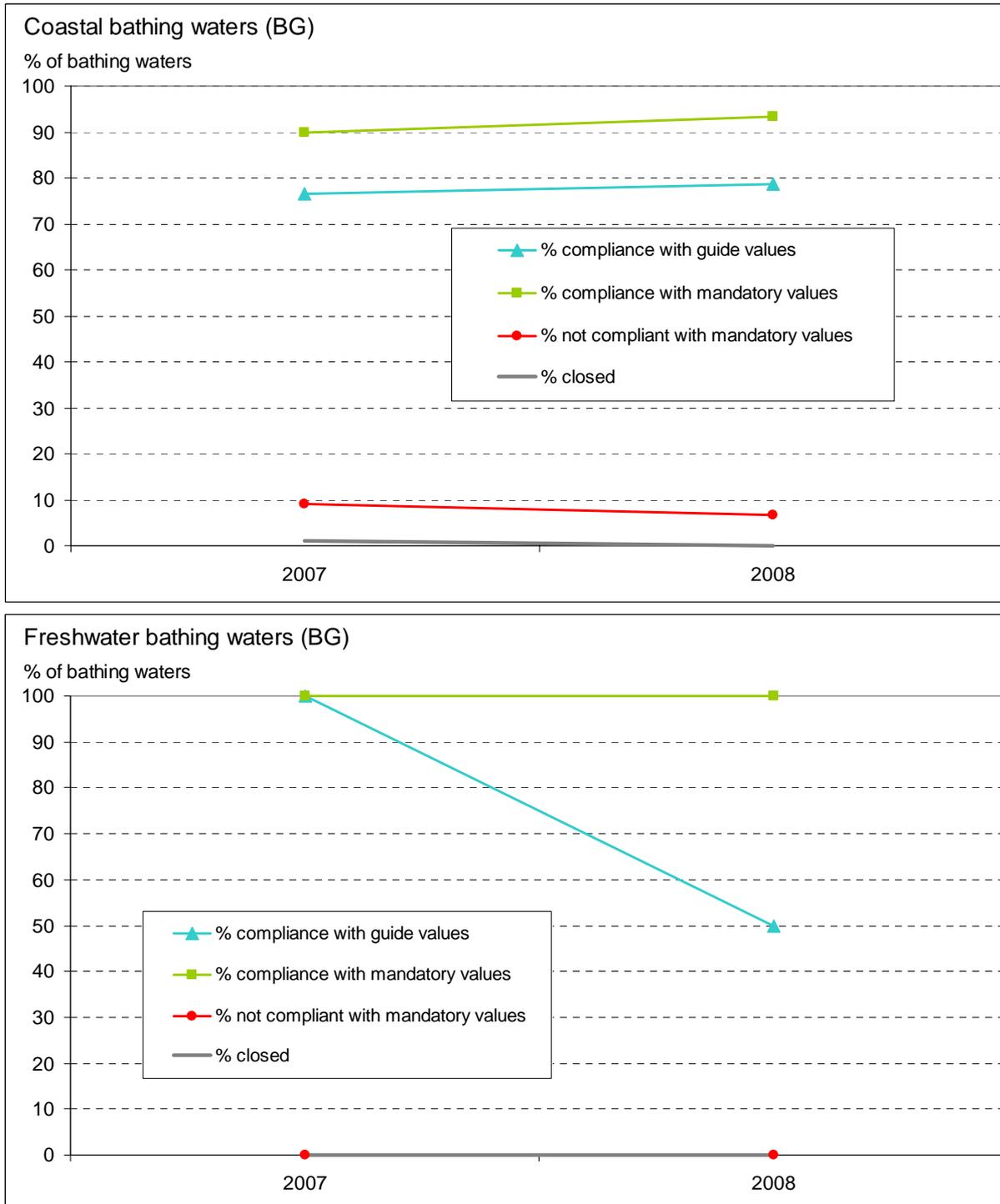


Table 1: Results of bathing water quality in Bulgaria in 2007 and 2008 as absolute numbers

		BG				
		Total number of bathing waters	Compliance with guide values	Compliance with mandatory values	Not compliant	Banned/closed throughout the season
Coastal Bathing Waters	2007	89	68	80	8	1
	2008	89	70	83	6	0
Fresh water Bathing Waters	2007	3	3	3	0	0
	2008	4	2	4	0	0

Table 2: Results of bathing water quality in Bulgaria in 2007 and 2008 as percentages

