# Bathing Water Directive report 2013 Romania

The report gives a general overview of information acquired from the reported data, based on provisions of the Bathing Water Directive<sup>1</sup>. The reporting process is described below, as well as state and trends of bathing water quality in Romania.

# 1. BWD reporting in 2013 season

In 2013 bathing season, 50 bathing waters have been reported in Romania. For each bathing water, five groups of parameters have been delivered:

- basic 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;

Bathing waters of Romania in 2013							
Total reported	50						
Coastal	49						
Inland	1						
Season period	106 days						
Coastal	1 Jun to 15 Sep						
Inland	1 Jun to 15 Sep						
Samples taken	450						
New BWD implemented in	2012						

- *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 initiated new BWD (2006/7/EC) reporting in 2012 season. The 2013 season data were delivered to the European Commission by **9 January 2014**, with additional deliveries on 10 March 2014.

Altogether, **50 bathing waters** have been reported – 0.2% of all bathing waters in Europe. Out of all bathing waters in Romania, one (2%) has been newly identified in 2013 season. No bathing waters have been delisted<sup>2</sup>. 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.

<sup>&</sup>lt;sup>1</sup> Available at <u>http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=0J:L:2006:064:0037:0051:EN:PDF</u>

<sup>&</sup>lt;sup>2</sup> Bathing waters which were identified in 2012 season, but not in 2013 season

The bathing season period was from 1 June to 15 September, i.e. 106 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.

According to the BWD, the bathing water sample dataset should satisfy the following conditions:

- a minimum of one sample per month<sup>3</sup>
- a minimum of four samples per season<sup>4</sup>
- a minimum of 16 samples in total<sup>5</sup>
- four consecutive seasons<sup>6</sup>
- a pre-season sample<sup>7</sup>

The monitoring took place at all identified bathing waters, likewise all met the described monitoring rules set by the Directive. Table 1 shows the share of bathing waters that did not satisfy monitoring frequency, as well as corresponding reasons.

#### Table 1: Number of assessed bathing waters in 2013

Total number of bathing waters in 2013	Bathing waters	Bathing waters with sampling frequency not satisfied						
	with sampling frequency satisfied	Insufficiently sampled	Closed	Not sampled	Total			
50	50	0	0	0	0			

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).

Bathing waters are accordingly classified to one of the BWD quality classes:

<sup>&</sup>lt;sup>3</sup> The interval between two samples should not exceed 31 + 4 days, provided that the next sampling is done according to the monitoring calendar; exception applies for temporarily closed bathing waters

<sup>&</sup>lt;sup>4</sup> Three samples if the season does not exceed eight weeks or the region is subject to special geographical constraints

<sup>&</sup>lt;sup>5</sup> 12 samples if the season does not exceed eight weeks or the region is subject to special geographical constraints

<sup>&</sup>lt;sup>6</sup> The condition does not apply if the bathing water is newly identified or any changes have occurred that are likely to affect the classification

<sup>&</sup>lt;sup>7</sup> A pre-season sample is taken into account at total number of samples per season

- compliant with guide values
- compliant with mandatory values
- not compliant
- banned

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 for the period of 2010–2013 as reported in the past reporting years and for the bathing season of 2013 are presented in Figure 1 (for coastal bathing waters) and Figure 2 (for inland bathing waters). The previous reports are available on the European Commission's bathing water quality website<sup>8</sup> and the European Environment Agency's bathing water website<sup>9</sup>.

#### 3.1 Coastal bathing waters

In Romania, all coastal bathing waters met at least sufficient water quality in 2013. No coastal bathing waters had to be closed during the bathing season. See Appendix 1 for numeric data.

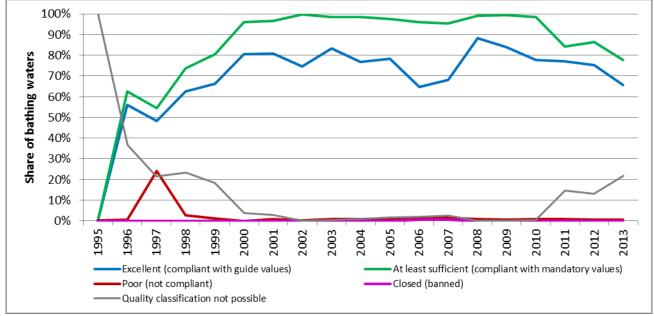


Figure 1: Coastal bathing water quality trend in Romania. Note: the "At least sufficient" class also includes bathing waters of "Excellent" quality class, the sum of shares is therefore not 100%.

