# Albanian bathing water quality in 2016





Photo: © Peter Kristensen



# BWD Report For the Bathing Season 2016 Albania

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 Albania.

#### 1. BWD reporting in the season 2016

In 2016 bathing season, 92 bathing waters have been reported in Albania. For each bathing water, five groups of parameters have been delivered<sup>2</sup>:

- *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;

additional deliveries on 29 December 2016, 03 April 2017.

• *short-term pollution periods* – identifiable events that adversely affect water quality by faecal contamination; reporting is optional.

The authorities of Albania report data according to the new BWD (2006/7/EC) since the season 2012. The data for the season 2016 were delivered to the European Commission by **5 December 2016**, with

Altogether, **92 bathing waters** have been reported – 0.4% of all bathing waters in Europe. Out of all bathing waters in Albania, none have been newly identified in 2016 season. All bathing waters in Albania are coastal. **893 samples** were taken at bathing waters throughout the season – 10 per bathing water on average.

Bathing waters of Albania in 2016						
Total reported	92					
Coastal	92					
Inland	0					
Max season period	<b>127 days</b> 17 May to 30 Sep					
Samples taken	893					
Share of bathing waters with good or excellent water quality	61 %					
Reporting under Directive 2006/7/EC since	2012 e					

<sup>&</sup>lt;sup>1</sup> Directive BWD 2006/7/EC, available at <a href="http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=0]:L:2006:064:0037:0051:EN:PDF">http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=0]:L:2006:064:0037:0051:EN:PDF</a>

<sup>&</sup>lt;sup>2</sup> See the BWD Data Dictionary for detailed explanations: <a href="http://dd.eionet.europa.eu/datasets/latest/BWO">http://dd.eionet.europa.eu/datasets/latest/BWO</a> 2006

The maximum bathing season period was from 17 May to 30 September, with a maximum season span of 127 days<sup>3</sup>. Season duration varies for coastal bathing waters.

Detailed information on bathing waters is available from national portal at http://www.akm.gov.al/.

#### 2. Assessment methodology<sup>4</sup>

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, livestock waste, bird faeces etc. 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 water in the bathing sites concerned.

The monitoring requirements under the Directive are:

- taking a pre-season sample (taken shortly before the start of the bathing season) 5;
- a minimum of four samples per season<sup>6</sup>;
- a minimum of one sample per month<sup>7</sup>.

If these rules are satisfied, the bathing water is categorised as 'sampling frequency satisfied'. If not all monitoring requirements are fulfilled the bathing water is categorised as 'not enough samples'. 60.9% of bathing waters met the described monitoring requirements set by the Directive, while the rest did not satisfy monitoring requirements for different reasons: being new; having changed environmental conditions that might affect water quality classification; closed; not monitored due to legal issues, physical inaccessibility to the site etc.

<sup>&</sup>lt;sup>3</sup> If season length in a country varies depending on bathing water, the single longest season per bathing water is indicated, and not the overall count of season days in a country.

<sup>&</sup>lt;sup>4</sup> The methodology used by the EC and the EEA is described here, while results of assessment by national authorities may differ in individual cases.

<sup>&</sup>lt;sup>5</sup> A pre-season sample is taken into account at total number of samples per season.

<sup>&</sup>lt;sup>6</sup> Three samples are sufficient if the season does not exceed eight weeks or the region is subject to special geographical constraints.

<sup>&</sup>lt;sup>7</sup> 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.

Table 1 shows the statistics of bathing waters according to monitoring requirements.

Table 1: Bathing waters in 2016 according to compliance with BWD monitoring provisions

	Count	Share of total [%]	
BWs with sampling frequency satisfied (and are not new, are not subject			
to changes or were not closed in 2016)		60.9%	
These bathing waters have been monitored according to provisions and	56		
have complete dataset from the last assessment period. They have been			
quality-classified (excellent, good, sufficient, poor).			
BWs with sampling frequency not satisfied (and are not new, are not			
subject to changes or were not closed in 2016)		19.6%	
These bathing waters exist throughout the last assessment period but have	18		
not been monitored throughout the period according to provisions for	10		
various individual reasons. They may be quality-classified if there is an			
adequate volume of samples available for credible classification.			
BWs that are new, subject to changes or closed in 2016			
These bathing waters do not have complete dataset for the last assessment		19.6%	
period because they are new, have been subject to changes (that are likely	18		
to affect the classification of the bathing water) or have been closed. They			
cannot be quality-classified.			
Total number of bathing waters in 2016	92	100%	

Bathing waters where sampling frequency was not satisfied can still be quality assessed if at least four samples per season (three samples if the season does not exceed eight weeks or the region is subject to special geographical constraints) are available and equally distributed throughout the season. Assessment of bathing water quality is possible when the bathing water sample dataset is available for four consecutive seasons. Bathing waters are accordingly classified to one of the bathing water quality classes (excellent, good, sufficient, or poor).

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

Quality assessment is not possible for all bathing waters. In these cases, they are instead classified as either:

- not enough samples8;
- new<sup>9</sup>:
- changes<sup>10</sup>;
- closed<sup>11</sup>.

