BWD Report For the Bathing Season 2014 Romania

The report gives a general overview of information acquired from the reported data, based on provisions of the Bathing Water Directive¹. The reporting process is described below, as well as state and trends of bathing water quality in Romania.

1. BWD reporting in the season 2014

In 2014 bathing season, 50 bathing waters have been reported in Romania. For each bathing water, five groups of parameters have been delivered²:

- *identification data* including name, location, geographic type of bathing water and availability to bathers;
- seasonal data including season start and end, national quality classification in present season, potential management measures and changes in quality;
- *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 unexpected situations that have, or could reasonably be expected to have, an adverse impact on bathing water quality and on bathers' health; reporting is optional;
- *short-term pollution periods* identifiable events that adversely affect water quality by faecal contamination; reporting is optional.

The authorities of Romania report data according to the new BWD (2006/7/EC) since the season 2012. The data for the season 2014 were delivered to the European Commission by **3 December 2014**, with a redelivery on 12 January 2015 (delivered corrected coordinates).

Altogether, **50 bathing waters** have been reported – 0.2% of all bathing waters in Europe. Out of all bathing waters in Romania, none have been newly identified in 2014 season. 98% of bathing waters in Romania are of coastal type; the other 2% are inland. **450 samples** were taken at bathing waters throughout the season – nine per bathing water on average.

Bathing waters of Romania in 2014						
Total reported	50					
Coastal	49					
Inland	1					
Max season period	107 days 1 Jun to 15 Sep					
Samples taken	450					
New BWD implemented in	2012					

¹ Directive BWD 2006/7/EC, available at <u>http://eur-</u>

lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2006:064:0037:0051:EN:PDF

² See the BWD Data Dictionary for detailed explanations: <u>http://dd.eionet.europa.eu/datasets/3151#tables</u>

The bathing season period was from 1 June to 15 September for coastal and inland bathing waters, i.e. 107 days altogether. Detailed information on individual bathing waters is available from national bathing water profiles at <u>http://www.ms.gov.ro/?pag=182</u>.

2. Assessment methodology

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 or livestock waste. 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 the water in the bathing sites concerned.

The monitoring requirements under the New Bathing Water Directive are:

- taking of a pre-season sample (taken shortly before the start of the bathing season) ³;
- a minimum of four samples per season⁴;
- a minimum of one sample per month⁵.

The conditions described above must be met for all bathing waters. If these rules are satisfied, the bathing water is categorised as 'sampling frequency satisfied'. If at least one monitoring requirement is not fulfilled the bathing water is categorised as 'sampling frequency not satisfied'. In such cases, bathing water can still be quality assessed if at least four samples per season are available and are more or less equally distributed throughout the season. All Romanian bathing waters met the described monitoring rules set by the Directive. Table 1 shows the statistics of bathing waters according to satisfied BWD monitoring rules.

	Count	Share of total [%]
BWs with sampling frequency satisfied that are not banned or closed (B)		
in 2014		
These bathing waters have been monitored according to BWD provisions	50	100%
(monitoring frequency satisfied and have pre-season sample. They have		
been quality-classified (CG, CI, NC).		
BWs with sampling frequency not satisfied and that are not banned or		
closed (B) in 2014.		
These bathing waters have not been monitored according to BWD	0	0%
provisions (monitoring frequency not satisfied). They may be quality-		
classified if there is a reasonable volume of samples available.		
BWs that are banned or closed (B) in 2014.		
The bathing waters that were banned or closed (B) because of a legal	0	0%
dispute and could not be sampled.		
Total number of bathing waters in 2014	50	100%

³ A pre-season sample is taken into account at total number of samples per season.

⁴ Three samples are sufficient if the season does not exceed eight weeks or the region is subject to special geographical constraints.

⁵ 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.

Since the data series of four consecutive years has not been collected yet, the assessment of bathing waters has been done according to transitional rules. This means that only the most recent season's data have been considered, while quality classification is based on criteria of the old BWD (76/160/EEC). The results for both parameters are classified in the following three quality categories: compliant with the mandatory value (CI), compliant with the guide values (CG), and not compliant with the mandatory value (NC).