<sup>&</sup>lt;sup>8</sup> http://ec.europa.eu/environment/water/water-bathing/index\_en.html

<sup>&</sup>lt;sup>9</sup> 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

No specific management measures have been described by national authorities.

# 5. Interactive information on bathing water quality in Europe

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 22 000 coastal beaches and inland sites across Europe. Data is aggregated and visualized on national and station level. Detailed information regarding specific bathing site are given in pop-up windows (can be activated with a click on a selected bathing location) and bathing water profiles which can be opened through hyperlinks in pop-up windows.

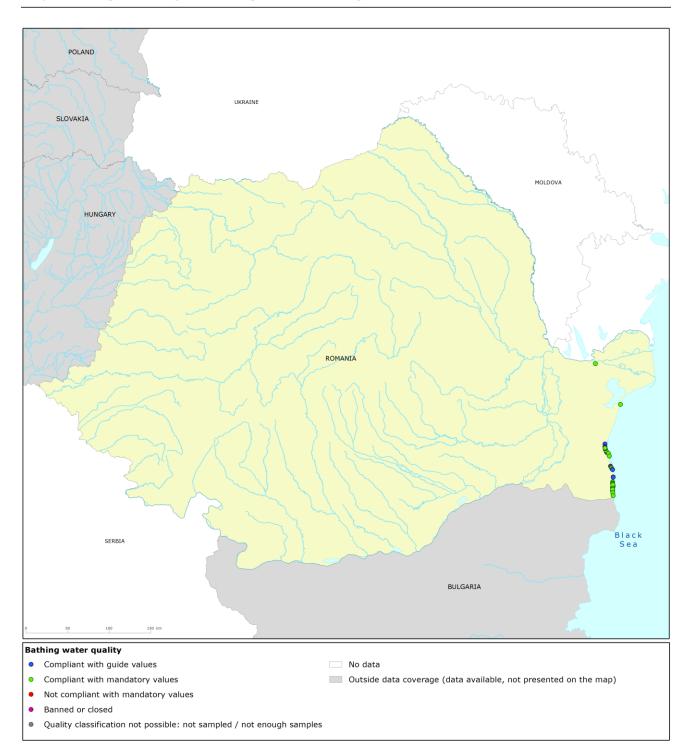
The data on bathing water quality in 2013 and previous years can also be viewed in WISE bathing water data viewer, an application prepared by TC Vode (<u>http://bwd.eea.europa.eu/</u>). The WISE bathing water quality data viewer combines text and graphical visualisation, providing a quick overview of the locations of coastal and inland bathing waters, as well as statistics on their quality. Specific bathing water locations can be observed on Google Earth, Google maps or Bing maps.

# Appendix 1: Results of bathing water quality in Romania from 2010 to 2013

		Total	Exce (comp with a valu	oliant guide	At least sufficient (compliant with mandatory values)		Poor (not compliant)		Closed (banned)		Quality classification not possible*	
			No	%	No	%	No	%	No	%	No	%
	2010	49	1	2.0	49	100.0	0	0.0	0	0.0	0	0.0
Coastal	2011	49	43	87.8	49	100.0	0	0.0	0	0.0	0	0.0
Соа	2012	49	4	8.2	49	100.0	0	0.0	0	0.0	0	0.0
	2013	49	17	34.7	49	100.0	0	0.0	0	0.0	0	0.0
	2010	0	0	0	0	0	0	0	0	0	0	0
Inland	2011	0	0	0	0	0	0	0	0	0	0	0
Inla	2012	0	0	0	0	0	0	0	0	0	0	0
	2013	1	0	0.0	1	100.0	0	0.0	0	0.0	0	0.0
	2010	49	1	2.0	49	100.0	0	0.0	0	0.0	0	0.0
Total	2011	49	43	87.8	49	100.0	0	0.0	0	0.0	0	0.0
LO T	2012	49	4	8.2	49	100.0	0	0.0	0	0.0	0	0.0
	2013	50	17	34.0	50	100.0	0	0.0	0	0.0	0	0.0

Note: the "At least sufficient" class also includes bathing waters which are of excellent quality, the sum of shares is therefore not 100%. \* This includes new bathing waters, bathing waters with changes that affect or could have affected bathing water quality, and bathing waters that do not have enough samples.

# Appendix 2: Bathing water quality map





Source: National boundaries: EEA; Large rivers and lakes: EEA, WFD Article 3; Bathing waters data and coordinates: Romanian authorities