		BG				
		Total number of bathing waters	% compliance with guide values	% compliance with mandatory values	% not compliant	% banned/closed throughout the season
Coastal Bathing Waters	2007	89	76.4	89.9	9.0	1.1
	2008	89	78.7	93.3	6.7	0.0
Fresh water Bathing Waters	2007	3	100.0	100.0	0.0	0.0
	2008	4	50.0	100.0	0.0	0.0

Table 3: Results of bathing water quality for all bathing waters in Bulgaria in 2008

		BE				
		Total number of bathing waters	Compliance with guide values	Compliance with mandatory values	Not compliant	Banned/closed throughout the season
Bathing Waters	2008	93	72	87	6	0

4. Development of bathing water quality

Coastal bathing waters

In Bulgaria, 93.3% of the coastal bathing waters (83) complied with the mandatory values in 2008. This is an increase compared to the previous year (+ 3.4%). The rate of compliance with the guide values increased by 2.2% and reached 78.7% (70 bathing waters). This is 14.6% less compared to the rate of compliance with the mandatory values. Six bathing waters (6.7%) did not comply with the mandatory values, which is a decrease by 2.2%. No coastal bathing water had to be closed during the season.

Freshwater bathing waters

All four reported freshwater bathing waters were in compliance with the mandatory values, the same as in 2007. Two of four bathing waters met the guide values. This is a decrease by a half compared to the previous year, when all three reported bathing waters met the guide values. No freshwater bathing water had to be closed during the season.

5. General information as provided by the Bulgarian authorities

In 2002 Republic of Bulgaria has transposed in the national legislation the Directive 76/160/EEC. The competent authorities concerning bathing water are the Ministry of Health at national level and its 28 Regional Inspectorates on Public Health Protection and Control 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 ISO, EN or BDS relevant to the methods laid down in the Annex of the Directive.

During 2008 bathing season 89 coastal and 4 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.

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 press, radio and TV). During the bathing season every week the regional CAs give press conference incl. the current bathing water quality status on their territory. There is also a practice the actual information for bathing water quality to be made available to the guests of the big sea hotels.

Wastewater treatment

In order to achieve the objectives of Directive 91/271/EEC concerning urban wastewater treatment Republic of Bulgaria developed an Implementation Program with detailed Action Plan consisting of a set of coordinated measures and deadlines. Bulgaria has identified a part of the national territory as a sensitive area according to the requirements of the Directive. The whole Bulgarian Black Sea Region is identified as sensitive area and under the above mentioned Program priority measures intended for the bathing water quality improvement are envisaged. The Implementation Program's goals are included also in River Basin Plans which have to be adopted till 2009.

37 waste water treatment plants exist in the Black Sea Region, of which 32 are operational. 25 new WWTPs are to be built in the Black Sea basin in the years until the end of 2014.

The necessary investment costs for the construction of the waste water collection systems and WWTPs to comply with the goals laid down in the Directive are estimated on 2 218 MI EURO for the whole country. Full implementation of the Directive is expected by 31 December 2014, in line with the transition periods granted to Bulgaria for the implementation of the Directive.

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, that include the following:

- defining in 2004 the polluted water, the water in risk of pollution and the vulnerable zones. The area of vulnerable zones in Bulgaria is 34% of the whole territory;
- adoption in 2005 of the Code of Good Agricultural Practice;
- adoption in 2006 of the Action Program;
- development of Training program for farmers on how to implement measures of the Code of GAP.

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 mineral fertilizers and plant protection products is forbidden.

6. More information on bathing water quality in the European Union

More information on bathing water quality in the European Member States, including the reports for 27 Member States and the EU summary report, can be found on the bathing water quality website (http://ec.europa.eu/environment/water/water-bathing/index_en.html).

By 2015, Member States will have to comply with the stricter and more ambitious requirements laid out in the new Bathing Water Directive (Directive 2006/7/EC). This Directive requires more effective monitoring and management of bathing waters, greater public participation and improved information. More information on the new Directive can be found on the bathing water quality website and on <http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2006:064:0037:0051:EN:PDF>.

Cyprus, Denmark, Estonia, Finland, Germany, Hungary, Latvia, Lithuania, Slovakia, Spain and Sweden started to report according to more stringent new requirements in 2008 bathing season, while Luxembourg already started in 2007 bathing season.

WISE - Water Information System for Europe (www.water.europa.eu) is a gateway to all water related information. Among other water related data, information on individual bathing water quality can be found in the WISE Map viewer and WISE Data viewer through interactive maps and graphs (<http://www.eea.europa.eu/themes/water/status-and-monitoring/state-of-bathing-water>).

Map 1: Bathing waters reported during the 2008 bathing season in Bulgaria