<sup>&</sup>lt;sup>8</sup> Not enough samples have been provided throughout the last assessment period (the last four bathing seasons or, when applicable, the period specified in Article 4.2 or 4.4).

<sup>&</sup>lt;sup>9</sup> Classification not yet possible because bathing water is newly identified and a complete set of samples is not yet available.

<sup>&</sup>lt;sup>10</sup> Classification is not yet possible after changes that are likely to affect the classification of the bathing water.

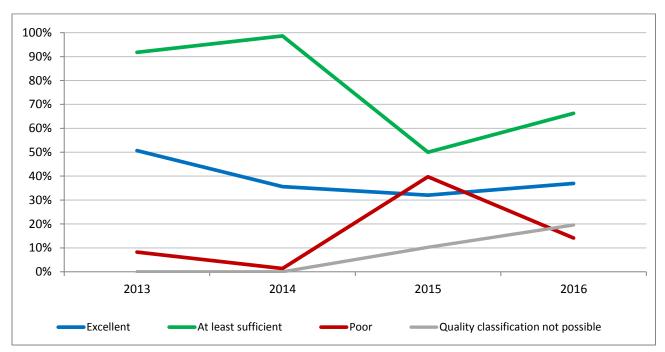
<sup>&</sup>lt;sup>11</sup> Bathing water is closed temporarily or throughout the bathing season.

#### 3. Bathing water quality

The results of the bathing water quality in Albania throughout the past period are presented in Figure 1. The previous reports are available on the European Commission's bathing water quality website<sup>12</sup> and the European Environment Agency's bathing water website<sup>13</sup>.

#### 3.1 Coastal bathing waters

In Albania, 66.3% of all existing coastal bathing waters met at least sufficient water quality standards in 2016. See Appendix 1 for numeric data.



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

#### 3.2 Inland bathing waters

There are no inland bathing waters in Albania.

### 4. Information regarding management and other issues

In Albania, assessed under provisions of the revised Bathing Water Directive for the second time, 13 bathing water sites (or 14.1 %) were classified as poor. This is a major improvement in comparison with 2015 season when 31 bathing water sites (or 39.1 %) have been quality assessed as 'poor'. This improvement can be associated with five wastewater treatment plants which have been constructed in

<sup>12</sup> http://ec.europa.eu/environment/water/water-bathing/index\_en.html

<sup>13</sup> http://www.eea.europa.eu/themes/water/status-and-monitoring/state-of-bathing-water

the recent years. These plants together provide wastewater treatment for almost half a million residents which results also in much cleaner bathing water. The treatment plants and their characteristics are:

- 1. Wastewater Treatment Plant in Kavaja with capacity of 4.500 m³/day provides treatment for 25 000 residents. The treatment plant donated German Government through KFW by is situated in Qurret Kavaja.
- 2. Wastewater Treatment Plant in Durres was donated by World Bank, Luxemburg Government, European Bank and European Commission. With capacity of 60 000 m³/day it provides a treatment for 250 000 residents.
- 3. Wastewater treatment plant in Saranda was donated by World Bank, Luxemburg Government, European Bank and European Commission. It provides treatment for 60 000 residents. Its capacity is 12 240 m³/day.
- 4. Shengjini wastewater treatment plant provides treatment for 60~000 residents. Its capacity is  $12~240~\text{m}^3/\text{day}$ . It was donated by World Bank, Luxemburg Government, European Bank and European Commission.

Wastewater Treatment Plant in Velipoje has capacity of 15 800 m<sup>3</sup>/day. It provides treatment for almost 50.000 residents. It was donated by the European Commission within the Instrument for Pre-Accession Assistance (IPA) programme.

#### 5. Bathing water quality assessment presentation in online viewers

The European bathing water legislation focuses on sound 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: <a href="http://ec.europa.eu/environment/water/index\_en.htm">http://ec.europa.eu/environment/water/index\_en.htm</a>.

The bathing water section of the Water Information System for Europe (WISE) which is accessible at the EEA bathing water website (<a href="http://www.eea.europa.eu/themes/water/interactive/bathing/state-of-bathing-waters">http://www.eea.europa.eu/themes/water/interactive/bathing/state-of-bathing-waters</a>) allows users to view the bathing water quality at more than 21 000 coastal and inland sites across Europe. 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. Having access to bathing water information, citizens are encouraged to make full use of it and participate with their comments.

# Appendix 1: Results of bathing water quality in Albania from 2013 to 2016

Table 2: Bathing waters in the season 2016 according to quality

	Total number of bathing waters		Excellent quality		At least sufficient quality		Poor quality		Quality classification not possible: not enough samples /new bathing waters/bathing waters subject to changes/closed	
			No	%	No	%	No	%	No	%
Total	2013	73	37	50.7	67	91.8	6	8.2	0	0.0
	2014	73	26	35.6	72	98.6	1	1.4	0	0.0
	2015	78	25	32.1	39	50.0	31	39.7	8	10.3
	2016	92	34	37.0	61	66.3	13	14.1	18	19.6

Note: the class "At least sufficient" also includes bathing waters which are of excellent quality, the sum of shares is therefore not 100%.

## Appendix 2: Bathing water quality map

Map 1: Bathing waters reported during the 2016 bathing season in Albania



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