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

3. Bathing water quality

The results of the bathing water quality in Romania as reported in the past reporting years and for the bathing season of 2014 are presented in Figure 1. The previous reports are available on the European Commission's bathing water quality website⁶ and the European Environment Agency's bathing water website⁷.

3.1 Coastal bathing waters

100% 90% 80% 70% 60% 50% 40% 30% 20% 10% 0% 2007 2008 2009 2010 2011 2012 2013 2014 Excellent At least sufficient Poor Quality classification not possible

In Romania, all coastal bathing met the mandatory values (CI) water quality in 2014. See Appendix 1 for numeric data.

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

⁶ http://ec.europa.eu/environment/water/water-bathing/index_en.html

⁷ http://www.eea.europa.eu/themes/water/status-and-monitoring/state-of-bathing-water

3.2 Inland bathing waters

There is one bathing water in Romania, Tulcea Lac Ciuperca, first identified in 2013 season. Its quality is compliant with mandatory values.

4. Information regarding management and other issues

A list with bathing waters identified for the bathing season 2014 and monitoring calendar was posted on the websites. A public meeting on the monitoring of bathing water quality was announced in the local press (14 May 2014) for the other stakeholders (press, interested public). The meeting was organized by Constanta Public Health Directory on 16 May 2014. This meeting was also attended by the other responsible local authorities: local Public Health Directory and local EPA - Bathing water department, as well as by NGOs and the R&D marine National Institute.

Bathing water profiles have been established since 2011 and are available in Romanian language online. A template for identifying and assessing causes of pollution that might affect bathing waters and impair bathers' health has been applied before beginning of the season. The analytical methods used for monitoring are those required and mentioned by the Directive. Monitoring results are posted every two weeks on the Constanta Public Health Directory site (<u>http://www.dspct.ro/s48/local-seasonal-results/</u>).

5. Bathing water quality assessment presentation in online viewers

The new legislation requires more effective monitoring and 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: http://ec.europa.eu/environment/water/index_en.htm.

The bathing water section of the Water Information System for Europe (WISE), which is accessible at the EEA bathing water website (<u>http://www.eea.europa.eu/themes/water/interactive/bathing/state-of-bathing-waters</u>), allows users to view the bathing water quality at more than 21 000 coastal beaches and inland sites across Europe. The data on bathing water quality in 2014 and previous years can also be viewed in WISE bathing water data viewer, an application prepared by TC Vode (<u>http://bwd.eea.europa.eu/</u>). 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.

Citizens have now access to more bathing water information than ever and are encouraged to make full use of disseminated information.

Appendix 1: Results of bathing water quality in Romania from 2011 to 2014

		Total number of bathing waters	Compliant with the guide values (CG)		Compliant with the mandatory value (CI)		Not compliant with the mandatory value (NC)		Quality classification not possible: not enough samples/banned or closed	
			No	%	No	%	No	%	No	%
Coastal	2011	49	43	87.8	49	100.0	0	0.0	0	0.0
	2012	49	4	8.2	49	100.0	0	0.0	0	0.0
	2013	49	17	34.7	49	100.0	0	0.0	0	0.0
	2014	49	11	22.4	49	100.0	0	0.0	0	0.0
Inland	2011	0	0	0	0	0	0	0	0	0
	2012	0	0	0	0	0	0	0	0	0
	2013	1	0	0.0	1	100.0	0	0.0	0	0.0
	2014	1	0	0.0	1	100.0	0	0.0	0	0.0
Total	2011	49	43	87.8	49	100.0	0	0.0	0	0.0
	2012	49	4	8.2	49	100.0	0	0.0	0	0.0
	2013	50	17	34.0	50	100.0	0	0.0	0	0.0
	2014	50	11	22.0	50	100.0	0	0.0	0	0.0

Appendix 2: Bathing water quality map



Map 1: Bathing waters reported during the 2014 bathing season in Romania

Source: National boundaries: EEA; Large rivers and lakes: EEA, WFD Article 3; Rivers in Western Balkan: TC Vode; Bathing waters data and coordinates: Romanian authorities